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# PROJECT REPORT DPS 5140

Doctorate in Professional Studies
(Work Based Learning in the Higher Education curriculum)

Middlesex University
National Centre for Work Based Learning Partnerships

**April**, 2003

(Re-submitted September, 2003, following revisions)

Project title: A critical inquiry concerning the justification of programmes of Work Based Learning in the Chester College of Higher Education curriculum

A project submitted to Middlesex University in partial fulfilment of the requirements for the degree of Doctor of Professional Studies

Submitted by: William David Eric Major

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### **Executive Summary**

The case study, which is the subject of this report, was undertaken in the field of Work Based Learning Studies in Higher Education, with the principal empirical research data collected and analysed between June, 2001 and January, 2003.

The key issues for investigation related to:-

- philosophical and educational underpinning for Work Based Learning
- empirical research into the student experience of Work Based Learning

The setting for the project was the Centre for Work Related Studies at Chester College of Higher Education.

The context of the research was that of the place of Work Based Learning in the Chester College of Higher Education curriculum.

The principal method of research was the case study, with sub research methods:

- literature search
- questionnaire to 312 WBL students (June, 2002)
- semi-structured interviews with 31 WBL students (June to December, 2002)

### Publications resulting from the research:

- The Place and Status of Knowledge in Work Based Learning; November, 2002; in Knowledge, Work and Learning; Conference Proceedings of the Work Based Learning Network of the Universities Association for Continual Education; p162-170
- A More Holistic Form of Higher Education: the Real Potential of Work Based Learning; December, 2002; article in Widening Participation and Lifelong Learning: The Journal of the Institute for Access Studies and The European Access Network; Staffordshire University; Vol.4, No.3; ISSN 1466-6529
- Learning About Learning through Work Based Learning (provisional title); proposed 2004; chapter in Learning About Learning (provisional title); Kogan Page (for Institute of Learning and Teaching in Higher Education)

In addition, the following article is under consideration for publication:

• Towards a philosophical underpinning for Work Based Learning: the Ontological Perspective

In addition to this Report for the University, a Report setting out recommendations in respect of Work Based Learning provision has been produced for Chester College.

### Main findings:

- That there is evidence to suggest that WBL has the capacity to engage learners in more holistic ways of being and knowing
- That there is every justification for HE to recognise the workplace as a bona fide site of learning
- That the central role of critical reflection in WBL is recognised by learners, though much work needs to be done in terms of its facilitation
- That WBL may be considered to have a sound philosophical base in both epistemological and ontological terms
- That WBL offers a distinctive pedagogy worthy of HE

# Chapter 1 Introduction

### PART\_A

### **Background**

#### Introduction

The starting point for this project was my view that, in the context of justifying the place of Work Based Learning (WBL) in the Higher Education (HE) curriculum, the pragmatic argument alone is insufficient. Having been immersed in Work Based Learning at Chester College of Higher Education for more than a decade, I was well aware of the arguments of its opponents as well as those of its supporters concerning the issue of its admissibility into the curriculum. From my reading of the existing literature on WBL, which is growing but not extensive, I was aware that what had been written, especially in terms of a rationale for its existence, tended to focus on higher education's responsiveness to the present political, social and economic imperatives (what I refer to as the pragmatic argument for Work Based Learning). This alone did not seem to me to be a sufficiently convincing reason for its admission in to higher education. My view, which has provided the rationale for this project, is that, if there is to be an argument for the justification of Work Based Learning in the higher education curriculum, principally it must be made on philosophical and educational grounds.

I recognise at the outset the potential for criticism from a positivist perspective through my use of the word "justification", on the grounds that I am simply seeking to justify what I do and, therefore, my work is essentially subjective. In the section that follows, I set out my professional experience through which I have developed my pre-understanding in respect of the issues that are the concern of this project. It is the knowledge developed in this context that has led me to undertake the investigation commented on in this report, together with the desire to further enhance my professional understanding. Given that this research is inextricably bound to my every day work it would be difficult to deny a subjective interest. However, even though it has been bound up with and sustained by my professional concerns, I have attempted to undertake it in a scholarly way and, therefore, hope to have avoided the worst excesses of subjectivism.

The definition of Work Based Learning that I am using in the context of this Report is that of fully accredited, negotiated, modules or programmes of planned learning through work delivered by Higher Education providers. This definition necessarily excludes students' non-assessed learning through part-time employment, sandwich placements which are not accompanied by a clearly defined learning agreement and not subject to assessment, other than, perhaps, on a pass/fail basis, and any other form of non-accredited work experience. It does, however, allow for informal learning where that learning is carefully identified and evidenced and assessed for credit for prior experiential learning as part of a planned programme of Work Based Learning, where that prior learning is deemed to be relevant to, and congruent with, the planned outcomes of study. The definition of Work Based Learning that I am working with implies that students are assessed, using explicit assessment criteria, against agreed learning outcomes which are level related and require evidence of learning such that

equals any other subject or field of study within the higher education academic curriculum.

### Personal biography & what I brought to the study

I have been a member of the academic staff of Chester College of Higher Education for more than twenty years, initially teaching Theology and Religious Studies to both undergraduates and postgraduates and, from 1990, having involvement with Work Based Learning, at first gradually and finally, from 2000, full time. My arrival at the College in the early 1980s coincided with the introduction of a compulsory Work Experience scheme for undergraduate students on full time non-vocational degree programmes. This provision was developed and enhanced into a double module of Work Based Learning as a result of a shared government-funded research project carried out between 1990-1992. The research involved the University of Liverpool and Liverpool John Moores University with Chester College taking the lead role, and the aim was to assess the viability of an agreed model of Work Based Learning that might be deployed across the three institutions with students on full-time nonvocational degree courses. I was appointed in 1990 (on a 2 basis) as the Project Officer for Chester College. The model of Work Based Learning that has evolved at Chester since then is arguably one of the largest and most sophisticated models of its kind in UK HE today with, each year, more than 550 students on full-time degree programmes undertaking a fully accredited double module as part of their level 2 studies. There is a taught element to it in that students spend the first week of the double module on an intensive College-based Support Programme followed by six weeks in placement, concluding with a week back in College for debrief and assessment purposes. The scheme is quality controlled and assured through the usual College Quality Assurance (QA) procedures including the appointment of three External Moderators under an External Examiner.

Given that it is really only since the early 1990s that Work Based Learning began to emerge as a serious area of study at higher education level, Chester College may claim to have been involved in that pioneering work. Its definition of Work Based Learning, however, was limited to that of an accredited double module with students gaining marks for the demonstration of their learning achievements through workbased projects. In other Higher Education Institutions (HEIs), WBL was developing along different lines with a focus on partnerships with businesses and organisations for the provision of full programmes of learning through work for people in employment who would be regarded as part time students of the University. Middlesex and Portsmouth Universities, among others, were involved in developments within this definition of Work Based Learning. Having been appointed in 1995 as Head of Work Based Learning at Chester College (on a .8 basis), and aware of such developments elsewhere, I set out, with others, to devise a programme of WBL for people in work to undertake continuing professional development through flexible, negotiated, fully accredited, work based study routes similar, in many respects to the Middlesex model. The Work Based & Integrative Studies framework, offering the full range of academic awards up to and including Master's level, was validated by the College in 1998 and, subsequently, revalidated in January, 2003.

As a result of securing Higher Education Reach Out into Business and the Community funding in July, 2000, Chester College set up the Centre for Work

Related Studies and I was appointed Centre Director on a full time basis. Rapid growth in Work Based Learning activity ensued with a commensurate increase in staffing. Although issues concerning the appropriateness of the College's engagement with Work Based Learning were not particularly burning at that moment, there were murmurings of discontent, especially among some academic staff, concerning the growth of activity in, what they considered to be, largely un-chartered and unproven territory. This reinforced my strong feeling that the new Centre needed the assurance that it was being built on rock (i.e. sound underpinning philosophical and educational arguments) and not sand (i.e. pragmatic arguments) and that, if necessary, it could engage adequately in debate on matters concerning the place of WBL in higher education. There were also issues concerning the development of a research profile for the Centre, given the College's push to increase, overall, its research activity.

As already stated, I was the Project Officer for Chester College (1990-92) in the research project (shared with the University of Liverpool and Liverpool John Moores University), which led to the development of a framework for the award of academic credit for Work Based Learning for full-time students on non-vocational degree programmes. I was responsible for designing and delivering the Chester version of the jointly approved model. I also designed, with others, the Work Based & Integrative Studies framework, which is the structure through which Chester College delivers programmes of Work Based Learning to its part-time undergraduate and postgraduate students.

Again, as already noted, since 1995, I have been successively Head of Work Based Learning and, most recently, Director of the Centre for Work Related Studies at Chester College and, thus, well placed to undertake research in the areas of Work Based and Work Related Learning. With the establishment of the Centre in July, 2000, the College was able to capitalise on a number of government initiatives such as the Graduate Apprenticeship scheme, the University for Industry Learning through Work framework and training programmes (funded by the North West Development Agency) for the mobile telecommunications industry. These have provided me with further opportunity for focussing on innovation in Work Based Learning.

Given my previous study with Middlesex University for a Masters award in Work Based Learning Studies (awarded 1998), I was in a position to submit a RAL claim at Level 4 in respect of Research Methods. I am also the author of a number of publications which are either directly related to Work Based Learning or offer insights which inform thinking about WBL. This meant that I was in a position to submit a substantial claim for RAL at Level 5.

I maintained in my planning submission (DPS4521) that, overall, my substantial experience of WBL Studies in HE at a high level of operation, when viewed in direct relation to the focus of my proposed study, provided for an entirely coherent programme and made me an entirely suitable candidate to carry out the Programme as proposed.

#### RAL at level 5

The focus for my L5 RAL claim was that of leadership in curriculum design and innovation in Higher Education. This mirrored precisely the overall focus of my D.

Prof. Programme where the reference is to Work Based Learning. The work referred to in this claim directly underpinned my proposed project through its concern with adult learning and the use of research strategies designed to uncover new insights into how adults learn. Social psychology was the main disciplinary focus for the articles in section 2 of my claim, and that discipline has underpinned much of my project research activity. Given the direct relevance of the articles I submitted for my RAL claim, together with the volume, and the publishable quality of the work, I was awarded the maximum RAL claim of 120 credit points at level 5.

Published articles that focused directly on the innovative work that I had undertaken or had responsibility for in the area of curriculum design included:

- A Comparative Analysis of Work Based Learning Undergraduate Modules at University College Chester and University of Luton; Malcolm Bailey and David Major; in Local Economy Quarterly; 1998, Vol.5, No.4; University of Luton
- Pioneering Values and Valuing in a College of Higher Education; David Major; in NAVET Papers, Vol. X, Nov. 1994; National Association for Values in Education and Training
- Dialogue in Assessment; David Major; in Assessing Capability in Degree and Diploma Programmes, edited by Mantz Yorke; 1995; Centre for Higher Education Development, Liverpool John Moores University

Published articles that related to some of the issues that I had worked on which had informed my thinking in relation to curriculum design and innovation included:

- Autonomy and Religion: A Psychological Approach; David Major; in Modern Believing; Oct. 1994, Vol.XXXV, No.4; Journal of the Modern Churchpeople's Union
- Relationality and Religion: A Psychological Approach; David Major; in Modern Believing; Oct. 1999, Vol. 40, No. 4; Journal of the Modern Churchpeople's Union
- An Analysis of the Teaching Styles of Jesus, the Buddha and Socrates in the Light of John Heron's Six Category Analysis of Counselling Interventions;
   David Major; in Modern Believing; Oct. 1997, Vol. XXXVIII, No.4; Journal of the Modern Churchpeople's Union
- A Critical Examination of the Place of "Belief" in NLP; David Major in NLP World; Nov. 1996, Vol.3 No.3; Intercultural Journal on the Theory and Practice of Neuro-Linguistic Programming (Refereed)
- Shaping the Tools: Study Skills in Theology; Ruth Ackroyd and David Major; 1999; Darton, Longman and Todd (Book)

Bid documents that I had written which had been successful in securing funding for curriculum design and innovation included:-

- Higher Education Reach Out into Business and the Community Fund, 2000
- North West Development Agency, Skills Development Fund, 2000
- University for Industry/Negotiated Work Based Learning (Learning through Work) pilot, phase 2
- Higher Education Funding Council for England for Development funds and Additional Student Numbers for Graduate Apprenticeships, 2000

Thus, I came to my D. Prof. studies with a substantial portfolio of evidence that was closely aligned with the research to be undertaken as the main element of my doctoral programme. This included empirical research reported on in the articles Autonomy & Religion and Relationality & Religion, as well as literature based research, for example, the article on Neuro Linguistic Programming, as well as writings on study skills, such as my co-authorship of Shaping the Tools, and writing up practitioner research, as with the jointly written article on a comparative analysis of two programmes of Work Based Learning.

The bid documents are also relevant in the context of my D.Prof. programme in that they provide evidence of my awareness of issues pertaining to WBL in the HE context. Since my appointment as Head of Work Based Learning at Chester College in 1995, I had followed closely developments in this field of study and monitored ways in which government was promoting HE-Business interaction. I was fortunate in that the College senior management team saw the growth potential of WBL, gave me freedom to set up the Centre for Work Related Studies in July, 2000, and allowed me to develop the work of the Centre as I saw fit. By this time, I had done sufficient background work, especially in terms of putting in place a framework for academic awards relating to WBL, and in building up relationships with potential partners, to be able to tender for business opportunities. Through considerable success in attracting funding, I have been able, in the past two and a half years, to increase Centre staffing from 3 to 18 (plus 20 part-time WBL Tutors) with a turnover in excess of £1 million per annum.

All of these activities, both in terms of publications and Centre developments, have been integral to my D.Prof. studies in that they have fed into my central project which has been built on and around them. Thus, they form an integral and coherent part of the overall award.

#### The pragmatic argument for WBL

I have referred a number of times to what I term the "pragmatic argument" for Work Based Learning and consider that, before proceeding further, this warrants some discussion. The term 'pragmatic' is frequently used to indicate that a course of action is being taken for practical or convenient reasons rather than for reasons that have a clear theoretical or principled basis supportive of a course of action. Thus, in the context of Work Based Learning, it is clear that successive governments in recent years have sought to influence the HE curriculum in a variety of ways in order to make it more relevant, as they would argue, to the needs of the economy and society in general. Using a carrot and stick approach, incentive funding of various sorts has been offered to the sector, principally in order to address the issue of the employability of graduates and the relevance of the curriculum to their lives after HE. At the same time, there has been a planned increase in the number of people taking up places at Universities and Colleges of HE, raising the participation rate to unprecedented levels and leading to what has become referred to as the massification of HE. If the present UK Government is successful in its aspirations, the rate of participation is set to increase even further and the pressures on HEIs to address issues concerning the employability of students will be even greater. Even now, through the present concern with Key Skills, HEIs are being required to further engage with issues of vocationalism and competence and the place of so-called employability skills in the HE curriculum, allegedly for their benefits to students and society. In addition, degree and sub-degree provision with increased vocational relevance is being promoted through the likes of the Graduate Apprenticeship initiative and the Foundation Degree.

With growth in numbers has come diversity of delivery methods, partly in order to cope with the increase in student numbers but also to encourage growth itself. Elearning, distance learning and various forms of part-time study have increased commensurately with the overall growth in the sector, as has Work Based Learning. Although the extent of higher education's involvement in WBL is not uniform across the sector, it is indisputably a growth area and, in those HEIs that have invested in it, such as Chester College, it is proving to be a popular option. There is, no doubt, a compelling pragmatic argument for the place of WBL in the HE curriculum. The Government, in particular, looks favourably upon it because it appears to address a number of their key objectives: it is not only widening participation and enhancing students' employability but it is engaging HEIs with businesses, requiring them to take the latter's needs seriously and, arguably in so doing, making a direct contribution to socio-economic needs. HEIs may also consider it to be an appropriate arm of their activities, giving them, as they see it, increased credibility outside of the sector and creating the opportunity to engage more directly with the world of business and commerce. Clearly, however, pragmatic arguments alone cannot and should not prevail in terms of a justification for the place of WBL in the HE curriculum. Not only must proponents of WBL reckon with the rear-guard action mounted by some staff in the Universities and Colleges who are willing to fight tooth and nail against what they regard as the further dilution of the HE curriculum through what they consider to be spurious interlopers, such as WBL, but it would be underselling the concept of Work Based Learning itself by not providing it with a sounder and more lasting justification.

In referring to the "pragmatic argument for WBL", I am not intending to convey a value judgment. It is simply a shorthand description of reasons for the inclusion of Work Based Learning in HE that do not emerge directly from philosophical or educational arguments. I recognise that, within what I have termed the "pragmatic argument", there may be a range of reasons why higher education might offer such programmes, some more strongly grounded in reasoned educational argument than others. For example, there seems to be a strong prima facie case on educational and epistemological grounds for the sort of partnership arrangement cited by Garnett et al (Boud & Solomon, 2001) where there are clear benefits in terms of intellectual capital gains for both the University and the employer through a negotiated programme of Work Based Learning. At the other end of the spectrum may be a situation where a source of government funding is available that is accessed by a HEI principally for the revenue it brings rather than on the basis of a clearly articulated educational iustification. My view is that, whatever the initial reason for its involvement in Work Based Learning, ultimately the HEI so involved needs to satisfy itself that WBL is an activity that is soundly grounded in a philosophy of higher education that can be clearly articulated and subjected to rational debate. Until this has been achieved, however worthy the activity may appear to be, it is bound to a pragmatic rationale that may not be adequate if put to the test.

### The importance of the philosophical & educational case for WBL

It was against the background I have outlined above that I came to the D.Prof. studies programme with the aim of furthering my own understanding of the arguments that might be developed in relation to an underpinning for Work Based Learning on philosophical and educational grounds. It seemed to me that, with full responsibility for the College's Work Based Learning provision, it was crucial for me to arrive at a position where I could engage in philosophical and educational debate concerning a justification for the College's involvement in Work Based Learning, and not be forced on to the back foot by relying on the pragmatic argument alone. My reading of the literature on WBL at that point led me to the conclusion that this task had not really been undertaken in any serious way, as far as I could tell, by anyone else, leading me to conclude that, through engagement with the D.Prof studies, I might make a contribution at least to justify Chester College's involvement in Work Based Learning if not to offer insights to a wider audience.

A product of my D.Prof. programme was to be a Report to the Senior Management Team concerning Chester College's Work Based Learning provision (Appendix E). One of the main purposes of this report would be to seek support for the further expansion of the Centre's activities and, given the publication of the White Paper, *The Future of Higher Education* (January, 2003), such a report proved timely. Although the College has many supporters of Work Based Learning it also has its critics, which include members of the SMT itself. Therefore, it seemed to me to be vitally important that I set out in clear terms the educational and philosophical case for Work Based Learning (a) to explain to the College, and to offer it reassurance, that its involvement to-date in WBL is entirely justifiable, and (b) to offer it a well worked out position to demonstrate how it can build on, and further develop, its Work Based Learning activities. Building such a case would also be important in order to counter the critics of Work Based Learning though, given that WBL challenges traditional HE, it has to be accepted that such critics may be determined not to be convinced by rational argument.

I considered that making a sound educational and philosophical case for the justification of Work Based Learning in the higher education curriculum would involve more than the relatively superficial arguments that myself and others had articulated for the purposes of the validation of WBL modules and programmes, important and necessary though that was. Portwood & Garnett (Portwood & Costley, 2000) recognise the relevance of this factor for institutional politics. What I hoped to achieve was a deeper and more thoroughgoing examination of philosophical and educational issues that might lead me to a greater understanding and awareness of (a) a knowledge base for WBL, (b) the way in which learning through WBL might have a wider impact on individuals than the cognitive alone, and (c) of the ways in which individuals learn through Work Based Learning.

While the main impetus for my research was a local concern, it was clear to me that my theoretical work, in particular, would have relevance to a wider audience. Thus, the articles I have written on the basis of this research attempt to set out philosophical and educational reasons which are intended to be supportive of the HE sector more widely as it seeks to further engage in Work Based Learning.

### PART B

### Research focus & key aims and purposes of research

Early on in my thinking about this project, I had to make decisions about its scope and the way in which it would be conducted. My first priority was concerned with the development of Work Based Learning provision at Chester College. Given that considerable developmental work has been undertaken in WBL at Chester in recent years, I considered that, in order to convince the College's senior management team of the desirability of further expansion of the provision, it would be more important to provide them with evidence of the effectiveness of the provision thus far, rather than research the areas of growth as I envision them. Thus, I decided to concentrate on gathering evidence of the student experience of WBL at Chester College in an attempt to demonstrate the effectiveness of existing provision and to focus on the distinctive contribution that Work Based Learning makes to Chester College's overall portfolio of activities.

However, it seemed to me that this alone was not sufficient, and that I needed to undertake, alongside this, an exploratory investigation into the philosophical and educational underpinnings for WBL in higher education. Of course, I realised that this would be a massive undertaking for a team of scholars if anything of real worth were to be produced, and that I could do no more than begin to make a start for myself. I had felt for some time the need to undertake some serious work on the theoretical underpinnings of Work Based Learning, having read some of the emergent theories relating to it and having mused on many occasions on what theoretical perspectives on WBL might look like. Thus, this wider research was an important matter of professional development for me.

It also seemed to me, on the basis of my experience of managing WBL at Chester College, of crucial importance that I undertake this task for two main reasons. First, because of the views held by some colleagues at Chester that Work Based Learning has no real place in higher education and is only in the curriculum by dint of government intervention. I felt that if I could begin the task of articulating a clear philosophical and educational rationale for WBL in HE, there would be a better basis for debate. Second, and more importantly because (a) I believe that this is a task which has to be undertaken for the credibility of Work Based Learning and the credibility of all those engaged in it, as it moves towards full acceptance as a recognised part of the curriculum in many HEIs, and (b) I felt that, until this task is attempted, it would be unreasonable to put a case for the further expansion of WBL at Chester to the College's SMT, given institutional politics and the potential derailing activities of the anti-WBL lobby.

Thus, the overall purpose of the research was to conduct a critical inquiry concerning the justification of programmes of Work Based Learning within the overall curriculum provision of Chester College.

My key aim, was defined as:

to investigate the nature and distinctive features of Work Based Learning in order to demonstrate that, on philosophical and educational grounds, its inclusion in the Chester College curriculum is entirely justified.

This aim was accompanied by the following objectives:

- to undertake empirical research into the student experience of WBL at Chester College in order to provide data to support developments in the College's WBL provision
- to review and analyse literature that deals either directly with WBL in a HE context, or has implications for it, in order to begin the task of developing a theoretical underpinning such that might be used to support arguments for the growth of WBL provision at Chester College
- to undertake research into pedagogical issues associated with WBL in order to demonstrate its distinctiveness as a way of learning in higher education

In respect of issues concerning the nature of Work Based Learning, my intention was:

- to investigate the WBL knowledge base with a view to identifying a broader range of knowledges generated through WBL (**Epistemology**)
- to examine the potential of WBL for disclosing self-knowledge through the process of critical self-reflection (Ontology)

In respect of the distinctiveness of Work Based Learning, my intention was:

• to examine the educational case for WBL in respect of its potential to contribute to the learning of individuals (Pedagogy)

My original intention had also been to devise methodologies for the facilitation of Work Based Learning. However, this has not yet been achieved. My Report to the Senior Management Team of Chester College (Appendix E) makes recommendations, in the light of my research and the recently published White Paper on the Future of Higher Education, concerning the further development of Work Based Learning provision at the College, and their decisions are awaited. The research has also led to discussions within the Centre's undergraduate WBL Development Group and will inevitably lead to modifications to existing approaches in time for the 2003/04 cohorts. Thus, the intention remains pertinent in that, subsequent upon the research, the aim is still to devise methodologies for WBL facilitation but this work has not yet been completed.

The theoretical research did present me with some difficulties in determining the actual scope of the project. Clearly its boundaries seemed potentially limitless. However, in my reading of theoretical perspectives on Work Based Learning, and

from my pre-understanding of philosophy and educational theory, it seemed to me that there were three areas that needed to be addressed, namely epistemology, ontology and pedagogy. Again, any one of these would have been sufficient to focus on, but my feeling was that they needed to be thought of as interrelated and that my purposes would be better served by keeping, as far as possible, all three in the frame at any one time. I identified a corpus of texts on Work Based Learning that I would make reference to, together with a number of theoretical perspectives that I felt would be important to consider if anything worthwhile were to be produced by me by way of insights as to how a philosophy of Work Based Learning might begin to take shape. I determined that I would stay within my definition of Work Based Learning, thus excluding, to a large extent, a considerable body of literature on so-called competence-based or vocational and professional education. Chapter 3 consists of a discussion of the texts that I did make use of in the construction of the arguments that form the basis of my products for the D.Prof. award.

There is a sense, then, in which my project has a very close focus on research into the student experience of Work Based learning at Chester College (micro activity) while, at the same time, having very broad concerns relating to philosophical and educational perspectives that might help to formulate arguments to support the existence and the development of WBL curriculum provision both at Chester College and indeed elsewhere (macro activity). In Chapter 2 of this report I attempt to show how, under the concept of the case study, these dual concerns are held together, and in Chapter 5 bring together evidence from both in making the case for Work Based Learning.

# **Chapter 2 Research Methodologies**

### The case study

The case study concept, as an over-arching research strategy, has informed my thinking about the way in which research for this project should be conducted. Given that there is no single model for the conduct of a case study (Yin, 1994) but rather some broad principles to consider, it may be that I am using the idea in a fairly loose sense. However, it seemed to me to have the advantage of providing a broad framework in which various sub research strategies might be explored. It also enabled me to take account of the local nature of the enquiry (with the empirical studies being conducted exclusively with students of Chester College and with the overall aim of the project focused on informing the College's understanding of Work Based Learning). A further advantage was that, while operating within the interpretive tradition of research (Cohen et al, 2000), it did not exclude the quantitative approach perhaps normally associated with positivist thinking.

In this case, the major empirical research methods used are the qualitative semistructured interview (Yin {1994} observes that the interview is regarded as one of the most important sources of case study information {p84}), and the quantitative questionnaire survey (again, Yin notes that a good case study will want to use as many sources as possible {p84}). The literature review accounts for the third major research method. Following Garnett's understanding of the place of the Literature Review in D.Prof. projects (Garnett, 2002), I have chosen to see the literature I have reviewed both as informing the research methods (in particular, a main function of the literature review in this research was to help to shape and sharpen the questions used in both the qualitative and quantitative surveys) and as being an integral part of the research, and therefore a research method, itself, hence the ordering of the chapters in this project report with the literature review following the chapter on research methodologies rather than preceding it.

The case study model has also helped me to reconcile my aspirations for a wider applicability of my research findings with the fact of the largely local focus for empirical data collection. Given that I needed to draw heavily on literature in order to inform and clarify my thinking in respect of the philosophical issues I needed to deal with to achieve the central aim of my study, I felt that there was a sense in which the arguments I formulated as a result of this work would have wider applicability than Chester College alone (indeed I have been presumptuous enough to publish on this basis). The interpretive research model, provided for by the case study, deflects the issue of generalizability to some degree and focuses more on the issue of relatability. Thus, Yin's definition of the case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 1994, p13), while placing the research in a local context, is counter-balanced by the notion of external Here Yin makes the point that "survey research relies on statistical generalization, whereas case studies rely on analytical generalization" (p36). He goes on to argue that, "in analytical generalization, the investigator is striving to generalize a particular set of results to some broader theory" (p36). Thus, it seemed to me that the case study, as an overarching research strategy, would enable me to embrace the literature review as a bona fide method of research (and not use it just as a way of identifying gaps in knowledge which the research would seek to fill, as in the more conventional understanding of the role of literature in doctoral studies {Garnett, 2002}), and for it not only to help to shape the local study but for it to be seen to relate to broader contexts.

However, I am aware, as Yin's definition implies, that the case study provides for a research situation where contextual conditions may be highly relevant to the object of study. In this case, Work Based Learning provision at Chester College cannot be divorced from the College itself. Historically such provision has evolved during a period of more than twenty years and is inextricably bound to the history of the College over that period, including its mission and purpose and the various situations it has found itself in during that time. Although the articles that I have written (as the products of my D.Prof. studies) seek to engage in the wider debate concerning Work Based Learning as a national and international phenomenon, I cannot escape the fact that my experience of Work Based Learning is grounded in my broader experience of Chester College, and that that experience has inevitably shaped my thinking about it. Thus, I would argue, these products of my research can also be viewed within the broad context of the case study. My hope is that my readers will be able to relate what I have to say to their own contexts thus avoiding, to a large degree, issues of the extent to which my findings, and the conclusions I draw from them, are generalizable.

The case study is, of course, contested as a method of research and Cohen et al (2000) point to three areas of weaknesses identified by Nisbet & Watt's (1984) study (Cohen et al, p184). In summary there are concerns about:

- generalizability (though it is acknowledged that an exception is "where other readers/researchers see their application", hence the importance of the concept of relatability),
- that they are not easily open to cross-checking, thus, they may be selective and subjective
- problems of observer bias

Although I recognise these as serious issues to be considered by the researcher who chooses the case study route, I feel that the particular model of case study I have selected avoids the worst excesses of the concerns expressed. For example, I was not engaged in participant-observation as a research method nor involved in collecting vast quantities of data consisting largely of my own interpretation of incidents/events, to which some of these concerns refer. I have already commented on the issue of generalizability and note that the Nesbit & Watt analysis allows for the exception where other readers or researchers recognise the applicability or relatability of findings and conclusions to their own contexts. I have also already commented briefly on the issue of subjectivity, recognising it as an issue in the context of my research. However, my view is that, given the inevitability of researcher bias and subjectivity evident in any form of research, the research methods I have selected each have their own checks and balances which I have attempted to comment on in the sections that follow. Given that the case study is within the interpretative research paradigm there is, by definition, a subjective element though, it seems to me, that that is not necessarily to be construed as a weakness but rather as an important feature of the research. It also foregrounds the reality that some research topics, principally those within the humanistic sphere, are only open to approaches which cannot

possibly avoid the subjective element. What seems important here is not that the subjective be recognised as a weakness but that it be taken account of as an inevitable aspect of the research method with appropriate allowances made. I am particularly taken, for example, by the comment of Cohen et al (2000) that "significance rather than frequency is a hallmark of case studies, offering the researcher an insight into the real dynamics of situations and people" (p185). A judgment concerning "significance" is inevitably a subjective one, based as it is on the researcher's interpretation of the data, but one that may, nevertheless, be crucial in terms of offering an insight into what is going on. It has to be left to others to judge whether, on the basis of the evidence available, the researcher's judgment was sound.

The case study, then, like any other research method, can be analysed in terms of both its strengths and its weaknesses. For my purposes, the gains seemed to outweigh the disadvantages, with the principal gain being that, in Yin's (1994) words, "as a research strategy (it) comprises an all-encompassing method" (p13). With reference to Stoecker, (1991), Yin notes that "the case study is not either a data collection tactic or merely a design feature alone but a comprehensive research strategy" (p13).

Yin (1994) states that it is necessary to construct a preliminary theory related to the topic of study (p27). In this case I have derived the theory essentially from the overall aim of the study, thus, the case study will show that the nature and essential features of Work Based Learning make it an entirely appropriate activity for Chester College to engage in.

### Literature Review

As indicated above, the literature review constitutes a major element of this research project. It had the purpose of clarifying for me some of the questions to be asked in the empirical studies but, in the context of my overall project, it was crucial in terms of the issues concerning the **nature** of Work Based Learning where I needed to draw on philosophical perspectives in order to develop an interpretative framework for the empirical research data. Here I was engaged, to some extent, in an activity perhaps more akin to the conventional approach of the PhD, though Garnett's unpublished paper on the place of the literature review in the D.Prof. project, helps to clarify this issue. Garnett argues that, in the case of the D.Prof., the literature review is "likely to be focused on enhancing aspects of an already established project theme" rather than being crucial in determining "knowledge gaps". Referencing Gummeson (1991), he considers that a feature of the review is that it is likely to be "informed by considerable and high level pre-understanding of the professional area" (Garnett, 2002).

While agreeing with Garnett to a large extent, in my particular case I needed to review thoroughly the existing literature on Work Based Learning in order to satisfy myself that my pre-understanding of the "knowledge gap" that I believed existed, did truly exist. I have already identified this "knowledge gap" in chapter 1, where I expressed my view that no serious work had been undertaken in the matter of a philosophical underpinning for Work Based Learning in a higher education context and that, thus far, it appeared to have survived on pragmatic arguments alone. I expressed the view

that this was an inadequate basis on which to make a claim for the admission of Work Based Learning in to the HE curriculum.

The purpose of the literature review for this project was, therefore, three-fold:

- to undertake a thorough review of the existing literature on Work Based Learning to determine whether or not substantial work had been undertaken in respect of a philosophical underpinning for it
- to identify and to draw on philosophical and educational perspectives that might be utilised in an attempt to begin the task of articulating an underpinning for Work Based Learning such that might assure a higher education institute of the appropriateness of its inclusion as an aspect of HE provision
- to assist with the identification and clarification of questions for the empirical studies

### Qualitative survey

### Sampling, Selection & briefing

Semi-structured interviews were carried out with 31 learners, during the period June to December, 2002. 13 were full-time students on the College's undergraduate Work Based Learning scheme, with 11 part-time undergraduates in full-time employment and 7 part-time postgraduates in full-time employment. There was a mix of both female and male respondents in each group, with an overall preponderance of female students. The respondents were also of various ages ranging from the conventional age of entry into higher education through to mature students of middle-age. As neither age nor gender were defined as issues for this research, no attempt was made to further clarify issues of either and no account was taken of these characteristics of my respondents during the analysis of the data. (See Appendix K for a sample interview transcription.) The semi-structured interview method was chosen because of its particular suitability within the overall context of a case study (Yin, 1994) and because of its ability to provide a clear interview guide with a set of key questions while, at the same time, offering a flexible approach permissive of further questioning in order to prompt, to probe meanings, and to respond attentively and appropriately to the interviewees in order to achieve a depth of response. It also seemed particularly appropriate because of its strong relational dimension and the concern I had to engage in a form of research that had some of the features of cooperative enquiry, though I recognise that this particular approach to research only borders on approaches to research that might be considered new paradigm.

Interviewees were selected in a variety of ways. Some were self-selected; for example, full-time undergraduates on the College's WBL scheme were invited to put themselves forward for interview and those who did were interviewed. (A colleague from the Centre for Work Related Studies interviewed six of the subjects from this category, and one part-time postgraduate student, with me interviewing the remaining full-time candidates along with all of the other students from each category.) A number of part-time postgraduate students on the Graduate Apprenticeship scheme were approached directly by me, as were a number of other part-time undergraduate and postgraduate students. I was, of course, aware that such a direct approach may have made it difficult for them to refuse and so I did offer them 'get out'

Those I did interview had expressed their willingness and a desire to be involved in the research partly perhaps because, as it subsequently transpired, they had all had a positive experience of Work Based Learning. I was more concerned, from a moral point of view (simply because arrangements had been made via a third party), about the way in which a group of employees on a corporately negotiated WBL programme (through the University for Industry Learning through Work scheme) had initially been approached with the request to participate in the research. This meant that, in my briefing session with each student prior to the commencement of the interview, as well as explaining the purpose of my research, as I did to all the interviewees. I also emphasised with members of this particular group the opportunity to withdraw if they did not feel entirely comfortable in participating. All of them assured me that they had not been coerced in any way and that they were more than prepared to assist with the research. I did, however, have an uneasy feeling that they may have been put in a position where they felt unable to refuse simply because the request had come from their line manager. Had I had more time available to me to make alternative arrangements, I feel certain that I should have approached this differently.

I am aware that there is a further potential issue relating to selection which concerns those students who I did not get to interview who, for one reason or another, may not have had a positive experience of Work Based Learning. Given that the majority of my respondents were self-selected (this applied to all full-time undergraduates of whom only 13 out of a total cohort of more than 500 were interviewed), they may not be considered to be an entirely representative sample. For example, all of the students interviewed, whether full-time or part-time, appeared, overall, to have had a positive experience of Work Based Learning and spoke positively about it. Clearly, in each case, and in answer to each question, there were various levels of response, not all of which were high in praise of WBL but, overall, a negative or dark side did not appear. I can either assume that there were no such cases (which, on other grounds, I consider to be unlikely) or that those who had not had a positive experience did not put themselves forward for interview, which seems to be more likely. I am aware that, each year, out of a cohort of more than 500 full-time undergraduates undertaking Work Based Learning, a small minority do not have a positive experience of it. This may be for a host of reasons, though frequently involves the attitude of the student themselves or occasionally the employer, rather than the potential of the workplace to yield insufficient learning. Rarely either is it because a student cannot adapt to learning in this way. There was, however, one part-time undergraduate respondent in full-time employment who, prior to undertaking Work Based Learning, had been involved in a serious situation of conflict with her line manager who, had she not been moved to another post, felt that she would not have been able to be involved in study of this sort. This is a reminder that the conditions must be right for learning through work to occur. There is also the potential for uncovering learning, especially about the self, that may not be particularly welcome. This may be especially the case in WBL studies where collaborative learning and critical self-reflection are key parts of the learning process and may lead to discoveries about the self that the learner may prefer to have remained unexposed. My research did not reveal any cases of this sort but it, nevertheless, seems important to acknowledge the likelihood of their existence among those I did not interview.

### Conduct & transcription of interviews

Interviews were conducted face to face, either on College premises or in the workplace, with three interviews being conducted on the telephone because of distance and convenience. This inconsistency of 'place' does raise questions in relation to sampling. Whether or not my respondents interviewed at work would have responded differently had they been at home or attended the College, I have no means of knowing, though I suspect this variance had little influence on their responses. However, as Bird & Hammersley (1996) note, "the character of a discussion and the quality of material can show a marked contrast between an interview held in the formal circumstances of a teacher's office and one held in the informal ambience of a pub" (p92). In every case interviews were carried out in quiet and semi-private locations to avoid unnecessary noise and interruption and to create, as far as possible, a relaxed environment for the interviewees. I was aware of the importance of putting interviewees at their ease if they were going to talk freely and openly and I believe that I achieved this, though I was aware of my inclination to talk too much at times (though, hopefully, not at the expense of attentive listening) and recognise that the skilled interviewer speaks as few words as possible because it is the answers of the subjects that are important.

There was an attempt to keep each interview within a 20 to 30 minutes time slot, both for reasons of concentration as well as expenditure of time and energy in undertaking the tasks of transcription and analysis. However, another issue in respect of sampling is that the interviews did not take place at a consistent time of day. Thus, some were carried out during mornings, with others conducted in afternoons and some in the evenings. Little more can be said other than the acknowledgement that sampling in this respect was not systematic. Undoubtedly time of day influences mood, and mood influences what and how things are said. Similarly the time of the week might also have an influence with, say, possible differences in response on a Friday afternoon when compared with a Monday morning. Given logistical issues it was not possible to undertake more systematic sampling, though I recognise the issues it raises in respect of the representativeness of the data.

All interviews, with the permission of the subjects, were audio-taped and subsequently transcribed and analysed. Transcription was undertaken verbatim, rather than edited, with a note in brackets where long pauses, or laughter or other minor emotional outbursts occurred, in order to attempt to create more of a feeling for the interaction that had occurred during the interview. As Gillham (2000) notes, it is not possible to capture the dynamics of the interview in a transcription (p10), and Kvale (1996) observes that transcripts are decontextualised conversations (p164) so, it seemed to me that, the occasional bracketed comment, where appropriate, to indicate the reactions of the interviewer or interviewee, might prove helpful in enabling a better recall of the context. In the majority of cases, I undertook the task of transcription myself and, where I did not, I proof-read the transcription while listening to the taped interview. To check the accuracy of my transcribing and analysing skills, I asked a colleague to select, at random, one example from the batch of completed transcripts and make an assessment of my competence in this respect. My work was found to be accurate. Interviewees were also written to, following this process, and thanked for participating in the research and invited to comment on my analysis of their comments. No comments were received, which indicates that either the interviewees were content with my interpretation of their contributions or that they did not have the time or the inclination to respond.

### Interview guide

The interviews were structured around 8 questions (see box below) which provided the Interview Guide.

- Q1 I'd like you to think about the impact WBL has had on you as an individual. Has it changed your view of yourself in any way? If so, in what way(s)?
- Q2 Can you briefly outline the knowledge and skills you think you have gained through WBL?
- O3 How do you think you acquired this knowledge and these skills?
- Q4 In what ways did you deliberately set out to learn something new?
- Q5 Can you give an example of something you learned which was unplanned?
- Q6 The idea of critical reflection was introduced in (Support Programme or Methods module). Can you give an example of critical reflection in which you engaged during the (placement or project)? To what extent has reflecting critically changed the way you view (a) work, (b) yourself, (c) the world generally?
- Q7 Did you consciously, ar unconsciously, apply any WBL theories? If so, can you identify them and then describe how you were able to utilise them?
- Q8 Can you identify any knowledge and skills you gained from WBL that you have been able to use in other areas of study/contexts?

The questions were designed to explore further, with the interviewees, some of the issues raised in the questionnaire survey and to confirm or disconfirm the theory that Work Based Learning provides a more holistic form of higher education than do more conventional modes of teaching and learning (see, for example, my article at Appendix A). Thus, the questions were formulated in a way that attempted to elicit from the interviewees something of the impact that WBL had had on them, especially in relation to their view of self (as in Q1), as well as to attempt to identify something of their views on the place of knowledge in WBL (as in Qs 2, 5 and 7) and how they acquired it (as in Qs 3 and 4), and to assess the extent to which the ability to critically reflect and to critically self reflect had changed their views in relation to work, themselves and the world more generally (as in Q6). This latter area of research interest reflects Barnett's (1997) view that higher education should be preparing graduates who can reason critically, engage in critical self-reflection, and be prepared to engage in critical action (p 163). A central interest throughout this research has been to see whether or not WBL contributes significantly to the "curriculum for critical being" (p102) which Barnett claims higher education should be providing.

Two colleagues from the Centre worked with me in order to identify the questions pertinent to the research and to refine their wording. We were torn between a concern, on the one hand, to keep the number of questions to a minimum, in order not to overface the respondents and to keep the interview within manageable time limits and, on the other, to cover as much ground as we could, and felt we needed to, in order to address the research concerns. The 8 questions we finally arrived at seemed to us to strike a balance between the principal areas of research interest that I had previously

defined, namely the ontological, epistemological and pedagogical. Thus, questions 1 and 6 relate broadly to ontological issues, questions 2, 5, 7 and (to some extent) 8 (though its real intention concerns knowledge transfer) to epistemological issues, with questions 3 and 4 focusing on pedagogical issues. To get to the heart of these matters while, at the same time, trying to keep the language and phraseology of the questions as simple as possible, proved a challenge. Individual questions were trialled as part of this process before being piloted in the context of an entire interview. Modifications were undertaken to the wording in the light of feedback received and, even at the stage of agreeing the final list, we were aware of the range of ways in which the same questions could be expressed, though reasonably satisfied that the areas of questioning focused on were the ones we aimed to gather data on.

Having attempted to heed the advice of expert authors on the subject of interviewing to take care throughout the process of formulation to make questions as distinct from one another as possible, it was disappointing to discover, during the course of carrying out the interviews, how close to one another questions 3 and 4 were and how questions 7 and 8 lacked sufficient discrimination in terms of the responses they drew forth. In some ways this has proved to be no more than a minor irritant but it has reinforced for me that setting questions is a skilled part of the interview process.

### Interview analysis

Interviews were analysed using the technique of meaning condensation. Of the five main approaches to interview analysis proffered by Kvale (1996, p187) (categorisation of meaning, condensation of meaning, structuring of meaning through narratives, interpretation of meaning, ad hoc methods for generating meaning), condensation of meaning seemed to me to be the most appropriate, given the nature of the data and the purposes of the study. It also has the virtue, in my view, of being essentially phenomenologically rooted, as evidenced by Giorgi's (cited by Kvale) intentions in developing the approach in 1975, where the "methodological aim of the study was to use phenomenology in the service of qualitative research" (p194). Kvale quotes Giorgi as saying that his interests were "in demonstrating how rigour and discipline can be applied without necessarily transforming data into quantitative expressions", and of demonstrating "how one deals systematically with data that remain expressed in terms of ordinary language"(p194). The organising principle of this approach is in terms of identification of data into natural meaning units and then further identification of the central theme or themes within each natural unit. Thus, the interview is read through to gain some sense of the whole. It is then broken down into natural meaning units which, for convenience, I related to responses to the main questions. The unit is then analysed in order to identify the theme or themes that dominate it The themes are then expressed as succinctly as possible and then combined together in a descriptive statement, as shown in the extract below.

| Natural Unit   | Central themes |
|--|----------------|
| Question 1: We'd like you to think about the impact WBL has had on you as an individual and we're wondering if it has changed your view of yourself in any way and, if so, in what ways? |                |
| Yes, I feel WBL has had quite an impact and I'm not sure   | WBL has had an |

whether it's necessarily to do with how it was delivered to me or whether it's my own particular interests in this sort of thing coming together, but I found the reflection side of things quite a heavy impact because it was a lot more structured in terms of the way you looked at how you reacted to situations. I also found quite a lot of influence in terms of the looking at your strengths and weaknesses or your learning styles, and things like that, and how they are appropriate in different situations and so I found the whole thing quite interesting and I've done quite a bit of further reading around it over time, things like Brookfield's Critical Thinking and Goleman's Emotional Intelligence, stuff like that, because I found it quite an interesting process.

impact, especially developing the skill of critical reflection and learning about other WBL theories.

From what you've been saying you've obviously considered this far more than just superficially. You've read round it. Do you feel that it has changed your view of yourself in any way?

I think undoubtedly it has but I think the difference with me is that I've encountered it at several points over a couple of years. The thing I find is that the initial one (reference to u/g WBL) - I found one or two things interesting particularly the first time I came to it in terms of team roles, Belbin because, at the time I was also running for election with the Student Union for something when I first came across it and I found it quite interesting for the team role that I played and it very much fitted the role and that was quite interesting. Then I've come back to these kind of things in various courses or returning to WBL staff in College over time, or supervising work-based learners and I feel the set of repetition of these things over a few years finally meant that it was something that I thought about regularly in what I've done, instead of a one-off exercise.

Considers WBL has caused him to change his view of himself.

Some WBL theories have become ingrained in his thinking.

Summary Question 1. DA feels that WBL has made an impact on him, especially through developing the capability of critical reflection and learning about other WBL theories. He considers that WBL has caused him to change his view of himself and notes that some WBL theories have become ingrained in his thinking.

Issues of reliability and validity clearly impinge on this process, not least the accuracy of the researcher in teasing out the central themes from a natural unit. On the other hand, it is possible that any given statement may be open to a plurality of interpretations and suggesting that a statement has only one correct meaning may be an unrealistic demand for a degree of objectivity that is not feasible. However, some checks and balances were clearly needed given that I was entirely responsible for the analysis of all of the transcripts and so it was important that I obtained the services of a colleague to sample my work. Although one or two minor discrepancies were apparent, resulting from different perceptions of the main thrust of what a subject had to say, my work was judged to be sufficiently accurate for the purposes of the research, given that the researcher is, to some extent, engaged in the construction of meaning.

Although condensation of meaning is a proven method of interview analysis and one that, in the view of Giorgi, is loyal to phenomenological philosophy (Kvale, 1996), my criticism of it would be that it is essentially a reductionist approach to data analysis. I accept that this interpretation may be due to my deviation from the method in an attempt to identify those themes most commonly referred to by my interviewees. To gain some sense of the frequency of use of key central themes, and following the guidance of Gillham (2000) concerning content analysis, I undertook a further stage of analysis resulting in data more akin to a quantitative survey than the qualitative study I had intended (see Appendix L). Although this had seemed a logical step to me, it was not a sensible one, as it reduced the interviews to a list of key themes that bore no relation to the contexts in which they had first been identified by the subjects. So, while retaining the data in this reduced form for the purposes of identifying suitable statements for quotation and for producing a succinct reporting of findings in Chapter 4 (the more detailed presentation of findings, including extracts from the interviews, are to be found at Appendices F. G. & H, where the approach to reporting is more respectful of the integrity of the research method), it was necessary for me to take a step back to the descriptive statements to ensure that they remained the last line in the analysis (see Appendix M).

### Underpinning philosophy

It seems appropriate, at this point, to offer some justification for this method of research. Philosophically it is appealing to me, given the central importance it places on the relational dimension in arriving at knowledge and understanding (see my paper Towards a Philosophical Underpinning for Work Based Learning: the Ontological Dimension, Appendix D). Kvale (1996) discusses the post-modern view of the interrelational nature of knowledge (especially as influenced by Merleau-Ponty), which suggests to me that one could argue for the primacy of the interview as a research method in post-modern contexts. However, of the four philosophies, which highlight different aspects of the qualitative interview as a research methodology, outlined by Kvale (post-modern, hermeneutical, phenomenological and dialectical), as indicated already. I have tended towards the phenomenological, especially in terms of the way in which analysis of the interviews has been undertaken, whilst acknowledging that my approach, as is common in qualitative research, is something of a hybrid. With phenomenology as the prevalent underpinning philosophy of this qualitative research, my concern was to attempt to understand the experience of undertaking WBL from the subjects' viewpoint, thus describing this aspect of their world as experienced by the subjects themselves, and with the assumption that the important reality is what they perceive it to be. From my use of phenomenologically influenced methodologies in religious studies (e.g. Smart, 1973), I am aware that a certain bracketing out of the assumptions and prejudices of the researcher, together with empathetic understanding, is required if anything of the life world of the subjects is to be understood. In my role as interviewer I attempted to operate in ways compatible with that understanding, though must admit to finding that difficult at times. This is manifested in the transcripts themselves where it is clear that, at times, I ask leading questions and sometimes closed questions, indicating a tendency to guide the interviewee more towards my own viewpoint. Although this reflects the common problem of researcher bias, clearly it should not occur and, in my analysis, I have tried to indicate where an interviewee response may have been influenced by my intervention. On the other hand, there were times when such approaches to questioning were intended essentially to elicit clarification of meaning which, it seems to me, is acceptable practice.

It also seemed to me that an element of qualitative research data was important to pursue further some of the issues raised through the quantitative study and, in particular, to discover whether, in the view of my subjects, WBL did indeed offer them an educational opportunity that facilitated the development of this more rounded person which, Barnett argues, higher education should be aiming to produce. Face to face interviewing, using the format of the semi-structured interview, seemed to me to be the best method available to achieve that.

Although from the scientific perspective, knowledge generated through this form of qualitative research, would not be considered to be objective knowledge, neither should it be considered as subjective. On the other hand, given a definition of objectivity as inter-subjective agreement, it could be argued that the semi-structured interview does indeed go some way towards achieving that definition. Kvale (1996), citing Bernstein (1983), emphasises the inter-subjective nature of the knowledge which emerges from this form of enquiry. Bernstein refers to the notion of a dialogic conception of truth, where knowledge emerges through reasoned discussion in the inter-subjective context. I find that line of thought entirely consistent with my own understanding of the significance of relationality as a way of gaining self-knowledge and understanding, as well as knowledge and understanding of the other person. I also find appealing Kvale's observation that qualitative research is sensitive to the human situation involving, as it does, empathic dialogue with the subjects studied and, further, that it may contribute to the emancipation and empowerment of the subjects themselves. A number of my interviewees commented on their positive experience of the interview noting, in several cases how, through talking about their learning, and being listened to attentively, they had come to realise, in a way not previously apparent to them, what they had actually achieved, and how that had made them feel good about themselves.

#### Ethical issues

Ethical issues arise at each stage of the research process and I tried to be sensitive to them. I have already indicated that I was aware of the need for the informed consent of the subjects prior to interview. In briefing each interviewee, I explained the purpose of the investigation, showed them a copy of the questions I wished to put to them (and gave them time to read through the questions though, because I was seeking a more or less spontaneous response, not enough time for them to formulate their answers). I also explained that they were, of course, free to decide not to proceed with the interview or that they could withdraw at any time. Subjects were also given assurances concerning confidentiality, with the undertaking given that transcripts would remain anonymous (and subject only to use by the researcher and to be made available only to the researcher's examiners), and any quotes used in either published or unpublished reports would not be attributed. I realised that, at this stage, the importance of establishing trust is crucial to the success of the interview as a whole. There remains the question of power dynamics where there may be, in the minds of either the interviewer or the interviewee, an awareness of difference in status between the two parties. This raises ethical issues that are difficult to resolve yet important to be aware of. A solution might be to set up a situation of peer interviews, yet this might still not overcome the issue if the person asking the questions is considered to be of a higher status by virtue of role than the person answering the questions. It would also remove entirely the opportunity that the researcher relies on in this mode of enquiry, namely the opportunity to ask supplementary questions and to seek clarification of issues and to probe.

There is, of course, the wider ethical issue concerning the justification of the research in the first place. Kvale (1996) notes that the study should include issues regarding the "improvement of the human situation investigated" (p111). My response here is that the research is aiming to contribute to the raising of the profile of WBL in higher education and ensuring that it becomes embedded in the HE curriculum. evidence of my research demonstrates that, for some, WBL has opened up the opportunity to engage in higher education, an opportunity previously denied them and one they had not anticipated would ever be available to them. Helping to ensure that this form of widening participation continues to exist, along with the opportunity to become a lifelong learner through WBL, seems to me to be in itself sufficient moral justification for the research. Given the overall purpose of the study, I did not envisage that there would be any harmful consequences, potential or real, for those participating, as subjects, in my research and that, therefore, the ethical principle of beneficence had been considered. I was aware also of the principle of reciprocity. namely that the subjects should gain from the experience and not just be expected to freely give of their time and experience. Thus, my aim was to enable them to have a positive experience, to be listened to attentively and responded to appropriately, as well as being encouraged in their learning endeavours. The responses I received during the post-interview de-briefing suggested that the subjects, for the most part, had found the interview a positive experience.

I was also aware, throughout the interviewing process, of the moral responsibilities of the researcher. Thus, I was conscious that I should avoid seductive techniques which might result in the subjects disclosing anything that they might later regret. Interestingly, I found my respondents to be very open and, in one case in particular, where the subject talked of conflict in the workplace and identified her protagonist as another of my subjects, I found myself attempting to close down that area of discussion without dismissing it as irrelevant for my purposes.

### Reliability, validity and generalisability/relatability

Kvale identifies three ethical aspects of the researcher's role: scientific responsibility, relation to subjects and researcher independence (p118). In terms of scientific responsibility, the researcher must produce knowledge that is purposeful, controlled and verified. In relation to subjects, the researcher must be conscious of the role that is being performed and observe the appropriate behaviours. Researcher independence requires the maintenance of professional distance. Having commented in various ways on the latter two, some further comment is needed in respect of the reliability and validity of the research method and of the generalisability or, as seems more appropriate in the context of a case study, the relatability of the findings. Rather like moral issues, issues of verification, as Kvale argues (p235), pervade the whole research process. In terms of the interviews, I have already acknowledged my tendency, on occasions, to ask leading questions which, where this occurs, calls in question the reliability of the subject's response. I do not think that this happened to any great extent and, where it did so, I have tried to note it and take account of it at the stage of analysis. At the stage of transcription, I have again already noted ways in which attempts were made to check the accuracy and, therefore, the reliability of each transcript and its analysis. There are also issues concerning reliability in the area of reporting findings and so on, but I have tried to be conscious of the matter of reliability throughout the study and have made comments in the report where there has been something of relevance to discuss.

Kvale points out that issues of validity need to be considered at each point of the study including the justification for the study itself. My research, I feel, has been carried out within a community of research into WBL, and that it is consistent with theory and practice in this field both nationally and internationally. As Director of the Centre for Work Related Studies at Chester College, I am attempting to encourage a research culture within the Centre, and I have been sharing some of the work I have been doing for the D.Prof. award with my colleagues. Two colleagues, in particular, worked with me on question design, and reviewed with me the results of the trialling of the questions and the piloting of the interview in an attempt to ensure the validity of the questions asked and the structure of the interview itself. At the stage of interviewing, the researcher relies, to a great extent, on the trustworthiness of the responses given by the subjects but has the opportunity to seek clarification of meaning by asking further questions. As always, there is the issue of the inclination of respondents to provide the answers that they believe the interviewer wishes to hear. I did use probing, from time to time, in an attempt to make certain that I understood the meaning that was being conveyed and that the questions were actually drawing out what they were designed to do. In offering the subjects my analysis of the interview, I. was further seeking reassurance that I had understood the meanings they had intended to convey to me.

In that the questions asked in the semi-structured interviews emanated, to some extent, from the questionnaire element of the research, a degree of triangulation of results is possible. Triangulation of results also occurs through the comparison of various responses to the same question, where it is evident whether or not interviewees confirm or disconfirm each other's perceptions of some phenomenon or whether they agree or disagree over an issue.

Given that my respondents are all students of Chester College and that the focus of my research is on Work Based Learning at the College (with all the idiosyncrasies that this implies) they could not be considered to be a representative sample and. therefore, the notion that the results of this research may be generalisable to some degree, offers limited mileage. Even given the range of subjects interviewed (including from full-time students on short placements and recent graduates in their first year or so of employment to advanced professionals in full-time employment, some with previous HE experience and others with none, some working under the auspices of the Graduate Apprenticeship model and some through the University for Industry Learning through Work scheme), they could not be considered to be more than representative of the College student population as a whole. Yin (1994), on the other hand, and as already noted above, makes reference to analytical generalisation where "the investigator is striving to generalise a particular set of results to some broader theory" (p36). He argues that the issue of significance is not whether the results obtained through one case study could be replicated in the context of another but rather that the researcher "should try to generalise findings to 'theory', analogous to the way a scientist generalises from experimental results to theory" (p37). This is a matter of **relating** findings to theory rather than generalising the research. There is also the opportunity for another researcher to recognise the application of the method or of the findings to his/her own situation. This is again more about relatability than it is to generalisability.

There is also the post-modern perspective, which would contend that my findings have emerged as a result of my engagement with certain subjects with distinct identities and individual circumstances and that I too have particular circumstances in terms of my job and geographical location, and so on, and that the findings are, and should remain, a local issue. Even with this argument, there is still the opportunity for others to relate the findings to their own situation.

#### Quantitative study

Although the limitations of this method of survey were fully recognised it, nevertheless, seemed worthwhile to undertake some form of quantitative research as part of the overall case study in order to attempt to assess something of the impact of Work Based Learning on the cohort as a whole. It was always the intention of this research project that the quantitative approach to research would play a lesser but, nevertheless, supporting role to the qualitative. It was envisaged that it would be a useful way of engaging in a multi-method approach to research, consistent with the case study, and given that, according to Gillham (2000), "one approach is rarely adequate" (p2). I had envisaged that, with the proposed group interview, there might be an important opportunity for the further triangulation of results. In the event, the group interview did not prove to be as helpful, in respect of the data it produced, as I had hoped would be the case.

The input into the design of the questionnaire was very much a team effort and it would be inappropriate for me to take sole credit for it, though I recognise that, in the context of this report, I own it and am responsible for it. Two colleagues from the Centre and myself worked on the setting of questions and the design of the questionnaire. This was recognised as being the most crucial aspect of the whole research. As a result of trialling, we took the decision not to include any open-ended questions, which it had originally been my intention to do. This seemed a sensible decision, especially from the point of view of data processing (that is, it obviated the need for a coding frame as a preliminary to coding classification), and reasonable, given the significance of the qualitative dimension (that is, the semi-structured interviews) to the overall research. The questionnaire was piloted with 30 students who had just completed a similar double module of WBL as part of their HND studies and the feedback was that it had proved relatively straightforward to complete, confirming that the decision to avoid open-ended questions, in what amounted to a fairly lengthy questionnaire, was probably the right one. The timing of the HND placement (February to March, 2002) enabled us to undertake a simulation of the main study and to prepare the final version of the questionnaire in time for the main cohort of undergraduate students to complete at the end of their placement (June. 2002).

Thus, the questionnaire was a highly structured one, with the researchers determining the questions asked and the range of answers that could be given, and consisted of 35 closed questions (see Appendix I for full questionnaire and analysis of results) with some questions having a number of parts to them. Questions were presented mainly using a 'selected response' format (for example, Questions I-4), with some 'routing questions' used as "follow-ons" to some selected response questions (for example, Questions 5 & 10). The value of the selected response format, according to Gillham (2000), is that respondents are forced to make a choice (p30). Although, in some cases, further elaboration of a simple response was sought through a type of routing question, these were not open but simply offered a further selection from a range of restricted options. Thus, such questions were not strictly speaking 'routing' in the sense of seeking an 'open' response and may best be thought of as another example of 'selective response' style questions.

The questions were designed to elicit responses in 9 principal areas of enquiry :-

- Reflection on learning
- Distinctiveness of Work Based Learning
- Support mechanisms for Work Based Learning
- Planning and taking charge of own learning
- Transferable skills and career development
- Support materials for Work Based Learning
- The learning agreement
- Assessment
- Work Based Learning generally

Decisions about the types of question to be asked were informed largely by the needs of the WBL Development Group who were desirous of gaining intelligence that would inform their future planning. I was also keen to include some questions that might relate to the three principal areas of enquiry with which I was concerned, namely the epistemological, ontological and pedagogical. To some extent, the interests of the various parties were served, though a compromise had to be achieved in some areas, and the benefits of a collaborative approach to this type of enquiry outweighed, in my view, the more self-centred research interests of any one individual or group.

The questions reflect something of the various aspects involved in either the planning, execution or assessment of WBL projects, together with matters concerning students' learning, their recording of their learning and their reflections on learning as well as their views on issues of skill transferability and career planning. Thus, the questions themselves derive, to a large extent, from existing processes though, as indicated above, I was able to influence the composition of the questionnaire to include some questions that related more directly to my research interests and that had emerged from my reading in the area of Work Based Learning scholarship or from my preunderstanding of issues relevant to WBL.

312 students undertaking a double module of Work Based Learning as part of their level 2 studies completed the questionnaire out of a cohort of 487, giving a 64% response rate. Limited information was sought concerning the students themselves, given that the primary focus of the research was to gather data about their experience of Work Based Learning. There was, however, a mix of male and female students

with the majority being of conventional age (i.e. around 20-21 years, having entered at 18-19), though with some mature students of varying ages. Students were briefed as to the purpose of the questionnaire and the use to which the data would be put, and invited to respond, but were free to choose not to take part. Given that this was the second of two fairly lengthy questionnaires to be administered as part of the debriefing following the placement (the other was the double module evaluation form), and that students were under pressure to complete assignments, it is perhaps not surprising that just over a third of the cohort decided not to participate. Nevertheless, in terms of the usual response rate for questionnaire surveys, 64% would appear to be a reasonably healthy return. Those who did respond completed the questionnaire roughly at the same time (at the end of the morning session on the first day of the debrief and assessment week) in whichever campus lecture room they had been allocated to.

In terms of data processing, the questionnaires were read electronically and a set of frequency tables produced (see Appendix N). From this data, a simple set of descriptive statistics was produced and, on the advice of a statistician, the data has not been subjected to further analysis. My original intention, having had previous experience of this software, had been to use a more elaborate questionnaire that would have resulted in the use of SPSS (Statistical Package for the Social Sciences). However, given the exclusively selective response format of the questionnaire and with no intention of eliciting comparative data, the results, as they are, speak for themselves and no clear gains could be seen for increasing the complexity of the analysis, given the intentions of the research which was simply to gain information about the student experience of Work Based Learning both prior to and during the placement. There was no intention or desire to, for example, discover whether female students were more diligent than male students in attending to their learning logs or to make the enquiry in any way gender related. Neither was there a concern to tease out whether mature students were more or less likely than conventional age students to find Work Based Learning motivational, and so on. It is not that these are uninteresting questions, simply that they were not considered pertinent in terms of the intentions of the research.

Thus, the analysis of the data obtained through the questionnaire is essentially descriptive, with results set out in a summary form showing a percentage rating against each question so that the overall response to individual questions is immediately apparent. Clearly such a straightforward approach is possible only because of the exclusive use of closed questions where the range of answers is specified. Given that the questionnaire was administered to a clearly defined group (full-time undergraduate students on non-vocational degree programmes who had just completed a 6 week WBL placement) and that the sole purpose of the research was to find out about the student experience of Work Based Learning, no further questions were asked about the subjects themselves, thus, by intention no further information concerning subject descriptors is available.

This questionnaire, then, is clearly quite basic as a research instrument, and in terms of what it was intended to do and, therefore, its limitations are recognised and understood. The demonstration of its findings in terms of percentages means that statistically this is an unsophisticated approach producing only a set of descriptive statistics. It was considered, on receiving advice from a statistician, that little would

be added to an understanding of the results through examination of their statistical significance. They speak for themselves and no gains seemed apparent from further data analysis.

### Reliability, validity and generalisability

I have already pointed to the limitations of this piece of research and am, therefore, conscious that the value of the data collected should not be over-estimated. However. in acknowledging this, it must also be stressed that every attempt was made to ensure that the research instrument would produce reliable and valid data, albeit of a limited nature. As the questionnaire was designed by a team of professionals all working directly in the area of Work Based Learning, there are clearly some assurances in respect of validity, resulting from the professional context in which it originated. Every effort was made to develop a research instrument that was reliable with questions being trialled and modified in the light of feedback and the overall questionnaire piloted with a similar group to those in the main study but under controlled conditions so that immediate feedback could be received and any misunderstandings corrected. The standardisation of questions ensures that another source of bias is eliminated though, of course, it is not possible to know if all of the questions have been understood in the same way. It was hoped that the clear personal relevance of the questionnaire to the subjects' recent experience would avoid it being given perfunctory treatment and there was no evidence of hasty and careless completion. There was also an attempt to keep the questions brief and relatively simple to respond to. Some questions required a purely factual response (e.g. Q1) while others focused on behaviour (e.g. Q3 "how often did you....?") and others more on opinions (e.g. Q10 "Do you think that you have....?"). Questions in this latter category are typically the ones that are most likely to lead to bias unless they are phrased in a balanced and neutral way. This was not always easy to achieve when the overriding concern was to keep the questions as simple as possible and, therefore, some questions in this category may suggest the bias of the researcher in favour of a particular response, though this may be no more of a problem than the general one inherent in closed questions within a specified response format.

Given that this research was conducted with a particular group of students who had just completed a specific model of Work Based Learning as an aspect of their HE curriculum, and that certain of the questions asked of them relate directly to some of the distinctive features of that model, it seems unlikely that the research has immediate generalisability. However, with modifications designed to address the distinctive features of other local models, there seems to be no reason why, in principle, the results of this element of the research may not be generalisable to some degree.

#### Ethical issues

There seems to be a prima facie case for research of this nature in order to help the team delivering the Chester College model of Work Based Learning to assess its effectiveness. Although benefits ensuing from the research might not accrue directly to the subjects themselves, it was anticipated that the data would inform planning in respect of future delivery to similar cohorts of students. Although all of the students

present for the de-briefing sessions, following the placement experience, were briefed about the research and its purpose, they were entirely free to decide whether or not to participate in it. Apart from its use in this present context, the main purpose of the research was to provide data for the undergraduate WBL Development Team to consider and it has not been put to any use that might harm the subjects in any way or call in question their credibility and/or their integrity.

### Data analysis

The practice adopted in terms of data analysis is one consistent with the case study, namely the individual analysis of each of the three principal research methods followed by a process of triangulation whereby the sources of evidence are reviewed together so that the case study findings are based on the convergence of information and not on one set of data alone. This approach reflects, to some degree, the "chain of evidence" idea which, according to Yin (1994), increases reliability (p98). See the chart below which outlines this process.

|   |   | Summary of C   | Case Study resear  | <u> </u>                            |                                  |                                  |
|---|---|--|--|-------------------------------------|----------------------------------|----------------------------------|
| Overall Alm to<br>he achieved   | Disciplinary<br>field to<br>be investigated | Areas of<br>Enquiry  | Case study<br>evidence base                                      | Measure/benchmark of<br>Achievement |                                  |                                  |
|   |   |  |  | Three<br>Propositions               | QAA<br>Descriptor                | Barnett's<br>"critical<br>being" |
| Nature of WBL Philosophy  | Philosophy                                  | Ontology   | Literature Article(s) Quantitative data Qualitative data         | Proposition<br>1                    | As<br>relating<br>to being       | Critical<br>self-<br>rellection  |
|   |   | Epistemology   | Literature Article(s) Quantitative data Qualitative data         | Proposition<br>2                    | As relating to knowledge         | Critical<br>thinking             |
| Distinctive features<br>of WBL  | Education                                   | Pedagogy   | Literature Chapter for a book Quantitative data Qualitative data | Proposition<br>3                    | As<br>relating<br>to<br>learning | Critical<br>being                |
| Justification for<br>WBL/<br>Recommendations<br>to<br>Chester College | _   | Summary of Conclusions & Recommendations  Report for Chester College |  | Extent to which standards are met   |                                  |                                  |

# Chapter 3 Literature Review

### Introduction

The Literature Review, as indicated in the previous chapter, was a crucial part of the project in three main ways:

- 1. Confirming my pre-understanding of the existence of a 'knowledge gap' in respect of an underpinning philosophy for Work Based Learning
- 2. Directly addressing the project issues, especially in respect of providing source material and stimulus for the development of a potential underpinning philosophy for Work Based Learning and for developing arguments in my three main areas of interest, namely: epistemology, ontology, pedagogy
- 3. Providing ideas for questions for the empirical surveys

Frequently a text would provide source material and stimulation in all three areas. Certainly with regard to the third area (i.e. ideas for questions), no one particular source stands out, except for Barnett (1997) in respect of Q6 of the semi-structured interview guide, with his concept of the 'critical being'. Otherwise no reading was undertaken specifically with the formulation of questions in mind.

However, in respect of the other two categories, it was necessary for me to read widely and extensively in order to (a) satisfy myself that there was a knowledge gap in the case for Work Based Learning and (b) that I might develop my knowledge and understanding in order to attempt to make a contribution in the broad area of philosophical and educational underpinning for WBL by focusing on issues to do with epistemology, ontology and pedagogy as my three principal areas of interest.

Further comment on, and critiquing of, the literature I have used, that either directly or indirectly relates to Work Based Learning in higher education, is to be found in the articles that I have written as part of this programme (see Appendices A,B,C&D), and these should be read in conjunction with this review.

The same literature that confirmed my view of a knowledge gap in the case for WBL, frequently facilitated my own thinking in terms of a philosophical underpinning for it and, therefore, it seems inappropriate to structure this chapter in a way which implies that some sources were used only to draw negative conclusions. However, I begin by referring to a number of writings which I made reference to in anticipation of finding a deeper interest in issues concerning a philosophical underpinning for Work Based Learning which did not match my expectations, before identifying those writers on whose work I drew in the construction of my own arguments as articulated in the articles I have produced as part of this project.

The chapter is divided into 4 main sections, as follows:

Section I: Confirming the knowledge gap

Section 2: Key theme 1: Ontology

Section 3: Key theme 2: Epistemology

Section 4: Key theme 3: Pedagogy

#### Section 1: Confirming the knowledge gap

My initial interest in reviewing literature on Work Based Learning, then, was prompted by my view that the pragmatic argument alone for WBL is insufficient and that, if it is to become embedded in the higher education curriculum, it needs to be principally because of sound philosophical and educational, rather than pragmatic, reasons alone. Thus, I was concerned to identify and review recent scholarship in respect of WBL, of which there is not currently a vast amount. This is not unexpected given that Work Based Learning is a relatively new phenomenon in HE and it is only in the very recent past that serious academic writing on it has begun to appear. As well as work by British scholars, a good proportion of this has come from Australia and, in particular, the University of Technology in Sydney. Because of the constant dialogue between academics concerned with Work Based Learning both in the UK and Australia, the Australian output is highly relevant to the situation in the UK and vice versa. Of a rather different order is the literature on Work Based Learning emerging from the United States. Much of this is in the context of management training programmes, and although some of the comment is relevant to Work Based Learning in the UK much of it is not. Literature relevant to Work Based Learning from UK academics tends to have a more general focus on Experiential Learning in its various forms, and there is not a great deal that deals exclusively with Work Based Learning, though the picture is changing.

An analysis of the literature concerning Work Based Learning, from whichever continent, reveals as its main foci, the following:

- setting out the case for its existence as a bona fide form of personal and professional development
- outlining the advantages to employers of supporting Work Based Learning and addressing issues concerning its organisation in work place settings
- discussing the rationale for its existence in Institutions of Higher Education, mainly in terms of its responsiveness to present political, social and economic imperatives (what I refer to as the pragmatic argument for Work Based Learning)
- examining issues concerning competence assessment frameworks in the light of HE assessment strategies

What I did not find was any thoroughgoing discussion of the philosophical and educational case for Work Based Learning in the Higher Education curriculum. This is not to say that such issues are not broached in the existing literature. They are, but frequently passed over lightly and raising more questions than they answer. The tendency, evident in recent publications, to collect together contributions from a range of authors (for example, Symes & McIntyre, 2000) is also indicative of the fact that few, if any, scholars have yet thought through a full philosophical and educational rationale for Work Based Learning in the Higher Education curriculum. Helpful though such volumes are in collecting together essays from scholarship associated with Work Based Learning, they frequently lack the sort of coherent argument that needs rehearsing if Work Based Learning in Higher Education is to remain a credible force. This is not meant to be critical of the fine work that is being undertaken by a number of scholars in the WBL field, but simply to recognise that we are still in the

early days of WBL in the HE curriculum and the emergent literature is reflecting just that.

# Work Based Learning: A New Higher Education?

A recent collection of essays combining the thoughts of both Australian and UK Work Based Learning scholarship is Work Based Learning: A New Higher Education? (Boud & Solomon, 2001). I came to this text with the expectation that some of the philosophical issues I was interested in would be addressed. However, this is essentially a volume on approaches to Work Based Learning (with the main section offering a series of case studies) and, although it offers many important insights into operational and strategic issues, it seems to me that it is at its weakest where it deals with the reasons why HE should be involved in Work Based Learning and, so far as I can see, it does little more than outline what I refer to as the pragmatic argument. It talks of the pressures on Higher Education from Government to address the needs of society and the economy, and of the loosening of the stranglehold that the Universities once had as sources, guardians and transmitters of knowledge. recognises that if HE does not offer accredited Work Based Learning, businesses and organisations will find some means of doing this for themselves, and argues that it is. therefore, wise for Universities to enter into partnerships with employers. agreeing with the authors that all of these issues, and others, challenge HE to respond, I maintain that the pragmatic argument alone is insufficient to sustain the place of Work Based Learning in the Higher Education curriculum. A different approach is needed and, it is my view that, it is one which starts from the philosophical and educational justification for the place of Work Based Learning in HE and which gathers strength from the pragmatic argument but does not rely on it alone. Like the pragmatic argument it will challenge the inappropriateness of much of the conventional understanding of Higher Education which finds additions to the curriculum, such as Work Based Learning, hard to accommodate. But it will engage with that understanding in such a way as to show that, over time, it has become distorted to the point that narrow definitions of it are blind to the real purpose and the real potential of Higher Education. Boud & Solomon and their associates are quite right to point to the new circumstances facing HE which bring about new opportunities and new relationships. A right and proper activity of the University is to seek to align (or realign) itself with the world outside. Clearly it has to take account of cultural shifts and respond to the reasoned arguments of pressure groups but, at the end of the day, it alone must take responsibility for the curriculum it delivers and for satisfying itself that anything it does deliver is grounded in a sound epistemology.

# Stephenson & the Capability Movement

Although the Capability movement of the late 1980s/early 1990s under the leadership of John Stephenson was not directly concerned with Work Based Learning, it has implications for it and, given that Stephenson has gone on to be the driving force behind one of the Government's latest WBL initiatives (that of the University for Industry's Learning through Work scheme), I had anticipated that it might deal with some of the issues which were of interest to me.

In the preface to *Quality in Learning: a Capability Approach in HE*, Stephenson & Weil (1992) note that education for capability was created out of frustration at the artificiality of the divide between education and training. At the heart of the concerns

of the Capability movement are issues about the purpose of HE and the view that a higher education experience should be about more than the pursuit of knowledge and the development of intellectual skills. It should, in the view of Capability, be about a broader range of purposes enabling graduates to be effective in their personal, social and working lives.

Thus, capability implies an integration of knowledge and action with each being mutually enhanced and enriched through an education whose principal methodology is that of active learning. Active learning (which is not synonymous with Work Based Learning, though presumably Work Based Learning might be viewed as an example of it), emphasises a way of learning as much as what is learned, and that way includes the learner taking increasing responsibility for his/her own learning, being committed to learning from experience, and developing the skills of the reflective learner.

Stephenson & Weil speak of "the holistic nature of capability" which is essentially an "integration of personal qualities, skills and specialist knowledge which enables students to be effective" (p3). The holism of which they speak implies that, in taking action, the capable person does so not only on the basis of sound knowledge but having thought through issues to do with values, with self confidence to make judgments, and a willingness to take risks in situations not previously encountered.

The point is that capability encourages approaches to learning that have an immediate benefit and impact on students during undergraduate studies but also fit them for lifelong learning and effectiveness in both personal and professional living. Capability approaches to learning emphasise the **application** of knowledge and skills, the ability to **negotiate** one's own learning agenda, the ability to work **collaboratively** with others, and to undertake structured **reflection** on one's own learning and progress. These are key features of the Work Based Learning framework which Stephenson has gone on to develop with others for the University for Industry Learning through Work scheme, demonstrating the continuity which exists between a Capability approach to full-time undergraduate study and programmes of Work Based Learning for continuing professional development purposes.

Assuming, then, that there is a high degree of compatability between Capability and Work Based Learning, we ought to be able to examine the philosophical and educational underpinning of the former in order to inform the latter. However, it is not clear to me that the task of articulating a philosophical rationale for Capability in HE has been undertaken and this may be because it is regarded that there is such a strong prima facie case for it that one is not needed. On the other hand, it could be argued that Capability does not need this level of justification, given that it is essentially about approaches to learning and, therefore, essentially a methodological Capability, however, is not without its epistemological or pedagogical matter. implications in that it claims that "rigid distinctions between possession of knowledge and application of knowledge are unhelpful" and that "reflections as outcomes of action can extend knowledge and deepen understanding" while "greater knowledge and deeper understanding can inform planning and improve effectiveness of actions"(p7). Thus, the method of learning advanced for this purpose - namely, active learning - can be seen to have epistemological implications in that knowledge is developed and shaped as a result of this proposed form of experiential learning.

This means that a College or University proposing to facilitate capability learning really needs to consider the issue of the nature of the knowledge that is being engaged upon in order to justify this approach, just as it needs to consider the justification for its involvement in Work Based Learning per se. It is not clear to me that answers to the questions I am concerned with in this project have been provided by the Capability movement. Again, this is not a criticism of that movement but further recognition that thought through philosophical justifications tend to follow innovations rather than precede them.

Some insights regarding potential philosophical and educational justification for Work Based Learning may be gleaned from the collection of mainly case studies edited by Stephenson & Yorke (1998) where there appears to be something of a blurring of the concepts of Capability, Independent Learning and Work Based Learning. For example, the chapter co-authored by Osborne, Davies & Garnett contrasts Work Based Learning at Middlesex University with the University's Independent Learning provision. Using the 11 criteria indicative of active, self-managed and independent student learning identified by Jacques (1991), the authors suggest that Work Based Learning and Independent Learning share a commonality of features. The implication of this chapter is that the only difference between them is that Independent Learning takes place in the conventional setting of the University whereas Work Based Learning occurs, as its name indicates, in the workplace.

While a commonality of features may be the case in respect of Work Based Learning and Independent Learning as learning methodologies and in respect of the criteria outlined by Jacques, the issue of the nature of the curriculum is not discussed. Herein, I would have thought, lies a fundamental difference in that, in Work Based Learning, work is the curriculum, pointing to a clear distinction between the two and one which raises epistemological issues especially for WBL. While this chapter may be of some help in respect of pedagogical issues in the context of Work Based Learning, it does not attempt to address the underlying philosophical issues which, I claim, need to be addressed if Work Based Learning is to be secure in the higher education curriculum.

My comments on Boud & Solomon, Stephenson & Weil, and Stephenson & Yorke are offered in some detail to indicate what I consider to be evidence of what I have claimed as a knowledge gap in the case for Work Based Learning. A number of the insights that come from these sources were, however, directly pertinent to my project and, for example in the case of Stephenson, suggest that his work was seminal especially in terms of advancing the case for more holistic approaches to learning and being.

#### Portwood & WBL as a subject

The work of Portwood, I considered, might offer promise in terms of my interest in a sound epistemological base for Work Based Learning and indeed his concerns come much closer to my own. Although not yet sufficiently rigorously defended, Portwood's argument that Work Based Learning has subject status implies that WBL is more than a pedagogy and that it has an underpinning epistemology in its own right (Portwood & Costley, 2000). This highly contentious claim, which Portwood acknowledges has, to some degree, to be taken on trust, given that work on it to date is meagre, speaks of an understanding of the "concept of the learned worker" who is

characterised by a combination of "intelligent scepticism" and "focused (specialised) intelligence". Portwood contends that if, through Work Based Learning, this combination is achieved then Work Based Learning has a justifiable claim to be regarded and treated as a subject in its own right.

Although Portwood further defines intelligent scepticism (which he aligns with critical understanding) and focused intelligence (which he defines as the intelligence of the expert), it is not entirely clear how these two higher order skills working in combination justify the claim that Work Based Learning is a subject in its own right. The argument seems to hang on the potential for the creation of new knowledge when, in the context of HE level Work Based Learning, intelligent scepticism and focused intelligence come together on a problem. At the point at which the concerns of the workplace (presumably implying the specific work context and the specific work knowledge) and the concerns of the University (presumably implying the higher order skill of critical thinking and the academic knowledge expected of the expert within a disciplinary field) intersect through Work Based Learning (or to put it in the terms of Gibbons et al (1994), where Mode 1 and Mode 2 knowledge intersect) lies the potential for knowledge generation which can truly be claimed as knowledge belonging to Work Based Learning. Such knowledge, it is assumed, will be characterised by inter-disciplinarity (on the grounds that, although focused intelligence might imply expertise within a specific discipline, it is now combined with expertise arising out of the work context) of such an order that it can be deemed to belong to a new subject, namely that of Work Based Learning.

Presumably Portwood's use of the term "subject" rather than "discipline" is quite deliberate in order to circumvent the philosophical debate on what constitutes a discipline. The term, however, does not overcome the problem that knowledge generated through Work Based Learning will be so vastly diverse, depending on the context and the nature of the work involved, that "subject" would have to be regarded as being almost without boundary. While Work Based Learning in this understanding could be deemed to be underpinned by a theory of knowledge (ie a particular explanation as to how knowledge, through Work Based Learning, is created), it would be almost impossible to define the boundaries of the content of that knowledge in order to agree with Portwood that Work Based Learning is a subject in its own right.

I cite Portwood in some detail because his work does have some relevance to my concerns, and his analysis of the way in which knowledge is generated at the theory/practice interface informs the findings of my empirical research which suggests that students experienced important learning through the application of theoretical perspectives to practical problems. However, overall, I consider this to be work-in-progress and, therefore, to be further evidence of the knowledge gap.

In concluding this section, I wish to make mention of the work of Brennan & Little (1996) who undertook A Review of Work Based Learning in Higher Education which sets out the level of involvement of HEIs in Work Based Learning activities, mainly to chart the response of higher education to Government funding initiatives related to Work Based Learning. This review does raise some of the philosophical and educational issues that impinge on Work Based Learning in higher education but there is insufficient scope within the review to deal with these in any depth. Such is the

pace of change that the review also now appears to be quite dated, dealing as it does with issues arising for Work Based Learning in the early 1990s.

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### Section 2, Key theme 1: Ontology

#### Introduction

I have written two papers which raise ontological issues in an attempt to make a case for Work Based Learning as a more holistic way of being and knowing than conventional university education provides for. As I have already stated, I have not found any literature which sets out to make the philosophical case for Work Based Learning in higher education, so what I offer here by way of review, are some of the ideas which I have drawn from scholarship and have used in an attempt to begin the task. Apart from the sub-section on Barnett, there is not a great deal by way of sustained discussion on any one author. This is because the main concerns of these authors are not my concerns, and to critique their works would prove a distraction. What I aim to do is to pick from their work ideas that seem to me to be relevant to my purposes of beginning the task of constructing a philosophical underpinning for Work Based Learning in higher education.

In A More Holistic Form of Higher Education: the Real Potential of Work Based Learning (Major, 2002, see Appendix A), I build an argument around the concept of "critical being" developed by Barnett (1997) in his book Higher Education: A Critical Business. It begins by asserting that currently the place of WBL in the HE curriculum is supported by the pragmatic argument alone. My view is that this is being used to plug a knowledge gap in terms of a justification for the place of WBL in HE when a rationale for Work Based Learning really needs to be articulated clearly in philosophical and educational terms. The article goes on to offer a number of insights to a wider audience among which are:

- the potential of Barnett's philosophy of higher education as an underpinning philosophy for WBL
- WBL's potential to deliver the more rounded graduate of which Barnett speaks
- that WBL has the potential to combine critical thinking with critical selfreflection and critical action
- that WBL has the potential to offer an holistic way of learning, being, and knowing

Barnett, a philosopher of education influenced by post-modern thought, has contributed significantly, for more than a decade, to the debate on the nature and purpose of higher education. It is my view that his definition of the graduate may be better realised through programmes of Work Based Learning than through a conventional university education. Barnett, in my view, develops arguments that could be deployed in the services of an emergent underpinning philosophy for Work Based Learning.

My reason for writing Towards a Philosophical Underpinning for Work Based Learning; the Ontological Perspective (Major, 2002, see Appendix D), was to engender some discussion among those involved with WBL in the HE sector on the potential of programmes of learning through work for providing additional value to students in terms of self-understanding and meaning-making. I was interested to explore this philosophically and to look at the potential of making a case for Work Based Learning from an ontological perspective. Thus, in this paper I attempt to set out an argument for Work Based Learning as an example of ontological-relational thought, a philosophical concept essentially concerning self-knowledge. A central argument is that WBL leads to more holistic ways of learning, knowing and being than does the conventional University curriculum largely because it demands the exercise of a broader range of critical abilities while, at the same time, insisting that learners accept responsibility for their own learning. Work Based Learning, it is argued, has the potential to deliver Barnett's view of the graduate as one who combines critical reasoning with critical self-reflection and critical action. It may be in the sense of this broader exercise of critical abilities that Work Based Learning differs, say, from other forms of independent learning, especially in foregrounding critical action as a key aspect of WBL. The combination of critical reasoning and critical self-reflection with critical action, could be the distinctive combination that sets Work Based Learning apart from other elements of the higher education curriculum. Critical reflection is also considered as a distinctive feature of Work Based Learning and as an important means of facilitating meaning making, and the article ends by commenting on Vaill's understanding of learning-as-a-way-of-being with its clear ontological implications.

#### Ontological-relational thought as a key philosophical concept in WBL

The background for both articles was my pre-understanding of the idea of ontological-relational thought, which is a philosophical concept that represents a way of knowing about or understanding oneself (and, as such, is a kind of epistemology relating to self-knowledge) in the context of relationships with other human beings. The idea can be found in the theological writings of Dietrich Bonhoeffer (for example, Bonhoeffer,1955) and has surfaced in some feminist discourses (for example, Loades,1990). Bonhoeffer's analysis of the concept of person shows that it is in the context of relatedness that people come to a true understanding of themselves. Relatedness provides, in Bonhoeffer's view, the basis for knowledge about ourselves, about the other person and, in the context of theological usage, about God.

Feminist theological discourse similarly emphasises relationality in contradistinction to the individualism which, it is argued, pervades the male perspective and has resulted in the domination and control approach of patriarchy. More generally, liberation theology (of which feminist theology may be considered an example) also has a strong relational perspective and, interestingly, offers the model of praxis which has to a large extent, through the influence of Freire's (1972) approach to adult education, been adopted by proponents of Work Based Learning as a key aspect of WBL methodology. The liberation model of theology was adopted by theologians working in situations of oppression and injustice who considered the Western model of theology, which is essentially an intellectual approach working from scripture, tradition and reason before deciding upon action, inappropriate for their particular circumstances.

This is not dissimilar from a central argument of some proponents of Work Based Learning who maintain that the idea of a theoretical higher education followed by application of theory when one arrives in the work setting is not necessarily the most appropriate model. Barnett (1990) makes a similar point concerning higher education in general implying that "a curriculum which first offers students theoretical components and then expects them to put theory 'into practice' in the practical situation is misconceived". He suggests that "the balance of curriculum elements should be reversed with the student learning how to practice as a professional and that the 'theory' should be derived by inviting the student to reflect on the practice to tease out the principles embedded in it" (p160).

The notion of praxis in the context of liberation is that of action (in the light of some injustice) informed by reflection. Theology as action might include a whole range of things not necessarily associated with the Western understanding of theology. Similarly in Work Based Learning, a wider range of activities are likely to be undertaken than those which make up a conventional programme of academic study.

Again, like the liberationist who sees the community (the church base community) as the key to successful action, so too in Work Based Learning the community of practice is seen as crucial in the learning process. (The term 'situated learning' may also be used of Work Based Learning to express the notion that learning in this context results from a process of participation in a community of practice.) Given that 'work' is typified by a network of relationships, Work Based Learning, as a form of learning, almost inevitably involves learning achieved in the context of collaboration, cooperation and partnership. As Raelin (2000) notes, the organisational qualities that facilitate Work Based Learning are those where collaboration is valued over individualism (p44). This is in contrast to the highly individualistic model of most University learning. However, that model itself is constantly under review and, in recent years, there has been a shift in teaching and learning methods in higher education, including some with a more relational bent, and a notable shift in assessment strategies which typically now contain a much broader range of ways of assessing students. The point is that the move to accommodate the relational-style learning that characterises Work Based Learning is no longer the huge jump that it may have been under the higher education system of twenty or more years ago.

I wish to maintain that, whereas conventional forms of higher education may inform and liberate the mind, Work Based Learning offers a more holistic way of knowing, a way of knowing which embraces action as well as thought and, more pertinently in terms of its distinctive characteristics, a way of being. (I have already indicated that I consider the core of the distinctiveness of Work Based Learning as an element of the higher education curriculum, to be found in the combination of critical reasoning and critical self-reflection with critical action.) Whereas the conventional approach in higher education is very much about the individual's learning, Work Based Learning has a stronger relational edge to it, recognising that work is rarely a lone activity. Solomon (Boud & Garrick, 1999) refers to the "foregrounding of the human" in the workplace and says that the "primacy of the technical is being overshadowed by the social and the cultural"(p121).) Thus, in Work Based Learning there is a stronger notion of interdependence and mutuality where learning is concerned and this, I would argue, constitutes a distinctive approach to learning and one that leads to a far more holistic way of being and knowing than may be found in other areas of

University learning. Hence my claim that Work Based Learning is essentially an example of ontological-relational thought in that it has the potential to impact on not only the developing knowledge of the individual but also on the individual as a person providing, overall, a more rounded being-in-relation who is aware of the presence and power of community as part of his/her own make-up and who demonstrates a commitment to critical action. This awareness could be construed as a spiritual dimension to Work Based Learning and, again, indicate a distinctive feature of this way of learning.

Individuals exist in social contexts and, therefore, it makes sense that learning occurs in social contexts. As Matthews and Candy (Boud & Garrick, 1999) point out, "conventional views of learning and of the nature of knowledge, especially those which consider learners as isolated individuals without a social context, are inconsistent with recent advances in the development and management of 'learning organisations'" (p60). I would go further and maintain that this applies equally to learning per se as well as to learning organisations. In other words, we need to move beyond the realms of the private learning and knowing which has been the product of conventional University learning to more collaborative forms of knowing and learning, where relationships as well as text-based learning impact and, I maintain, Work Based Learning is an example of how this can happen. Such learning may well help to create the learning organisation but the learning organisation would not exist without the learning individual.

On the basis of my prior understanding of philosophical ideas (most notably, the concept of ontological-relational thought), and from my reading of scholarship in the field of Work Based Learning (especially, as I perceived it, the foregrounding of relationality as a key philosophical concept), I concluded that there was sufficient commonality of background material for me to begin the task of attempting to construct an ontological argument for learning through work.

#### Barnett's concept of the "critical being"

A further source of inspiration, in terms of my own thinking, is the work of Ronald Barnett and, in particular, his book *Higher Education : A Critical Business* (1997). This builds, to some degree, on his earlier writings, most notably, *The Idea of Higher Education* (1990) and *The Limits of Competence* (1994).

In The Idea of Higher Education, Barnett expresses his view that we do not have a modern educational theory to match the growth and diversification of higher education. This has resulted in HE losing a clear sense of direction, not least in the sense of what counts as knowledge. He is of the opinion that there is no single epistemological stance that underpins the University curriculum but, rather, that there are many and various with no agreement as to what should be included. I found of particular interest, and of relevance to my concerns with developing an ontological perspective on Work Based Learning, his view that the HE curriculum should develop the all-round potentialities of students and not just the intellect, and his references to professional education and the notion of reflective practice. Barnett seems to be of the view that, without in any way compromising the strong tradition of critical thinking in higher education, there is a need to widen the range of opportunities provided to include 'practice' leading to critical reflection.

Aware of the pressure on higher education, from government and employers, to deliver more vocationally oriented skills Barnett, in The Limits of Competence, examines the way in which definitions of knowledge are changing. He refers to the broadening of the understanding of knowledge in the university to include 'knowing how' (operational competence) as well as 'knowing that' (academic competence). While Barnett seems to support this broadening of the HE experience, he is concerned that operational competence should be developed to a high level, and not simply be concerned with utility. Thus, in his view, at higher education level, it is about coping with unpredictability, which suggests that he is speaking about capability rather than competence, which, as he rightly points out, tends to be a closed rather than an open concept. What higher education should be delivering, in Barnett's view, goes beyond competence, whether it be operational or intellectual, to "the total world experience of human beings"(p178). From my point of view, this is an understanding that draws epistemology and ontology closely together and presents an opportunity to reflect on ways in which, through Work Based Learning, students might potentially achieve the state of 'beyond competence' that Barnett demands.

In Higher Education: A Critical Business, Barnett brings together some of the arguments that he has made in the two earlier works and focuses on the concept of 'critical being' which, he maintains, is the defining characteristic of a graduate. This concept embraces the key capabilities of critical reasoning, critical self-reflection and critical action. Barnett argues that the conventional understanding of a university education is that it engages students in critical reasoning and that it has neglected the self and the student's role in the world. This, however, he regards as limiting and challenges higher education to ensure that equal attention is given in the curriculum to critical self-reflection and critical action in order to promote the more holistic development of the graduate as a critical being. Although Barnett is rightly cautious about the university becoming subservient to the needs of business he, nevertheless, suggests that the capabilities he believes students should develop can come about through engagement with professional practice, though he notes that the aspirations of employers and those of the university may differ, with the former wishing to place a limit on the degree of criticality exercised. From my perspective, Barnett appears to set out a philosophical position that has the potential to underpin Work Based In my article, A More Holistic Form of Higher Education, I argue that Work Based Learning has the potential to lead people to more holistic ways of being and knowing, indeed that it can deliver the critical being that Barnett is striving for. In identifying reflexivity as a key graduate capability, and one that he regards as a matter of social epistemology and ontology (p42), he is identifying the same capability that I would claim is central to Work Based Learning. Barnett does, however, have a tendency to make his critical being seem something of a super-hero and it would help if he made the concept look more attainable. A further notion proposed by Barnett is that of the practising epistemologist which, he claims, is the new role for the academic and, which it seems to me, is not an entirely inappropriate way of expressing the qualities that can come about through Work Based Learning.

Given that I have chosen to develop an argument in A More Holistic Form of Higher Education (Major, 2002), which depend quite heavily on Barnett and, in particular, HE: A Critical Business, I feel it important to note my awareness of the sorts of objections that might be raised in respect of his philosophical position and which, therefore, might potentially undermine my own position. Barnett's views tend to

draw extensively on, and be influenced by, post-modernist thought and, therefore, his position is vulnerable to attack from those who do not share the post-modern perspective. Hagar (2000) falls into this latter category. He points to what he considers to be the flaws in Barnett's position concerning the irreconcilable nature of the characteristics of 'academic' and 'operational' competence, Barnett's two "rival versions of what it is to know the world". Unlike Barnett, Hagar considers that the two approaches can be reconciled, given that he believes Barnett's rationale for rejecting the idea of their reconciliation, and jettisoning them in favour of a postmodern alternative, to be based on unsound reasoning. Hagar does not share Barnett's overriding post-modern assumption that the world is unknowable and, therefore, he does not share Barnett's argument that we need to build a conception of education which starts from this viewpoint. Hagar rightly notes that this view leads only to fallibilism, "i.e. the view that no piece of knowledge is immune from revision" (Hagar, 2000, p58). Fallibilism is also, claims Hagar, a view that "has been commonplace for most of the twentieth century without unnerving consequences" (ibid).

While I have some sympathy for Hagar's view that Barnett is too strong in his assertion that the world is unknowable, I do not necessarily think that, in the case of Barnett, this underlying philosophical standpoint, even if considered weak or flawed, has inevitably led to him developing a conception of education which is similarly flawed and, therefore, unacceptable. In other words, my view is that, even if Hagar is right, I am not convinced that the outcome of Barnett's process of reasoning is necessarily damagingly tainted by the philosophical principles on which it is based. Clearly, in any case, no philosophical position is unassailable.

Interestingly Hagar himself points to what he takes to be the influence of Dewey's thought on Barnett (Hagar is presumably not intending to make a strong connection between Dewey and post-modernism), and then goes on to rest his own argument for a counter-position to that of Barnett on, to some extent, Dewey. This seems to confirm that the ultimate product of a person's thought does not necessarily rest or fall on the sources on which it is built, and also that it is possible to draw on some of the ideas of a particular scholar or school of thought without necessarily buying in to the whole package. This is certainly the position I would adopt in respect of Barnett, which, I believe, my critiquing of his views in my article (Appendix A) demonstrates.

Irrespective of whether or not my own personal predisposition is towards post-modernism, I do have much sympathy for Barnett's conclusion that University education is about "the critical life" (Boud & Symes, 2000) though, again, I acknowledge that this is another position which is not unassailable. That the purpose of a University education is, at least to some extent, about the development of one's critical faculties, I take to be almost unquestioned as the cornerstone of any serious concept of education. What may be contested is the interpretation of the extent of the application of criticality. Along with Barnett, and an understanding of education which goes back at least to Dewey, but probably much further than that, my view is that criticality should be applied to 'self' and to 'actions' as well as to 'thoughts', emphasising the importance of the reasoning-self-in-action as a distinctive feature of Work Based Learning. It is my view also that Work Based Learning has the potential to deliver a higher education of this broader definition and, therefore, is in tune with Barnett's understanding of graduate as "critical being", that is one who engages in

critical thinking, critical self-reflection and critical action. I am, however, critical of Barnett, for failing to state clearly how he considers higher education might go about developing graduates of this kind. Even when contributing to a collection of essays on Work Based Learning, as in the volume referred to below, he remains coy about committing himself to any precise ways in which the University can achieve his aspirations.

In more recent years, Barnett appears to have been courted by the world of Work Based Learning scholarship. For example, he is the author of the Foreword in Working Knowledge (Symes & McIntyre, 2000) and contributes a chapter to Understanding Learning At Work (Boud & Garrick, 1999). This is confirmation for me that others recognise the potential of his writings to contribute to the Work Based Learning discourse. However, I remain unconvinced that Barnett is anything other than sceptical about the potential of Work Based Learning to achieve the goals he desires for higher education. In neither publication does he write with any conviction about the role that Work Based Learning might play in achieving this broader understanding of the graduate that he argues is the responsibility of the University to produce. For example, in the chapter which he contributes to Understanding Learning at Work, he engages directly with Work Based Learning as an aspect of the higher education curriculum. He refers to the way in which, in his view, and under the conditions of what he describes as super-complexity, work and learning are rapidly converging, and he notes how effective work seems to require both 'knowing that' and 'knowing how'. However, while he is willing to argue that work has the potential for learning, Barnett(Boud & Garrick, 1999), seems to me to be cautious about endorsing Work Based Learning as a means of achieving the state of critical being he so highly prizes.

# The centrality of critical reflection in Work Based Learning

I argue in Towards a Philosophical Underpinning for Work Based Learning that critical reflection is a key capability in the context of meaning-making and, therefore, as a way of understanding one's own being. My contention is that any programme of Work Based Learning must see critical reflection as central and have as a key intention the development and enhancement of the students' critically reflective capacities. In addition, I contend that the powers of critical reflection are central to any concept of graduateness and that this capability is implied, though not referred to explicitly, in the descriptor for a Bachelor degree award provided in the Quality Assurance Agency qualifications framework (2001).

It is only in recent years that the idea of critical reflection has been the focus for serious scholarly critique and much work has still to be done in this area especially in the context of Work Based Learning. Mezirow's Fostering Critical Reflection in Adulthood (1990), Barnett's Higher Education: A Critical Business (1997), Moon's Reflection in Learning & Professional Development (1999), and Brockbank & McGill's Facilitating Reflective Learning in Higher Education (1998), have opened up the debate but there is still a serious need for a study which examines critical reflection in the context of Work Based Learning. If there is a single, most important, capability relevant to Work Based Learning, I would argue that critical reflection is a strong contender for the accolade. It is clearly a key and distinctive feature of any programme of learning through work. Whereas critical thinking has always been highly prized in higher education, critical reflection has been less so. Critical thinking

implies a degree of detachment and objectivity in relation to the object of (conceptual) thought, whereas critical reflection has a strong subjective element that, of course, may account for its more cautious treatment in the academic world. Critical reflection seems to me to carry with it the weight of critical thinking but brings the self into the equation. Thus, in critical reflection there is an attempt to examine the **implications** for the self (and, therefore, to make (construct) or to remake (reconstruct) meaning for oneself) in relation to whatever it is that is under critical scrutiny. It seems to me, therefore, that critical reflection is justifiably considered in the context of ontology, given its focus on the self in relation to the object of enquiry, whereas critical thinking (thought applied to the object of enquiry) may be more of an epistemological matter.

Critical thinking promotes development of the mind and thus relates well to the understanding of the purpose of the University in conventional thought, whereas critical reflection is about a much more holistic way of being and knowing and is, therefore, consistent with my understanding of the outcomes of programmes of Work Based Learning, which I also maintain is consistent with a contemporary understanding of higher education. Mentkowski et al (2000) note that self reflection brings together knowing and doing (p8) and cite Perkins (p148) who argues forcefully that reflective intelligence can be developed. This suggests that a legitimate aim of programmes of Work Based Learning is to assist learners to develop and refine their abilities to critically reflect.

The object of critical reflection, I would argue, is the self in relation to knowledge acquired and applied (that is, critical action) and not reflection on the self per se. As Barnett (1990) observes, criticism leads to critical self-reflection where students stand back and place their knowledge and accomplishments in a larger perspective, that is, conduct a critical dialogue with themselves (p171). Herein, some would argue, lies a fundamental difference between Work Based Learning in higher education and so-called vocational training in that Work Based Learning involves conscious reflection on actual knowledge and experience. This is a learned and not necessarily an intuitive process and so part of the responsibility of the Work Based Learning facilitator is to assist the learner to develop his/her critically reflective capacities.

The much celebrated work of Schon (1983) concerning the reflective practitioner is about ways in which reflective processes in the context of practice can be increased and enhanced. Raelin (2000) argues that the most important competency of Work Based Learning is that of reflective practice (p47). Barnett (1990) argues that every student should be a reflective practitioner (though he has some criticisms of Schon's concept of reflective practice) in that only in self-reflection can any real state of intellectual freedom be attained (p160). Boud (Boud & Solomon, 2001) raises the question as to whether critical reflection in Work Based Learning contexts provides a sufficiently critical edge to promote the kinds of critical thinking characteristic of a University education, and concludes that some reflective activities may not (p55). However, there seems no reason why, with appropriate facilitation, work based learners cannot be encouraged to pursue the deeper critique that Boud maintains will lead to appropriate levels of critical reflection demonstrated in improved and transformed work situations where productivity is enhanced and where taken-forgranted assumptions held by self and others are noticed and questioned (ibid). As Matthews & Candy (Boud & Garrick, 1999) note, the effective practitioner actively seeks out opportunities for new learning which they describe (following Botkin et al, 1979) as 'generative' or 'anticipatory' rather than 'reactive' or 'maintenance' learning (p50). Boud also argues for the qualities of critical self reflection that take the learner beyond the **context** of learning "so that they are not trapped by the specificities of their context" (Boud & Solomon, 2001,p56). When this happens, Work Based Learning proves its potential to achieve the same outcomes as any other programme of higher education and thus further justifies its place in the higher education curriculum. For Garrick (Boud & Garrick, 1999) recognition is given to "the nonroutine that forces professionals into the kind of reflective thinking that changes beliefs, values and assumptions" (p227).

Given the attention which scholars working in the field of Work Based Learning give to critical reflection, it will presumably not be long before more detailed studies of this capability, in the specific context of WBL, begin to emerge. However, at present, and to the best of my knowledge, no such study exists. I was, therefore, concerned to consult those texts which deal with critical reflection in higher education but in a more generic way. Brockbank & McGill's (1998) book on Facilitating Reflective Learning in HE has implications for Work Based Learning, principally in the area of pedagogy rather than ontology. There is much in this book about learning theory which is used to offer insights into the effective facilitation of reflective learning. The authors appear to consider that the delivery of course content in universities is largely through the traditional lecture and that this method does little to facilitate critical reflection in students. My view is that, if this is the case, and if critical reflection is a key characteristic of Work Based Learning, it opens the way for an argument to be made for WBL as a distinctive means through which HE can engage its students in critically reflective activity.

Moon, in Reflection in Learning & Professional Development (1999), offers important theoretical understanding of the concept of critical reflection and the thinking that underpins it. She draws on the work of various philosophers, both modern and post-modern, in attempting to get at the heart of the concept before turning to reflection as a pedagogical process. Among others, attention is given to Schon and to whether or not reflection can occur in action or only after action, which seems to me to pose interesting speculation on the concept of 'time' that is being used. Some reference is made to Barnett but, overall, there is limited comment on the impact of critical reflection on the self.

#### The potential of Work Based Learning for meaning-making

In A More Holistic Form of Higher Education (Major, 2002), I argue, as the title of the article suggests, that Work Based Learning has the potential to lead to a greater sense of holism in learning. There is a focus on the self which points to the significance of the ontological dimension in any philosophical discussion of learning through work. My claim is that the process of critical reflection has the potential to yield important self-knowledge, though, as I indicate in the article, I prefer to use the term meaning-making rather than knowledge in this context because, it seems to me that, knowledge and meaning-making are not the same thing. In my article, Towards A Philosophical Understanding of Work Based Learning, 1 cite the work of Raelin (2000) who considers reflection in the context of meaning-making, observing that "reflective judgment entails acknowledging that one's understanding of the world is not a given but must be actively constructed and interpreted" (p59). He reinforces this by expressing the view that "higher level reflection may not occur naturally" and

therefore "educational opportunities need to be provided within the work place to provoke critical reflection on current meaning perspectives" (p60).

Raelin refers to Mezirow and the concept of transformative learning (that is, learning that takes us into new meanings) and, of course, it is in this context that questions of ontology become especially pertinent. If Work Based Learning has the power to bring about transformative learning then it is especially powerful and important in terms of the more holistic conception of higher education that I have been arguing for, and offers further warnings about the potentially subversive nature of Work Based Learning. In transformative learning issues concerning being are transformed into issues of 'becoming' and the matters of emancipation, empowerment and self-realisation that Barnett (1994) speaks of (p191). Barnett (Boud & Garrick, 1999) refers to the learning challenges faced through work which he describes as increasingly of the supercomplex kind. This requires of people that they learn more than new techniques, ideas and practices by widening the very frameworks through which they interpret the world. It is demanded of us, argues Barnett, that we become different kinds of human being and notes that change is daunting because it often calls for fundamental changes in self-conception (p37).

#### Learning as a way of being

Before concluding this section, some reference needs to be made to Peter Vaill's (1996) concept of learning-as-a-way-of-being, given its potential to reinforce what I have had to say about Work Based Learning from the ontological perspective. His book, Learning As a Way of Being, is essentially about management education and leadership rather than learning in general. It is, however, a fascinating book, which argues that the best way of coping with situations of constant change is through effective learning. For Vaill, learning is, above all, an ontological issue. He is critical of, what he terms, institutional learning which he perceives to be a control system and "not a truly educational system in which liberation of mind and spirit of learners is the primary objective" (pxv). It is a system that ill prepares people for work. He uses the metaphor of permanent white water to refer to the situation of constant change in which learners today find themselves. Similarly the metaphor is used to engender an awareness of the unpredictability of working life with its surprises, its messiness, and its constant requirement to change. Vaill observes that the only way of coping with these situations is to become an extremely effective learner (p20). His contention is that learning, in our macrosystem environments, must go on continually and become a way of being, "an on-going set of attitudes and actions employed to keep abreast of the surprising, novel, messy, obtrusive, recurring events thrown up by these macrosystems"(p42). Vaill argues that, "at the very least, learning as a way of being must supplement institutional learning and often it must supplant it as the fundamental philosophy and practice of human learning" (p42). He stresses the concept of learning as a way of being by commenting that "being" refers to the whole person and, therefore, "learning extends into all aspects of life and all levels of awareness" (p43) and includes the interpersonal.

From my point of view, Vaill adds substance to my argument (in article, Appendix D) that learning, in the context of Work Based Learning, has the potential to impact on 'being' in a profound way. His philosophy of learning supports the ideas that I have referred to in relation to the ontological arguments in favour of Work Based Learning, especially the notions of holism and relationality as key features of learning through

work. Moreover, Vaill, in citing the kinds of learning that are important in conditions of permanent white water (for example, self directed, creative, expressive, feeling, reflexive), refers to learning which contributes to meaning-making and which has a spiritual dimension (p179). Dualistic understandings of learning (such as the cognitive, affective distinction honoured in institutional forms of learning) are deemed by Vaill to be unfortunate and, while recognising that some learning needs to occur in formal educational settings, he argues that permanent white water conditions demand that we find new ways for learning to occur through work and life (p76).

Vaill introduces spirituality, in the context of what he terms 'spiritual learning' in order to move beyond superficial and materialist understandings of meaning and, therefore, adds to my thinking about critical reflection as a way of meaning-making. He also makes reference to spirituality in terms of holism and refers to its relational dimension, both of which, again, are themes that are of relevance to my position and impinge on issues of ontology.

While not entirely agreeing with Vaill's implied definition of spirituality, he does have some interesting points to make with regard to the spiritual as a way of learning and meaning-making. He notes that the spiritual "seeks to get beyond materialist conceptions of meaning"(p179) and speaks of it as "the willingness to enter into a process of dialogue about meaning within oneself and with others"(p180). It appears to be that, for Vaill, the spiritual dimension is an ingredient essential to holistic perception. It is something that profoundly enhances, enriches, strengthens and intensifies normal meaning (p183). Whether or not the spiritual is construed as essentially a religious phenomenon (and I suspect Vaill may be leaning in that direction) or as an aspect of human being alone, without the baggage of religion, it is a helpful way of looking at what is implied by holistic modes of learning and, therefore, I believe, a helpful way of seeing the potential of Work Based Learning.

Although there may be a sense in which Vaill's book may be regarded as touting an 'alternative' philosophy, and I have no reason to assume that he might do anything other than agree with this, it does offer some important insights into learning as an aspect of a philosophy of being.

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#### Section 3, Key theme 2: Epistemology

In The Place and Status of Knowledge in Work Based Learning (Major, 2002, Appendix B), I set out to examine some of the epistemological issues that relate to the debate concerning the justification of Work Based Learning in the HE curriculum. It is my view that, at present, the issue of knowledge in WBL has not been fully addressed. I recognise the preliminary work of Portwood (2000) in this respect (which I consider to be an area of some potential) and the suggestion from Boud (2001) that a way forward for research is the further exploration of, so-called, Mode 2 knowledge (which I do not consider to be a helpful line of enquiry). Thus, I argue against the separation of knowledge into Mode 1 and Mode 2 categories, suggesting that WBL is involved as much in knowledge creation as it is with the application of

knowledge and, therefore, that more holistic ways of perceiving knowledge are required. An aim of the paper was to generate some discussion among those involved in WBL at HE level on this crucial issue of the place and status of knowledge in programmes of WBL rather than to offer solutions. I do, however, adopt a position that draws on the thinking of Barnett (1997) with his concept of the practising epistemologist and Raelin (2000) who speaks similarly of the need for a new epistemology of practice in the context of Work Based Learning.

### Implications of the post-modern perspective for WBL

As I note in my paper (Appendix B), no contemporary discussion concerning epistemology can avoid post-modern perspectives on the theory of knowledge. Over recent decades, debates of a philosophical kind, concerning the nature of knowledge, have been fuelled, in particular, by the epistemological concerns of post-modernism. These concerns impinge directly on issues to do with the curriculum offered in Higher Some commentators refer to a crisis in higher education concerning knowledge (for example, Barnett & Griffin, 1997). The role of the Universities, it is argued, has been undermined in recent times through the arguments of postmodernism (such arguments have been largely carried out in the Universities so, in effect, it is undermining from within) concerning the provisional and contextual nature of all knowledge. This raises questions for the University in respect of its traditional role as guardian of knowledge, and in respect of the status of the knowledge it may generate, and the claims that it makes about the knowledge that it transmits. Add to this the reality that the University no longer has a unique role in respect of any of its key functions regarding the generation, guardianship and transmission of knowledge, and the so-called crisis in higher education begins to make some sense. Griffin (Barnett & Griffin, 1997) claims that knowledge, as we have known it in the academy, is coming to an end as a result of loss of faith in the Enlightenment project (p3). The idea of the progressive development of human reason, giving us faith in the "grand narratives" (Lyotard), has all but been destroyed by the arguments of post-modernism that knowledge is culturally related, always partial, and specific to certain contexts.

While not losing sight of that understanding of knowledge, it is possible to overstate the contribution of post-modernism to debates on epistemology. As Scott (ibid) notes, it is the universalist claims to knowledge that are in peril. Science, in its disaggregated pieces, is in good order (p16). This suggests that, while disciplines such as philosophy and theology may have been shot through with post-modern arguments, other areas of knowledge have been left relatively unscathed. I assume, for example, that advances in medicine have hardly been touched by the post-modern debate on the theory of knowledge.

If the arguments of post-modernism are right, especially in respect of grand narratives – and, of course, we have no means of being certain that they are – it would seem to be a good thing that the University has been forced to reappraise its own understanding of the knowledge it has generated and transmits. If this results in an apparent loss of faith in its raison d'etre, this would seem to be better than it living under an illusion. What has happened, of course, is that the University has integrated post-modern thinking which, as I indicated earlier, it has been largely responsible for generating, into its curriculum and into its research. Thus, it could be argued that the

University has inflicted itself with post-modern thought and it probably affects it more profoundly than it affects other walks of life.

Although it would be too much to claim that Work Based Learning in higher education emerged as a result of the post-modern debate alone, it could be argued that this debate has done nothing to debar it from the curriculum and may well have enhanced its prospects. Usher & Edwards (1994) note how educational theory and practice is grounded in the modern tradition (p24). By contrast, however, they note that "trends of interdisciplinarity and experiential approaches to teaching and learning can be seen as changes taking place under the impact of the post-modern and therefore very much a part of it" (p25). In the penultimate chapter of their book, they devote a section to The Post-modern & Experiential Learning, where they note that experiential learning has now become an accepted part of adult learning theory and practice (p197). It accords with post-modernism in the sense that it relates to local knowledges "through participation and immersion not detachment" (p198). They note that discourses of experiential learning refer to the relativity of knowledge, accord greater equality of status "to knowledges generated from a wide number of sources, including everyday life" (p198), and note constant construction and reconstruction of knowledge through experience. They note also the changing role of educational practitioners from sources and producers of knowledge to facilitators of knowledge.

In further analysing the emergence of experiential learning, Usher & Edwards examine it in the context of the political agenda and go on to note its ambivalence arguing that it is neither "inherently emancipatory nor inherently oppressive" (p205). It has the potential for both and these remain in tension with each other. Although they do not refer to Foucault at this point, earlier in their writing, the authors have engaged with his thinking and, in particular, the knowledge, power, and truth nexus. This applies equally to experientially generated knowledge. For Foucault, power and knowledge are inseparable, "they directly imply one another" and "there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations" (Foucault, 1979 quoted in Usher & Edwards, 1994, p87). Even earlier in their book, Usher & Edwards note that the most that can be hoped for from post-modernism in respect of education, is that "it might suggest a way of looking differently at education as a social practice, at educational processes such as learning and teaching, and at bodies of knowledge and the way they are organised and transmitted" (p28). They offer a warning in respect of experiential learning and learner-centred approaches to education in that "they are easily transformed into the kind of instrumentalism which underpins the increasingly dominant training and enterprise culture" (p29). This reinforces the importance of having a sound philosophical base for Work Based Learning in that it is in danger of being underpinned by what I refer to in chapter 1 of this report as the "pragmatic argument" for WBL. Usher & Edwards also make the point that there is the risk that learners "can be more readily manipulated under the guise of democratic participation and personal empowerment" (p29).

All of this has implications for Work Based Learning and I will make further comment on this in the context of my discussion of Garrick (below). However, it is worth considering at this point how inappropriate it is to polarise the modern and the

post-modern perspectives, especially in a Work Based Learning context. If the emergence of Work Based Learning is, at least to some extent, resulting from post-modernism, attempts are made to avoid it being used inappropriately (as described above by Usher & Edwards in the context of experiential learning more generally), through the modernist confidence in rationalism. In the section above on Ontology, I refer to the work of Barnett who is thought of by some as being influenced by post-modernism, and yet his profile of a graduate is heavily reliant on the modernist view of the purpose of education. This is characterised by Usher & Edwards as "founded on the humanist idea of a certain kind of subject who has the inherent potential to become self-motivated and self-directing, a rational subject capable of exercising individual agency" (p24/25). It seems more appropriate, therefore, in the context of Work Based Learning to see both modern and post-modern perspectives on education side by side rather than in opposition.

Recently, scholars working in the field of Work Based Learning have looked to postmodernist critiques for assistance in developing their own arguments. For example, Garrick (1998) in Informal Learning in the Workplace, draws on Foucault's poststructuralist theory of power in his analysis of interviews with HRD specialists. Garrick notes, however, the influence of Foucault's thought on adult education theory in terms of its potential for undermining conventional wisdom concerning personal empowerment and autonomy as outcomes. He notes that Foucault's notions of 'historical situatedness' and the 'disciplinary processes' "inherent in power formations, seriously challenge this conventional understanding of adult education" Garrick considers the implications of Foucault's position in respect of reflection, a capability which plays a crucial role in adult education, in general, and Work Based Learning, in particular. He notes that reflection, in this context, is mainly concerned with "the interplay of the individual and influential social forces"(p26). Foucault's point would be that there is no way that we could know to what extent the influence of the power of external authority has shaped the individual This is pertinent comment in the context of this section on epistemology, especially if it is claimed that, through critical reflection, knowledge is generated for the individual and perhaps for the organisation for whom the individual works. As Garrick reminds his readers, "knowledge acquired from experience is far from unproblematic even though much of the current research on workplace-based learning tends not to acknowledge this" (p28). It would seem that the uncertainities of postmodernism, on the one hand open the door for Work Based Learning and, at the same time, with the other hand, pull it shut. This does not seem to me to be a cause for alarm, given the tendency of post-modernist thinking towards deconstruction and the challenging of anything that claims to have a degree of certainty about it. However, it does remind us of the importance of questioning all of our assumptions and of challenging all theories, perhaps especially those on which we would seek to build our arguments.

Garrick further explores the implications of Foucault's "technologies of power" in respect of learning in the workplace, especially in the context of corporate rewards and punishment systems (p60). He demonstrates how, in Foucault's thinking, organisations may be manipulative in order to achieve their objectives, and shows how power may have the appearance of plausibility and seductiveness but is essentially repressive. He makes reference also to Foucault's notion of "the panoptican gaze" (p81) and examines the implications for learning in the workplace

under conditions of observation and a kind of imposed self-regulation to meet corporate demands. This comment links, to some extent, with the rise of knowledge management and the growing awareness of the importance of human capital to the overall intellectual capital of businesses and organisations. Stewart's (1997) analysis of the relationship between human and structural capital is pertinent in this regard, especially his observation that the extent of the value of human capital to an organisation is commensurate only with the willingness of individuals to surrender their knowledge.

While Garrick's analysis is of great interest, the overriding concern for anyone engaged in Work Based Learning who accepts the validity of post-modern arguments. has to be with what can be done about it. Garrick, for example, this time under the influence of Lyotard, notes that useful knowledge in the corporate context is increasingly based on performativity (p101). What Garrick does not do, so far as I can see, is to say why this should or should not be considered desirable, or to consider what the alternative is and why it is better. He fails to note that Work Based Learning is bound to have a performative dimension and aspiration otherwise it is not Work Based Learning in the sense of learning for, at, and through work. Thus Garrick, perhaps unnecessarily, presents us with the same old question of the philosophy of education as to whether education is a means to an end or an end in itself, as if a choice has to be made between two conflicting alternatives. The point which Garrick draws to our attention is clearly an important one and one that should not be glossed over. Clearly it is not acceptable in educational terms for businesses to have a purely instrumental agenda in respect of Work Based Learning, a concern expressed by Barnett (1997) and addressed in my article A More Holistic Form of Higher Education (Appendix A). However, it has to be recognised that, as part of the nature of work, businesses are bound to have a performativity agenda. Nevertheless, neither this, nor Foucault's concerns as to whether or not reflection is an unimpeded process, should lead us to believe the situation is a hopeless one. Surely the onus is on those in higher education who are facilitators of Work Based Learning (who, following Foucault's line of thought, will presumably be under the same influences of power technologies as anyone else) to provide the antidote. In other words, to alert work based learners to the issues raised by post-modernist thinkers, and to the concerns that an employer may have a strong degree of self-interest in making learning opportunities available to them. This is part of what I term, in A More Holistic Form of Higher Education (Appendix A), the potentially subversive nature of Work Based Learning though, presumably, it could be maintained that employer motivation does not matter a great deal as long as the individual learner also gains. In fairness to Garrick, he does redeem himself, in my eyes, to some extent, when he poses the question "What can sustain trainers and adult educators more generally in the face of such power?" (p79). He answers his own question thus: "Perhaps problematizing 'truths' about workplace learning and its purposes through deconstruction, in which reflection, doubt and questioning are central, would help"(p79). He goes on to note that "contemporary work based learning strategies rarely deal in self-criticism, paradox, irony or doubt, yet it is precisely these qualities that give substance to learning" (ibid). In this last quotation Garrick reflects, in my view, a particular and rather narrow definition of Work Based Learning, and one which is based on an understanding that WBL and informal learning are synonymous, with both being assessed in terms of competence and benchmarked occupational standards. This is clearly not the definition I am working with, which assumes that, through Work Based Learning, learners will develop the same critical stance towards knowledge that they would develop in and through any other aspect of higher education provision. In other words, they will become the critical beings of which Barnett (1997) speaks. Perhaps it is as a result of these differing definitions that I do not share, to the same degree, the concerns raised by Garrick about the educational efficacy of Work Based Learning.

# Subjugated knowledges

It is perhaps surprising that Garrick, in his reference to Foucault's thinking, does not mention the notion of "subjugated knowledges" with its implications for Work Based Learning, though this would also be true of other scholarship on WBL (for example, Symes & McIntyre {2000}, and Boud & Garrick {1999}) where reference is made to Foucault without apparent awareness of this particular concept. The idea of subjugated knowledges is one raised by Foucault in *Power/Knowledge* (1980) where he defines it in two ways:

- 1) in terms of historical contexts where, for various reasons, ideas/events have been buried in the interests of systematisation
- in terms of local knowledges, especially those that have been considered as low level or insufficiently developed to be worthy of consideration as part of disciplinary knowledge or knowledge systems.

It is within the context of Foucault's second definition of subjugated knowledges that Work Based Learning might have an interest. It seems to me that workplaces are potentially full of knowledge that is local and specific, some of which may not be developed and articulated as knowledge in any conventional way. Much of that which is commonly referred to as tacit knowledge (e.g. Garrick, 1998) may be of this character. Foucault wishes to foreground this type of knowledge in contradistinction to knowledge that is ordered and hierarchically presented as a unified system with all of the implications of such structures as control and power mechanisms. It is not difficult to see Foucault's post-structuralist interests emerging here, with their concomitant interests in local knowledges and their relative status of powerlessness.

It does not seem difficult to me to align Foucault's understanding of subjugated knowledges with the case of Work Based Learning in higher education. Until recently, it could reasonably be argued that Universities have disregarded, to a large extent, the informal, local, tacit, knowledges of workplaces. They would have found no place for knowledge that they may have considered to be of a relatively low status, which was not clearly articulated, and did not fall into a neat disciplinary classification. In adopting such an approach, workplace knowledge was effectively dismissed and, therefore, in Foucault's terms, subjugated. Work Based Learning, in a higher education context, now recognises the importance and the value of local knowledge and seeks to appropriate it, through processes of accreditation for prior experiential learning, in to HE awards. Thus, there is a sense in which, again in Foucault's understanding, these local workplace knowledges are potentially an endangered species in that Universities are now, through their Work Based Learning provision, attempting to colonise these subjugated knowledges, to reclaim them and bring them back within the fold of unitary discourses.

Having arrived at this understanding of the significance of Foucault's thinking for Work Based Learning, it is not necessarily immediately apparent as to its usefulness other than as a framework for awareness raising as to what has been the case and what the situation is now in respect of subjugated knowledges. There is also perhaps an indirect warning for higher education from Foucault of the dangers of attempting to combine these subjugated workplace knowledges into a unity and claiming a new unitary Work Based Learning discourse. This would be a reversion to the modernist paradigm in an attempt to construct a grand narrative for the purposes of power and control, an approach which in Foucault's view would be highly inappropriate.

#### Human capital theory and social capital theory

It seems pertinent to make reference, in the context of this section on epistemology, to both human capital theory and social capital theory, given that both are concerned with the knowledge and intellectual capital of businesses and organisations. Stewart (1997) points to the organisational dimension in respect of both and appears to think of human capital only in the context of communities of practice and their contributions to the intellectual capital of businesses and organisations. Schuller (in Coffield, 1997) describes social capital theory as more recent and less clearly defined than human capital theory. He notes how human capital theory emerged in the 1960s, with the idea that investment in education and skill development was a significant factor in economic growth. Citing Coleman (1988), he notes that human capital relates to the changes which occur in individuals as a result of them undergoing education/training (paid for by themselves or others) that enables them to act in new ways. Garrick (1998) makes the point that contemporary views of informal learning in the workplace frequently rest on human capital theory for justification (p18). Interestingly when he goes on to consider the interest human capital theory has in making informal learning effective, he refers, among other things, to mentoring, coaching, networking and working in teams, all of which seem to me to presuppose social capital, and perhaps reinforce the close connection between the two.

It is clear that Work Based Learning may be used as a means of growing an individual's knowledge and thereby has an important role to play in the enhancement of their human capital. An individual may make a decision to invest in themselves at their own expense by undertaking a course of study. Alternatively, a course of study might be suggested to them by their employer, who might also be willing to pay for it. Garrick, following Marsick & Watkins (in Garrick, 1998), notes that human capital theory assumes a causal relationship between vocational education and productivity (p128), hence employers viewing training as an investment rather than a cost. Garrick and Usher (2000), make the observation that knowledge has become commodified as part of an employee's human capital and, drawing on Foucault's ideas about the subject and power, express concern that "the knowledge and identity of employees is constructed in subtle (and sometimes not so subtle) ways that align individual aspirations with organisational goals"(p1). Garrick (1998) makes a connected point when he says, "It is clear that current conceptions of both informal learning and of workplaces as learning environments are 'framed' by their location within discourses of market economies and human capital theory. These discourses narrow what it means to 'be critical' and this narrowing represents a major challenge for universities chasing new markets in Work Based Learning degrees" (p148). I have already commented on this potentially darker side to Work Based Learning in the section above on post-modernism where I argue that WBL has the capability of being subversive and, therefore, of negating the worst excesses of an employer's instrumental agenda. However, I accept that this will not cover every case and will

not solve the issue. The point made by Garrick & Usher is a reminder to those involved in Work Based Learning in higher education that ideally, when negotiating partnership arrangements with employers, safeguards need to be built in to ensure that education is not being used exploitatively, and that the learning needs of individuals are seen equally as a matter of self determination by the learner. However, in Work Based Learning, the ideals of education have to be held in balance with the reality that, as noted above, the nature of work will inevitably include a performativity agenda. In circumstances where an employer is funding employee learning in order to aid business objectives, it may be considered that a minimum level of acceptability is that the learners are willing participants who have identified benefits for themselves through undertaking Work Based Learning.

As noted above, social capital, according to Schuller, is not as clearly defined as human capital, though he goes on to offer three conceptions of social capital theory, drawing on the work of Putnam (1996), Fukuyama, (1995) and Coleman (1988). Although each of these theories places a different emphasis on the interpretation of what constitutes 'social', they all agree that the notion of human capital makes little sense divorced from the issue of wider social relations and, I have argued in the section on Ontology (above), for recognition of the importance of social relations within the frame of work. There is, then, as I noted above in the context of a discussion on a point made by Garrick, an organic relationship between the two concepts, both of which are concerned with human capital. Perhaps the point of most significance for Work Based Learning in respect of both human capital theory and social capital theory, is the notion of the intellectual capital of organisations (Stewart, This is an entity which does not exist apart from the individuals who contribute to it, and yet the individuals benefit from it on the basis of the whole being worth more than the sum of the parts. In my articles Towards a Philosophical Underpinning for Work Based Learning (Appendix D) and Learning About Learning through Work Based Learning (Appendix C), I refer to the importance of the relational dimension in Work Based Learning and speak of the value of collaboration in learning. I make the point that what is distinctive about learning in WBL is that it occurs within a community of practice. That community of practice may be considered to be the social capital of an organisation. It has the potential to offer mentoring, coaching, feedback on performance, networking, team working, group tasks, and so on. Stewart (1997), emphasising the importance of communities of practice, notes the role of community in building human capital. He speaks of communities of practice as the "shop-floor of human capital, the place where the stuff gets made" (p96). The clear link between human capital and the intellectual capital of organisations is made by Stewart when he describes intellectual capital as the tree and human capital the sap that makes it grow and sustains it (p86). In turn, intellectual capital includes structural capital which, according to Stewart (p76), is the means through which human capital is packaged and which permits it to be used again and again in the creation, application and dissemination of knowledge. As Schuller (in Coffield, 1997) comments, social capital "refers to ways in which diverse areas of knowledge are pieced together by more than one person, not necessarily operating at the same level but complementing each other at least to the extent which makes forms of learning possible which would not otherwise have been so" (p123).

Baron et al (in Coffield, 1998), speak of the hidden nature of social capital and suggest that it is "a process in which social relations are formed and reformed with

material consequences" (p56). They go on to say that a learning society viewed from a social capital perspective has the following main components:

- inclusion
- appropriate vocational training
- a job worthy of a human being
- participation in education/training throughout life
- excellence with equity
- knowledge, understanding and skills to ensure national economic prosperity
- active citizenship
- social integration and economic success

This reinforces the point that, in the view of social capital theory (and this is true of human capital theory also), education is never thought of as an end in itself but always as a means to an end. I have already commented on this issue and do not propose to do so again here. The list of components also points to the conceptual link between human capital and social capital theory, with the former essentially being dependant on the latter in that the identified components are unlikely to occur outside of the context of communities of practice. While it could be argued that both, in a sense, provide a clear rationale for Work Based Learning, it is also clear that those involved in WBL need to be aware that the ideals of the academy may potentially, at times, be in conflict with the agendas of both human and social capital theories in light of the point made above concerning their understanding of education as essentially a means to an end.

#### The knowledge revolution

If post-modernism challenges the University, there is an even more serious challenge and potential threat for the University, fuelled in part by post-modernism, but largely made possible through technology, from the so-called knowledge revolution which has made knowledge the property of everyone. Scott (in Barnett & Griffin, 1997), argues that what is happening to knowledge may be more to do with its wider social distribution than to its epistemological dislocation (p21). He speaks of this wider distribution taking two forms. One is the re-emergence of local knowledge as opposed to expert or abstract knowledge. The second is the shift from Mode 1 to Mode 2 (Gibbons et al, 1994) knowledge. In both cases the biggest adjustment for the University is the recognition of the validity of both local knowledge, and what is represented by, so-called, Mode 2 knowledge. Barnett (1994) speaks of a paradigm shift brought about as a result of discipline-based, propositional, knowledge being challenged by experiential learning, transferable skills, problem-solving, group work, Work Based Learning and others. He makes the point that these are not just about new teaching methods but illustrate the changing definitions of knowledge that are taking place. He concludes that legitimate knowledge is being broadened to embrace 'knowing how' as well as 'knowing that', and comments that knowledge acquires an operational character (p46-47). Arguably, Work Based Learning straddles the divide between the knowledge which the University happily recognises, and the knowledge which it finds hard to accommodate, and therein lies a significant challenge to the place of Work Based Learning in the higher education curriculum.

In addressing the place of knowledge in Work Based Learning it is necessary, though perhaps self-evident, to state, along with Boud (Boud & Solomon, 2001) that "a basic assumption of Work Based Learning is that knowledge is generated through

work"(p36). The object of learning is always the acquisition of knowledge in some shape or form. All workplaces are essentially sites of knowledge production with different workplaces generating different knowledge depending on the nature of the work in question. It may be worth differentiating, at this point, between 'hard' knowledge and skills, related to the specificities of a particular workplace, and the 'soft' knowledge and skills which are generic to any given work situation (for example, self knowledge and knowledge of the other, especially perhaps in the context of team-working, negotiating, knowledge of strategies in communication, and so on). Both 'hard' and 'soft' knowledge and skills will be learned (and produced) in the work setting.

It has become customary to speak of the knowledge revolution, in the sense where it is understood that knowledge is the principal asset of corporations and nations (Matthews & Cundy, in Boud & Garrick, 1999). Such knowledge is subject to a dynamic process through which it is enhanced and renewed. This points to a continuing need for Work Based Learning as a means of generating the intellectual capital (Stewart, 1997) so crucial to the success of businesses and organisations. At the same time, the process of learning points to the value of Work Based Learning for the individual and the organisation (Garnett, 2001). A particular difficulty in assessing the place of knowledge in a work setting may be the actual identification of what the knowledge is. Much knowledge in the workplace is of the tacit or implicit kind. This unarticulated, and often taken-for-granted, knowledge so evident in practice, is frequently shared and forms the knowledge-base of a community of practice (ibid).

### Mode 1 and Mode 2 knowledge

Mention has already been made of *The New Production of Knowledge* (Gibbons, et al, 1994). This is a book that is receiving much attention at the moment especially in the context of the debate concerning the status of knowledge in higher education as well as in Work Based Learning. It is based on the idea that a new form of knowledge production is emerging alongside the more traditional one. Knowledge is considered to be either Mode 1, relating to the traditional view of disciplinary knowledge where knowledge is considered to be institutionalised within universities, or Mode 2 where knowledge operates within the context of application, is trans-disciplinary, and generated in broader social and economic contexts. There appears to be a tendency on the part of some scholars to see Mode 2 knowledge as offering something of an epistemology for Work Based Learning (e.g. Boud in Boud & Solomon, 2001). While there is a certain attractiveness about this, I have two reservations: (1) that, if this is accepted, there is a concern that WBL as an HE activity becomes epistemologically dislocated from its home base, and (2) I am not convinced that there is a real distinction to be made in any case and that the claim may be based on a characterisation that may be flawed any way. (It would seem that, given my definition of Work Based Learning as part of the HE curriculum, WBL has a foot in both camps, perhaps bridging the perceived divide between the two modes.) Whether this analysis is right or wrong, the book is extremely helpful in describing the way in which knowledge production has changed and it does offer some important insights for Work Based Learning, especially through emphasising trans-disciplinarity as a characteristic mark of Mode 2 knowledge, which is entirely consistent with the understanding of the nature of knowledge in WBL.

In my paper The place and status of knowledge in Work Based Learning (Appendix B), I express concern with regard to the danger of driving further the already existing wedge between so-called "academic" and so-called "vocational" knowledge if the Mode I/Mode2 distinction prevails. While I can see the helpfulness of the distinction in some contexts, and while I recognise that the abbreviated descriptions usually proffered to clarify the difference between Modes I and 2 knowledge distort the fuller concepts articulated by the authors, nevertheless, I see the distinction as essentially unhelpful in supporting the case for the justification of Work Based Learning in the higher education curriculum.

In my article I argue that the debate should focus not so much on modes of knowledge (each representing a different status of knowledge), but levels of knowledge, and that it should be recognised that knowledge generated as a result of the application of theory advances that knowledge or lifts it to a higher level. On this model, modes of knowledge prove unhelpful just as they do in terms of arguments concerning the place of Work Based Learning in the University. Higher education is still wedded to dualism when it comes to understanding knowledge. Inappropriate though this may be, it is still accustomed to distinguishing between 'academic' and 'vocational' knowledge and between 'theory' and 'application'. In each case, traditionally, it places a higher value on the former than it does on the latter. The notion of Modes 1 and 2 knowledge simply reinforces this divide and suggests to the University that it was right all along to concentrate its attention, almost exclusively, on Mode I knowledge, leaving Mode 2 knowledge to those dealing with vocational education and, therefore, better suited to it. For the reasons given, I am inclined to disagree with Boud (Boud & Solomon, 2001,p37) who views the further analysis of Mode 2 knowledge as a way forward for research into Work Based Learning.

My article makes the point that Work Based Learning does not, or should not, recognise any divide in knowledge in the first place. Not only is it unhelpful to its cause, but it is also, I consider, a travesty of the truth of the matter. In and through Work Based Learning, knowledge is far more holistic than the notion of Modes 1 and 2 knowledge implies. Knowledge is applied in Work Based Learning but, in the application, that knowledge changes. It becomes richer by advancing theoretical as well as practical understandings and, thus, becomes new knowledge. In this sense, knowledge is generated in and through work-settings where Work Based Learning is consciously undertaken. This is to the extent that we may safely talk of Work Based Learning as having a knowledge base. Once this is conceded, we are not far from the contention of Portwood (Portwood & Costley, 2000), that Work Based Learning has a justifiable claim to be regarded and treated as a subject in its own right.

### The status of knowledge in Work Based Learning

That the place of knowledge is central to all programmes of Work Based Learning is not, or should not be, in question. The only question that higher education has to wrestle with concerns the status of that knowledge and, as I have argued above, if the debate is shifted away from types of knowledge to knowledge levels then the issue all but disappears. This may be easier said than done, however, given the way in which, traditionally in the University, knowledge is codified and organised. As Boud & Symes (Symes & McIntyre, 2000) clearly indicate, Work Based Learning challenges traditional codifications of knowledge. They point to the way in which working knowledge is often unbounded, unruly, and much less subject to disciplinary control

(p25). While acknowledging the workplace as a site of knowledge production, they rightly note that that knowledge is difficult to compartmentalise in terms of the traditional epistemological frameworks associated with University study (p24). The status of such knowledge is, therefore, highly likely to be called in question by academics representing the status quo because, somehow, status is accorded to knowledge by virtue of it being given the protection of a discipline.

The arbitrary nature of disciplinary divisions has, of course, long been debated in the University and, given the widening of the curriculum found in most Universities today, such divisions have been stretched, in some cases, almost to breaking point. As Barnett (1990) suggests, we have reached a point where the basis on which various forms of knowledge are declared admissible and acceptable to higher education are far from clear. He adds that modern epistemology has given up the search for the ultimate foundations of knowledge. If there is no single epistemological stance which underpins the University curriculum, then, as far as Work Based Learning is concerned (or, for that matter, any other contender), all depends on the quality of argument advanced for its epistemological legitimacy. While there is no call for the abandonment of traditional subject boundaries, it may be time for the Universities to give up the pretence that they are somehow more than convenient ways of organising the curriculum. If this latter point is accepted, then the way is paved for the full admission of Work Based Learning into the higher education curriculum, and the danger of the status of its knowledge being discriminated against is lifted.

#### A new epistemology of practice

Before concluding this section on epistemology, Barnett's (1997) notion of the academic as practising epistemologist needs to be commented on, together with Raelin's (2000) contention that Work Based Learning needs a new epistemology of practice. In Barnett's view, the practising epistemologist is one who is able to use multiple discourses to interpret the world and who, like the post modernist, recognises that what counts as knowledge is more open and more subject to broader definition than may have been the case in the past. There would seem to be a sense in which the academic as practising epistemologist has to accept responsibility for defining knowledge and for justifying its levelness. Whether or not Barnett's argument, that the only place of supremacy left for academics in respect of knowledge is in metaknowledge (that is, knowing about knowledge), is accepted or not, the point that he makes about the academic being both in and of the world (that is, having societal value) is pertinent in the context of Work Based Learning (p152). The danger of the work based learner becoming too specialised and having too narrow a view of learning and of knowledge is also overcome if Barnett's understanding of the practising epistemologist is used as a benchmark. All work based learners should be practising epistemologists in that, to address the requirements of graduateness, they must transcend the view of knowledge either as purely theoretical or as functional and narrowly contextual, and view the world through multiple discourses, engaging in critical thinking, critical self-reflection and critical action, as appropriate. practising epistemologist, properly conceived, is one who embraces learning and knowing in a much more holistic sense than disciplinary perspectives normally allow. Barnett (1994) refers to reflective knowing as an epistemology oriented towards the "life-world", a concept of which Habermas speaks, and Barnett, perhaps reflecting the post modern view, maintains that reflective knowing accepts that all kinds of knowing can help us to understand the world better just as, at the same time, it knows that all forms of knowing are partial (p179).

Raelin (2000), speaking in similar vein to Barnett in his book Work Based Learning: the New Frontier of Management Development, contends that Work Based Learning needs a new epistemology of practice, including both declarative and procedural knowledge, and suggests that a critical issue for such an epistemology is when to introduce explicit instructions and reflection to yield optimal performance. Any epistemology that underpins Work Based Learning must presumably, given that Work Based Learning is a form of experiential learning, start from the understanding that knowledge is created through action and, in particular, reflection on action. However, there is the question of prior, or supporting knowledge, to take into account. Some of this may relate to 'hard' knowledge and skills (that is, knowledge and skills drawn from such disciplines) and some to 'soft' (that is, knowledge and skills drawn from such disciplines as social psychology) but, in both cases, the point at which such knowledge is admitted for critical consideration is crucial.

At the point at which it is admitted into the learning cycle, such knowledge loses, to some degree, its original context through its absorption into the work place setting and the work based learners learning agenda. Once admitted, the knowledge input is subject to critical reflection and critical action through which process new knowledge is created or knowledge is developed and enhanced. Given this coalescence of knowledge from potentially multiple sources (some 'hard', some 'soft', some impinging on the project in hand, some on the self-understanding of the learner) in the service of a specific goal or goals, it may be argued that an epistemology of practice for Work Based Learning is a holistic epistemology. Alternatively, one could see it as an integration of epistemological traditions which, in coming together, act in the sense of a new epistemological framework, forming an epistemology of practice. contradistinction to the divisions of knowledge into different types, spoken of earlier, an epistemology of practice sets aside anything that leads to a bifurcation between theory and practice on the grounds that it is epistemologically unsound. considers that pure scientific method needs to be tempered with issues arising from application and that disciplinary knowledge needs to be corrected and qualified by knowledge from other disciplines and from everyday life. Raelin (2000) comments that theory contributes importantly to practice but practice contributes to theory and identifies gaps between formal research and processes in the field. In this way theory can be united with practice which is consistent with the philosophy of praxis (p62).

Other recent epistemological debate suggests that traditional ways of conceptualising knowledge and skills as separate entities is misleading and would see this area reconceptualised under the generic rubric of knowledge. As I have argued already, knowledge involved in action includes conceptual or propositional knowledge (knowing 'that'), procedural knowledge (knowing 'how') and strategic knowledge (knowing 'what to do' and 'when'). As Eraut (1994) notes, conceptual, procedural and strategic knowledge is underpinned by 'personal' or dispositional knowledge (knowledge concerned with values and attitudes) based on experience. Contemporary theorists see these concepts of knowledge as highly interactive and inseparable and regard them as part of the same process of learning that brings about new knowledge. This reinforces the idea that an epistemology of practice is a holistic epistemology.

Finally, it is worth commenting more fully on Raelin's book, Work Based Learning: the New Frontier of Management Development, because I believe it has much to offer but may be somewhat overlooked in UK and Australian WBL circles. Raelin appears initially to see Work Based Learning in purely functional terms in that he claims its key purpose is to bring about change in organisations (ie Work Based Learning is seen as a means of overcoming things which block operational effectiveness (p2)). While this alone is not a sufficiently convincing enough reason for higher education's involvement in Work Based Learning, his work should not be summarily dismissed. Raelin does not set out to justify why higher education should be involved in Work Based Learning (though he writes in his capacity as a University academic), thus it would be entirely unfair to set his work aside because he does not address this issue. His main concern would appear to be to justify Work Based Learning from the perspective of the employing business or organisation, demonstrating the benefits of it in terms of business effectiveness and seeing it as a form of management development. In doing this, however, he inevitably points indirectly to the benefits to the other two principal stakeholders, namely the individual learner and higher education. The single entity, then, which is Work Based Learning, can be viewed from at least three different perspectives; the organisation, the learner, the higher education institution. My view is that much that has been written recently about Work Based Learning is from the business/organisation perspective, with some from the perspective of the individual undertaking Work Based Learning for continuing professional development purposes, and with very little considering the benefits of involvement in Work Based Learning to the higher education institution, though an exception to this is Garnett (2001) who writes of the mutual gains to the University and the employer through Work Based Learning, with each accessing the intellectual capital of the other. In fact Raelin's work is as thorough and detailed as any I have come across in terms of raising issues of a philosophical as well as an educational nature that are pertinent to Work Based Learning. He recognises that the most important competency of Work Based Learning is that of reflective practice (p47) and he concludes, in a similar way to Barnett (1997), as I have noted above, that we must move beyond the theory/practice divide to the notion that we need a new epistemology of practice (p53).

#### Section 4, Key theme 3: Pedagogy

In the chapter I have written for a forthcoming ILT publication, Learning about Learning through Work Based Learning (Appendix C), I argue that effective learning is a holistic process that integrates knowing and doing in a critically reflective way, and moreover that Work Based Learning is a sound facilitator of learning of this quality.

My contribution to this collection of articles on learning about learning enabled me to draw on some of the empirical findings of my research and to focus on pedagogy in the context of Work Based Learning. I attempt to argue in this chapter that, through

Work Based Learning, learners appear to have a much better understanding of the learning process than is gained through conventional teaching methods. In addition to my own empirical research findings. I make reference to a longitudinal empirical study into effective learning undertaken by Alverno College in Milwaukee. A main contention of the chapter is that WBL requires learners to assume a considerable degree of responsibility for their own learning and that this, together with critical reflection as a key ability in WBL, leads to learners developing a greater understanding about how learning occurs. A main interest in writing this article is to generate some discussion among those involved with WBL in HE not only concerning pedagogy but also the wider issue of the nature of Work Based Learning itself. The research data points to the fact that WBL is not simply a method of learning (though it may combine many methods of learning). It is more than that which, in turn, raises questions about its status, including whether or not it can and should be considered a subject. This latter point is a contentious issue that, as far as I can tell, apart from the work of Portwood and the view expressed by Middlesex University, has not been sufficiently debated in HE. There is, I would maintain, a knowledge gap here that needs to be addressed, and in this, and the other articles I have produced as part of my D.Prof. studies, I have attempted to offer some insights and to open up a debate that needs to be engaged in on a large scale across the HE sector by scholars involved in designing and delivering programmes of Work Based Learning.

#### Influential thinkers

In writing this chapter, I was able to draw on my pre-understanding of educational philosophy and psychology by relating ideas to the work of Dewey, Vygotsky and Rogers. These influential thinkers seem to me to have the potential of contributing to a pedagogy of Work Based Learning. Clearly none of them wrote with Work Based Learning, in my definition, in mind, and yet each was very much concerned with education providing a broader experience than the classroom alone.

For example, the American philosopher of education, John Dewey, is frequently referred to in any discussion about experiential learning in general, or Work Based Learning in particular, especially when it comes to the consideration of method. It has to be remembered, however, that Dewey was essentially concerned with the school curriculum and not adult learning. Nevertheless, the points that he made about experience being the core of the educational process, which is, itself, essentially a social process, and the idea that learning which arises from experience is marked by continuity and connectedness, are consistent with my contention that Work Based Learning is not only an appropriate vehicle for the delivery of higher education but is essentially a holistic and relational process.

While Dewey is often cited in philosophical support for experiential learning and Work Based Learning Vygotsky, who also considers learning to be essentially a social process, is often identified as a key figure in supporting experiential learning from a psychological perspective. His concept of the "zone of proximal development" is pertinent to Work Based Learning in the sense that it points to the greater potential of collaborative learning over that of independent learning. The "zone" refers to the distance between independent problem-solving and problem-solving undertaken in collaboration with others, with the latter proving the more effective. Vygotsky suggests that individuals are capable of achieving much more in collective activity than they are capable of achieving on their own. There is a clear implication here for learning

through work within the context of a community of practice. His emphasis on the importance of "dialogue" as a facilitator of cognitive growth is also relevant to an understanding of the processes of Work Based Learning. Dialogue is a profoundly social process and a relational activity and is, therefore, entirely consistent with my arguments about the nature of Work Based Learning.

Carl Rogers, who is well known for his holistic and student-centred approach to learning, with his concern that the most important thing that students can learn is to learn how to learn, is arguably also a key figure in any debate which seeks to offer indirect support to Work Based Learning as having implicit within it an appropriate educational method. Work Based Learning is entirely consistent with the student-centred learning approach of which Rogers approved, as well as foregrounding the process of learning, given that today's new ideas become tomorrow's outmoded information. The philosophy of learning espoused by Rogers also emphasises the part that emotions play in the learning process and, thus, he advances an argument for a holistic view of learning much along the lines I have claimed for Work Based Learning.

It can be seen, therefore, that Work Based Learning is not without its support, albeit indirect and unknowing, from recent heavy-weight thinkers and clearly, if space permitted, much more could be said of their respective ideas to reinforce the contention that it is entirely justifiable that Work Based Learning should be admitted into the higher education curriculum.

#### The current debate

A recent influential text, again emanating from Australia, is a further collection of essays, entitled Understanding Learning at Work (Boud & Garrick, 1999), which reflects the growth in thought about the learning process in a work-based context. Understandably the workplace is considered as an important site of learning but it is recognised that there is no single model for learning at work. Again, themes that are familiar in the context of the debate about Work Based Learning are explored with a high degree of scholarship. For example, the Mode 1/2 distinction in respect of knowledge, knowledge creation, intellectual capital, situated learning, the learning organisation, communities of practice, generative and maintenance learning, double and triple-loop learning, and so on. While this is an immensely valuable book which presents a convincing argument that learning can and should be very much a part of working life, it includes little by way of a rationale for higher education's involvement in all of this. This may be reasonable enough in that the book does not set out with this intention. However, from my perspective, and with my interest in seeking to justify the involvement of Chester College in Work Based Learning, it lacks reference to the HE dimension. Clearly learning can and does go on at work without the involvement of the University. This, however, leaves unanswered the question as to the place of HE in workplace learning and its justification for involvement in awards for learning achieved through work contexts. For a book that appears to have such a close connection with higher education this is a surprising lacunae.

Barnett, in his contribution (Boud & Garrick, 1999), draws the pedagogical distinction, which is becoming increasingly used, between "formal" and "informal" learning and suggests that the latter may typify the work context. He recognises, however, that this may be too simplistic a distinction to make as "both formal and

informal learning constitute work" (p36). I would also argue that Work Based Learning requires that the knowledge that comes from so-called formal learning be integrated with the informal learning that derives from the experience of work. (1 would also wish to draw a distinction between "planned" and "unplanned" learning and argue the case that Work Based Learning should essentially be concerned with planned learning whilst welcoming the unplanned learning that inevitably arises in a work context.) Barnett would appear to agree with this when he notes that learning can be cognitive (mastery of new concepts), operational (mastery of new skills) or experiential (accommodate to new set of relationships) and that Work Based Learning incorporates a mix of these and is, therefore, challenging in multiple ways. He suggests that it is simultaneously challenging in terms of one's knowing, one's acting and one's reflecting (p37). If we add to this the interdisciplinary or transdisciplinary nature of Work Based Learning, the mix becomes even more complex. In a sense it could be argued that Barnett is simply affirming the Alverno assertion that learning is a complex process and is not complete unless knowing and doing are combined and, in turn, combined with reflective processes. This is, in a sense, "how" Work Based Learning occurs and is a distinctive feature of it.

Senge's concept of "generative learning" (cited by Beckett in Boud & Garrick, 1999, p83), in opposition to more traditional mechanisms which he calls "adaptive learning", suggests a similar process to the Alverno model of learning (Mentkowski, et al, 2000, see below for further comment), as does the concept of "organic learning" where life at work is experienced as an integration of thinking, feeling and doing in social settings. Beckett argues that, when the worker-learner is aware of learning from these experiences, this can be called "organic learning" (p87-90), and he argues for rationality as an integrating factor in the process (p94).

In the context of "how" learning occurs in Work Based Learning the importance of facilitation must not be overlooked. This is something of a new role for the academic and one which may be regarded as being more akin to research supervision than formal teaching (Boud & Symes in Symes & McIntyre, 2000, p28). Where formal teaching is not involved and students are learning in off-campus settings, perhaps where electronic means of communication are the norm, the tutor becomes something of a hybrid in terms of the combination of academic, administrative and support roles. In reality the University facilitator is not a lone facilitator in Work Based Learning, given the social nature of work and the opportunity of informal facilitation through collaboration and dialogue with colleagues. Nonetheless, however it occurs, facilitation is crucial. As Billett (Boud & Garrick, 1999) notes, "guidance in the workplace is...a key factor for the development of robust knowledge"(p158). He also notes that the "lack of available expertise has a negative impact upon workplace learning"(p158). This reinforces the point made previously and, at the same time, signals a distinctive feature of Work Based Learning, namely that learning in the context of Work Based Learning involves participation in a community of practice (Tennant in Boud & Garrick, 1999, p173). The distinctiveness of this form of learning is, according to Tennant, that it entails a different mind-set, one that moves away from the individual towards the community.

It is a moot point as to whether contemporary research into the learning process should be used to show how Work Based Learning addresses the essential requirements for effective learning when it could equally be argued that it should be used to inform all learning and is, therefore, best seen as part of a shift in higher education from teaching to learning, with learning being foregrounded as the key activity of the University. Garrick (ibid) seems to suggest the possibility of this when he notes that contemporary research points to an unprecedented degree of convergence between workplace learning and formal education (p225). Certainly Osborne, Davies & Garnett (in Stephenson & Yorke, 1998), in comparing Work Based Learning with Independent Learning, point to the close affinity between the two in terms of learning methodologies, suggesting that a gulf between what may occur in learning through work and what may occur through campus-based learning (albeit non-conventional learning) is more perceived than real.

Given these points, there may be little merit in attempting to claim for Work Based Learning more than it may rightly deserve in terms of its distinctive features. It may be, for example, that what I seek to claim as a feature of Work Based Learning is simply a reflection of a move in learning research generally towards more holistic ways After all, as Moon (1999) suggests, "learning outside and inside the classroom can hardly be different kinds of learning all together" (p22). There may, therefore, be little point in attempting to argue that the workplace presents a richer source of potential learning than the lecture room, especially in terms of all-round, holistic, development. Nevertheless, it is necessary to argue that Work Based Learning does provide for this because this is part of the justification for the inclusion of Work Based Learning in the higher education curriculum. However, it is worth noting that Work Based Learning does appear to encourage a number of significant growth points for learners, including the move from single to double and triple loop learning (Raelin, 2000), and the development of deep rather than surface approaches to learning (Vail), 1996), given that transferability is a key feature of Work Based Learning and that only a deep approach to learning is likely to lead to knowledge transfer (Boud in Boud & Solomon, 2001, p42). It also encourages growing acceptance of responsibility for one's own learning, or the skill of meta-learning (learning to learn), which is a crucial attribute of the successful lifelong learner.

#### The Alverno College curriculum

Reference was made above to the Alverno model of learning (a distinctive approach to curriculum design whereby students, irrespective of their academic discipline, and alongside that discipline, develop competence in eight abilities : communication, analysis, problem solving, valuing in decision making, social interaction, developing a global perspective, effective citizenship, aesthetic engagement). documented in a range of publications from Alverno College, Milwaukee, stretching over two decades. The most recent substantial volume from them is Learning that Lasts. This is an account of research undertaken over a period of twenty-five years into the effectiveness of the distinctive Alverno, abilities-based, curriculum, which includes compulsory off-campus experiential learning (akin to the placement style of Work Based Learning for UK full-time undergraduates). This is a work which draws on scholarship by way of creating an interpretative setting for the empirical research The Alverno philosophy emphasises the integral relationship between knowing and doing, seeing learning very much as a holistic process, and the book argues that the research findings support the argument that such a way of learning leads to learning that lasts.

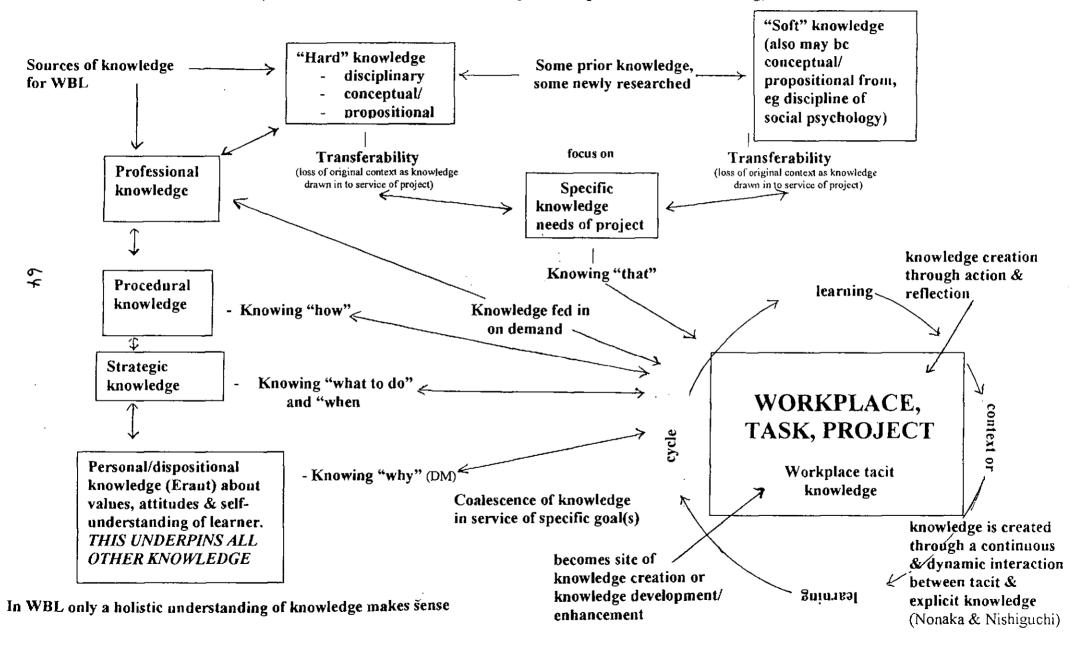
### **Conclusion**

I have attempted to argue that the distinctiveness of Work Based Learning in terms of its contribution to the higher education curriculum is in its exercise of a broader range of critical abilities, foregrounding critical action alongside that of critical reasoning and critical self-reflection. Barnett (1997) and Raelin (2000) refer to the coalescence of these critical abilities as an "epistemology of practice" or, what I have termed, "knowledge-in-action". I have attempted to represent diagrammatically (see over page) some of the issues that I raise both in this literature review and in my article *The Place and Status of Knowledge* (Appendix B) in order to show how knowledge-in-action operates. This seems to me to pull together a number of crucial issues discussed in my articles and in this review and, therefore, makes a fitting conclusion to this chapter.

The model demonstrated focuses on knowledge creation through action and reflection in relation to a specific workplace task or project. It highlights the crucial role of critical thinking, especially in respect of disciplinary knowledge, and emphasises the learner-centred nature of Work Based Learning through the coalescence of different knowledges in the service of a specific goal or goals. The model aims to show how learners are responsible for their own learning, drawing on prior knowledge and researching new knowledge in order to ensure their grounding in knowing "that" (disciplinary knowledge). At the same time, they need to know "how" (procedural knowledge) and "what to do" and "when" (strategic knowledge) in order to safeguard their responsibilities of ensuring that the task or project moves forward to completion and, along with it, their increase in learning. Further, they need to know "why". This is the personal and dispositional knowledge, of which Eraut (1994) speaks, that concerns the values, attitudes and self-understanding of the learner. In my terms, this relates closely to the ontological dimension of Work Based Learning, and provides an underpinning to all other knowledge and actions connected with learning through the work-based task or project. The model also seeks to acknowledge the crucial role of the tacit knowledge of the workplace, drawing on the insight of Nonaka & Nishiguchi (2001) that knowledge is created through a continuous and dynamic interaction between tacit and explicit knowledge. Thus, the workplace becomes a site of knowledge creation or knowledge development and enhancement. On the basis of this model, my conclusion is that only a holistic understanding of knowledge makes sense in any discussion of epistemology in the context of Work Based Learning. It is the holistic nature of Work Based Learning that, in my view, makes it distinctive as a part of the higher education curriculum.

# What might an "epistemology of practice" (or knowledge-in-action) look like?

(Based on Article: The Place & Status of Knowledge in Work Based Learning)



# **Chapter 4 Empirical Research Findings**

# Part 1: Qualitative survey - semi-structured interviews

This research was undertaken to explore the claim for the inclusion of Work Based Learning in the HE curriculum of Chester College of Higher Education.

Interviews were conducted with 31 students undertaking various forms of Work Based Learning (see chapter 2). The questions were designed to elicit information in my three main areas of interest, namely ontology, epistemology and pedagogy. I was concerned to gather date relating to three central propositions:-

# Proposition 1 Ontological Dimension (Chapter 4 {a}) Questions1 and 6

• that Work Based Learning has the potential to bring about change in the way in which individuals see themselves, their work and their worlds

# Proposition 2 Epistemological Dimension (Chapter 4 {b}) Questions 1, 2, 5, 7 & 8

 that knowledge and skills generated through Work Based Learning are fully commensurate with HE standards thus justifying the place of WBL in the curriculum

### **Proposition 3** Pedagogical Dimension (Chapter 4 {c}) Questions 3, 4 and 6)

 that individuals have access to a broad range of ways of learning through WBL and have the opportunity to use the ways that suit them best

#### Chapter 4 (a) ONTOLOGY

#### Proposition 1 (Questions 1 and 6): the Ontological Dimension

A central argument in my article on ontology (see Appendix D) is that Work Based Learning leads to holistic ways of knowing and being and that, through critical reflection as a distinctive feature, it has the potential for facilitating meaning-making. The work of Barnett was acknowledged in the article as informing my thinking, especially his concept of "critical being" which embraces critical thinking, critical self-reflection and critical action. These and other ideas led me to formulate the proposition that Work Based Learning has the potential to bring about change in the way in which individuals see themselves, their work and their worlds with the aim of gathering evidence relating to the ontological aspect of the student experience of WBL.

Question 1 I'd like you to think about the impact WBL has had on you as an individual. Has it changed your view of yourself in any way? If so, in what way(s)?

A detailed analysis of responses to Question 1 identified three principal categories of response, only two of which will be considered in this section on ontology.

- Impact of WBL on self (the ontological dimension)
- Impact of WBL on knowledge and skill development (considered in the section on epistemology, p71)
- Essentially about opportunities created by WBL (with the inference being made that this category is also likely to be connected with the impact on self and, thus, relevant to the ontological dimension)

The measure for the student response rate is 31, which is the number of students who participated in the semi-structured interviews. Any overlap in the categories defined below reflects the attempt to preserve something of the various nuances of the students' replies.

Respondents identified the following ways in which Work Based Learning had impacted on them:

| Way in which WBL impacted on self  | Student response rate |
|--|-----------------------|
| Growth in self knowledge Changed view of self Brought about self examination | 16                    |
| Greater awareness of own capabilities Growing confidence in own abilities    | 13                    |
| Growth in self confidence  | 10                    |
| Feeling of being valued Experiencing rise in self esteem                     | 2                     |
| Positive impact on self image  | 2                     |
| Brought about feeling of empowerment   | 14                    |
| Increased motivation   | 3                     |

Respondents identified the following ways in which Work Based Learning had brought about opportunities for them:-

| Opportunities opened up                | Student response |
|--|------------------|
| by WBL                                 | rate             |
| Test out career aspiration             | 3                |
| Awareness of discipline of work        | 2                |
| Provided break from conventional study | 2                |
| Gained access to higher education      | 4                |

A more detailed presentation of the findings from Question 1, including extracts from the interviews, is to be found at Appendix F.

Collectively the data accumulated from Question 1 responses would seem to support the proposition that Work Based Learning has the potential to bring about change in the way in which individuals see themselves. This may come through the discovery that their knowledge and learning does have something of value to contribute in the work setting and this brings about a changed view of self. For example,

"As I was going through the placement I got to feel more confident and where before I wasn't exactly sure how competent I was of doing this job and if I really was the type of person to be doing it, afterwards I realised how easily I could do the job. I was valued in the job" (level 2 full-time undergraduate)

Similarly, there seems to be much self-learning and self-examination generated through WBL which influences self perception and, again, leads to a changed view of self. For example,

"I've grown as a person which I wouldn't have done unless I'd done this really because I've been involved in so many multi-disciplinary groups working together with a common aim really so it certainly has changed me ...... Like it's been a huge struggle I can't deny that but, from a personal point of view, it's been great. In the year I've learnt so much and, as I said before, I believe in myself and I'm much more confident and my essays are fine now." (level 1 part-time undergraduate in full-time employment)

Question 6 The idea of critical reflection was introduced in (Support Programme or Methods module). Can you give an example of critical reflection in which you engaged during (placement or project)? To what extent has reflecting critically changed the way you view (a) work, (b) your-self, (c) the world generally?

Data collected in response to Question 6 proved quite difficult to classify and, in the end, I decided to apply a simple division, making the data less complex to handle, even at the risk of glossing over other potential categories. Three categories emerged:

- preliminary data, which does raise concerns that I have had prior to embarking on this research concerning levels at which critical reflection is undertaken,
- the way in which, through critical reflection, the views of individuals have changed in respect of themselves, work and the world more generally (the ontological dimension)
- diverse data (this was the data which proved difficult to classify) which is essentially about the potential of critical reflection as a way of learning in relation to self, work, and the world (considered in the section on the pedagogical dimension, page 79)

# Preliminary data

Respondents made the following general claims concerning change brought about through critical reflection, in respect of self, work and the world:

| Change brought about through  | Student response |       |
|-------------------------------|------------------|-------|
| Critical reflection           | rate             | :<br> |
| Changed attitude toward self/ | 19               | Self  |

| Awareness of importance of critical self-reflection |    |       |
|---|----|-------|
| Change in attitude to work                          | 11 | Work  |
| No change in attitude to work                       | 3  |       |
| Change in attitude to world issues/                 | 14 | World |
| Greater awareness of importance of global issues    |    |       |
| No change in attitude to world issues               | 3  |       |

Of the 31 respondents, 20 either did not indicate their clear understanding of critical reflection during the interviews or their answers indicated only a basic understanding of it. 11 respondents indicated a grasp of the process of critical reflection. A number of my summary descriptions are cited below indicating the low level of awareness of the process of critical reflection:

V.A. 's answer does not seem to relate well to the question on critical reflection.

T.B. 's answer does not indicate whether she has an understanding of what is involved in the process of critical reflection.

S.R. admits to not being sure what critical reflection is.

R.A. 's response suggests that she has done little by way of critical reflection.

Overall LA appears to have a fairly superficial view of critical reflection.

However, a number of responses did indicate a grasp of the critically reflective process:

AS claims that he has developed the skill of critical reflection. He notes the development of this skill from superficial to more sophisticated levels.

DA claims that, through critical reflection, he has been able to evaluate a situation of conflict in the work place, and that critical reflection has enabled him to take a more balanced view of the situation than he might otherwise have done.

In some respects the findings here confirm for me a concern I have had for some time that the level at which most students reflect is a superficial one and is probably best not described as 'critical' reflection. At an earlier stage of my D.Prof. studies (not originally part of my learning agreement and not reported on in detail in this report), I devised a list of components entailed in the reflective process and then took a sample of students reflective essays which had been submitted and assessed as part of the assignment requirements for a double module of undergraduate WBL at level 2 and measured their work against the grid. Preliminary findings from the small sample I investigated showed a fairly low level of reflection on the part of most students and reinforced my concern that students were not developing a stronger capability in this area through WBL. With this in mind, some adjustments were made to the input on critical reflection in the Support Programme and it remains to be seen whether or not the next cohort demonstrate a higher level of competence in this area as a result. It will certainly be my intention to monitor this and to work with others to find ways of further facilitating students' reflective capabilities.

It may be, of course, that my expectations are unrealistic. I suspect that, when full-time undergraduate students come to their WBL studies at the end of their second year, very few of them have even encountered the term critical reflection, never mind have any understanding of what is involved in the process. While the skill will be

introduced to students in certain areas of professional practice, for most students on non-vocational degrees, studying fairly traditional academic subjects, it would seem that critical reflection is not much referred to let alone used.

Some evidence from the interviews I conducted with postgraduate students in their first eighteen months of full-time employment suggests, however, that, like most skills, the ability to critically reflect requires practice and frequent implementation. In other words, critical reflection is a learned process. Thus, a female non-Chester graduate, now undertaking a programme of WBL with the College, recognised that the former Chester students on her course had the edge because of their previous experience of WBL and, therefore, of critical reflection. She notes:

"But, yes, this course is definitely quite good. I got the feeling from the guys that were previously students of Chester College that they had a bit more understanding and a bit more insight into how to go out into the workforce, whereas I was a bit more naïve and not really sure. I knew that the way I would need to communicate would be different but I wasn't ready. I suppose it's something you learn as you get into work. You start to develop this and that. It's different."

A former Chester male student notes how, having had the experience of critical reflection through undergraduate WBL, he is now, in postgraduate study, able to develop further the capability of critical reflection:

"I think going back to the second year and doing WBL, it was a bit of an arbitrary thing really, you just say, I've done this, it was good because... it was bad because... I should do this. And there perhaps isn't a great enough thought about it, it's just on a rather superficial level, but I think doing it over the last few months, the first thing that helps critical reflection is the organisation and the specific tasks that you set yourself, with clear objectives and things to do. Critical reflection becomes a lot more useful, and a lot more easy to see and, therefore, you can make much more detailed judgments and reflections about the things that you've been doing."

Despite the concerns expressed above, the fact that the data reveals student awareness of the rich potential of critical reflection for self development, professional development and development as a citizen is extremely positive and clearly provides a solid platform to build on in terms of the potential for further facilitation of the development of this capability to deeper levels.

Change in views
Respondents made the following claims concerning the way in which, as a result of
critical reflection, their views had changed in respect of self, work and the world

| Change in <u>views</u> brought about through Critical reflection               | Student response rate |                |
|--|-----------------------|----------------|
| Increased confidence levels  | 5                     | Self           |
| More positive attitude to self   | 5                     | Self           |
| Feeling of empowerment   | 2                     | Self           |
| Now views issues from multiple perspectives/<br>Adopts more balanced viewpoint | 8                     | Work/<br>world |
| Greater awareness of the relational perspective                                | 18                    | Work           |
| Willingness to take critical action  | 2                     | World          |

# A more detailed presentation of the findings from Question 6, including extracts from the interviews, is to be found at Appendix F.

The evidence in respect of the influence of critical reflection in terms of both people's abilities and willingness to see things from multiple perspectives and to take relational perspectives, I feel to be important and encouraging. In my paper Towards a Philosophical Underpinning for WBL: the Ontological Perspective (see Appendix D), written as part of my D.Prof. studies, I argue that WBL can be viewed, from a philosophical perspective, as an example of ontological-relational thought. There seemed to me to be a strong prima facie case for suggesting that WBL occurring, as it does, by definition, in the context of the workplace, is about collaborative learning, and learning through team working, cooperation, and inter-dependency. Thus, I find it encouraging to discover that the empirical evidence also indicates this to be the case by showing that, through critical reflection – a key feature of WBL – respondents claim to have a greater awareness of, and sensitivity towards, the importance of relationships and the relational perspective, and that they feel it leads them to more balanced judgments based on their ability to view issues from more than one perspective.

#### Concluding comments in respect of proposition 1

My conclusion, following the analysis in respect of data relating to the first proposition, is that there is some evidence to support the contention that Work Based Learning has the potential to bring about change in the way in which individuals see themselves, their work and their worlds. The inclination on the part of the researcher, of course, is to claim too much, and I recognise that some of my respondents were of the view that WBL and critical reflection had not brought about change for them in these respects. However, the evidence seems clearly to point to the fact that WBL and critical reflection have the potential to bring about change, at least for some people.

These findings are important as they suggest that, through Work Based Learning and through critical reflection, people are exposed to learning which they recognise as enabling them to go beyond the realms of critical thinking (the key requirement of conventional University education) to include critical self-reflection as a key element of their higher education. Given this, then the ontological dimension is admitted more formally into the HE curriculum than may have previously been the case, and recognition is given to the crucial role of self-learning as part of that curriculum. This opens up a far more holistic form of University education and one that is consistent with Barnett's (1997) view of what higher education should be about. Although my findings do not include evidence of people's willingness to take critical action on the basis of their beliefs and values (an important characteristic of a graduate, in Barnett's view), there is evidence to suggest that critical reflection causes people to examine issues in the world in ways that they may not have previously done.

# Chapter 4 (b) EPISTEMOLOGY

# Proposition 2 (Questions 1, 2, 5, 7 & 8): the Epistemological Dimension

In my paper on epistemology (Appendix B), I argued that knowledge is of paramount importance in Work Based Learning both in terms of knowledge creation as well as the application of knowledge. Although I did not address this matter in the paper, there are also the issues of knowledge recognition (for example, through the accreditation of prior learning) and knowledge dissemination (for example, the production of a report for an organisation following the completion of a project). Both of these aspects of knowledge are provided for in Work Based Learning and are consistent with current literature on knowledge management (e.g. Nonaka & Nishiguchi {2001}).

In my article, I attempted to make the case for a holistic view of knowledge rather than an approach which makes a distinction between different modes of knowledge, distinguishes between knowledge and skills or is discriminating in terms of knowledge status. My argument was that the crucial issue was concerned with level rather than mode or status. The issue for higher education, then, is to safeguard the level of knowledge derived through WBL, hence my proposition that knowledge and skills generated through Work Based Learning are fully commensurate with HE standards thus justifying the place of WBL in the curriculum, with the aim of the research being to establish whether or not this is indeed the case.

# <u>Question 2</u> Can you briefly outline the knowledge and skills you think you have gained through Work Based Learning?

In the interviews respondents were asked to outline briefly the knowledge and skills they thought they had gained through Work Based Learning. This was, therefore, a key question in relation to the proposition but, given that interviewees were not given time to prepare in advance of the question being asked, it was unlikely that any of them would be able to give anything like a comprehensive account of their knowledge and skills gains through WBL. Thus, the responses were almost inevitably impressionistic, with some respondents, no doubt, omitting large areas of important learning achieved through Work Based Learning. The intention, however, was to capture a 'snap-shot' of the learning that came to mind for each interviewee as he or she responded to the question which, when put alongside all of the other responses to the same question, might present something of the breadth as well as the depth of knowledge and skills achieved through learning in the workplace. For example,

"The basic knowledge that most people gained, I would say, was just the work theories and the research theories, the learning curves and everything that we went through in the Support Programme before we started. But I think if you're not on some kind of marketing or business management course, you don't really come across anything like that so things like that are hard to know. When you have to do a project at the end of them you use the material and it helps you to do your work—it's about what you didn't know before." (level 2 full-time undergraduate)

"During the ISM 105 module which is the professional skills, the topics I chose in that ranged from team-working to creative thinking, problem-solving, all those kind of things that you need to have at your disposal. The actual skills and the knowledge that you need to apply, I've learnt

through those modules which has been very helpful." (part-time postgraduate in full-time employment)

When subjected to analysis, answers to Question 2 identified five principal areas of response, only two of which will be dealt with in detail here:

- knowledge gains
- skills gains
- information gains
- educational gains (considered in the section on the pedagogical dimension, p79)
- self-knowledge gains (considered in the section on ontological dimension, p65).

**Information gains** may be dealt with fairly summarily, not because of its unimportance but because, to some extent, it may be regarded as a by-product of WBL, especially for full-time undergraduates on placement. Two areas were identified here, namely career options and knowledge of a profession.

The principal focus for comment in relation to this proposition is, therefore, on knowledge and skills gains. In many ways this amounts to an artificial division but it seems a convenient way of breaking up the data. By treating skills alongside knowledge it perhaps also reinforces the point that each and every skill is dependant on a knowledge base and, therefore, skills are rightly and properly considered in this section on epistemology. I do not propose to comment further on this issue as it is debated more fully in my published article, prepared as part of this D.Prof. submission (see Appendix A), and referred to previously (Major, 2002).

### Knowledge gains

An understandable division was evident in terms of knowledge gains between full-time undergraduate students undertaking a short placement experience and part-time students in full-time employment. More than three-quarters of the full-time students focused, in particular, on gains in their academic subject knowledge, with nearly two-thirds of part-time students in full-time employment claiming gains in professional knowledge.

The measure for the student response rate is 31 which is the number of students who participated in the semi-structured interviews.

Respondents identified knowledge gains in the following:

| Knowledge gains                           | Student response rate |
|---|-----------------------|
| Academic subject knowledge                | 14                    |
| Professional knowledge                    | 10                    |
| Knowledge gained through application      | 9                     |
| Knowledge of Work Based Learning theories | 5                     |

Respondents identified skills gains in the following:

'soft' skills

| Soft skill gains                 | Student response |
|----------------------------------|------------------|
|                                  | rate             |
| General 'soft' skill development | 11               |
| Communication skills             | 9                |
| People skills                    | 11               |
| Negotiating skills               | 1                |

'hard' skills

| Hard skill gains                           | Student response |
|--|------------------|
|  | rate             |
| Technical, including ICT skill development | 4                |
| Time management                            | 3                |
| Task/project management                    | 2                |
| Problem-solving                            | 2                |
| Study and research skills                  | 5                |

A more detailed presentation of the findings from Question 2, including extracts from the interviews, is to be found at Appendix G.

Further information about knowledge and skills gains was gleaned from student responses to Question 1. Here students had been asked to consider the impact that WBL had made on them and some responded, as follows, with reference to their increased knowledge and skills:-

| Areas where knowledge & skills gains  | Student response |
|---|------------------|
| Have had an impact on self  | rate             |
| Personal & professional development   | 5                |
| Interpersonal skills & the relational dimension/<br>Human relationship skills | 8                |
| Team working/professional integration   | 4                |
| Self manage/work independently  | 3                |
| Self-reliance skills  | 2                |
| Responsibility for own learning   | 2                |
| Effective communication   | 3                |

A more detailed presentation of the findings from Question 1, including extracts from the interviews, is to be found at Appendix G.

Question 5 Can you give an example of something you learned which was unplanned?

In responding to Question 5 which was about unplanned learning, respondents identified skill and knowledge development in the following areas:-

| Unplanned skill & knowledge | Student response |
|-----------------------------|------------------|
| development                 | rate             |
| ICT/internet                | 4                |
| WBL theories                | 3                |
| Communication skills        | 5                |
| Professional knowledge      | 5                |
| Organisational skills       | 1                |
| Team management/leadership  | 1                |
| Project needs               | 3                |
| Bureaucratic processes      | 1                |

Respondents also identified, in answer to this question, gains in self-knowledge in the following areas:-

| Unplanned gains in               | Student response |
|----------------------------------|------------------|
| self-knowledge                   | rate             |
| Self knowledge/self-appreciation | 11               |
| Learning through reflection      | 5                |
| Learning can be motivational     | 1                |
| Work can be fulfilling           | 1                |

Respondents further identified, in the context of Question 5, the following gains in terms of relational learning:-

| Unplanned learning in context of    | Student response |
|-------------------------------------|------------------|
| relational learning                 | rate             |
| People learning                     | 1                |
| Interpersonal skills                | 4                |
| Team working/collaborative learning | 2                |
| Skills of negotiation & diplomacy   | 1                |
| Value of networking                 | 1                |
| Meetings/conference calls           | 1                |

A more detailed presentation of the findings from Question 5, including extracts from the interviews, is to be found at Appendix G.

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<u>Question 7</u> Did you consciously, or un-consciously, apply any Work Based Learning theories? If so, can you identify them and then describe bow you were able to utilise them?

This question focused on the application of so-called WBL theories. The use of the term "WBL theories" has been discussed elsewhere in this report, and is a term of convenience rather than one that clearly identifies the mixed corpus of concepts and theoretical perspectives contained within it. Most of the material presented under this umbrella term comes either from the discipline of social psychology or the field of business studies and is included in the Support Programme for full-time undergraduates taking WBL or in the WBL Methods & Processes module for part-time students in employment because of its relevance to work based or work related learning.

Respondents identified theoretical perspectives, in relation to the following, which they had applied during Work Based Learning:-

| Application of WBL theoretical          | Student response |
|---|------------------|
| perspectives                            | rate             |
| Application of WBL theories (general)   | 28               |
| Communications                          | 2                |
| Time management                         | 1                |
| Project management                      | 3                |
| Team working                            | 4                |
| Interpersonal skills/gaining better     | 7                |
| understanding of others                 |                  |
| Reflection in learning                  | 5                |
| Subject knowledge                       | 3                |
| Problem-solving                         | 1                |
| Leadership                              | 2                |
| Self-analysis                           | 3                |
| Kolb learning cycle                     | 8                |
| Understanding & interpreting experience | 4                |
| Transactional analysis                  | 3                |
| Business models                         | 1                |
| Organisational analysis                 | 1                |
| Stress management                       | 1                |
| Conflict resolution                     | 1                |
| Theory/practice reinforcement           | 1                |

Given that respondents did not have advance notice of the questions, with the likely consequence that, in this case, only those theories that had made the most impact on them in terms of their application would be recalled, there is an interesting and broad mix of WBL theories referred to. Again, this mix hints at the interdisciplinary nature of work and, therefore, of Work Based Learning, and the importance of having multiskilled practitioners in an effective workforce.

A more detailed presentation of the findings from Question 7, including extracts from the interviews, is to be found at Appendix G.

Question 8 Can you identify any knowledge and skills you gained from WBL that you have been able to use in other areas of study?

This question was originally designed with full-time undergraduate students in mind with the particular intention of discovering whether or not the knowledge and skills they had gained through their Work Based Learning (undertaken at the end of their second year) would be of benefit to them in their final year studies and on in to the future. However, it was also considered to have relevance to part-time students in employment in terms of the potential of the transferability of knowledge and skills from one context to another. Thus, the question was modified slightly when presented to part-time students in employment, though its intention of getting students to consider issues of knowledge and skill transfer remained the same.

The knowledge and skills identified in response to this question proved difficult to categorise and I propose to deal with all of them in this present section on epistemology. However, I propose to divide them under two headings

- knowledge and skill transferability
- knowledge and skill transferability with either ontological implications or pedagogical implications, together with issues concerning life enhancement.

There was general recognition, on the part of 30 of the 31 students interviewed, that knowledge and skills gained through WBL had the potential for immediate transferability to other contexts.

Respondents identified the following as knowledge and skills that they regarded as transferable to other contexts:-

Knowledge & skill transferability

| Knowledge & skills with potential     | Student response |
|---------------------------------------|------------------|
| for transferability                   | rate             |
| Time management                       | 2                |
| Team work                             | 4                |
| Team management                       | 1                |
| Interpersonal skills                  | 3                |
| Communications skills                 | 4                |
| ICT skills                            | 3                |
| Project management                    | 3                |
| Conflict resolution                   | 2                |
| Decision-making skills                | 1                |
| Skills in problem-solving             | 1                |
| Creativity                            | 1                |
| Research skills                       | 2                |
| Subject knowledge through application | 4                |

Knowledge & skill transferability with ontological &/or pedagogical implications

| Transferable knowledge & skills with ontological &/or pedagogical implications | Student response<br>rate |
|--|--------------------------|
| Study skills   | 9                        |
| Data for dissertation  | 6                        |
| Learning to learn  | 3                        |
| Managing own learning  | 2                        |
| Self knowledge   | 6                        |
| Reflection on learning   | 6                        |
| Multiple perspectives  | 1                        |
| Career choices   | 4                        |
| Work experience  | 3                        |

A more detailed presentation of the findings from Question 8, including extracts from the interviews, is to be found at Appendix G.

# Concluding comments in respect of proposition 2

The overall evidence of the data collected from the 31 interviews seems to me to be sufficient to confirm the proposition that knowledge and skills generated through Work Based Learning are fully commensurate with HE standards thus justifying the place of WBL in the curriculum. What is clear, however, is that there may well be a broader range of knowledge and skills developed in students through WBL than may be the case through conventional programmes of HE. This broader range of knowledge and skills would appear to be more consistent with the vision of higher education articulated by Barnett in his recent writings (e.g. Barnett, 1997) and consistent with what is now being referred to in some quarters as "blended learning". Although the evidence in relation to this particular proposition alone is perhaps not sufficient to make such a judgment, there does seem to be enough of it, and for it to be sufficiently compelling, to make the argument that, taken together with the evidence aligned with the other two propositions, Work Based Learning has the potential to develop in students the ability to reflect self-critically, as well as to think critically. The research did not focus specifically on critical action, though a small number of respondents did refer to this indicating, perhaps, the potential of Work Based Learning to bring it about. The evidence presented in respect of this proposition alone indicates that, through Work Based Learning, the broad range of knowledge and skills needed to become Barnett's 'critical being' are accessible. If there are gaps in terms of knowledge and skills apparent from the interviews, they seem to me to be in the all-important area of disciplinary knowledge and this should signal some concerns in respect of the justification of Work Based Learning in the HE context. However, as there was no intention to attempt to gather comprehensive responses to the interview questions (if there had been students would have been given advance notice of them), the place of subject knowledge in WBL, as apparent from this study, is not entirely clear. Reference is made to it mainly by full-time undergraduates, many of whom would have been working in placements allied to their subject disciplines. Where it is referred to, it appears to be in the context of knowledge enhancement through WBL.

The issue may be more acute, however, in respect of part-time students in full-time employment from whom few comments were received in respect of subject knowledge. However, if professional knowledge is substituted for subject knowledge, as it seems appropriate that it should in this context, it will be noted that several references were made to knowledge enhancement in this respect. Few people at work operate solely on the basis of a single discipline. The reality is that WBL, as commented on a number of times in this report, is almost certain to be multi- or transdisciplinary and the broad range of responses from the interviewees confirms this to be the case. One of the reasons for the use of the term "WBL theories" is to reflect more accurately the nature of work and of WBL and to indicate that a broader knowledge base than that of a single discipline alone is characteristic of WBL in the HE context.

## Chapter 4 (c) PEDAGOGY

# Proposition 3 (Questions 3, 4, & 6): the Pedagogical Dimension

In the chapter on pedagogy which I have written for a forthcoming ILT publication (Appendix C), I argue that effective learning is essentially a holistic process that integrates knowing and doing in a critically reflective way and that Work Based Learning is a sound facilitator of learning of this quality. I argue that, through WBL, learners appear to have a much better understanding of the learning process than is gained through conventional teaching methods. A main contention of the chapter is that Work Based Learning requires learners to assume a high degree of responsibility for their own learning, that it presents them with a wide range of ways of learning and that, together with critical reflection as a key ability in WBL, leads to learners developing a greater understanding about how learning occurs.

This chapter for the ILT publication was written subsequent upon analysis of the empirical research data which supports the claims made above. The proposition I formulated, with the aim of the research being to establish whether or not it is the case, was that individuals have access to a broad range of ways of learning through Work Based Learning and have the opportunity to use the ways that suit them best.

### Question 3 How do you think you acquired this knowledge and these skills?

This question was concerned to elicit something of the various ways in which people learn. It was not in any sense meant to be about the physiological workings of the brain or to engage in any form of psychological study. The purpose was simply to find out about people's learning preferences and how, when freer from the constraints of a more controlled learning environment (such as the University or College), they went about their learning. It was, then, more to do with methods of learning and the idea that, through Work Based Learning, people probably engaged in a wider variety of ways of learning than they would in a more conventional form of higher education.

The data reveals a considerable variety of ways of learning with a tendency towards practical learning, as might be anticipated from a question about Work Based Learning. Typically, in response, interviewees would discuss a wide range of ways of learning they use, indicating versatility and fitness for purpose. In an attempt to order the responses, six principal categories have been defined

- experiential learning
- conventional learning
- instructional learning
- reflective learning
- relational learning
- other ways of learning.

The measure for the student response rate is 31, which is the number of students who participated in the semi-structured interviews.

Experiential learning

| Learning through experience                      | Student response |
|--|------------------|
|  | rate             |
| Practical/active/"hands ou" learning             | 24               |
| Trial and error                                  | 8                |
| Positive experience as reinforcement of learning | 4                |
| Motivation/definite goal or challenge            | 6                |

Conventional learning

| Conventional ways of learning    | Student response |
|----------------------------------|------------------|
|                                  | rate             |
| Direct teaching/access to tutors | 6                |
| Access to appropriate literature | 21               |
| Internet                         | 3                |
| Theories                         | 8                |
| Theory/practice reinforcement    | 11               |

Instructional learning

| Learning through instruction                 | Student response rate |
|--|-----------------------|
| Receiving instruction/advice from experts    | 7                     |
| Asking questions                             | 5                     |
| Observation (observing those with expertise) | 17                    |

Collectively the above three categories indicate something of the range of ways students undertaking Work Based Learning actively seek to access knowledge needed to support their learning. In Appendix H, I discuss the admission of conventional learning into programmes of WBL and refer to the distinction that is sometimes made between education and training, a distinction which, I suspect, work based learners, quite wisely, have little interest in.

Reflective learning

| Learning through reflection                | Student response rate |
|--|-----------------------|
| Learning through critical reflection       | 5                     |
| Application of reflective learning cycle   | 3                     |
| Evaluation of own &/or others' performance | 2                     |
| Learning occurring through self knowledge  | 3                     |
| Defining the context of learning           | 2                     |
| Learning through writing                   | 3                     |

Although this way of learning sounds a lone activity, a part-time postgraduate in full-time employment recognises a social dimension to it when she summed it up as follows,

<sup>&</sup>quot;I mean sometimes it is just by looking at the whole situation at work, seeing what's going on and then in your mind's eye you've got all this theory and you can see people behaving exactly as you

have read about someone's theory or personality or different traits and you can see it exactly coming through in the workplace or outside the workplace. So, it's all a mixture really. It goes across the board. It's more of an unconventional learning in that sense, it's not learning as in a school or college environment, it's more a learning in society such that you feed in one with another and it doesn't necessarily go from the book to the workplace, it could go from the workplace back to the book."

Relational learning

| Learning with and through others | Student response rate |
|----------------------------------|-----------------------|
| Collaborative learning           | Tale<br>5             |
| Sharing ideas                    | 1                     |
| Gaining feedback                 | 4                     |
| Engaging in debate and argument  | 1                     |
| Teaching others                  | 2                     |
| Modelling behaviour of others    | 5                     |

"I think I learn more in the seconds when we discuss things...". This comment by a part-time student in full-time employment helps to sum up the above category which is discussed in more detail in Appendix H.

Other ways of learning

| Various other ways of learning                       | Student response rate |
|--|-----------------------|
| Interest in the subject a pre-requisite for learning | 2                     |
| Confidence in own abilities                          | 1                     |
| Through "bite-size" chunks                           | 1                     |
| Tapping in to tacit knowledge of workplace           | 1                     |
| Teach yourself                                       | 2                     |
| Knowledge transfer                                   | 1                     |
| Through repetition                                   | 2                     |
| Through brainstorming                                | 1                     |

A more detailed presentation of the findings from Question 3, including extracts from the interviews, is to be found at Appendix H.

# Question 4 In what ways did you deliberately set out to learn something new?

Designed in some ways to cover similar ground to Question 3, this question focused on how respondents went about learning something new. Answers were categorised under 5 headings:-

- attitudes to learning (probably not an entirely adequate description, though it seems more or less appropriate)
- planning learning
- ways of learning

- relational learning
- the use of prior learning.

Attitudes to learning

| Attitudes to learning                                    | Student response rate |
|--|-----------------------|
| Motivation/importance of right attitude to learn         | 2                     |
| Confidence important in learning                         | 2                     |
| Preparedness to undertake reflection                     | 1                     |
| Willingness to self-assess                               | 1                     |
| Pro-activity/creating learning opportunities for oneself | 2                     |
| Receptivity  | 1                     |
| Flexible approach  | 2                     |

Having the right attitude to learning was recognised as important by a number of students. A full-time undergraduate noted,

As well as having an appropriate attitude to learning, students also recognised the need for planning for learning in WBL, as the table below indicates.

Planning learning

| Learning through planning for learning  | Student<br>response<br>rate |
|---|-----------------------------|
| Planning for new learning               | 9                           |
| Learning to meet needs of a project     | 8                           |
| Developing a framework for new learning | 3                           |
| Having a clear focus                    | 3                           |
| Monitor progress in learning            | 1                           |
| Awareness of learning methods           | 1                           |

Ways of learning

| Various ways of learning             | Student response |
|--------------------------------------|------------------|
|                                      | rate             |
| Through reading                      | 8                |
| Through the internet                 | 5                |
| Through instruction/asking questions | 6                |
| Teach yourself                       | 1                |
| Through practice                     | 5                |
| Trial and error                      | 1                |
| Through observation                  | 2                |
| Through knowledge application        | 3                |

<sup>&</sup>quot;I just went in there and thought I will do the job as best I can, and I'll try and get stuck in and wherever I am going I am willing to learn and whatever I do in the process I hope I learn some new skills."

Relational learning

| Learning with and through others       | Student response rate |
|--|-----------------------|
| Gaining feedback on performance        | 2                     |
| Through discussion                     | 2                     |
| Through collaboration                  | 2                     |
| Learning from the experience of others | 5                     |

Use of prior learning

| Drawing on previous learning              | Student response |  |  |
|---|------------------|--|--|
| •   | rate             |  |  |
| Drawing on prior knowledge and experience | 2                |  |  |
| Drawing on known theories                 | 3                |  |  |

A more detailed presentation of the findings from Question 4, including extracts from the interviews, is to be found at Appendix H.

Question 6 Can you give an example of critical reflection in which you engaged during the placement? To what extent has reflecting critically changed the way you view (a) work, (b) yourself, (c) the world generally?

Answers in response to Q6 offer some diverse data which is essentially about the potential of critical reflection as a way of learning in relation to self, work and the world. Reference was made to this in the discussion on proposition 1 and certain of the data was referred to this section. This is perhaps a timely reminder in the context of this discussion on pedagogy that ways of learning, in the context of Work Based Learning, may well be wider than in conventional learning, embracing self learning and learning which has the potential to lead to critical action either in the context of personal living or at work or in the world more generally. A distinctive feature of Work Based Learning may, then, be its provision of a "blend" of learning which leads to the more rounded 'critical being' of which Barnett speaks.

The data is roughly divided into 2 sections:

- putting critical reflection to use in learning
- issues concerning critical reflection and learning

Putting critical reflection to use in learning

| Critical reflection in learning                    | Student response |  |  |
|--|------------------|--|--|
|  | rate             |  |  |
| As a tool of analysis                              | 2                |  |  |
| In decision-making                                 | 3                |  |  |
| Facilitates a more considered approach to learning | 1                |  |  |

| In problem solving                              | 4 |
|---|---|
| As a means of identifying areas for improvement | 4 |
| In future planning                              | 4 |
| For identifying unplanned learning              | 1 |
| Exercising engagement of thought                | 2 |

Issues concerning critical reflection & learning

| Critical reflection and learning                     | Student response |  |  |
|--|------------------|--|--|
|  | rate             |  |  |
| It is challenging and demanding                      | I                |  |  |
| It is essentially personal                           | 2                |  |  |
| It is relevant to substantive issues only            | 2                |  |  |
| Its constructive nature & purpose                    | I                |  |  |
| It is a professional competence                      | 4                |  |  |
| It ensures one takes responsibility for own learning | 3                |  |  |

| A more detailed presentation of the findings from  | Question | 6, | including | extracts |
|--|----------|----|-----------|----------|
| from the interviews, is to be found at Appendix H. |          |    |           |          |
|  |          |    |           |          |

Questions 2, 7 and 8 each contained a few points relevant to the discussion in relation to this proposition but largely repeat points made elsewhere. Some further comment is to be found at Appendix H.

# Concluding comments in respect of proposition 3

There would appear to be sufficient evidence from the interviews to confirm the proposition that individuals have access to a broad range of ways of learning through WBL. It also seems reasonable to assume from the information divulged by the respondents that this broad range of learning methods can be matched to individual learning styles and learning preferences, and that this indeed happens to be the case. However, there is also evidence to suggest that each individual embraces a variety of ways of learning with the implication that not all of these will necessarily reflect a preferred learning style. In cases where students move out of their "comfort zone" to access learning this may be because it is the most convenient and expeditious way of doing so. For example, the practical learner who reads a book in order to access a theory he or she needs.

While the evidence is clearly not available to support this view, it is, nevertheless, my opinion that learning in the context of work enables individuals to draw on a wider

range of learning methodologies than does conventional HE study and that, through the opportunity and, to some extent, the necessity of dipping in and out of different styles of learning, learners develop a broader range of learning competences leading to more holistic ways of understanding learning than would result from conventional University study alone. My argument, though again only inferred from the evidence rather than supported by it, is that this exposure to a wide range of ways of learning, gives rise to the capability of learning to learn.

My view is that, if the interview transcripts are read holistically, there is a clear sense of respondents being made aware through Work Based Learning of the various ways in which they learn. This is particularly true, I believe, though not exclusively so, of full-time undergraduate students, many of whom have had little or no previous work experience and certainly none where planned learning in the context of work has been a requirement. There seems to be a sense in which they suddenly switch on to the importance of learning and the importance of being aware of their own learning and accepting some degree of responsibility for it. This, together with some theoretical input on learning styles, gives them the opportunity to consider their strengths and weaknesses in terms of their ability to learn and presents them with the opportunity through WBL of accessing a wider range of ways of learning than they may have been accustomed to in their previous experience of school or college education.

If my views here bear any relation to the reality of the situation, it would also seem to me that learning through WBL provides a more solid learning platform for Barnett's (1997) "critical being" than does conventional HE learning. It provides for that wider range of learning opportunities which students, I would maintain, need if they are to not only engage in the critical thinking that is so highly prized in higher education but also in critical self-reflection and critical action. Through Work Based Learning they are required to engage in each of these three elements of criticality in order to be fully effective, and the evidence of the interviews would appear to suggest that students recognise this and do so engage in this broader range of critical activity.

## Chapter 4 (d)

## Part 2: Quantitative Research - Questionnaire

The quantitative survey applied only to full-time undergraduate students on 6 week Work Based Learning placements. 312 replies were received from a cohort of 487 giving a 64% return rate.

A full account of the results of the survey is to be found in Appendix I. My intention in this section is to comment on the research findings in the context of the main topic areas to be covered by the questionnaire as identified in my learning agreement, namely:

- Planning and taking charge of own learning
- Support mechanisms for WBL
- Recording and reflecting on learning achievements in the work place
- The distinctiveness of WBL
- The development of critical thinking and critical reflection in the context of work based settings

These 5 areas of investigation are consistent with the 9 principal areas of enquiry to which questions were designed to elicit responses (see p 25), with the latter covering a slightly broader range of enquiry to reflect the interests of the WBL Development Team and to provide them with data useful for planning purposes, including data relating to transferable skills and career development, the Learning Agreement, Assessment and WBL generally.

### Planning & taking charge of own learning

# Proposition 1: that, through Work Based Learning, students are likely to gain a greater sense of responsibility for their own learning

The data shows that 96.5% of students claimed to keep a record of their experiences on the placement. Students were advised by tutors, and through support literature, to keep a learning log (a) to assist them in monitoring their own learning, and (b) to aid the completion of their assignments, though the log itself was not part of assessed course work and students knew this. Whatever their motives for keeping the log, the evidence suggests that the large majority of students were aware of the importance of taking some responsibility for identifying and recording their learning achievements.

Answers to various sub-questions within Question 5 also indicate that students are well aware of the additional responsibilities that Work Based Learning places on them for planning and taking charge of their own learning. For example, answers to Q5(i) show that 94.2% of students agree that WBL required them to be more reliant on their own resources than they have to be in the context of College-based modules.

In terms of planning, answers to Q5(f) indicate that the large majority of students taking part in the survey (93.3%) recognise that in Work Based Learning you are involved in the planning and evaluation of your own learning.

A similarly large number of respondents (87.8%), according to Q5(b), agreed that in Work Based Learning they were able to structure their learning to meet their personal and professional needs with 70.5% (Q5{c}) agreeing that in WBL you can devise your own programme of learning. 66% of the respondents, however, according to Q5(d) agreed that accepting responsibility for devising your own WBL programme was difficult. There is an uncertainty in this question, not picked up through piloting, as to whether or not the respondents found "accepting responsibility" difficult or "devising their own learning programmes" difficult, though I suspect it is the latter. Either way, there is recognition that Work Based Learning does place additional responsibilities, in respect of own learning, on the learner.

Responses to Q5(n) indicate that students are aware of the opportunities that WBL presents them with for focusing on what they need to know (75.3% agree this to be the case), with 92.6% at Q5(g) agreeing that Work Based Learning enabled them to acquire knowledge and skills relevant to their future personal and working lives while acknowledging that, at College, tutors make decisions about the focus of learning (Q5{e} where 84.6% agree this to be the case).

In answer to Question 9 (a), 61.3% of students said that they deliberately planned to learn certain skills and understandings with 77.3% agreeing that this had helped them to make significant changes to their learning (Q9{b}).

In spite of the opportunity to plan their own learning, which the majority of students acknowledge is the case in WBL, 65.5% said, in response to Q15, that their learning had occurred randomly rather than through careful planning. This result may be open to various interpretations with the one that is most consistent with the evidence being that detailed learning occurred randomly within the broader context of planned learning, for those students.

Questions about the Learning Agreement were also, to some extent, indirectly about the control students have over their own learning in WBL with 50.5% noting that they had made changes to their learning outcomes after the start of the placement and 36.3% claiming that they had added new learning outcomes to their Agreement during the course of the placement.

Overall, the evidence of the survey, in respect of proposition 1 (namely that, through WBL, students are likely to gain a greater sense of responsibility for their own learning), would appear to suggest that it is confirmed. There seems little room for doubt, on the basis of the evidence, that students recognise that in Work Based Learning they have to accept responsibility for planning and taking charge of their own learning.

# Support mechanisms for WBL

Proposition 2: that Work Based Learning at Chester College is appropriately supported both by employers and the College and that students are given access to the knowledge they need for learning through work.

In terms of support during the placement, 84.9% of the respondents indicated that they were always able to rely on their line manager or supervisor for advice and help

when they needed it (Q6). 58.7% agreed that they sought advice about their work from people other than their line manager or supervisor (Q7). This suggests a reasonably strong support network in the work place. Fewer students appear to have made use of the support of their College WBL Tutor (39.1%), though 11.5% drew support from other College tutors (most likely, subject specialists) and fellow students (50.6%) with a surprising 28.8% admitting to gaining support and help from their parents (O8). Presumably the sort of support and help given to students was wide ranging and undoubtedly covered issues concerning human relationship skills as well as technical and job or task specific knowledge and skills. In terms of giving students access to knowledge needed for the workplace, the Chester College model of undergraduate Work Based Learning includes a Support Programme. This is an intensive, one week, College based course, designed to prepare students for the placement experience. Typically, it includes, what have become known in the Centre as, WBL theories (a general and somewhat inaccurate term used as short-hand for a wide range of theories relevant to work). These theories typically include team working, learning styles, time management, project management, organisational structures and, most pertinently, critical reflection. In addition, the Support Programme includes much information about assessment and the practical arrangements associated with the double module.

Given the emphasis which is placed upon the importance of the theory-practice interface, so typical of the workplace and of Work Based Learning, it was a little disappointing to discover that only 67% of students claimed to refer to any theoretical concepts to help them make sense of their work based experience (Q4{a}). Of those, 83.9% claimed to have accessed these theories through the Support Programme Handbook (Q4{b}). This is, what amounts to, the course manual, containing, in abbreviated form, theoretical perspectives on a range of issues relevant to work, together with much practical advice and guidance concerning learning through work. Also slightly disappointing was the extent to which other sources of learning about theoretical concepts were accessed, with only 42.4% (Q4{b}) of the 67% (Q4{a}) making use of "other texts".

Data for Q16 and Q 17 also relate to this proposition, with answers to Q17{a}) showing that 85.8% of respondents claimed to have read the Support Programme Handbook during the placement. It would appear, however, from responses to Q17{b}), that the main driver for doing so was to gain information about assessment issues (47.8%), with 45.5% accessing information about both work based and assessment issues.

It is difficult to assess the extent to which this proposition can be confirmed. Structures are in place to support students during the placement but the extent to which they access them is largely a matter for them to decide. Most students would appear to be well supported in the workplace itself. Given that one of the intentions of the WBL experience in an undergraduate programme is to make students more self-reliant and more responsible for their own learning, it may be that the reason that more of them do not access College tutor support is precisely because they are accepting more responsibility for themselves.

Of greater concern is the issue broadly concerning the place and status of knowledge in Work Based Learning. My view is that knowledge in a WBL context can be

viewed in a number of ways. Of prime importance is the knowledge that is generated as a result of engagement with projects in the workplace. Evidence from the survey indicates that 92.6% of the respondents agreed that, through the placement, they had acquired knowledge, skills and attitudes that had immediate relevance to their future working and personal lives (Q5{g}). Thus, learning through work is clearly acknowledged, as is the transferability of knowledge gains.

Further evidence of the way in which knowledge gained through work is transferable comes through the response of students to Q10 where 81.3% think that they have developed skills which they will be able to use in their third and final year of studies. Similarly, responses to Q11 indicate that the large majority of respondents (93.6%) think that, through WBL, they have developed skills which they will be able to use in other jobs that they may undertake in their immediate futures.

The discipline of work, as a by-product of WBL, also features in the survey and data shows that 67.9% of respondents feel that their ability to meet deadlines has improved as a result of the placement (Q12{a}), with 82.2% of those feeling that it will help them to meet deadlines for assessment when back in College (Q12{b}). The discipline of working regular hours, and the influence of the placement on career decisions, also feature in the survey and suggests that WBL does have a positive contribution to make to both areas.

All of this is positive in terms of knowledge generated through work and the transferability of that knowledge from one context to another. However, another important area in respect of knowledge is the knowledge that is taken into the workplace. The Chester College Support Programme is intended to provide students with theoretical perspectives in a range of both 'hard' and 'soft' areas that they can examine in practice in the workplace. Yet the evidence suggests that this aspect of Work Based Learning is not proving as effective as it ought to be. Evidence from the group interview, which I conducted following the placement, may throw some light on to this. It would seem, and this is confirmed by most employers, that the majority of students throw themselves wholeheartedly into Work Based Learning. They are keen to make a good impression with their employers and they are keen to do a good There seems to be a clear sense in which the job and the job description dominate and students spoke of College requirements becoming marginalized. The evidence of Q5(1), which shows that 80.2% of respondents find WBL more motivating than classroom learning is, perhaps, further evidence of the enthusiasm students appear to have for WBL.

It may, then, be quite hard for them, in a short space of time (the six weeks of the placement), to engage with the issues presented to them in the Support Programme in the way that College tutors would wish. There would appear to be the tendency on the part of many students to fall back on the Support Programme Handbook principally for the purposes of, and at the time of writing, their assignments rather than wrestling with the theory/practice interface during the course of the placement itself. However, at Q5(j) the data shows that 88.6% of respondents claim that, in Work Based Learning, they were able to apply knowledge gained through their College subject(s). This is important data in that it suggests that students do recognise the applicability of their HE learning to the work setting and confirmation that at least some of the learning they acquire is of relevance to their employability.

On balance, 1 would wish to argue that the proposition is confirmed in that students are given access to at least some of the knowledge they need for learning through work even though the evidence indicates that not all of them may use it as fully as might be considered desirable.

### Recording & reflecting on learning achievements in the workplace

# Proposition 3: that students record, and reflect on, their learning achievements in the workplace.

Responses to Q1(a) show that 96.5% of students claimed to keep a record of their experiences while on placement with, what would appear to be, the overwhelming majority keeping a written record (Q1{b}). 74.9% claimed that they deliberately set aside time to reflect on their progress towards achieving their learning outcomes with nearly two-thirds (61.5%) claiming to do this either on a daily or weekly basis. Further evidence in respect of reflection is found at Q3(a) where responses indicate that almost one third of the students (32.1%) had considered the way in which their preferred learning style had influenced the way they tackled their work. Learning styles was raised as a theoretical issue in the Support Programme and some students, at least, presumably had reflected on this in relation to their experience of work. In a similar way, evidence at Q4(a) suggests that two-thirds of respondents (67%) had referred to theoretical concepts to help them to make sense of their work based experience, with the majority of those (83.9%) claiming to have accessed them through the Support Programme Handbook. Although the figure reported at Q4(a) is disappointing, in that one third of the students claimed not to have used theoretical concepts in this way, it does, nevertheless, point to a degree of reflective activity on the part of those who did. Of course, it is also true that all students completing this questionnaire had to engage, to some degree, in reflective activity in order to be able to do so.

While, on the basis of the evidence, it may seem reasonable enough to confirm the proposition, there is no way of knowing, from this survey alone, whether any of this reflective activity was undertaken in more than a perfunctory manner. It was the job of the semi-structured interviews to probe further into issues concerning the depth at which reflective activity was undertaken. The findings from the qualitative survey in this respect are reported on page 68 of this report.

### The distinctiveness of Work Based Learning

# Proposition 4: that Work Based Learning possesses certain distinctive features apparent to those engaged in the experience

All respondents (100%) claimed to find learning in the workplace different from learning in College (Q5{a}), which suggests that Work Based Learning must possess some distinctive features recognised by those who engage in it. Some of those distinctive features appear to be recognised as relating particularly to the way in which programmes of learning through work place a high degree of responsibility on the learner for determining the focus of learning and for negotiating the learning outcomes of a programme of WBL. Thus, at Q5(b) 87.8% of respondents agreed that

they had been able to structure their learning to meet their personal and professional needs, and at Q5(n) 75.3% claimed that WBL enabled them to focus on what they needed to know. 70.5% at Q5(c) felt that they had been able to devise their own programme of learning, with 66% agreeing that accepting responsibility for devising their own learning programme was not easy (Q5(d)). This ability to take charge of your own learning in WBL is contrasted with the way in which, at College, tutors assume those responsibilities. 84.6% of respondents recognised this to be the case (Q5{e}).

The majority of students (93.3%) who took part in the survey agreed that WBL had involved them not only in planning their own learning but also in the evaluation of it (Q5{f}) and 92.6% agreed that WBL had enabled them to acquire knowledge, skills and attitudes that have immediate relevance to their future working and personal lives (Q5{g}). Again, the vast majority of respondents (94.2%) agreed that WBL required them to be more self-reliant than did College based courses (Q5{i}) and 88.6% (Q5{j}) agreed that it enabled them to apply knowledge gained through College modules.

96.8% of respondents agreed that Work Based Learning had raised their awareness of the relevance of practical experience for learning (Q5{k}), with 80.2% claiming it to be more motivational than classroom learning (Q5{e}). Responses to Q9(b) indicate that about one half of respondents (77.3% of the 61.3% YES respondents at Q9{a}) felt that they had made significant changes in learning as a result of the opportunity given through WBL of planning their own learning, which seems to indicate an awareness of having power over their own learning sufficient to direct or redirect its course.

This proposition appears to be confirmed, with respondents agreeing in large measure that the distinctive features of Work Based Learning, either made explicit or residing implicitly within the questionnaire, are recognised by them as being features of WBL. These distinctive features are identified as follows:

- WBL as negotiated learning
- WBL requires the learner to take responsibility for his/her own learning
- In WBL learning can be focused on where it is needed
- WBL requires the learner to be self-reliant
- WBL provides the opportunity for the application of knowledge
- WBL is a form of experiential learning
- WBL gives the learner power over his/her own learning

# Development of critical thinking & critical reflection in the context of work based settings

# Proposition 5: that Work Based Learning gives rise to the development of critical thinking and critical reflection

This is a particularly difficult proposition to test by way of a questionnaire and the intention in introducing it into the survey was simply to discover something of the behaviours of students that might facilitate a reflective approach to learning. The

principal mode of enquiry into the development of reflective capabilities was left for the semi-structured interviews of the qualitative research.

Answers to Q1(a) indicate that the vast majority of students surveyed (96.5%) claimed to keep a record of their learning experiences while on placement. At Q1(b), where students were given the opportunity to indicate the way(s) in which they recorded their experiences, the evidence suggests that the majority kept some form of written record. Almost three-quarters of those surveyed (74.9%) claimed that they deliberately set aside time to reflect on their progress towards achieving their learning outcomes (Q2{a}), with almost one third (31.2%) claiming to do this on a daily basis, and almost another one third (30.3%) alleging that, for them, it was a weekly activity (Q2{b}).

It appears, however, that only 32.1% (Q3{a}) did sufficient reflection to be aware of the way in which their preferred learning style affected the way they went about their work. However, there seems to be some evidence that students had reflected to a sufficient degree on the overall impact of the experience for 75.8% to agree that they had learnt something that had possibly made a lasting change in them (Q30) and a similar number (76.8%) claiming that, at some point during the placement, they had had a sudden insight which made them realise they had learned something new (Q31).

It could be claimed that further evidence of reflection is found in response to Q32(a) where students were asked whether or not during the placement they felt they had left their "comfort zone". 34% claimed this to be the case and nearly all of them (97.1%) claimed to have persevered with their learning when faced with this situation (Q32{b}).

Although, overall, there is insufficient evidence to claim that the proposition (that WBL gives rise to the development of critical thinking and critical reflection) is confirmed, there is evidence to suggest that students are engaging in practices which have the potential to lead to critical thought, and also some evidence that reflection is occurring through experiences in the workplace. The evidence from the qualitative research study, however, suggests that the level at which critical thinking and critical reflection is engaged in may not be as deep as might be hoped for. Findings relevant to this aspect of the study are to be found on page 68 of this report.

# **Chapter 5 Conclusions & Recommendations**

The principal aim of this section of the report is to identify the main conclusions of my research and to make recommendations intended for the Senior Management Team of Chester College of Higher Education concerning the College's Work Based Learning provision (see report to SMT of Chester College on WBL provision {Appendix E}).

As stated in Chapter 1, the overall purpose of the research was to conduct a critical inquiry concerning the justification of programmes of Work Based Learning within the overall curriculum provision of Chester College, with the key aim being defined as: to investigate the <u>nature</u> and distinctive <u>features</u> of Work Based Learning in order to demonstrate that, on philosophical and educational grounds, its inclusion in the Chester College curriculum is entirely <u>justified</u>.

For the purposes of triangulation of results and overall evaluation of the evidence in relation to the central aim of the project, the following approach will be adopted (see Chart {p28} for summary, showing how, in the context of the case study, evidence is brought together for consideration as a whole). The central aim will be broken down into three parts, namely:

- Nature (of Work Based Learning)
- Features (of Work Based Learning
- Justification (for Work Based Learning in the higher education curriculum)

The nature of Work Based Learning has been researched in two principal philosophical areas, namely:

- Ontology
- Epistemology

The distinctive features of Work Based Learning have been researched in one principal educational area, namely:

Pedagogy

The justification for Work Based Learning to be included in the higher education curriculum will be judged in relation to three measures:

- The three propositions relating to the Qualitative survey and the extent to which they are confirmed by the evidence
- The QAA qualifications descriptor for an honours graduate (see Appendix O)
- Barnett's analysis of the "critical being" (see Appendix O)

Each area of enquiry will be supported by an evidence base consisting of:

- Literature relevant to current WBL debate
- The article(s) I have produced for publication
- Data from the Qualitative interviews
- Data from the Quantitative survey

Triangulation, and overall evaluation, of results will lead to conclusions and recommendations.

# **ONTOLOGY**

#### Evidence base

- Literature (from Chapter 3 Literature Review)
- Articles:

Major, D; 2002; A More Holistic Form of Higher Education: the Real Potential of Work Based Learning; in The Journal of Widening Participation and Lifelong Learning Vol. 4, No.3, Dec. 2002 (Appendix A)

(This paper was peer reviewed prior to publication.)

Major, D: 2002: Towards a Philosophical Underninging for Work Based

Major, D; 2002; Towards a Philosophical Underpinning for Work Based Learning; the Ontological Perspective; unpublished (currently under consideration for publication) (Appendix D)

- Quantitative data (from Propositions I & 5)
- Qualitative data (from Questions 1 & 6)

#### Literature

I consider that the work of Barnett has a great deal of potential as a source of philosophical underpinning for Work Based Learning. His concept of the "critical being" (Barnett, 1997), which embraces critical thinking, critical self-reflection and critical action in a holistic way and one commensurate with Barnett's view of what a graduate should be, is, in my view, achievable through Work Based Learning. Evidence from the Qualitative data suggests growth in self-knowledge through WBL and an awareness of the importance of critical reflection and critical self-reflection. The issue of critical action was not focused on in the interviews, though a number of my respondents noted how, through critical reflection, they had experienced change in their attitudes to world issues (Q6), with some noting their greater awareness of the need to view issues from multiple perspectives (Q6), and an awareness of the relational viewpoint (Q6).

Vaill's (1996) understanding of learning as a way of being, I also consider to be a valuable contribution to a potential philosophical underpinning for Work Based Learning. I have argued in my article A More Holistic Form of Higher Education that critical reflection, as a key feature of WBL, has the potential to assist individuals with meaning-making and Vaill's understanding of 'spiritual learning' supports that argument. Although 1 recognise that the empirical evidence from my research must not be exaggerated in respect of the way in which WBL impacts on individuals and brings about change for them, nevertheless, there is a certain amount of evidence from the Qualitative data which suggests that it does increase self knowledge and can bring about a changed perception of self (Q1). The evidence also shows something of the wide range of ways of learning individuals engage in when undertaking Work Based Learning (e.g. Q3) and I have argued that this has the strong likelihood of leading to learning to learn which may be another way of understanding Vaill's concept of learning as a way of being.

#### **Articles**

Drawing on concepts such as critical being and learning as a way of being, I attempt in these two articles to make the case for Work Based Learning as a more holistic way of being and knowing than conventional university education provides for. Critical reflection is featured as a key attribute required in, and developed through, WBL, and

I attempt to show how the concept of relationality is central to work and, therefore, to learning through work. Some of the claims made in these theoretical articles are, I would argue, backed up by evidence from my empirical research (e.g.Q6). A holistic reading of the semi-structured interview responses, gives, in some cases, a clear sense of the way in which the respondents claim to have grown and changed in respect of their "being" as a result of engaging in Work Based Learning.

### Quantitative data

Proposition 1: that, through WBL, students are likely to gain a greater sense of responsibility for their own learning

Proposition 5: that WBL gives rise to the development of critical thinking and critical reflection

Given that the principal purpose of this survey was essentially to gather data for the WBL Development Group within the Centre for Work Related Studies at Chester College, with a view to gauging the effectiveness of advice and support given to students on placement, there was a tendency to ask direct questions about functional rather than philosophical issues. However, data shows that, for example, students are aware of the greater responsibilities that WBL places on them for assuming control over their own learning and for being involved in its planning and evaluation (e.g. O5). While no attempt was made to measure the success of the students in rising to these challenges, nevertheless, the fact that they recognise that WBL places these responsibilities on them is sufficient to make the claim that it has the potential to lead to learners having greater control and responsibility over their own learning. inference which may be made is that this is more likely to lead to "learning as a way of being" than might be the case through more controlled learning environments. This is said in the knowledge that there is a general move in higher education to promote learner autonomy and to facilitate independent learning both of which, as indicated above, Work Based Learning requires of its students.

Although extremely difficult to test students' critical thinking and critical reflection abilities through a questionnaire, nevertheless, some evidence does emerge from the quantitative survey in these respects. For example, almost three quarters of the cohort surveyed claimed to set aside time for reflection on their progress towards achieving their learning outcomes (Q2{a}), and just over three quarters, in saying that they had achieved learning that would make a lasting change in them (Q30), were presumably implying that they had undertaken a process of critical reflection which had led them to that conclusion. The claim that "change" has occurred as a result of experiences gained through Work Based Learning, is commonly written about by students in assignments (not researched as part of this project) where they are attempting to demonstrate their critically reflective skills.

All that may be claimed from this aspect of the survey is that there is evidence to suggest that students are engaging in practices which have the potential to lead to critical thought, as well as some evidence that reflection is occurring through experiences in the workplace. This confirms the findings of the qualitative research, though it has to be acknowledged that the evidence there also raised concerns about the level at which critical reflection, in particular, is occurring.

### Qualitative study

Proposition 1: that WBL has the potential to bring about change in the way in which individuals see themselves, their work and their worlds.

In order to be in a position to confirm this proposition, the empirical evidence from the semi-structured interviews would need to show evidence of ways in which, as a result of undertaking WBL, people's views of themselves their work and their worlds had **changed**. In addition, if I were to be in a position to strengthen the arguments I make in the two articles, empirical evidence in respect of **relational learning** and **critical reflection** would be necessary. Comment on the three areas of change, relational learning and critical reflection make up this section.

## Change

In respect of change, the data shows that a number of respondents claimed that WBL had made an impact on them with more than half (16) claiming that it had brought about growth in self knowledge or that it had changed their understanding of themselves or that it had brought about self-examination (Q1). Again, nearly half of the respondents (13) spoke of gaining a greater awareness of their own capabilities and of having a growing confidence in their own abilities as a result of undertaking Work Based Learning (Q1). 10 respondents claimed an overall growth in self confidence resulting from WBL, with others speaking of experiencing greater self esteem, of having an improved self image and of feeling empowered through WBL (Q1). Change in relation to attitudes to work and to world issues were also identified by some respondents, though others did not think that WBL had brought about change for them in these respects (Q6).

While the evidence is not overwhelming, there is sufficient of it to make the claim that Work Based Learning has the potential to bring about change in the way people understand themselves and that, for some at least, it has had an influence on their lives or impacted on them as human beings and, even, for some, changed their attitudes to work and to issues in the world. If this is the case, it suggests that WBL is a powerful way of learning that engages the affective domain (e.g. evidence of Q1) as well as the cognitive (e.g. evidence of Q2) and, therefore, has the potential to bring about more holistic ways of being and knowing than, arguably, is the case through more conventional forms of HE study (though, given that this is not a comparative enquiry, I do not have data, apart from Q5 of the Quantitative study, on the student experience of conventional HE). This would certainly add weight to the theoretical arguments of my articles. A note of caution, however, needs to be struck in that some, at least, of my subjects could be considered to be highly impressionable. undergraduate students, new to a form of experiential learning conducted in the workplace, frequently undergo a steep learning curve during the course of the six weeks of the placement which makes quite an impression on them. Usually, learning in this way is an entirely new experience for them and the experience of change (from the lecture room to the workplace) can be stimulating, exciting and invigorating. My past experience of talking with students during and shortly after their placements is that, typically, they are full of enthusiasm for what they have been doing. In many cases they will have had an entirely new experience (even those students who have worked throughout their degree studies, frequently express their excitement at being able to experience work in a profession of their choosing, as do mature students with a record of employment), and often an opportunity to apply their learning to a task for

an employer. All of this can have quite an impact and create the impression of having had a unique experience.

Another group of my students, on whom Work Based Learning appeared to make a considerable impression, consisted of a number of people in full-time employment who had not expected to ever engage in HE level study. For them, an unanticipated opportunity had opened up and their discovery that not only were they able to cope with this level of study but that some of their professional competences were actually recognised as equating with higher education level learning, proved to be highly motivational. It is perhaps, therefore, not surprising that a typical response was that WBL had impacted on them hugely and in a very positive way in that they now valued themselves more highly and recognised their capabilities and their contribution in the workplace.

For both of these groups, what I shall refer to as, the "novel" factor of Work Based Learning should not be underestimated or ignored. However, the evidence of the interviews also suggests that even some of those not falling into either of the above categories recognised something of the impact of WBL on them in terms of changed self-understanding and improved motivation. It may, therefore, be the case that, while the novel factor may play a part in the impact on the individual of the experience of WBL, it does not explain it in its entirety and that there are other factors involved. It is my contention that these other factors are concerned with the distinctive features of Work Based Learning that cause the learner to engage in a wide variety of ways of learning within the context of a community of practice.

#### Relational learning

In respect of relational learning, the evidence shows that respondents engaged in various forms of collaborative learning. These included sharing ideas, gaining feedback from others, engaging in debate and argument as a way of learning, tapping into the tacit knowledge of the workplace, asking questions, team working, and so on (Q3). In terms of skill gains and development there were also numerous references to various forms of interpersonal skills including communication skills, people skills, negotiating skills, team management and leadership skills, and so on (Qs 4&5).

There seems to be sufficient evidence from my qualitative research to make the claim that Work Based Learning almost inevitably involves people in various forms of collaborative learning and engages them in interpersonal relationships in a variety of ways to the extent that, when combined with the impact it has the potential to make on individuals in respect of their self-understanding, supports the philosophical viewpoint that Work Based Learning is a form of ontological-relational thought (a point developed in *Towards a philosophical underpinning for WBL*). The evidence seems to suggest that most participants recognise that WBL involves learning in community and not in isolation, and that learning through work involves an awareness of inter-dependency, mutuality and collaboration. This raises issues for higher education, not least in terms of the way in which assessment of learning is undertaken. It also contrasts quite starkly with the conventional culture of learning in higher education with its emphasis on individualism and personal achievement.

The significance of the evidence, however, should not be over-stated nor the differences between WBL and conventional HE polarised. There is no reason, for

example, why much learning on the University campus cannot be undertaken using more collaborative methods (many University departments now like to refer to themselves as learning communities) and sometimes learning in the workplace may be best achieved through lone activity, such as reading a book or writing an article. However, it remains the case that a distinctive feature of Work Based Learning is that, typically, it occurs within a community of practice, which itself facilitates much of the learning that occurs and, therefore, places emphasis on the notion of relational learning. Any form of collaborative learning implies that there are two principal forms of learning occurring simultaneously: that is, (1) learning about the topic or subject under consideration, and (2) learning about the others who are engaged in learning with you which, in turn, almost inevitably leads to more self learning. This, it seems to me is the essence of the ontological-relational perspective and, therefore, the claim, that Work Based Learning is a form of ontological-relational thought, justified.

#### Critical reflection

I have regarded critical reflection as a sub-section of ontology throughout this research, though I have also acknowledged its potential in terms of both epistemology (especially concerning self-knowledge) and pedagogy (especially as a method of learning). My principal reason for retaining it in this category is because of its potential for meaning-making and, therefore, as a way of understanding one's own being. The article, *Towards a philosophical underpinning for WBL*: the ontological perspective, attempts to make the case for critical reflection as a key and distinctive feature of Work Based Learning. The theoretical view that I expressed in this article is that the centrality of critical reflection in Work Based Learning ensures that it has the potential to lead to more holistic ways of being and knowing, ways which embrace critical thought and critical action in a way of critically self-reflective being, which aligns with Barnett's understanding of the "critical being". The acid test, however, is in respect of student awareness of the potential of critical reflection to achieve this state.

Evidence from the quantitative study (as noted above) of full-time undergraduates' experiences of Work Based Learning show that three quarters of the respondents (74.9%) claimed that they deliberately set aside time for critical reflection. The qualitative study suggested also that the majority of students were aware of the importance of critical reflection in WBL with some making claims about its effectiveness. Nearly two-thirds of my subjects (19) claimed that critical reflection had either changed their attitude to themselves or that they were now more aware of the importance of critical self-reflection (Q6). More than one third (11) claimed that critical reflection had changed their attitude to work and nearly half (14) indicated that either change had occurred in respect of their attitude to world issues or that they were now more aware of the importance of global issues (Q6). The data also reveals students' awareness of the rich potential of critical reflection for self development, professional development and development as a citizen. Among the specific claims made concerning the effectiveness of critical reflection were the following: that it had brought about a more positive attitude to self, that it had brought about the feeling of empowerment, that it prevented the myopic viewpoint and opened up the potential for issues to be considered from a range of perspectives with the potential to lead to more balanced viewpoints, that there was a greater awareness, as a result of critical reflection, of the relational perspective, and that it has the potential to bring about critical action (Q6).

However, on the basis of the evidence that, through critical reflection, change has been brought about for individuals in respect of their views and attitudes towards themselves, their work and their worlds, I am cautious about emphasising the significance of this finding to any great extent because of my serious concerns that the level at which students on programmes of WBL may be engaging in critical reflection is not a very deep one. Almost two-thirds of the respondents (20) either did not indicate clear understanding of critical reflection or their answers indicated only a basic understanding of it (see discussion on Q6 in Chapter 4). I am drawn to the observation of Boud (Boud & Solomon, 2001, which I quote in Towards a philosophical underpinning for WBL), concerning whether critical reflection in WBL contexts provides a sufficiently critical edge to promote the kinds of critical thinking characteristic of a University education. Boud concludes that some reflective activities may not (ibid, page 55), and his observations lead me to infer that my suspicions, on the basis of the data I collected concerning the level at which students are engaging in critical reflection, may not just be a local issue but one that is pertinent to WBL at large. If this is the case, it indicates a clear need for a great deal more work to be done in this area so that the level at which WBL students are engaging in critical reflection is consistent with the standards of critical thinking engaged in elsewhere in the University.

What is clear to me is that, whatever the situation is in respect of the level at which critically reflective activity is taking place in the context of WBL, it does not change the situation in respect of the centrality of critical reflection in this field of study. Critical reflection is the key capability of the reflective practitioner. Similarly, critical reflection is at the heart of the model of praxis espoused in liberation thinking and considered by some to be a key aspect of WBL methodology (discussed in Towards a philosophical underpinning for WBL). However, critical reflection is not necessarily an intuitive process. It is one that people have to learn, especially if they are to achieve a depth of reflection acceptable to higher education. Thus, those responsible for delivering programmes of Work Based Learning must also be charged with the responsibility for facilitating the development of students' critically reflective capabilities. That critical reflection is a capability that develops through learning and experience is implied by one of my postgraduate respondents who noticed that her peers, who had undertaken WBL previously, possessed a greater understanding and insight than she did concerning learning in the workplace. Similarly, two other postgraduate students, who had undertaken WBL as part of their undergraduate studies, noted their own development in their ability to critically reflect, suggesting that, to some extent, it is a learned process.

### **Conclusions**

It would seem that the overall volume of evidence from my four sources is sufficient to make the claim that, with reference to each of my three measures or benchmarks of achievement, in respect of the ontological dimension, the standards are met demonstrating, in my definition, the justification for WBL in the Chester College curriculum.

## Proposition 1

It would seem reasonable, on the basis of the evidence, to claim that the proposition that WBL has the potential to bring about change in the way in which individuals see themselves, their work and their worlds is confirmed. This needs to be done tentatively because not all of my respondents made such claims and, where they did, it was not always possible to gauge the strength of feeling concerning the extent of any change. Neither would I wish to insist on exclusivity for Work Based Learning in this respect because this was not a comparative study. However, there does seem to be sufficient evidence to suggest that, through WBL, learners are engaged in a form of "blended learning" that embraces their intellects and their emotions in fairly equal measure, leading them to not only engage in critical thinking but also in critical self-reflection and, potentially, critical action (though the research offers limited evidence in respect of the latter). This more holistic way of learning is, I would argue, characteristic of Work Based Learning and a distinctive feature of it, leading to the conclusion that there is a strong ontological dimension to WBL.

## QAA qualifications descriptor

Although the QAA qualifications descriptor hints at a more rounded understanding of graduateness than may be the concept catered for in many universities, at least until recently, it has to be recognised that it has limitations in respect of the concept of the graduate spoken of by Barnett and, indeed, the more rounded graduate that I have been claiming WBL has the potential to produce. In my summary of the QAA descriptor, only one aspect of it seems to come anywhere near addressing ontological issues. This is where it says that graduates will have qualities and transferable skills necessary for employment requiring the exercise of initiative and personal responsibility, decision-making, and the learning ability to undertake further Although this draws in issues that I have considered equally under training. epistemology and pedagogy as well as ontology, I have no hesitation in asserting that Work Based Learning should find the achievement of this measure a straightforward one and, moreover, that the evidence of my findings confirms that it does indeed have the potential to enable its achievement. It is not the place to address the strengths and weaknesses of the QAA descriptor, though, in passing, I will observe that, in respect of an ontological perspective, it would appear to be severely deficient.

# Barnett's "critical being"

I was interested in Barnett's work for some considerable time before I noticed his involvement in contributing to texts on Work Based Learning (Barnett, 1999). I take this to mean that others have also recognised his potential contribution to this area of study, even though his early references to it are not extensive neither can they be said to be particularly supportive of it. In my reading of his one or two contributions to WBL literature, I detect a reservation in his thinking concerning the potential of Work Based Learning to deliver the more rounded graduate of which he speaks. Nevertheless, whether he sees it or not, I would wish to argue that, through Work Based Learning, with critical reflection as a key component of it, individuals undertake critical self-reflection that has the potential to be transformative in relation to their lives and their work in precisely the way that Barnett would wish. Read holistically, a number of the interview transcripts indicate the way in which, according to the respondents, WBL has impacted on them, including its requirement that they engage in critical reflection in relation to their work and to their own performance in carrying out that work. The quantitative survey reinforced this

finding to some degree and I have argued the theoretical case particularly in my article A More Holistic Form of Higher Education.

# Recommendations to Chester College Senior Management Team

- 1. that Work Based Learning be recognised as making a distinctive contribution to the Chester College of Higher Education curriculum through engaging learners in more holistic ways of being and knowing Chester College, Appendix E "Summary Report for Recommendations" points 1 & 4 which request SMT to clarify the position in relation to the College's undergraduate WBL curriculum and to sanction its further development.)
- 2. that there is every justification for higher education to recognise the workplace as a bona fide site of learning, where learning occurs principally through communities of practice (See Report for Chester College, "Summary of Recommendations", points 2 & 3 which request SMT to support the expansion of the College's Foundation Degree provision by introducing entirely work based models, and through the introduction of a D.Prof. award.)
- 3. that the contribution of Work Based Learning to the Government's widening participation and lifelong learning agendas be acknowledged and supported financially (Following this Report, a formal request will be made to the College's Widening Participation Committee that recognition be given to aspects of the Centre's work which support widening participation and lifelong learning especially through the newly established Enterprise Unit managed and operated by the Centre for Work Related Studies, with a request that funds to develop this work be made available to the Centre.)
- 4. that recognition be given to the central and key role of critical reflection in programmes of Work Based Learning (See point 5 below.)
- 5. that critical reflection is a process to be learned and that much work needs to be undertaken in respect of the facilitation of that learning by those in higher education responsible for delivering programmes of Work Based Learning (Following this Report, a paper will be presented to the College's Teaching & Learning Committee with a request that support should be given to further research in this area. As Director of the Centre for Work Related Studies, I propose to set up a review panel within the Centre to focus on the ways in which students on various modules and programmes of WBL are supported in terms of the facilitation of critical reflection, with a view to exploring ways of strengthening current provision.)

## **EPISTEMOLOGY**

#### Evidence base

- Literature (from Chapter 3 Literature Review)
- Articles

Major, D; 2002; A More Holistic Form of Higher Education: the Real Potential of Work Based Learning; in The Journal of Widening Participation and Lifelong Learning Vol. 4, No.3, Dec. 2002 (Appendix A) (This article was peer reviewed prior to publication.)

Major, D; 2002; The Place and Status of Knowledge in Work Based Learning; in Conference Proceedings, Work Based Learning Network of the UACE, Nov. 2002; UWIC (Appendix B)

(This paper was peer selected for conference delivery.)

- Quantitative data (from Proposition 2)
- Qualitative data (from Questions 2, 5, 7 & 8)

#### Literature

No single text that I have come across deals adequately, in my view, either directly or indirectly, with the place of knowledge in Work Based Learning, but then I have not come across a text that claims to do so. Portwood's work offers real potential, especially the concept of the "learned worker" who is characterised by a combination of "intelligent scepticism" and "focused intelligence", but is largely undeveloped as a theoretical perspective. Barnett & Griffin's (1997) The End of Knowledge in HE offers potentially useful background knowledge against which to view the emergence of WBL in a post-modern context, and Gibbons et al (1994) The New Production of Knowledge provides the opportunity to make a counter argument. Symes & McIntyre's (2000) collection of essays offers a useful backdrop to some of the issues pertinent to epistemology. Nevertheless, these and other texts provide valuable sources for the development of my own arguments and also provide substance for reflections in respect of my empirical research findings.

#### **Articles**

Defining the place and status of knowledge in Work Based Learning is crucial if progress is to be made towards its full acceptance as a justifiable element of the higher education curriculum. My paper, The place and status of knowledge in Work Based Learning (Appendix B), is an attempt to outline some of the issues pertinent to this debate. In this paper, I argue for a holistic view of knowledge in the Work Based Learning context, with the recognition that WBL is about knowledge creation as well as knowledge application. This is essentially a theoretical argument and, as a way of attempting to further my understanding in respect of knowledge in WBL and to generate some empirical data that might support it, a number of questions were asked of students, in both the quantitative and the qualitative surveys about the sorts of knowledge they had encountered through Work Based Learning, their sources for accessing this knowledge and what they felt they had learned through WBL.

## Quantitative data

Proposition 2: that WBL at Chester College is appropriately supported both by employers and the College and that students are given access to the knowledge they need for learning through work.

For the purposes of this enquiry, the first part of this proposition is considered to relate exclusively to the concerns of the College's WBL Development Group. The issue for this report is in respect of evidence concerning knowledge that students need for WBL. As indicated elsewhere in the report, a feature of the Chester College model of undergraduate WBL is the Support Programme through which students are introduced to theories considered to be relevant to learning through work. The evidence shows that only two thirds of the cohort claimed to refer to any theoretical concepts to help them make sense of their work based experience (Q4{a}), though at Q17(a) more than 85% claimed to have read the Support Programme Handbook. While there would appear to be insufficient evidence here to be confident about the proposition, further evidence from Q5(j) shows that nearly 89% of respondents claimed that they were able to apply knowledge gained through their College subject(s).

Equally important to knowledge input are knowledge outputs and the evidence of the survey shows that nearly 93% of the respondents agreed that, through the placement, they had acquired knowledge, skills and attitudes that had immediate relevance to their future working and personal lives (Q5{g}). Thus, learning through work is clearly acknowledged, as is the transferability of knowledge gains. While it did not feature as part of the research for this project, evidence from students written assignments would confirm that, typically, they include references to material that forms part of the Support Programme as well as identifying knowledge gains from the placement, thus corroborating the claims cited above.

#### Qualitative study

Proposition 2: that knowledge and skills generated through Work Based Learning are fully commensurate with HE standards thus justifying the place of WBL in the curriculum

My respondents identified a broad range of knowledge and skills acquisitions through Work Based Learning. A number of full-time undergraduates worked in areas related to their degree subject(s) and claimed gains in respect of their academic subject knowledge (Q2). This extended to gaining a greater theoretical understanding of their subject as well as gaining knowledge through subject application (Q2). Similarly, a number of part-time students in full-time employment spoke of making gains in terms of their professional knowledge (Q2).

Respondents also claimed that knowledge was achieved in the area of Work Based Learning theories and their application (Q2). This is essentially the "taught" element of WBL pertaining to the Chester model (a one-week Support Programme for full-time undergraduates prior to their six week placement or a module on WBL Methods & Processes for part-time students in employment).

Skills gains were spoken of in terms of both 'hard' and 'soft' skills with particular mention being made of communication skills, human relationship skills, time and project management, and study and research skills (Q1). Gains in self knowledge

were also frequently commented on (Q5) and emphasis placed on the potential transferability of knowledge and skills gained through WBL (Q8).

While the empirical data is not sufficiently comprehensive to be able to make unqualified claims about the place and status of knowledge in Work Based Learning, what there is seems to me to indicate that WBL is entirely justified as an element of the higher education curriculum. The empirical evidence confirms that knowledge is central to WBL - in other words, its 'place' is assured - but typically it is of a broader type than the disciplinary knowledge taught in the University. The study confirms that knowledge in Work Based Learning is clearly inter- or trans-disciplinary and that, without necessarily using that language, students recognise it to be so. The study also shows that, in a sense, the knowledge base in WBL is broader even than that because it unashamedly brings self knowledge and knowledge of others into the equation and, again, students clearly recognise this to be the case. The matter seems to be further complicated by the fact that, at any given time, there may be a mix of relatively straightforward and simple bits of knowledge with far more complex and sophisticated knowledge elements. Such a mix may include inputs in terms of the knowledge that is needed to perform a task or application in the work context, or outputs in terms of the knowledge that is generated through Work Based Learning. This mix of relatively simple and relatively complex knowledge makes it difficult to give assurances concerning the status of knowledge in WBL, especially if it is disaggregated and some elements of it are shown to be of a relatively low status. In a sense this is at the heart of the issue concerning the full admission of Work Based Learning into the higher education curriculum. Critics of WBL from within the University are likely to emphasise what they might consider to be the more trivial elements of knowledge and of learning generated through work and to present these as if that is all there is to it. The reality of course is that WBL does not occur in the more clinical setting of the lecture room where the tutor has a high degree of control at least over the inputs of knowledge. Work Based Learning occurs in the more messy and frequently ill-defined context of the workplace where, in most cases (research laboratories might be an exception), the limits of knowledge in all directions are unbounded and less controlled than in the confines of the University (which, of course, itself is also a workplace for some and in that context much of what has just been said refers equally to it).

Despite the range of knowledge and the different levels of knowledge pertinent to the workplace, there are controls which are used in WBL to assure the University that the knowledge gained through it is of a sufficiently high and sound status for it to be retained as a fully justified element of the higher education curriculum. In particular, a key document in WBL is the Learning Agreement which specifies the learning outcomes to be achieved from a learning through work project. Such learning outcomes have to be consonant with the level characteristics defined individually by HEIs and now generically defined for them by the QAA Qualifications Framework. Student assignments are used to confirm that the learning outcomes have been achieved and these are made available to external examiners for confirmation that appropriate standards have been met. This is essentially the way in which the status of the knowledge gained through WBL is assured and, given that these matters are handled professionally, then, I would claim, Work Based Learning is as justified as any other element of the HE curriculum. Certainly from the perspective of Chester College, Work Based Learning has been examined formally as an accredited activity

since 1991 with its own specialist external examiner and its own Assessment Board. Throughout this period, no substantive issues of a negative nature concerning academic quality have been raised by any of the succession of external examiners. The College's undergraduate WBL provision has also been examined in each Departmental Subject Review since the deployment of this particular QAA methodology and has been consistently highly rated by all Subject Review teams.

The diversity of knowledge and skills applicable to the workplace, seen perhaps by some as offering an ill-defined and ill-disciplined context for learning, may be seen by others as the reality of learning environments once formal school and higher education learning is completed. For most people, most of their lives are spent in such messy learning environments and it is through these that most of us learn the majority of what we know. Arguably, what is generated by way of learning through work is of a far more holistic nature than the learning generated through formal education, where the greater clinical control leads to a closer focus on critical thought as the chief outcome of a conventional University education. Barnett (1997) has argued convincingly about the inappropriateness of such a narrow focus which fails to engage students in matters of critical self-reflection and critical action. Together with critical thinking. Barnett sees these as being the characteristic marks of a graduate and, where opportunities for growth and development in each of these three crucial areas is not offered by Universities, then there is a sense in which they are failing in their responsibilities. My view is that Work Based Learning has the potential to offer the more rounded and holistic style of HE that Barnett is arguing for and I believe that the evidence of my empirical surveys suggests this to be the case.

## Knowledge support

It seems to me that an important issue for discussion in the context of Work Based Learning is that of the ways in which students have access to various sources of knowledge to inform their thinking and to support the generation of further knowledge. Numerous references were made by students during the semi-structured interviews, to knowledge inputs through either the College's Support Programme for full-time undergraduates or the Methods & Processes module for part-time students, and of the ways in which such knowledge informed their thinking and learning. Similarly, in the quantitative study, questions were asked which related to the Support Programme and the responses caused me to express some concern about the extent to which full use is made of the potential it offers.

Beyond the knowledge provided as part of the induction of students into Work Based Learning, there is also the question of the knowledge input students need during the course of their placement or defined time-span of learning. This is, in a sense, knowledge which is additional to the knowledge generated in the workplace, perhaps better thought of as work related knowledge rather than work based. For this reason, the professional studies programme devised at Chester College for part-time students in employment, has the potential to combine both work based learning and work related learning (that is, the knowledge needed to achieve further knowledge generated through work). Such knowledge inputs may be delivered conventionally to groups or accessed independently either through more formal means (e.g. libraries, on-line 'just-in-time' learning packages), or less formally (e.g. through accessing the tacit knowledge of the workplace, asking questions of experts). Given that Work

Based Learning may take place without higher education intervention of the conventional kind, it is not dependent on HE knowledge.

However, modules taught by HE tutors were part of the learning pathways delivered to a number of my respondents in full-time employment at their place of work. Given the close alignment of the content with work based needs, and the work based nature of the assessments associated with them, the students did not really discriminate between work based and work related learning. They did, however, in various ways, seem to me to acknowledge the importance of such knowledge inputs in terms of their personal and professional development, and as having a crucial role to play in terms of the development of WBL projects. For example, a module on Conflict Transformation provided knowledge used to inform proposals to a Health Trust on dealing with increasing violence towards hospital staff. A module on Change Management was regarded as having value in terms of personal and professional development as well as with planning for, and the implementation of, new working practices in a department of a local authority.

Knowledge inputs into Work Based Learning are crucial in any programme of learning through work whether accessed formally or informally. This is not in any way to minimise the value of learning generated *through* work which is, I consider, of value and importance in its own right. However, in order to facilitate workforce development, the more effective means of knowledge input may, at times, be via the more conventional methods of direct teaching. Work Based Learning is quite promiscuous in the range of ways in which it seeks to access knowledge for the purposes of informing and growing the intellectual capital of individuals and organisations.

#### Conclusions

It would be inappropriate for me, on the basis of the strength of the evidence from my four sources alone, to make exaggerated claims about the extent to which the three measures have been achieved in respect of the epistemological dimension of the study. However, I would wish to argue that, overall, there appears to be sufficient evidence to suggest the appropriateness of Work Based Learning in the higher education curriculum.

## **Proposition 2**

It would seem reasonable, on the basis of the evidence, to conclude that knowledge and skills generated through Work Based Learning are fully commensurate with HE standards thus justifying the place of WBL in the curriculum, and so confirm the proposition. This may need to be done tentatively, given that the data is not sufficiently comprehensive to make unqualified claims about the place and status of knowledge in WBL. Recognition needs to be given to the way in which, through "blended learning", a variety of knowledge at different levels may emerge to meet the specific needs of the learner in relation to the demands of the workplace. Recent literature on WBL, such as Symes & McIntyre's (2000) collection of articles, indicates the broad range of learning generated through WBL. Much of this might currently be considered to be beyond the remit of the University curriculum, conventionally interpreted. However, the concept of the University is also currently

changing (see, for example, Barnett {1990} or, more recently, the DfES White Paper, The Future of Higher Education, {2003}) and the new paradigmatic understanding of the role and function of higher education may more easily accommodate the more holistic understanding of knowledge typically generated through Work Based Learning. If the strength of the evidence is not sufficient to wholeheartedly confirm the proposition, neither is there any evidence, so far as I can see, which would lead to the conclusion that WBL is not an appropriate activity for a HEI to engage in.

## QAA qualifications descriptor

The QAA qualifications descriptor is more fulsome in respect of the epistemological dimension than it was found to be in respect of ontology. In my abbreviated version of the descriptor, I have identified five measures relevant to epistemology.

For an honours degree, students need to have demonstrated:

- A systematic understanding of key aspects of their field of study
- An ability to deploy accurately established techniques of analysis and enquiry within a discipline
- Conceptual understanding that enables the student to devise and sustain arguments and/or solve problems and to describe and comment upon particular aspects of current research
- An appreciation of the uncertainty, ambiguity and limits of knowledge They will be able to:
  - Critically evaluate arguments, assumptions, abstract concepts and data.....to make judgments and to frame questions to achieve a solution(s) to a problem

There are issues to be resolved before, with confidence, it could be claimed that a student, through Work Based Learning, could achieve the capabilities identified in the descriptor. For example, clarification would be needed as to what constitutes a "field of study" (quality I above). It cannot be claimed that the authors studiously avoided the term "discipline" for philosophical reasons because they use it in the next sentence (quality 2). However, this inconsistency in itself suggests that neither term is being used with an inflexible definition in mind. If "discipline" is defined narrowly (as in the philosophy of Hirst {1965}) there are many University courses that are not disciplinary (for example, media studies) and, even well established and timehonoured courses (e.g. law) would have to be ruled out. Thus, I am assuming that "field of study" and "discipline" are being used somewhat loosely and interchangeably which, from the perspective of Work Based Learning, is a positive thing. All work-based learners may be construed as working within a "field of study", even if we do not agree with Portwood (2000) that Work Based Learning is a subject in its own right. A "field of study" might be a professional area and, for the present purposes, I am assuming that this is the case.

On the basis of the evidence of my four sources alone, it would be inappropriate for me to make a judgment as to whether or not programmes of Work Based Learning have the potential to measure up to the QAA descriptor. Clearly a much more detailed longitudinal study would need to be undertaken to confirm this. However, from the experience of working with part-time students in full-time employment who are studying for an honours degree through Work Based Learning, and through

assessing their work and presenting it to external examiners for confirmation of awards, I would have no hesitation in claiming that the QAA descriptor is achieved.

I would also wish to argue that, on the basis of the evidence I have collected, there is support for the view that the descriptor is likely to be achieved through Work Based Learning, given that my interviewees have a background of substantial professional knowledge (many of whom have confirmed this through impressive claims for credit for prior learning), with a number of them engaged in research, problem-solving, and major projects of various kinds (spoken of in the context of the semi-structured interviews). My view is that the evidence of their assessments, though beyond the remit of this research and, therefore, not open to corroboration in this context, demonstrate the higher order cognitive skills outlined in the descriptor.

## Barnett's "critical being"

The aspect of Barnett's "critical being" relevant to this context is critical thinking, though it seems inappropriate, given the claims previously made that this is a holistic concept embracing critical thinking, critical self-reflection and critical action, to break it down into sub parts. Barnett's concern about current University provision is that it is too narrowly focused on critical thinking and is failing to produce the more rounded graduate that he advocates. However, the issue here is whether or not, through Work Based Learning, the quality of a student's critical thinking can match that of a more conventionally taught University student. Again, the nature of the evidence does not permit a judgment to be made against it and I can only draw on my experience of assessing students and presenting their work to external examiners and gaining their views as to its quality. From the evidence, it can be seen that students, through WBL, are engaged in activities which clearly demand the skills of critical thinking and that the interviews give an insight into the way in which students are dealing with challenges that require the exercise of critical thinking skills and that they are being successful. In a Work Based Learning context, it is almost inevitable that critical thinking and critical action are inextricably bound together with critical selfreflection. Such a combination is the essence of critical being (see my article, Appendix A).

## Recommendations to Chester College Senior Management Team

- 1. that it should be acknowledged that on epistemological grounds there is no reason why Work Based Learning should not be retained as part of the Chester College curriculum
- 2. that it should be accepted that the status of the knowledge generated through Work Based Learning is safeguarded by appropriate quality control mechanisms such as Learning Agreements and negotiated learning outcomes and quality assured through the external examination process
- 3. that the inter- or trans-disciplinary nature of Work Based Learning be recognised in that not only does WBL transcend the knowledge boundaries of any single discipline but it also engages the learner in development in terms of self knowledge and knowledge of other people, thus leading to more holistic learning

- 4. that the potential of Work Based Learning for providing a more holistic view of knowledge be recognised, including its potential to engage individuals in critical self reflection and critical action as well as in critical thinking
- 5. that it be accepted that knowledge input is an important feature of all programmes of Work Based Learning and that such knowledge inputs be recognised as necessary to aid the creation of knowledge through Work Based Learning

Recommendations 1, 2 & 3 to the College, through the SMT, are intended to underpin the more specific recommendations of the Report to Chester College (Appendix E) which seeks the expansion of the College's Work Based Learning provision by offering reassurances in respect of the College's quality control and quality assurance requirements.

Recommendations 4 & 5 are to the College's Teaching & Learning Committee and the academic staff of the Centre for Work Related Studies with the intention of generating further discussion about the nature and potential of Work Based Learning, and to encourage investment in further research in this field of study.

As Director of the Centre, I feel that, through the research, a more secure evidence base concerning the nature and the effectiveness of WBL has been established and that this will enable me to engage more vigorously in College politics in seeking the further development of WBL activities.

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## **PEDAGOGY**

#### Evidence base

- Literature (from Chapter 3 Literature Review)
- Chapter for a book
  - Major, D; Learning About Learning Through Work Based Learning; chapter in Learning About Learning; Kogan Page (forthcoming publication due Spring, 2004)

    (Appendix C)
  - (This chapter has been accepted for publication subject to editorial advice.)
- Quantitative data (from Propositions 3 & 4)
- Qualitative data (from Questions 3, 4 & 6)

#### Literature

If taken in its broad sense as an example of Experiential Learning, Work Based Learning is better served by a strong literature base in pedagogy more so than in the other two areas of ontology and epistemology. In pedagogy, it can call on such heavy-weight thinkers as Dewey, Vygotsky and Carl Rogers, though it has to be recognised that the focus for the majority of work, certainly of the first two, is child education rather than adult. Nevertheless, it is generally assumed that something of the general principles articulated by these scholars is transferable to adult education including higher education. Dewey offers insights into the importance of experience as the core of the educational process while Vygotsky, among other valuable contributions, focuses on the advantages of learning in community, and Rogers offers his ideas that successful students are those who understand the learning process.

An important source of corroborative evidence for my own study is Mentkowski et al (2000) Learning that Lasts, which is an empirical study of the Alverno College, Milwaukee, USA, abilities-based curriculum. Some useful theoretical insights relevant to my own research, and used in the chapter for a book, come from Boud & Garrick's (1999) Understanding Learning at Work.

## Chapter for a book

This chapter is built around some of the empirical findings of my qualitative research as well as drawing on some of the research work undertaken by Alverno College. It attempts to show how, through Work Based Learning, learners appear to have a much better understanding of the learning process than is gained through conventional teaching methods. It is argued that this is partly because students on WBL are required to assume a considerable degree of responsibility for their own learning and that, with critical reflection as a key capability, this leads to the development of an understanding of something of the learning process itself.

#### Quantitative data

Proposition 3: that students record, and reflect on, their learning achievements in the workplace

Proposition 4: that WBL possesses certain distinctive features apparent to those engaged in the experience

In respect of proposition 3, the vast majority of students (96.5%) claimed to keep a record of their experiences while on placement, with three quarters claiming to deliberately set aside time to reflect on their progress in placement (Q1). Various other questions, when answered in the affirmative, also implied a degree of reflective activity on the part of the respondents. However, the data itself does not indicate anything of the level at which this reflection occurred.

There is evidence from the survey to suggest that students do recognise that WBL is a distinctive form of learning and that it requires them to take more control of their learning than they may have been used to in other aspects of the HE curriculum  $(Q5\{e\})$ . Thus, just under 88% recognised that WBL facilitates tailor-made study  $(Q5\{b\})$  which also involves greater responsibility for the evaluation of own learning  $(Q5\{f\})$ . Recognition of the importance of the development of skills of self-reliance was also evident  $((Q5\{1\}))$  as well as a clear indication that the majority of students found WBL more motivational than classroom learning  $((Q5\{e\}))$ .

Recognition of the following distinctive features of WBL is evident from the survey:

- Negotiated learning
- Taking responsibility for own learning
- Focused learning
- Self-reliance
- Knowledge application
- Experiential learning
- Power over own learning

#### Qualitative study

Proposition 3: that individuals have access to a broad range of ways of learning through WBL and have the opportunity to use the ways that suit them best

The chapter which I am contributing to a forthcoming book on learning seeks to deal with some of the pedagogical issues that I believe need to be addressed in the context of Work Based Learning (see Appendix C). My view is that effective learning is essentially a holistic process that integrates knowing and doing in a critically reflective way. In support of my argument I cite the work of Barnett (1999), Mentkowski et al (2000) and others who are concerned in one way or another with adult learning. I also refer to some of the empirical data emanating from my research and attempt to show how this gives weight to my argument.

A broad range of ways of learning are identified by those taking part in the semi-structured interviews, and these are fully outlined in Chapter 4 where responses given to Question 3 are set out under six principal categories: (1) experiential learning, (2) conventional learning, (3) instructional learning, (4) reflective learning, (5) relational learning, and (6) other ways of learning. Thus, under experiential learning, variously described as practical learning and "hands on" learning, a number of ways in which respondents claimed to learn were defined, including "trial and error", and learning through positive experience. It was instructive to note the number of references to more conventional forms of learning where respondents spoke of the importance of having direct teaching as part of Work Based Learning and of having access to tutors. More than two thirds (21) of the respondents spoke of the importance of being able to

accessing appropriate literature, with others commenting on use of the internet and of accessing appropriate theories when learning through work. More than one third (11) of my respondents referred to the importance for their learning of theory/practice reinforcement. Similarly, instructional learning was regarded as an important source of work based learning with a number of respondents commenting on the value of receiving instruction or being given advice by experts. Observing others and asking questions were also identified as important sources for learning. The interviewees also spoke of the value for learning of critical reflection and of applying the reflective learning cycle. What I have termed relational learning was also emphasised with collaborative learning, including the sharing of ideas, gaining feedback, and engaging in debate and argument, all identified as important sources for learning. Reference was also made to tapping into the tacit knowledge of the workplace in order to learn.

Responses to other questions concerning how learning occurred through work drew attention to the importance of having the right attitude to learning and of being receptive and flexible in the face of learning opportunities. The importance of planning one's learning and monitoring its progress was also commented on, and the contribution that others can make to one's own learning recognised. Responses to Question 6 in particular emphasised further the way in which critical reflection facilitated learning, with students speaking in particular of its value as a tool of analysis and its use in decision-making and problem-solving.

The empirical evidence, then, confirms that there is a wide variety of ways in which people learn through work. Answers to Question 3 tended, if anything, to emphasise practical learning over theoretical, though respondents generally took a balanced view, recognising that different learning needs required different approaches. It seems reasonable to assume from the information given by my respondents that, when free to do so, the way in which individuals go about learning is inclined to match their preferred learning style. It also seems reasonable to assume, though the survey did not attempt to deal with this, that access to a broad range of learning styles has the potential to lead to more holistic ways of understanding learning and, thus, has the potential to lead to the capability of learning to learn. The evidence does support the view that, whatever else students learn through Work Based Learning, they also learn about themselves. This inevitably means that at least an element of emotional learning is brought into the equation. Arguably it is self-learning that gives rise to an understanding of how one learns which, in turn, leads to a greater awareness and understanding of the process of learning itself or of learning to learn.

If this is the case, then Work Based Learning is consistent with Carl Rogers' (1983) holistic philosophy of learning with its emphasis on people's understanding of how they learn rather than what they learn. This is a sophisticated process and one that many learners, I suspect, may never contemplate. It is a process that a conventional University education may not require one to consider. The difficulty some of my respondents had initially in engaging with a question that asked them 'how' they learn suggests they may never have been asked that question before. The fact that most were able to engage with it to some degree, having thought about it in the context of Work Based Learning, suggests to me that having greater responsibility for their own learning (a requirement of Work Based Learning), together with experiencing a broader range of ways of learning, better equips people to understand something of the learning process.

I conclude also, on the basis of the evidence of my research, that there is something about the integration of knowledge and action that leads to effective learning. A number of my respondents referred to the theory/practice interface as an important site of learning for them, with some expressing the view that theory unrelated to practice is hard to remember. The results of the longitudinal study undertaken by staff at Alverno College, Milwaukee (Mentkowski et al, 2000), would seem to support this finding. They note that "learning involves the whole student: knowing and doing work together in a dialectic whereby each is constantly redefining the other "(p8). Barnett (Boud & Garrick, 1999), from a theoretical perspective, would also appear to support the idea that learning is a complex process and is not complete unless knowing and doing are combined and, in turn, combined with reflective processes.

It seems that the interrelationship between theory and practice, which characterises much Work Based Learning, is a distinctive feature of it. So, too, is the idea that much Work Based Learning occurs within and through participation in a community of practice. Both of these features in different ways highlight the idea of relationality in learning which, in turn, I would claim as a distinctive feature of WBL.

## **Conclusions**

#### The claim for distinctiveness

Before summarising the evidence from my four sources, it would seem appropriate to comment on the claim for the distinctiveness of Work Based Learning which, to some extent, is an issue which lies at the heart of this report.

To claim distinctiveness is not the same as to claim uniqueness. Where, in various places, I provide detail of what I claim to be distinctive features of Work Based Learning, I am not claiming uniqueness. Therefore, it may be the case that some, or even many, of the same features are to be found in the delivery of more conventional programmes of HE though, I suspect, on the basis of the comments of scholars cited below, that this is not so. What I am claiming is that Work Based Learning in the context of the HE curriculum, has demonstrable distinctive features and these are set out in the summary below.

This is not a comparative study but even if it were, a claim for the uniqueness of Work Based Learning would be too bold a claim to make. Reference was made in the Literature Review to the chapter in Stephenson & Yorke (1998) co-authored by Osborne, Davies & Garnett where Work Based Learning at Middlesex University is contrasted with the University's Independent Learning provision. The two modes of learning are shown to share essentially the same features with the principal difference being that of "work". Work implies "action" and, therefore, if Work Based Learning has a clear distinctiveness to offer to the HE curriculum it is most likely in the realm of the critical action of which Barnett (1997) speaks. It may be that this is what sets Work Based Learning apart from other areas of the HE curriculum. With hindsight, it is clear to me that my empirical research did not focus sufficiently on critical action, though there is a sense in which, in WBL, the key capabilities of critical reasoning, critical self-reflection and critical action are inseparable. It is this "holism" that I have argued is a distinctive feature of Work Based Learning.

It is almost inevitable that, in attempting to identify the distinctiveness of Work Based Learning, comparisons will be made with conventional higher education. I am aware that I have already, on a number of occasions, made such comparisons. This, however, as I have just noted, is not a comparative study and, therefore, I did not set out to obtain data which might inform me as to students' experience of traditional HE programmes. However, a considerable body of literature has emerged in recent years under the guise of teaching and learning in HE. This does provide some evidence, though it seems to me that it is rarely presented in a direct way. Rather it is presented in the context of encouraging more imaginative approaches to teaching and learning in the University in order to make learning more effective. The implication of much of this work is that there is negative evidence concerning the effectiveness of traditional teaching methods.

A number of writers note the predominance of the lecture as the major teaching and learning method in HE. Edwards et al (2001) observe that this is a stark reality and is likely to remain so. Barnett (1992) notes that much research has been undertaken in HE pedagogy but claims this has resulted in few changes in course design (p150). Brown et al (1998) make the point that conventional approaches to teaching and learning in the University are often criticised for their lack of 'interactivity' (p7). Gibbs & Habeshaw (1989), giving the examples of lectures and reading, say how difficult it is for people to carry out a passive task for long without losing attention (p26). They recommend course design which involves both theory and practice, and say that students learn well when they take responsibility for their learning (p33). Barnett (1992) argues that the evidence shows the prevalence of the surface approach to learning in Universities (p151), and Gibbs (1994) speaks of the difficulties in getting students to move from surface to deep learning (preface).

There is a clear danger here in caricaturing teaching and learning in conventional HE. Undoubtedly there is also evidence to show that methods of learning and teaching employed in Colleges and Universities are many and varied. However, if the lecture is indeed still the most common mode of delivering teaching in HE, it does provide a stark contrast to methods of delivering Work Based Learning, and enables the identification of the distinctive features of the latter. There are, of course, many ways of delivering a lecture and little is to be gained by caricaturing the lecture as a passive activity over against the active learning implied by Work Based Learning. Both, it may be argued, have their place, and I have suggested elsewhere in this report the importance of more conventional teaching for delivering some of the underpinning knowledge needed for success in Work Based Learning.

As evidenced above (Stephenson & Yorke, 1998), there are other teaching and learning strategies employed in higher education which, it could be claimed, lead to similar patterns of learning to those brought about through Work Based Learning. Even where more imaginative ways of learning are facilitated in conventional HE study (for example, group tasks, role play, problem-solving, and so on), these typically take place in the more sheltered and controlled environment of the University campus and do not necessarily relate to the "real" demands of work, having been "set up" by the facilitator, leaving the learners disempowered, to some degree, and sheltered from the real consequences of their actions.

By contrast, those engaged in Work Based Learning are dealing with "live" projects that really do matter in terms of their "real" life outcomes. In Work Based Learning power is placed in the hands of the learners, demanding that they take responsibility for their own learning, and exercise the skill of self-reliance. Arguably such contexts place an entirely different perspective on learning, giving Work Based Learning a sense of distinctiveness within higher education.

My view is that what sets Work Based Learning apart from other elements of the higher education curriculum is its emphasis on "action" in the "real" world. This, I would claim, is at the heart of the distinctiveness of Work based Learning and this is reflected, to some extent, in the summary that follows.

This summary includes some of the findings of the research based on the empirical and theoretical surveys. These are drawn from the discussions contained within the report and need to be read in that context. However, they are not collected elsewhere in this way and may, therefore, provide a useful summary in relation to the principal aim of the project concerning an investigation into the nature and distinctive features of Work Based learning.

## The nature of Work Based Learning

- Engages learners in more holistic ways of being and knowing with the potential for critical reasoning, critical self-reflection and critical action
- Learning occurs largely in the context of communities of practice
- Critical reflection is an essential feature of WBL
- Presents learners with a broad range of knowledge from which to draw in the construction of new knowledge through theory/practice interplay in relation to specific tasks/projects, resulting in more holistic views of knowledge
- Represents a field of study and is, thus, inter- or trans-disciplinary, transcending the knowledge boundaries of any single discipline and engaging learners in development in terms of self knowledge and knowledge of other people, thus leading to more holistic learning
- Has the potential to lead to a distinctive form of learning, entirely appropriate for higher education, that combines knowing and acting with critical reflection
- Has the capacity to develop in learners the ability of learning to learn

## Distinctive features of Work Based Learning

- Theory/practice interplay
- Knowledge application
- Integration of knowledge and action as part of the learning process and leading to effective learning
- Knowledge is inter or trans-disciplinary
- Knowledge production
- Regarding work as the curriculum
- Negotiated nature of modules and programmes of WBL
- Learning focused on where it is needed
- Power over own learning
- Role of critical reflection
- A form of experiential learning
- Experience of learning in more holistic ways

- Learning in 'real' world with 'real' time and 'real' life issues and projects more conducive to learning
- Being exposed to a wide variety of ways of learning and, therefore, gaining a sound experience of the learning process
- Foregrounding of learning about the self
- Importance of accepting responsibility for own learning
- Requirement of capability of self-reliance
- Learning within a community of practice
- Development of relational perspectives as part of the learning process
- Importance of collaborative learning

#### Evidence from the 4 sources

It would seem that the overall volume of evidence from my four sources is sufficient to make the claim that in respect of the pedagogical dimension to two of my measures or benchmarks of achievement, the standards are met demonstrating, in my definition, the justification for WBL in the Chester College curriculum. It could be argued that the third measure, Barnett's "critical being", does not lend itself easily as a benchmark against which to measure pedagogy, though I would maintain that my findings are entirely consistent with an approach to learning which would yield the qualities that Barnett is seeking in graduates.

## **Proposition 3**

On the basis of the evidence, it would seem reasonable to confirm the proposition that individuals have access to a broad range of ways of learning through WBL and have the opportunity to use the ways that suit them best. Chapter 4 outlines a wide range of learning strategies employed by those undertaking Work Based Learning and, through the interviews, a number of students indicated an awareness of their learning preferences and how these could be accommodated through WBL while, at the same time recognising that they employed a variety of learning styles to match the different areas of knowledge they needed to access.

#### QAA qualifications descriptor

In my abbreviated version of the descriptor, I have identified three measures relevant to pedagogy.

For an honours degree, students need to have demonstrated:

• The ability to manage their own learning

They will be able to:

- Apply the methods and techniques that they have learned.....and apply their knowledge and understanding, and to initiate and carry out projects
- Communicate information, ideas to a variety of audiences

It would seem to me that it is not difficult to make a case demonstrating how these qualities may be developed through Work Based Learning. They are expressed in a way which suggests that they could have been written especially as qualities demonstrable through WBL, though that seems unlikely. However, it does show a considerable shift in the understanding of graduateness and one which, presumably, Barnett would find agreeable, though it is interesting to speculate whether since the

QAA provided its Qualifications Framework radical adjustments have really been made to University courses to accommodate its requirements.

I confirm that the evidence of my research demonstrates the full engagement of WBL with these three measures and note, therefore, that the standard has, in my view, been met. This suggests the basis of a strong argument for the justification of Work Based Learning in the higher education curriculum.

## Barnett's "critical being"

There seems little doubt that, if Barnett's concept of the "critical being" is to be realised, something like the wider range of ways of learning offered by WBL is essential. Barnett tends not to offer advice to the University as to precisely how, pedagogically speaking, it should go about producing "critical beings" but, the implication seems clear, namely that, as well as providing learning contexts for the development of critical thinking, it needs also to provide learning contexts suitable to facilitate critical self-reflection and to promote critical action. My view, which has been reinforced through the findings of my empirical research, is that Work Based Learning has the potential to provide the learning context for all three.

## Recommendations to Chester College Senior Management Team

- 1. that it be recognised that Work Based Learning has the potential to lead to a distinctive form of learning, entirely appropriate for higher education, that combines knowing and acting with critical reflection (See Report to Chester College (Appendix E) where the development of the College's Work Based Learning provision is recommended, especially to offer a distinctive feature to undergraduate awards for full-time students.)
- 2. that more research should be undertaken in respect of the hypothesis that Work Based Learning has the potential to lead to the ability to learn how to learn (This will be a recommendation in the paper to be submitted to the College's Teaching & Learning Committee requesting investment in further research into Work Based Learning.)

## Concluding remarks

The three areas I have commented on in relation to Work Based Learning (ontology, epistemology, pedagogy) are naturally interlinked and impinge equally on the issue of the nature of Work Based Learning. I hope that I have shown that Work Based Learning, far from being simply an alternative method of delivering learning, is much more complex than that and is, in fact, a way of learning that leads to more holistic ways of being, knowing and acting. To call it a subject, as does Portwood (Portwood & Costley, 2000) seems to limit it too narrowly in one sense (it is more than a subject in the sense that it is also a philosophy of learning), and to broaden it too widely in another (the diversity of work prevents any bounds being placed upon it to make it manageable as a subject), though Portwood's analysis of how knowledge occurs through Work Based Learning is important. Work Based Learning as a "subject" is, of course, a contentious proposal. On the one other hand, there is a sense in which to call it a subject is settling for the status quo rather than challenging the rigidity of the interpretation of subject divisions that still exists in the University.

Buying in to Work Based Learning clearly means buying in to a package that offers an experience of higher education that is different from the conventional understanding of a University education. Clearly the flexibility that negotiated programmes of Work Based Learning offer is attractive to some but not to all. Access to such flexible programmes requires, for example, that the student is in work, and in work which will yield the learning necessary to achieve a higher education award. However, it seems to me that the important point about Work Based Learning from the higher education perspective is its standing in terms of its ability to meet the criteria that constitute graduateness. If Work Based Learning can achieve learning outcomes that equate to those in conventional programmes of higher education then, it seems to me that, there is no logical reason why Work Based Learning should not be admitted fully into the higher education curriculum.

My view is that if the QAA descriptor for an Honours award is the benchmark of what constitutes graduateness, then Work Based Learning can meet those criteria, perhaps, in some areas, more easily than conventional programmes of higher education, given the clear emphasis on knowledge application. This alone should ensure its full acceptance into higher education. However, I hope to have shown that, philosophically and educationally, there is every reason to admit Work Based Learning into higher education, given that it can be demonstrated that it has a sound epistemological base, a pedagogy that is entirely in tune with the contemporary understanding of the processes of learning, and that, from an ontological perspective, it can be shown to have the capability of facilitating personal growth and development and the capacity for meaning-making.

Mentkowski et al (2000), in speaking of lifelong learning, say that the challenge is to link knowledge, reflection, judgment and action. I think it could be argued reasonably that this applies equally to Work Based Learning and, if this is achieved at the appropriate level, it may offer a richer experience than the conventional University experience. Even if the latter point is not accepted, certainly it legitimates the place of Work Based Learning in the higher education curriculum.

Boud & Symes (Symes & McIntyre,2000) may well be right when they say that, where work is the curriculum, as it is in programmes of Work Based Learning, this provides "a radically new approach to what constitutes university study" (p14). Radical though it may be, I hope to have shown that there are sound reasons why Chester College should fully embrace Work Based Learning and accept it as a legitimate and justifiable contributor to the higher education curriculum.

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## Post-script on personal learning

In Chapter 1 of this report I indicated that a clear personal goal to be achieved through this research was that of increasing my own understanding of Work Based Learning and, in particular, my understanding of the philosophical and educational arguments that might be used to confirm its place in the higher education curriculum. Notwithstanding the reality that this is not a one person job to be done once, but an on-going debate that needs to be engaged in by a broad range of scholars working in the field of WBL over time. I nevertheless feel a sense of personal satisfaction from having made a start for myself on this challenging task. I am aware of the considerable distance I have travelled in terms of my own understanding of Work Based Learning since beginning my D.Prof. studies. Like others working in the field of WBL today, I was not born into it but came into it through incidental means, having initially shown an interest which led to me being asked in 1990 by a member of SMT to take on a research role on behalf of the College in a project operated jointly with two other local Universities. I appreciate now that for ten years my engagement with Work Based Learning had been a more practical one focusing on the design and delivery of modules and programmes of WBL, and involvement in College politics in order to make things happen. I was personally convinced that WBL was important and "a good thing" and could be justified using, what I have termed, the pragmatic argument. Subsequently I did undertake some research into facets of it, for example the place of dialogue in assessment (Major, 1995). However, in terms of a theoretical underpinning for Work Based Learning, I realise now how shallow my understanding had been.

During the 1990s my research interests refocused when I undertook study in the field of social psychology and engaged in examining issues where theology (my disciplinary area) and social psychology interface. Although not directly concerned with research into WBL at this time, I feel that this new interest left me poised to commence work on the D.Prof programme. Through the project I feel I have now begun to develop a research profile in WBL which has given me a personal feeling of greater credibility in my new role. I took a gamble in July 2000 by finally cutting my ties with the College's Theology & Religious Studies Department when I took on the role of Director of the Centre for Work Related Studies. Having made the decision, and taken on this new challenge, I knew that I had to develop a personal research profile in WBL for my own self esteem and to justify the trust the College had placed in me by putting me in charge of an academic department which has considerable development potential. Although I recognise my own limitations as a scholar and realise that I have done no more than scratch the surface in terms of developing philosophical and educational perspectives on Work Based Learning, for me a principal outcome of this research has been a genuine boost in terms of self-belief. This is principally because, as a result of the research, my professional understanding of WBL has increased significantly and I now feel much more self assured, and confident about, and credible in, the role I have taken on. I very much look forward to pursuing my research interests in Work Based Learning in the years ahead.

As a result of my studies I have undertaken a re-evaluation of my personal professional practice, which has led to important learning for me. In particular, I have

- gained a better understanding of the way in which I work as a reflective practitioner, which, I recognise, has tended to be an individual activity, and now appreciate the greater potential of a "community of reflective practice" (which I would aim to create in the Centre)
- experienced a change in attitude within myself towards internal College politics, as a result of the establishment of an evidence base for the effectiveness of WBL. This will lead me to be less tentative in arguing the case for WBL and in negotiating its further development

- been provided with insights into the effective marketing of WBL, given that it may be seen by some potential learners as offering an opportunity for "second chance" learning. This reinforced for me how WBL may be perceived and the considerable potential it has in terms of widening participation and lifelong learning, both of which are politically important issues. In addition, WBL appears to appeal to some learners who perceive its greater flexibility in terms of striking an acceptable life/work balance
- (this point relates to the one just made) increased my awareness of how new the style of learning through WBL is to both employees and employers who, by and large, retain certain preconceptions about a University education. The understanding of a paradigm shift, in terms of access to higher education and the nature of its provision, would appear to be one that is more firmly grasped within the University than it is outside it. Again this is a valuable insight when considering the marketing of WBL.
- gained further specific insights into the new breed of HE lecturer that is needed to facilitate WBL and to support learners, both from talking with learners and from my own perspective as a learner on a programme of WBL. This is largely a role that is still evolving and comprises not only the academic knowledge and expertise of the traditional understanding of the academic but involves a considerable amount of administrative responsibility and the sort of role provided for on-campus students by a student support and guidance service. My feeling is that there is a mass shortage of individuals in higher education who can combine successfully these roles and represent the full range of the services of the University/College to the student, and that very little is being done within higher education to support the development of the necessary expertise.

# Chapter 6 Mapping

In my RAL submission I mapped the level 5 descriptors against each of my publications in order to demonstrate the level at which I was working and the range of descriptors I had covered. In approving my full claim of 120 credit points, my assessors were agreeing with my analysis, and confirming that I was indeed achieving the appropriate depth and range of knowledge and understanding in respect of the level 5 descriptors.

In the final chapter of this report, I attempt to map my learning outcomes against the level 5 descriptors and the Learning Outcomes as defined for DPS 5140 with a view to convincing my assessors that the quality of the learning that I have achieved in and through the project is of doctoral standard and demonstrates professional excellence in my field of study.

## Learning Outcomes resulting from the Project

The negotiated learning outcomes listed below were agreed with my employer and the University and formed part of the signed Learning Agreement. It is my view that I have achieved these learning outcomes and that the evidence of my products and this report testify to that.

On completion of the Project, I should demonstrate the ability to :-

- Engage with literature on or associated with Work Based Learning in such a way that the depth of my knowledge and the level of my ability to work at the current limits of theoretical and/or research understanding is clear and commensurate with learning at level 5.
- Analyse and interpret the data from my research in such a way that it informs
  my understanding of the educational issues associated with Work Based
  Learning and enables me to make a significant contribution to the body of
  scholarship surrounding it.
- Synthesise concepts from the literature I have studied and ideas gained from
  my empirical research in order to formulate new understandings and new
  frameworks that will advance or redefine existing knowledge concerning
  Work Based Learning in the Higher Education context.
- Critically evaluate the conclusions of my own study and those of other scholars in the field of Work Based Learning in order to clarify issues concerning the nature of WBL and to justify proposed improvements in practice.
- Work collaboratively with colleagues from the Centre for Work Related Studies and with the wider WBL critical community in order to increase the level of scholarly activity associated with Work Based Learning and thereby to increase its profile as a bona fide HE activity.
- Undertake study in a professional context in such a way that learning is planned and managed autonomously and where political sensitivity is shown.
- Deal professionally with colleagues in situations where issues concerning the academic credibility of Work Based Learning is the subject of discussion, and

- to devise new approaches to the resolution of problems associated with WBL in a HE context.
- Implement a research strategy appropriate to the project enquiry and to show an awareness of the strengths and limitations of the findings from the applied research methodologies used.
- Take responsibility for a study which is exploring the boundaries of the HE curriculum in relation to new learning contexts and new understandings of what constitutes academic knowledge.
- Accept responsibility for the depth of knowledge and sound professional
  practice associated with WBL which characterises the Centre for Work
  Related Studies and, at all times, to act in accordance with ethical norms of
  behaviour and while taking into account the professional views and opinions
  of the community of scholarship locally, nationally and internationally when
  formulating solutions to issues.

1 propose to take each of these learning outcomes in turn, mapping them against the relevant level 5 descriptors and the generic learning outcomes for DPS 5140, and to comment briefly on what I consider to be the evidence of their achievement.

## Learning Outcome 1

• Engage with literature on or associated with Work Based Learning in such a way that the depth of my knowledge and the level of my ability to work at the current limits of theoretical and/or research understanding is clear and commensurate with learning at level 5.

#### **Evidence**

I contend that Chapter 3 of this report together with the articles I have produced in the context of this research (namely:

- Major, D; 2002; A More Holistic Form of Higher Education: the Real Potential of Work Based Learning; in The Journal of Widening Participation and Lifelong Learning Vol. 4, No.3, Dec. 2002 (Appendix A)
- Major, D; 2002; The Place and Status of Knowledge in Work Based Learning; in Conference Proceedings, Work Based Learning Network of the UACE, Nov. 2002; UWIC (Appendix B)
- Major, D; 2002; Towards a Philosophical Underpinning for Work Based Learning; the Ontological Perspective; unpublished (currently under consideration for publication) (Appendix D))

provide evidence that this learning outcome has been achieved.

## Mapped against

I consider that this learning outcome can be mapped against the following Level 5 Descriptors:-

## Cognitive

- **D.** t Knowledge: evidence that the candidate has great depth of knowledge of an inter-disciplinary nature in a complex area and is working at current limits of theoretical and/or research understanding
- D. 2 Analysis: can deal with complexity, lacunae and/or contradictions in the knowledge base and make confident selection of tools for the job
- **D.** 3 Synthesis: can autonomously synthesise information/ideas and create responses to problems that expand or redefine existing knowledge; can develop new approaches in new situations, through adding a new dimension to existing understanding or predicting an outcome that can be verified

**D.** 4 Evaluation: can independently evaluate/argue a position concerning alternative approaches; can accurately assess/report on own and others' work; can justify evaluations as constituting bases for improvement in practice

This learning outcome can also be mapped against the generically prescribed learning outcomes 1, 2 and 3 of DPS 5140, namely:

- L.O. 1 Knowledge, research and analysis: knowledge outcomes will be specific to the focus of the project but must include critical analysis of both relevant interdisciplinary issues and advanced theoretical and/or research issues; and justification of methods used.
- L.O. 2 Synthesis/evaluation : design of new responses to new situations and comprehensive evaluation of them
- L.O. 3 Problem solving: ability to construct and assess problem solving strategies in a wide range of situations

## Learning Outcome 2

Analyse and interpret the data from my research in such a way that it informs
my understanding of the educational issues associated with Work Based
Learning and enables me to make a significant contribution to the body of
scholarship surrounding it.

#### Evidence

I contend that Chapters 2 and 4 of this report, together with the chapter I have produced for a new ILT volume, (namely:

 Major, D; Spring 2004; Learning About Learning through Work Based Learning; chapter in Learning About Learning (Institute of Learning & Teaching in HE); Kogan Page {Appendix C}),

provide evidence that this learning outcome has been achieved.

## Mapped against

I consider that this learning outcome can be mapped against the following Level 5 Descriptors:-

Cognitive

D. 1 Knowledge: as above

## Transferable Skilts

**D.** 9 Research capability: can demonstrate effective selection, combination and use of research methods; can show full appreciation of their limitations and possibilities in achieving objectivity, reliability and validity appropriate to the area and subject of study in the work situation; can contribute to the development of applied research methodology.

This learning outcome can also be mapped against the generically prescribed learning outcome 1 of DPS 5140, namely:

L.O. 1 Knowledge, research and analysis: as above

## Learning Outcome 3

• Synthesise concepts from the literature I have studied and ideas gained from my empirical research in order to formulate new understandings and new frameworks that will advance or redefine existing knowledge concerning Work Based Learning in the Higher Education context.

#### Evidence

I contend that the three articles and the chapter for a book produced as part of this programme of study (namely:

- Major, D; 2002; A More Holistic Form of Higher Education: the Real Potential of Work Based Learning; in The Journal of Widening Participation and Lifelong Learning Vol. 4, No.3, Dec. 2002 (Appendix A)
- Major, D; 2002; The Place and Status of Knowledge in Work Based Learning; in Conference Proceedings, Work Based Learning Network of the UACE, Nov. 2002; UWIC (Appendix B)
- Major, D; 2002; Towards a Philosophical Underpinning for Work Based Learning; the Ontological Perspective; unpublished (currently under consideration for publication) (Appendix D)
- Major, D; Spring 2004; Learning About Learning through Work Based Learning; chapter in Learning About Learning (Institute of Learning & Teaching in HE); Kogan Page {Appendix C}),

provide evidence that this learning outcome has been achieved.

## Mapped against

I consider that this learning outcome can be mapped against the following Level 5 Descriptor:-

Cognitive

D. 3 Synthesis: as above

This learning outcome can also be mapped against the generically prescribed learning outcome 2 of DPS 5140, namely:

L.O. 2 Synthesis/evaluation : as above

## Learning Outcome 4

 Critically evaluate the conclusions of my own study and those of other scholars in the field of Work Based Learning in order to clarify issues concerning the nature of WBL and to justify proposed improvements in practice.

#### **Evidence**

I contend that this report, together with the articles identified above, provide evidence that this learning outcome has been achieved.

#### Mapped against

I consider that this learning outcome can be mapped against the following Level 5 Descriptors:-

Cognitive

D. 4 Evaluation: as above

#### Transferable Skills

**D.** 5 Self appraisal/reflection on practice: evidence that the candidate has worked with 'critical communities' through whom a new or modified paradigm is being established. Habitually reflects on own and others' practice so that self-appraisal and reflexive inquiry become intertwined, thereby improving the candidate's own and others' action

This learning outcome can also be mapped against the generically prescribed learning outcomes 2 and 4 of DPS 5140, namely:

L.O. 2 Synthesis/evaluation: as above

L.O. 4 Self appraisal and management of learning; ability to strategically plan and implement development of own professional learning, and critically reflect on outcomes

#### Learning Outcome 5

• Work collaboratively with colleagues from the Centre for Work Related Studies and with the wider WBL critical community in order to increase the level of scholarly activity associated with Work Based Learning and thereby to increase its profile as a bona fide HE activity.

#### **Evidence**

This report contains references to ways in which I have worked collaboratively with colleagues from the Centre for Work Related Studies at Chester College. The paper referred to below was presented at a national conference on Work Based Learning held at the University of Wales in Cardiff in November, 2002. In addition, I was able to make contributions in seminars and workshops and to engage in informal discussion with colleagues from across the UK on matters to do with Work Based Learning in the Higher Education context.

 Major, D; 2002; The Place and Status of Knowledge in Work Based Learning; in Conference Proceedings, Work Based Learning Network of the UACE, Nov. 2002; UWIC (Appendix B)

## Mapped against

I consider that this learning outcome can be mapped against the following Level 5 Descriptor:-

#### Transferable skills

**D. 8** Communication/presentation: can engage in full professional and academic communication with others in their field and place of work; can give papers/presentations to 'critical communities' for developmental purposes.

This learning outcome can also be mapped against the generically prescribed learning outcome 5 of DPS 5140, namely:

L.O. 5 Communication: evidence of engagement with 'critical communities' through whom new or modified paradigms are being established; ability to present their work orally

#### Learning Outcome 6

• Undertake study in a professional context in such a way that learning is planned and managed autonomously and where political sensitivity is shown.

#### **Evidence**

I believe that I have achieved this learning outcome. In terms of planning and managing my own learning, my advisors at the University should be well placed to confirm that I have taken responsibility for my own learning and that I have managed it effectively. My colleagues at the College would, I believe, attest to my political sensitivity both in handling the research itself and in disseminating the outcomes of it. This report is also a source of evidence for confirming the achievement of this learning outcome.

## Mapped against

I consider that this learning outcome can be mapped against the following Level 5 Descriptor:-

#### Transferable skills

**D.** 6 Planning/management of learning: is autonomous in study and use of resources; makes professional use of others in support of self-directed learning and is fully aware of political implications of the study

This learning outcome can also be mapped against the generically prescribed learning outcome 4 of DPS 5140, namely:

L.O.4 Self appraisal and management of learning: as above

## Learning Outcome 7

Deal professionally with colleagues in situations where issues concerning the
academic credibility of Work Based Learning is the subject of discussion, and
to devise new approaches to the resolution of problems associated with WBL
in a HE context.

#### Evidence

I contend that there is evidence in the articles (referred to above) I have produced as part of this programme to support the second part of this learning outcome. I believe that my colleagues at Chester College would confirm my professionalism when the issue of the academic credibility of Work Based Learning is the subject under discussion, as would my colleagues at the national Work Based Learning conference in which I was a participant (referred to above). In addition, I would cite the Report I have produced for Chester College senior management team on WBL provision as further evidence (Appendix E).

## Mapped against

I consider that this learning outcome can be mapped against the following Level 5 Descriptors:-

#### Transferable skills

**D.** 7 Problem solving : can isolate, assess and resolve problems of all degrees of predictability in an autonomous manner in work situations; can tackle unpredictable problems in novel ways

**D. 8** Communication/presentation: as above

This learning outcome can also be mapped against the generically prescribed learning outcome 3 of DPS 5140, namely:

L.O. 3 Problem solving: as above

## Learning Outcome 8

• Implement a research strategy appropriate to the project enquiry and to show an awareness of the strengths and limitations of the findings from the applied research methodologies used.

## Evidence

I contend that there is evidence of the achievement of this learning outcome in Chapters 2 and 4 of this report.

## Mapped against

1 consider that this learning outcome can be mapped against the following Level 5 Descriptors:-

Cognitive

D. 4 Evaluation: as above Transferable skills

D. 9 Research capability: as above

This learning outcome can also be mapped against the generically prescribed learning outcomes 1 and 2 of DPS 5140, namely:

L.O. 1 Knowledge, research and analysis: as above

L.O. 2 Synthesis/evaluation: as above

## **Learning Outcome 9**

 Take responsibility for a study which is exploring the boundaries of the HE curriculum in relation to new learning contexts and new understandings of what constitutes academic knowledge.

#### Evidence

I contend that the evidence of this report and the other products relating to this programme (articles, chapter for a book, report for Chester College) demonstrate the achievement of this objective

#### Mapped against

I consider that this learning outcome can be mapped against the following Level 5 Descriptors:-

Cognitive

D. 1 Knowledge: as above

Transferable skills

**D.** 7 Problem solving: as above

D. 8 Communication/presentation: as above

#### Operational context

**D.** 10 Context: complex, unpredictable, specialised work contexts requiring innovative study, which will involve exploring current limits of knowledge and, in particular, interdisciplinary approaches and understanding.

This learning outcome can also be mapped against the generically prescribed learning outcomes 3 and 6 of DPS 5140, namely:

L.O. 3 Problem solving: as above

**L.O.** 6 Responsibility and ethical understanding: evidence of responsibility for self and others and ethical understanding, including in complex, unpredictable and/or specialised work contexts

## Learning Outcome 10

Accept responsibility for the depth of knowledge and sound professional
practice associated with WBL which characterises the Centre for Work
Related Studies and, at all times, to act in accordance with ethical norms of
behaviour and while taking into account the professional views and opinions
of the community of scholarship locally, nationally and internationally when
formulating solutions to issues.

#### Evidence

I contend that I have achieved this learning outcome and that Chapter 2 of this report provides evidence of my awareness of ethical issues, especially in the context of the empirical research. My position as Director of the Centre for Work Related Studies at Chester College means that I am responsible to the senior management of the institution for sound professional practice in respect of all issues pertaining to the Centre and that, if so required, evidence of Annual Reviews and the officially recorded comments of various College committees in relation to Annual Reviews, together with staff appraisal comments, and external examiners reports, could be provided. The evidence of my publications, submitted as part of this programme, testify to my awareness of the scholarly views of others when arriving at my own resolutions.

#### Mapped against

I consider that this learning outcome can be mapped against the following Level 5 Descriptors:-

#### Operational context

- **D.** 11 Responsibility: autonomy within bounds of professional practice with high level of responsibility for self and others.
- **D. 12** Ethical understanding: awareness of ethical dilemmas likely to arise in research, professional practice and work situations; ability to formulate solutions in dialogue with superiors, peers, clients, mentors and others.

This learning outcome can also be mapped against the generically prescribed learning outcome 6 of DPS 5140, namely:

L.O. 6 Responsibility and ethical understanding: as above

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# APPENDIX A

# A More Holistic Form of Higher Education: the Real Potential of Work-based Learning

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ABSTRACT This article takes, as its starting-point, the concept of 'critical being' developed by Barnett in 'Higher Education: A Critical Business' (1997). It then examines the potential of Barnett's position for a philosophy of work-based learning in a higher education context, arguing that work-based learning, appropriately conceived, combines the three key features of Barnett's critical being, namely critical reasoning, critical self-reflection and critical action. The article goes on to consider the place of both the ontological and the epistemological dimensions to work-based learning, in an attempt to make a case for work-based learning as a more holistic way of being and knowing than conventional university education provides for:

## Background

Work-based learning is a relatively new phenomenon in the higher education curriculum and the existing literature is growing but not extensive (see Portwood & Costley, 2000 and Boud & Solomon, 2001). What has been written, especially in terms of a rationale for its existence, tends to focus on higher education's responsiveness to the present political, social and economic imperatives (what I refer to as the pragmatic argument for work -based learning). This alone does not seem to me to be a sufficiently convincing argument for its admission into higher education. My view is that, if there is to be an argument for the justification of work-based learning in the university curriculum, principally it must be made on philosophical and educational grounds.

Given that, in the paucity of literature that there is on work-based learning, very little attention has been given to its philosophical underpinning, there seems to be an urgent need to begin to make a philosophical case for it. In my attempt to make a contribution to this necessary endeavour. I draw on the work of Ronald Barnett, a philosopher of education influenced by post-modern thought who, in the work I refer to, makes a radical examination of the purposes of higher education. Although he does not write directly about work-based learning, what he has to say about the

desirable outcomes of the higher education process in general, I would contend, is entirely consistent with what I consider to be the potential outcomes of programmes of work-based learning in particular. From my own experience, of more than ten years, of working with undergraduate students on programmes of work-based learning, and of analysing and evaluating feedback received from them about their experiences, it is clear to me that, for many, the impact of work-based learning is a broad one which includes their critical self-reflection and critical action as well as their critical thought. It, therefore, seemed to me that Barnett's concept of 'critical being' was a good place to start in seeking to underpin work-based learning with a philosophical perspective.

The definition of work-based learning that I use for the purposes of this article is that of any planned programme of accredited learning in a higher education context. This may include the experience of work-based learning for an undergraduate in fulltime study as well as the experience of work-based learning of a full-time employee on a part-time programme of study who is following a planned programme of learning through work.

I am, clearly, an advocate of work-based learning and unashamedly intend to point to its positive features.

In terms of its potential for both widening participation and providing for lifelong learning. I believe that it has a great deal to commend it. It is a means through which higher education can acknowledge the reality of work in the lives of many people and recognise work as a principal source of learning for many. However, I recognise that, despite any claims I may make about its efficacy, work-based learning is still in its infancy in the higher education context and there is still much development work to be undertaken and rigorous evaluation of its impact to be made before extravagant claims about it and its benefits can be made with confidence. While not wishing to divorce philosophy from empirical evidence, I still feel it worthwhile to focus on philosophical issues in this article and, in advance, beg the indulgence of the reader if this gives the impression of an idealised view of work-based learning that may or may not be considered to be defensible.

# The Concept of Critical Being

In his book Higher Education: A Critical Business, Barnett (1997) argues that higher education should 'dispense with critical thinking as a core concept...and replace it with the wider concept of critical being' (p7). The critical being is someone who "embraces critical thinking, critical action and critical selfreflection" (p1). Barnett considers that critical thinking has become a 'defining concept of the Western University'(p2), but is concerned that this is limiting the range of the individual's critical potential through a narrow focus on knowledge. Criticality, in Barnett's argument, takes place in three domains of which knowledge is one. The other two domains are the self and the world which, in Barnett's view, have been largely neglected by the University in favour of knowledge. To be effective in the world, Barnett suggests that the individual needs to exercise not only critical reason but also critical self-reflection and critical action. These three abilities, acting in harmony, are what, in Barnett's view, constitute graduateness which, in turn, points to the responsibilities of higher education being wider than those it currently exercises, especially in respect of personal and professional development.

## Criticality in a Work Context

There is, I believe, much potential in Barnett's philosophy of higher education to support and underpin a philosophy of work-based learning. Although Barnett does comment on the potential application of criticality in the workplace, he believes that the sort of criticality businesses and organisations require is strategic in character which places limits in terms of the level of criticality achieved. Thus, Barnett is eautious about admitting the workplace as a site of potential development of critical faculties given that the intent of the workplace is to deliver "instrumental ends" and "not critical thinking that is oriented to truth or to understanding" (p14). Critical action comes with the same health warning from Barnett, namely that, although action elements are now common in higher education and do contain components of criticality, the interpretation of those critical components is usually limited to instrumental ends. 'Action for social and personal transformation is not typically envisaged' (p85). In respect of this comment, my view is that work-based learning does offer a framework for criticality which goes beyond the instrumental and which can indeed result in personal transformation. However, I recognise that a case still has to be made for this claim.

Barnett notes that critical reason will be in evidence in companies but limits will be placed on it. For example, he suggests it unlikely that critiques of a company's mission, tacit values, effect on society and on the lives of its employees would be welcome unless they relate to the company's well-being (p125). Critical thinking will be mainly limited to operational and strategic concerns (p.1-4). Similarly, although the critical self will be encouraged, especially in respect of total quality management and just-in-time management, with individuals taking responsibility for their own actions and for the level of critical engagement with work practices, such will be for instrumental ends only (p125). Barnett notes that the fear of anarchy causes critical action to be mistrusted and, therefore, held at operational levels only (p125). The corporate world, according to Barnett, wants the 'critical mind but not too much of it' (p126). The workplace experience is, therefore, partial in respect of the overall requirements of the university.

However, Barnett seems to be of the view that, although higher education is being driven by an 'instrumental agenda' (p91), largely set for it by Government, and therein lie some potential dangers, this closer involvement in the wider world is precisely what the university needs if it is to help students to engage seriously in critical self reflection and critical action. Thus, Barnett is not antagonistic towards innovation in higher education, and not, so far as 1 can tell, antagonistic towards work-based learning, rather his attack is aimed at the limited concept of higher education that has been pervasive for more than one hundred years (p90). In fact, he sees recent developments in higher education as giving rise to the possibility of the personal dimension being recaptured. He also hints at the potential of the workplace for the development of criticality in the three domains identified and insists that the business world needs the full influence of the critical mind, not least to deal with the world in which they find themselves (p126). "In the corporate world," says Barnett, 'the three spheres of criticality - critical reason, the critical self and critical action', need to come together (p128). Barnett insists that the world of work calls for forms of critical being, in self-reflection and action that higher education has been neglecting. 'In calling for capacities of critical thinking that can break through to new paradigms of understanding' (p128), work. claims Barnett, is challenging higher education to supply knowledge to attain levels of critique in that domain also. The corporate life calls for reflexive persons (p129), says Barnett, who seems to suggest that the term 'professional' implies that the three domains of criticality are present (p132-140).

Although Barnett indicates that both the work place and some innovations in higher education (for example, action research, problem-based learning and experiential learning) have potential with regard to the development of criticality, they do not attain sufficiently high levels of it (p37 & 39). He notes that they stretch 'criticality across the three domains of knowledge, self and the world' (p86), but he does not see the potential of 'study service' (p86) for achieving this. Instead he would probably consider it, and presumably work-based learning along with it, to be severely limited in terms of the development of

critical being. It is the contention of this article that work-based learning has precisely the potential to achieve this.

# Work-based Learning as a Medium for Achieving Criticality

Although Barnett does not tell the university precisely how it is to change in order to accommodate his broader definition of its activities, I am presuming that he does not have work-based learning in mind as a medium for achieving the more rounded graduate that he seeks. However, it is my contention that workbased learning has the potential to achieve precisely what it is that Barnett is asking for. Given that, by definition, it takes place outside the university and is located in work, it fulfils two important prerequisites for Barnett's criticality agenda, namely 'action' in the 'world'. I contend, also, that a distinctive and essential feature of work-based learning is the ability to undertake critical self-reflection. This contention is supported by the burgeoning literature on work-based learning, for example. Boud & Solomon (2001), Symes & McIntyre (2000), and Raelin (2000).

# The Holistic Nature of Work-based Learning

This focus on the self in work-based learning, emphasises the significance of the ontological dimension in any philosophical discussion concerning learning through work (Barnett notes that, through critical self-reflection, we become more fully human [p45]). As anyone who has engaged in it will testify, work impacts in a profound way on being and, I would argue that, work-based learning can have an even more profound ontological impact. Consider the number of people who define themselves by what they do. For many, work gives meaning to their lives (this is not to romanticise work in any way. For many, work is a curse, but this does not lessen its impact on their being. Indeed it may exacerbate it).

Although there is an emphasis on the self, through critical self-reflection, there is a strong relational dimension to work and, therefore, to work-based learning. Relational thinking informs our understanding of the significance of the ontological dimension to

work-based learning by emphasising that knowledge of the self comes about principally in and through our relationships with others. The work context emphasises collaboration, partnership, team-working and networking, all of which are relational activities, and all of which provide the potential for critical thought. It is worth noting that Barnett distinguishes between critical thinking (which is essentially a lone activity) and critical thought, which is, he argues, collaborative in nature (p16-17). Work-based learning, then, in this argument, provides a potential setting not only for critical thinking (individual) but also for critical thought (collaborative). In arguing that critical thought should be central in higher education, Barnett speaks of reflexivity as not just a personal attribute or disposition but as a matter of social epistemology and ontology (p42). He describes reflexivity as an ontological concept in that to be a person in modernity is to take on powers of self-reflection [p43]). 'Self-monitoring,' he says, 'becomes an embedded assumption in relation to our conception of what it is to be a fully participating member of society'(p42).

He refers also to reflexivity as a means of generating knowledge and, thus, as an epistemological concept (p43). The point is made that this is not just selfknowledge but "new cognitive resources for the community, especially when generated and exploited collaboratively" (p42). Although Barnett does not fully exploit the concepts of dialogue and inter-dependence, they are implied in much of what he has to say. He is, for example, critical of Schon (1983) in that he believes that his concept of the professional is "unduly individualistic, neglecting the extent to which professional life is necessarily social and intersubjective" (p132). He also notes that reflexivity and critique, neither of which can be constrained, 'rely on open dialogue' (p92). This stress from Barnett on the interpersonal, the importance of dialogue and the notion of inter-dependence, does not necessarily sit easily with some of his other comment which seems to suggest that he is concerned that higher education is being sucked into the Tagenda of economic reason"(p91) and, therefore, being used for spurious purposes by Government and society. While Barnett is right to maintain the independence of higher education, it seems strange that he should see it still

as in some way needing to avoid 'being used'. Accepting that the corporate world does not have a right to try to limit critical reasoning, surely does not mean that the levels of criticality, which Barnett refers to as instrumental or operational, should be summarily dismissed. As part of society, which depends for its survival, as we have seen, on the notion of interdependency, higher education (and the graduates that emerge from it) surely has a moral duty to do all that it can to support the economy. My point here is that work-based learning, which in Barnett's view, may have limited potential for developing critical beings, a point which I would wish to dispute, should not, even if I were wrong, be dismissed as an appropriate medium for higher education. Barnett is, of course, quite right to remind those involved in workbased learning, and other forms of experiential learning, of the dangers of eliciting a weak form of self-reflection (p93 & 101). He is also correct in pointing to the need for higher education, as it widens its scope, to see self-reflection and student values as crucial (p95 & 100). Work-based learning already sees both as essential.

Work-based learning, it is assumed in my definition, is entered into voluntarily and for positive reasons. No one can force another person to learn. But what is it that, through work-based learning, people learn? There has to be something to learn and, presumably, given a broad definition, that something is knowledge (this is the epistemological dimension to work-based learning). I will return in a moment to discuss in more detail the nature of that knowledge but let it suffice for now to say that that knowledge will be of three main types: knowledge of the industry in which the work is being conducted; self-knowledge resulting through the process of critical self-reflection, though I prefer to use the term meaning-making rather than knowledge in this context because, it seems to me that, knowledge and meaning-making are not the same thing; knowledge of the world, which no one can avoid given that we all live in the world, but with a critical edge as a result of the critical reasoning and critical action that work-based learning promotes.

At this juncture, let me cite two examples. The first is that of a full-time female student on a non-vocational

degree programme who decided to undertake a programme of work-based learning in a secondary school to provide her with the experience she needed to make an application for a place on a postgraduate certificate in education course and to test out her career aspiration. The job description she was given was broadly that of a teacher assistant but, in addition, she was tasked with preparing interactive ICT resources (through the use of powerpoint) to support sixth form teaching in Geography (her academic subject), and was given the opportunity to prepare and, under close supervision, deliver a number of lessons to lower school classes. In carrying out these tasks, the student not only learnt more about her subject in order to teach it, but she acquired considerable knowledge of the school as a working environment and as an 'industry'. She claimed to have made profound gains in self-learning through being confronted by many new challenges and through facing situations which required her to stand back from her experience and evaluate her own performance and the way in which, for example, she dealt with pupils, especially those who made direct challenges to her authority. In a similar way she assessed the quality of the professional relationships she established with colleagues, and evaluated both the methods she used for preparing teaching resources and their usefulness in terms of delivery in the semi-public domain of the classroom. In conversation with her tutor, after the work-based learning experience, she referred to the profound impact that these experiences had made on her and how they had brought about change in the way she viewed herself. Prior to the experience, she had not known how well she would survive it but, having risen to the challenge, her level of self-confidence was heightened, as was her selfesteem overall. She spoke of being proud of herself and of now having the confidence to step in to situations (of taking action in the world) where she felt she could make a difference. Of course, things may not have turned out like that for her and she may not have had such a rich and rewarding experience She may, for example, have discovered that teaching was not for her. Nevertheless, that in itself may be considered to be important learning and revelatory of important self-knowledge.

The second example is that of a fireman in full-time employment who embarked on a negotiated programme of work-based and work-related learning. Although he did not have formal academic qualifications beyond 'O'/GCSE level, he was accepted in to higher education as part of a widening participation strategy. He wished to use the opportunity as a means of cominning professional development, hopefully facilitating his path towards promotion to a more senior management post. In reviewing his learning to date, he experienced a new level of confidence in his own ability as he found that his higher education facilitator placed a high value on the learning that he had achieved to date through his work and the in-service courses he had participated in as part of his professional development. He was encouraged to submit a claim for the accreditation of prior experiential learning and experienced empowerment as he discovered that his learning could be mapped successfully against the level-related characteristics of a university education. He claimed that this new self-knowledge gave him a new perspective on his work (which he then viewed in a more critically reflective way) and indeed on the world and, as he proceeded along his planned learning pathway, which included a mix of conventional study (shift work permitting) with work-based learning projects, he felt that a whole new world of opportunity was opening up for him.

What we arrive at, I would contend (and would hope that, to some degree, the above examples support), is a much more holistic way of learning, being and knowing than, arguably, conventional university courses are likely to lead to. It is my view that workbased learning, of the placement variety, has the potential to provide this broader experience for fulltime students in higher education, providing them with precisely the sorts of experience that will bring about critical self reflection and a more critical edge to their understanding of the world. It may not, for the majority, lead to the qualities Barnett appears to want to see in students in terms of their preparedness to take critical action in the world. His super-hero student, standing in Iront of a line of tanks in Tiananmen Square, may not be a realistic expectation for most, but there will be lesser levels of critical action that students may aspire to as a result of their increased critical understanding of the world.

For an increasing number of students, work-based learning, in the context of full time employment, is becoming an attractive alternative option to full-time study. Continuing professional development is frequently carried out in this manner but now, through the Foundation Degree and other flexible forms of negotiated learning (for example, as provided for the University for Industry Learning through Work scheme), there is the prospect of completing undergraduate programmes entirely through workbased learning. In conception, it seems to me that work-based learning in these contexts is no different from work-based learning for full-time undergraduate students. The principles are the same and, clearly it could be argued that, opportunities for critical selfreflection and a critical edge to interpreting events in the world, are extended and enhanced through a full programme of work-based learning, rather than the limited extent to which this is possible through the part, and frequently a small part at that, which workbased learning may play in some conventional university programmes. For such work based learners in full-time employment, there is a real opportunity for a programme of learning that leads to a far more holistic way of being and knowing than a full-time university programme may provide for. Barnett may not have intended his work to be used in this way but, I believe, what he is asking for in a university education has the potential to be delivered through programmes of work-based learning.

# The Potentially Subversive Nature of Work-based Learning

There are, of course, a host of issues that need to be resolved if my contention is to stand up to any form of critical scrutiny. Not least, is Barnett's view that the business world, though demanding critical reasoning of its employees, wishes to place limits on it so that it does not go beyond the instrumental. While it is clear that this may often be the case, it has to be accepted that, in any successful form of work-based learning, there are three parties to the negotiated learning agreement. Thus, the outcomes of a work-

based learning programme, while being principally concerned with the needs of the learner, and addressing the specific business concerns of the employer, have to meet the requirements of higher education. Higher education places no limits on the extent of critical reasoning, indeed it should demand that it is taken beyond the mere instrumental to higher planes of criticality. Although employers may not particularly like this aspect of work-based learning, they have to accept it and accept that, by its very nature, it is potentially subversive. The task of the work-based learning student becomes that of exercising reflective judgment in relation to proposed action in any given situation.

As Barnett rightly notes, the corporate world calls for the very forms of critical being that the university has been neglecting (p128). 'Corporate life calls for reflexive persons'(p129). The problem, in Barnett's view, is that the world of business and commerce wants this on their own terms. The answer from work-based learning is that this is not possible, even if it were desirable, which it probably is not. It is not possible for the critical being to be so boxed in. At the same time, it should be recognised that, although the critical cerson may have developed their powers of criticality in the context of work, they are not limited to work but can be applied to the wider world. There is, fortunately, life beyond work to which the critical edge, developed perhaps through work-based learning, can be applied. The reflective judgment of the employee-learner will determine the situations at work where the application of critical reasoning to an issue suggests action beyond which the employer may wish to go. Where this is the case, the work-based learner may not be in a position to do more than propose critical action, leaving the employer to make the decision as to whether implementation should follow. This has not prevented the learner from addressing the issues, even if further learning has been inhibited as a result of critical action being blocked. In the context of workbased learning, the employer should respect the intentions of the employee-learner, even if the critical reasoning, which resulted in a proposed course of action, is perceived by the employer to subvert the aims or mission or public face of the organisation, or some other such major concern. If, of course, the business is a Jearning organisation, it will have benefited from the insights it has been offered and, even if not acted upon, these may inform future thinking and planning. The university will also have a right to comment on the process of critical reasoning undertaken by the learner in the course of arriving at a judgment.

Even if the critical reasoning and the critical self-reflection undertaken by the employee-learner in the context of his or her work does not result in critical action, as indicated above, precisely the same processes may be undertaken in relation to issues and events in the wider world. Thus, it could be argued that work-based learning is a suitable form of learning for living in this wider world and for being a critically active being within it.

# Knowledge in a Work-based Learning Context

Another crucial issue for work-based learning concerns the nature of the knowledge that resides in, or is created in, the context of such programmes. Knowledge generation and transmission is the core activity of the university, even if no longer its exclusive domain. But what counts as knowledge, though perhaps previously determined to a great extent by the university, is now recognised to be much more broadly a function of society in general. The university curriculum today, to a large extent, reflects society's broader definitions of knowledge providing, as it does, many more inter-disciplinary and vocationally oriented programmes that, even in the recent past, would have been vigorously contested by academics on the grounds of their inappropriateness for study in higher education. There has been a clear shift, even within the university, as to what counts as knowledge. Whereas previously the focus of the university curriculum was essentially on the acquisition of knowledge, engaging principally the cognitive faculties of students through a grappling with the theories and concepts underpinning a discipline, there has been a move resulting, it has to be said, largely from government intervention, on knowledge application. This has led, among other things, to the admission of programmes of work-based learning. Barnett notes, however, that 'knowledge situated in practice is not a

newish form of knowing alongside propositional knowledge, but is a tradition of enduring character' (p12).

Although the old distinctions between education and training and between academic and vocational courses. are waning, they have not disappeared altogether, and frequently reappear in the context of debates about the nature of work-based learning and its appropriateness or otherwise in the university curriculum. I do not wish to become impaled on that debate in this present context but to acknowledge it and move on. It seems to me that we need to move on because work-based learning is not consistent with the old understanding of training but neither is it consistent with the old understanding of a university education. Perhaps it would help if we arrived at a whole new set of terms, or at least a renewed agreement on definitions of words such as 'skill', 'competence', and 'vocational'. Such words have become much more associated with training for practical task completion yet, on their own, they could, and do, relate equally to academic abilities and orientations. Work-based learning, to a greater or lesser degree, is clearly about the application of knowledge. Again, the word 'application' raises worries for some academics who feel that this is straying beyond their territory (this, to some extent, is at the heart of Barnett's concerns when he accuses the university of being too narrowly focused on knowledge). Not only is this impression sometimes given but, along with it, the impression that, somehow or other, knowledge application is a lesser form of knowing bordering, perhaps, on what has been referred to as training. This is unhelpful and plain daft. Knowledge application is not a lesser form of knowing. It presupposes knowledge in the first place and takes it a step further and, therefore, it could be argued, is a more advanced form of knowing. As Eraut (1994) notes, 'learning knowledge and using knowledge are not separate processes but the same process' (p25). He also observes that the process of using knowledge transforms that knowledge so that it is no longer the same knowledge" (p25).

I am not certain that the debate, over which a great deal of fuss is being made at present, between Mode

I knowledge (conventional understanding of knowledge as being about theories and concepts) and Mode 2 knowledge (knowledge in application) (Gibbon et al, 1994), is anything but an unhelpful distraction from the main issue. Philosophically I regard it as suspect because, it seems to me, that it presupposes two principal epistemologies, neither of which exist other than in the most general of ways. It is also divisive and, at best, in danger of reinforcing old prejudices about one mode of knowledge being superior to the other and, at worst, implying that the two modes do not, or cannot, mix. My understanding of work-based learning is that, if it is about anything, it is about a mix of these two, so-called, modes of knowledge. Epistemologically it is a hybrid in that normally the knowledge element of work-based learning is either discipline-related or, more likely, of an inter-disciplinary nature, drawing on the concepts and theories of particular knowledge discourses and, at the same time, generating new knowledge applicable to the work context, as theory interfaces with practice (Portwood's understanding of workbased learning occurring where 'focused intelligence' and 'intelligent scepticism' interface is not unhelpful in this context (Portwood & Costley, 2000). This mingling of theory, knowledge application, and knowledge generation through the discrete activities associated with learning through work, is what typifies work-based learning. The knowledge that results from work-based learning is, therefore, of a distinctive nature and defies the notions of Modes 1 and 2 knowledge, rendering the particular theory that embraces them largely inappropriate in this context.

# The New Agenda for Work-based Learning

Work-based learning continues to face interesting times. Whether full-time programmes, or part-time within more conventional forms of study, work-based learning clearly must conform to the same criteria for an award, or part award, as any other aspect of the higher education corriculum. The Quality Assurance Agency framework for higher education qualifications applies equally to programmes of work-based learning as to more conventional forms of study. What is happening, however, at the present time, is that,

through various Government-funded initiatives such as the Graduate Apprenticeship Scheme and the foundation degree concept, both of which are work focused and consist either entirely of work-based learning or are intended to have substantial elements of work-based learning within them, two forms of accreditation are being juxtaposed. A similar juxtaposition between the two educational sectors normally associated with these forms of accreditation is also required, reinforcing a declared intention of Government that higher education and further education shall work together more closely. These schemes, quite nicely, force the hand of both, though fail to take account of the different understandings, found within the two sectors, of the nature of workbased learning, leaving them to sort it out for themselves. These understandings are informed, in the main, by the different requirements of the respective forms of accreditation, with vocational qualifications principally requiring the demonstration of competences (with competence, in this context, being mainly defined as 'can do') and with higher education erring on the side of the higher order cognitive skills of analysis, synthesis and evaluation, though it must be acknowledged that the QAA framework has broadened somewhat the qualification descriptors, tentatively suggesting that higher education might also be a means to an end (with that end being 'employment') as well as an end in itself.

These new developments mean that work-based learning really needs to be redefined. At the same time, the meaning of some of the terms traditionally associated with 'training', need to be clarified. Thus, we need to recognise that 'skills' may be both practical and intellectual and that 'competence' may refer, as Barnett (1994) clearly indicates, equally to either academic or operational competence. Similarly, the real meaning of 'vocational' should be adhered to rather than using the term as short-hand for a description of manual labour.

# Conclusion: Clarification of the Nature of Work-based Learning

What, then, is this new understanding of work-based learning? Perhaps it is not a new understanding at all

that is called for but a clarification of the notion of work-based learning. Work-based learning in higher education has, since its beginnings, quite rightly focused on flearning and learning in a higher education context. From the point of view of assessment of students, this has had the effect, at least in some institutions, of examining only, what amount principally to, understandings within the cognitive domain. Little attention may have been given to how well a job was done or how effective were the strategies employed by the student, and much more attention given to their learning understood in terms of conventional assessment criteria, typically including the student's ability to analyse, synthesise, evaluate and critically reflect. Especially with regard to the last category in the list (namely, critical reflection), I would depart from Barnett's accusation of the limited focus of higher education, by arguing that work-based learning is one area of the curriculum where critical self-reflection and critical action as well as critical reasoning are required and encouraged.

Given the new situation (for example, the Graduate Apprenticeship), where either national vocational qualifications or national occupational standards (or both) have to be included in the assessment package for work-based learning, there is a requirement for a much closer examination of the relationship between typical higher education assessment strategies and those pertaining to so-called vocational accreditation. We surely need to work to overcome this divide between two assessment frameworks if work-based learning is to be the truly holistic form of learning and knowing that, it seems to me, it has the potential to be. In any attempt to clarify what is involved in workbased learning. I would have to include the three-fold requirements of 'knowing', 'being' and 'doing' which, I contest, offers the sort of holistic model that may already exist, at least in the minds of some, but may not necessarily be evidenced in all forms of workbased learning. This model, I contend, is very much more in tune with the demands of Burnett, who argues for the critical being as the principal output of a university education, and much more in tune with an understanding of a philosophy of higher education lit for present purposes. The model must not compromise the integrity of higher education neither must it sell

short so-called vocational assessment. It must embrace the three elements of knowing, doing and being which, in my view, equate to Barnett's critical reason, critical action (though I accept that Barnett may consider this to be a gross understatement of what he means by critical action) and critical selfreflection, in a far more holistic model of higher education than currently exists but which, I maintain, does exist already, to some degree, in work-based learning, and with the logical development of relating more closely together two currently different patterns of assessment, has the potential to offer a model of work-based learning that is truly holistic. Perhaps the 'practising epistemologist' (p140), of which Barnett speaks, is none other than the work based learner who, in turn, is testimony to the transformative nature of work-based learning.

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# APPENDIX B

# Conference Paper for UACE Work Based Learning Annual Conference

### Knowledge, Work and Learning

27 & 28 November, 2002

Conference paper presenter: David Major, Chester College of Higher Education.

Conference paper title: The place and status of knowledge in Work Based Learning

**Abstract**: This paper seeks to examine some of the epistemological issues which relate to the debate concerning the justification of Work Based Learning in the HE curriculum. It will take account of post-modern perspectives on the theory of knowledge and of the so-called knowledge revolution and the impact these have had on the University. The perceived divide between academic and vocational knowledge, universal and local knowledge, and Mode 1 and Mode 2 knowledge will be discussed, and it will be argued that such ways of thinking are inappropriate and a hindrance in any attempt to arrive at a satisfactory way of understanding the place and status of knowledge in Work Based Learning. It will be argued that Work Based Learning is involved as much in knowledge creation as it is with the application of knowledge and, therefore, that more holistic ways of perceiving knowledge are required. The paper will continue to argue that a more helpful way of thinking of knowledge (especially when arguing the case for WBL in HE) is in terms of its level rather than its type, and it will conclude by commenting on Barnett's concept of the practising epistemologist, and suggesting that this befits the profile of both the WBL facilitator and learner, before pointing to Raelin's contention that Work Based Learning needs a new epistemology of practice.

### Key issues to be addressed

I do not pretend to be able to do anything more in this paper than to hint at what some of the issues are in respect of knowledge in the context of Work Based Learning. The key questions to be addressed are: what is the place of knowledge in Work Based Learning? and what is the status of the knowledge generated through Work Based Learning? In the context of higher education, there is also the question of what knowledge is required prior to the Work Based Learning experience for learning through work to be truly effective? This raises the matter of higher education support systems for Work Based Learning including, for example, prior knowledge in areas such as methods and processes associated with Work Based Learning, research methods, self knowledge, knowledge about others (especially the workings of groups, teams, organisations) and other knowledge drawn from social psychology (which, arguably, provides an underpinning discipline for much of the generic knowledge associated with Work Based Learning). Clearly there will be evidence of knowledge growth in many of these areas through Work Based Learning but there seems to be a case for an entrée into some generic knowledge (that is, knowledge not specific to the work context) either prior to or running alongside (in the case of those learners in fulltime employment) the planned programme of Work Based Learning which feeds into, and is part of, the overall learning experience.

### The post-modern context

No contemporary discussion concerning epistemology can avoid post-modern perspectives on the theory of knowledge. Over recent decades, debates of a philosophical kind, concerning the nature of knowledge, have been fuelled, in particular, by the epistemological concerns of post-modernism. These concerns impinge directly on issues to do with the curriculum offered in Higher Education. Some commentators refer to a crisis in higher education concerning knowledge (for example, Barnett & Griffin, 1997). The role of the Universities, it is argued, has been undermined in recent times through the arguments of post-modernism (such arguments have been largely carried out in the Universities so, in effect, it is undermining from within) concerning the provisional and contextual nature of all knowledge. This raises questions for the University in respect of its traditional role as guardian of knowledge, and in respect of the status of the knowledge it may generate. and the claims that it makes about the knowledge that it transmits. Add to this the reality that the University no longer has a unique role in respect of any of its key functions regarding the generation, guardianship and transmission of knowledge, and the so-called crisis in higher education begins to make some sense. Griffin (Barnett & Griffin, 1997) claims that knowledge, as we have known it in the academy, is coming to an end as a result of loss of faith in the Enlightenment project (p3). The idea of the progressive development of human reason, giving us faith in the "grand narratives" (Lyotard), has all but been destroyed by the arguments of post-modernism that knowledge is culturally related, always partial, and specific to certain contexts.

While not losing sight of that understanding of knowledge, it is possible to overstate the contribution of post-modernism to debates on epistemology. As Scott (ibid) notes, it is the universalist claims to knowledge that are in peril. Science, in its disaggregated pieces, is in good order (p16). This suggests that, while disciplines such as philosophy and theology may have been shot through with post-modern arguments, other areas of knowledge have been left relatively unscathed. I assume, for example, that advances in medicine have hardly been touched by the post-modern debate on the theory of knowledge.

If the arguments of post-modernism are right, especially in respect of grand narratives – and, of course, we have no means of being certain that they are – it would seem to be a good thing that the University has been forced to reappraise its own understanding of the knowledge it has generated and transmits. If this results in an apparent loss of faith in its raison d'etre, this would seem to be better than it living under an illusion. What has happened, of course, is that the University has integrated post-modern thinking which, as I indicated earlier, it has been largely responsible for generating, into its curriculum and into its research. Thus, it could be argued that the University has inflicted itself with post-modern thought and it probably affects it more profoundly than it affects other walks of life.

### The knowledge revolution

A far more serious development and potential threat for the University, fuelled in part by post-modernism, but largely made possible through technology, is the so-called knowledge revolution which has made knowledge the property of everyone. Again to refer to Scott (ibid), what is happening to knowledge may be more to do with its wider social distribution than to its epistemological dislocation (p21). He speaks of this wider distribution taking two forms. One is the re-emergence of local knowledge as opposed to expert or abstract knowledge. The second is the shift from Mode 1 to Mode 2 (Gibbons et al, 1994) knowledge. In both cases the biggest adjustment for the University is the recognition of the validity of both local knowledge, and what is represented by, so-called, Mode 2 knowledge. If anything has upset the apple-cart for the University, it is not so much post-modemism per se, but the knowledge revolution, the full impact of which has not been assimilated by the higher education Barnett (1994) speaks of a paradigm shift brought about as a result of discipline-based, propositional, knowledge being challenged by experiential learning, transferable skills, problem-solving, group work, Work Based Learning and others. He makes the point that these are not just about new teaching methods but illustrate the changing definitions of knowledge that are taking place. He concludes that legitimate knowledge is being broadened to embrace 'knowing how' as well as 'knowing that', and comments that knowledge acquires an operational character (p46-47). Arguably, Work Based Learning straddles the divide between the knowledge which the University happily recognises, and the knowledge which it finds hard to accommodate, and therein lies a significant challenge to the place of Work Based Learning in the higher education curriculum.

My argument is that a move away from perceiving knowledge as either academic or vocational, universal or local, Mode 1 or Mode 2, in fact anything which divides knowledge, to perceiving knowledge as a whole but having different levels, removes immediately any philosophical objections which the University might have to the admission into its curriculum of Work Based Learning. Such an acceptance means that the only legitimate concern the University should have concerning knowledge is its level rather than its type. In many ways, this argument is already won. There is ample evidence of the broadening scope of subject matter into the curriculum. I maintain that, given the arguments of post-modernism and the fact of the knowledge revolution, it is right and proper that this should be so and that, by the same token, there are no pressing philosophical or practical reasons why Work Based Learning too should not be fully admitted into higher education.

In addressing the place of knowledge in Work Based Learning it is necessary, though perhaps self-evident, to state, along with Boud (Boud & Solomon, 2001) that "a basic assumption of Work Based Learning is that knowledge is generated through work" (p36). The object of learning is always the acquisition of knowledge in some shape or form. All workplaces are essentially sites of knowledge production with different workplaces generating different knowledge depending on the nature of the work in question. It may be worth differentiating, at this point, between 'hard' knowledge and skills, related to the specificities of a particular workplace, and the 'soft' knowledge and skills which are generic to any given work situation (for example, self knowledge and knowledge of the other, especially perhaps in the context of team-working, negotiating, knowledge of strategies in communication, and

so on). Both 'hard' and 'soft' knowledge and skills will be learned (and produced) in the work setting.

It has become customary to speak of the knowledge revolution, in the sense where it is understood that knowledge is the principal asset of corporations and nations (Matthews & Cundy, in Boud & Garrick, 1999). Such knowledge is subject to a dynamic process through which it is enhanced and renewed. This points to a continuing need for Work Based Learning as a means of generating the **intellectual capital** so crucial to the success of businesses and organisations. At the same time, the **process** of learning points to the value of Work Based Learning for the individual and, where individuals within an organisation are learning, it becomes possible to speak of the **learning organisation**. A particular difficulty in assessing the **place** of knowledge in a work setting may be the actual identification of what the knowledge is. Much knowledge in the workplace is of the tacit or implicit kind. This unarticulated, and often taken-for-granted, knowledge so evident in practice, is frequently shared and forms the knowledge-base of a community of practice (ibid).

### A holistic view of knowledge

In the context of the justification of Work Based Learning in the higher education curriculum, it is important to make the point that Work Based Learning really does include knowledge creation and is not only a question of the application of Mention has already been made of the Mode 1/Mode 2 knowledge distinction drawn by Gibbons et al (1994) and it is worth expressing some concerns over this differentiation in the context of discussing the place of knowledge in Work Based Learning (though, clearly, this is also about the status of the knowledge generated through Work Based Learning), principally because there is the danger of driving further the already existing wedge between so-called "academic" and socalled "vocational" knowledge. While I can see the helpfulness of the distinction in some contexts, and while I recognise that the abbreviated descriptions usually proffered to clarify the difference between Modes I and 2 knowledge distort the fuller concepts articulated by the authors, nevertheless, I see the distinction as essentially unhelpful in supporting the case for the justification of Work Based Learning in the higher education curriculum. Although the government has recently articulated a clear message (not least through the availability of funding) to the higher education sector that it looks to it to develop a third principal activity, namely that of knowledge application, alongside the generation and transmission of knowledge, it is not necessarily helpful to isolate 'application' in this way. The 'theory' implicit in any 'application' may be considered as a pre-investment of knowledge but, nevertheless. the theory is integral to the process of application and cannot be divorced from it. On this ground it could be argued that applied knowledge is a more advanced form of knowledge than pure theoretical knowledge, in that it is a demonstration of the absorption of theory in practice. However, it could also be argued that, through application, the knowledge itself is developed and enhanced. (The view that knowledge is somehow degraded or diminished as a result of application is not only outmoded but totally unacceptable and clearly fallacious. Outmoded, too, is the view that knowledge-in-application is somehow of a different status or order to knowledgein-abstract-thought.)

As indicated already, it seems to me that the debate should focus not so much on modes of knowledge (each representing a different status of knowledge), but levels of knowledge, and that it should be recognised that knowledge generated as a result of the application of theory advances that knowledge or lifts it to a higher level. On this model, modes of knowledge prove unhelpful just as they do in terms of arguments concerning the place of Work Based Learning in the University. As already implied, higher education is still wedded to dualism when it comes to understanding knowledge. Inappropriate though this may be, it is still accustomed to distinguishing between 'academic' and 'vocational' knowledge and between 'theory' 'application'. In each case, traditionally, it places a higher value on the former than it does on the latter. The notion of Modes 1 and 2 knowledge simply reinforces this divide and suggests to the University that it was right all along to concentrate its attention, almost exclusively, on Mode 1 knowledge, leaving Mode 2 knowledge to those dealing with vocational education and, therefore, better suited to it. For the reasons given, I am inclined to disagree with Boud (Boud & Solomon, 2001,p37) who views the further analysis of Mode 2 knowledge as a way forward for research into Work Based Learning.

The point about Work Based Learning is that it does not, or should not, recognise any divide in knowledge in the first place. Not only is it unhelpful to its cause, but it is also, I consider, a travesty of the truth of the matter. In and through Work Based Learning, knowledge is far more holistic than the notion of Modes 1 and 2 knowledge implies. Knowledge is applied in Work Based Learning but, in the application, that knowledge changes. It becomes richer by advancing theoretical as well as practical understandings and, thus, becomes new knowledge. In this sense, knowledge is generated in and through work-settings where Work Based Learning is consciously undertaken. This is to the extent that we may safely talk of Work Based Learning as having a knowledge base. Once this is conceded, we are not far from the contention of Portwood (Portwood & Costley, 2000), that Work Based Learning has a justifiable claim to be regarded and treated as a subject in its own right.

# The status of knowledge in Work Based Learning

That the place of knowledge is central to all programmes of Work Based Learning is not, or should not be, in question. The only question that higher education has to wrestle with concerns the status of that knowledge and, as I have argued above, if the debate is shifted away from types of knowledge to knowledge levels then the issue all but disappears. This may be easier said than done, however, given the way in which, traditionally in the University, knowledge is codified and organised. As Boud & Symes (Symes & McIntyre, 2000) clearly indicate, Work Based Learning challenges traditional codifications of knowledge. They point to the way in which working knowledge is often unbounded, unruly, and much less subject to disciplinary control (p25). While acknowledging the workplace as a site of knowledge production, they rightly note that that knowledge is difficult to compartmentalise in terms of the traditional epistemological frameworks associated with University study (p24). The status of such knowledge is, therefore, highly likely to be called in question by academics representing the status quo because, somehow, status is accorded to knowledge by virtue of it being given the protection of a discipline.

The arbitrary nature of disciplinary divisions has, of course, long been debated in the University and, given the widening of the curriculum found in most Universities today, such divisions have been stretched, in some cases, almost to breaking point. As Barnett (1990) suggests, we have reached a point where the basis on which various forms of knowledge are declared admissible and acceptable to higher education are far from clear. He adds that modern epistemology has given up the search for the ultimate foundations of knowledge. If there is no single epistemological stance which underpins the University curriculum, then, as far as Work Based Learning is concerned (or, for that matter, any other contender), all depends on the quality of argument advanced for its epistemological legitimacy. While there is no call for the abandonment of traditional subject boundaries, it may be time for the Universities to give up the pretence that they are somehow more than convenient ways of organising the curriculum. If this latter point is accepted, then the way is paved for the full admission of Work Based Learning into the higher education curriculum, and the danger of the status of its knowledge being discriminated against is lifted.

# A new epistemology of practice

Barnett's (1997) notion of the academic as practising epistemologist also seems relevant in the context of this discussion. The practising epistemologist is one who is able to use multiple discourses to interpret the world and who, like the post modernist. recognises that what counts as knowledge is more open and more subject to broader definition than may have been the case in the past. There would seem to be a sense in which the academic as practising epistemologist has to accept responsibility for defining knowledge and for justifying its levelness. Whether or not Barnett's argument, that the only place of supremacy left for academics in respect of knowledge is in meta-knowledge (that is, knowing about knowledge), is accepted or not, the point that he makes about the academic being both in and of the world (that is, having societal value) is pertinent in the context of Work Based Learning (p152). The danger of the work based learner becoming too specialised and having too narrow a view of learning and of knowledge is also overcome if Barnett's understanding of the practising epistemologist is used as a benchmark. All work based learners should be practising epistemologists in that, to address the requirements of graduateness, they must transcend the view of knowledge either as purely theoretical or as functional and narrowly contextual, and view the world through multiple discourses, engaging in critical thinking, critical self-reflection and critical action, as appropriate. practising epistemologist, properly conceived, is one who embraces learning and knowing in a much more holistic sense than disciplinary perspectives normally allow. Barnett (1994) refers to reflective knowing as an epistemology oriented towards the "life-world", a concept of which Habermas speaks, and Barnett, perhaps reflecting the post modern view, maintains that reflective knowing accepts that all kinds of knowing can help us to understand the world better just as, at the same time, it knows that all forms of knowing are partial (p179).

Raelin (2000), speaking in similar vein to Barnett, contends that Work Based Learning needs a new epistemology of practice, including both declarative and procedural knowledge, and suggests that a critical issue for such an epistemology is when to introduce explicit instructions and reflection to yield optimal performance. Any epistemology that underpins Work Based Learning must presumably, given that Work Based Learning is a form of experiential learning, start from the understanding

that knowledge is created through action and, in particular, reflection on action. However, as indicated at the start of this paper, there is the question of prior, or supporting knowledge, to take into account. Some of this may relate to 'hard' knowledge and skills (that is, knowledge and skills drawn from appropriate disciplines) and some to 'soft' (that is, knowledge and skills drawn from such disciplines as social psychology) but, in both cases, the point at which such knowledge is admitted for critical consideration is crucial.

At the point at which it is admitted into the learning cycle, such knowledge loses, to some degree, its original context through its absorption into the work place setting and the work based learners learning agenda. Once admitted, the knowledge input is subject to critical reflection and critical action through which process new knowledge is created or knowledge is developed and enhanced. Given this coalescence of knowledge from potentially multiple sources (some 'hard', some 'soft', some impinging on the project in hand, some on the self-understanding of the learner) in the service of a specific goal or goals, it may be argued that an epistemology of practice for Work Based Learning is a holistic epistemology. Alternatively, one could see it as an integration of epistemological traditions which, in coming together, act in the sense of a new epistemological framework, forming an epistemology of practice. In contradistinction to the divisions of knowledge into different types, spoken of earlier, an epistemology of practice sets aside anything that leads to a bifurcation between theory and practice on the grounds that it is epistemologically unsound. considers that pure scientific method needs to be tempered with issues arising from application and that disciplinary knowledge needs to be corrected and qualified by knowledge from other disciplines and from everyday life. Raelin (2000) comments that theory contributes importantly to practice but practice contributes to theory and identifies gaps between formal research and processes in the field. In this way theory can be united with practice which is consistent with the philosophy of praxis (p62).

Other recent epistemological debate suggests that traditional ways of conceptualising knowledge and skills as separate entities is misleading and would see this area reconceptualised under the generic rubric of knowledge. As I have argued already, knowledge involved in action includes conceptual or propositional knowledge (knowing 'that'), procedural knowledge (knowing 'how') and strategic knowledge (knowing 'what to do' and 'when'). As Eraut (1994) notes, conceptual, procedural and strategic knowledge is underpinned by 'personal' or dispositional knowledge (knowledge concerned with values and attitudes) based on experience. Contemporary theorists see these concepts of knowledge as highly interactive and inseparable and regard them as part of the same process of learning that brings about new knowledge. This reinforces the idea that an epistemology of practice is a holistic epistemology.

# Concluding remarks

All I have been able to do in this paper is to touch upon some of the issues that I consider to be pertinent when discussing epistemology in the context of Work Based Learning. My view is that it is of vital importance that those of us involved in Work Based Learning in Higher Education debate openly the case for its justification within the HE curriculum and that we move beyond the pragmatic arguments in an attempt to establish clear philosophical and educational reasons for its inclusion. This seems to

me to be the principal reason for this conference and, therefore, I am delighted to have been able to take part in the debate.

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# **APPENDIX C**

#### Chapter ...

#### LEARNING ABOUT LEARNING THROUGH WORK BASED LEARNING

#### Introduction

Work Based Learning, defined in this context as fully accredited negotiated units or programmes of learning through work, is relatively new in the higher education curriculum. Arguably it is an area of activity that demonstrates something of the massive culture change that is occurring in University education largely brought about by a number of factors including the influence of post-modemism, the impact of the knowledge revolution, and the intention of governments to influence the shape of the higher education of the future to make it more relevant, as they see it, to the needs of society and the economy.

There seems little doubt that Work Based Learning in higher education is set to experience considerable growth in the future. Irrespective of government funding streams and initiatives (for example, the Foundation Degree in the U.K.) which foreground Work Based Learning, it appears to be appealing to both employers and learners alike. Employers appear to welcome it because it has the potential to address directly their particular staff training and development needs; learners welcome it because it gives them considerable control in terms of negotiating a curriculum which directly addresses their personal and professional development needs and maximises the potential of work by adding an explicit learning dimension.

While there may be a clear prima facie case for Universities to fully admit Work Based Learning into the curriculum, unless there are also clear philosophical and educational reasons for doing so, its position will be weak, leaving it vulnerable to attack especially from those within the University who are less convinced of its worthwhileness. I have argued elsewhere the case for the admission of Work Based Learning in the higher education curriculum on both epistemological and ontological grounds (for example, Major 2002). The evidence of recent research that I have undertaken convinces me that there are also strong pedagogical reasons for Universities to embrace fully Work Based Learning.

#### Scope of chapter

Effective learning, in my view, is essentially a holistic process that integrates knowing and doing in a critically reflective way, and moreover that Work Based Learning is a sound facilitator of learning of this quality. In this chapter I propose to argue that, through Work Based Learning, learners appear to have a much better understanding of the learning process than is gained through conventional teaching methods. In other words, through Work Based Learning, learners learn more about learning how they, in particular, learn than they do through classroom-based learning. I shall make reference to empirical research findings from studies carried out at Chester College of Higher Education as well as referring to the findings of a longitudinal study into student learning undertaken by Alverno College, Milwaukee. I shall discuss how learning occurs through Work Based Learning and what is distinctive about it and what the conditions are under which learning through work comes about. Close attention will be given to the notions of critical reflection and critical self-awareness as key features of learning through work. A main contention of the chapter will be that Work Based Learning requires learners to assume a greater degree of responsibility for their own learning than do conventional learning methods. It will be argued that this greater responsibility, together with critical reflection as a key ability in Work Based Learning, leads to learners developing a greater understanding about how learning occurs. It will also be argued that the ability to understand more about the learning process while, at the same time, developing knowledge and understanding, is one that is transferable to other, more conventional learning contexts, if

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learners are made more responsible for their own learning and if they learn how to critically self-reflect.

# Empirical research: Alverno College (USA)

The key questions to be asked in this chapter concern how people learn through work and what, if anything, is distinctive about Work Based Learning, and the conditions under which Work Based Learning occurs. Anything of real merit that can be said in these contexts must, of course, be grounded in empirical evidence and it has to be acknowledged that little is available at the present time. As Tennant (Boud & Gamick, 1999) notes "research in understanding learning in the workplace is still in its infancy" (p177).

An important longitudinal study undertaken by staff of Alvemo College, Milwaukee, USA on "learning that lasts" is an exception in that it includes evidence gathered from their off-campus experiential learning (OCEL) programme (similar in concept to Work Based Learning for UK full-time undergraduates) of the importance of OCEL for the reinforcement of learning (Mentkowski et al, 2000). Alverno, famous for its abilities-based curriculum, has undertaken research over a twenty-five year period into the lasting nature of an abilities-based education and their study shows how this education is retained and reinforced through work. A key Alverno educational assumption is that "education goes beyond knowing to being able to do what one knows" (p57) and, therefore, all Alverno students have to complete an OCEL requirement as an integral part of their degree studies. The understanding that learning is a holistic process and one best achieved through collaboration is also key to the Alverno philosophy.

Learning, in the Alverno view, is best understood as integrative and experiential, characterised by self-awareness, as being active and interactive, developmental and transferable with learning processes built around these assumptions (p61). This would appear to go some way towards explaining the "how" of Work Based Learning from the Alverno perspective, in that it is part of a broader educational process that combines College-based study with off-campus experiential learning. However, the distinctive Alverno philosophy is clear that experiential learning is as relevant to on-campus as to off-campus learning in that it is "a concept and practice that must permeate a college curriculum in a systematic and developmental manner" (p8). Again to quote Mentkowski at al, "learning involves the whole student: knowing and doing work together in a dialectic whereby each is constantly redefining the other" (p8). The "how" also points to the significance of collaboration in learning that opens up the opportunity for a "diversity of voices" (p46) and leads to individuals becoming participant researchers through the development of a culture of inquiry. The Alvemo researchers discovered that evidence pointed to students not truly understanding the curriculum abilities until in the workplace (p103). They also found that the abilities continued to develop after graduation, provided that the graduates were persistent in referring back to the conceptual models that they had learned in College (p103).

While evidence from the Alverno empirical research does not prove in any way conclusive so far as Work Based Learning is concerned, there are some important pointers to "how" people learn, and that "how" includes the experience of taking knowledge into the workplace and integrating it with the further experience of "doing" for new learning and new knowledge to occur. This suggests that a distinctive feature of Work Based Learning is the integration of knowledge and action as part of the learning process, with new or enhanced knowledge emerging as the product of learning. This suggests that, among the conditions under which learning through work occurs, the learner must have access to relevant knowledge to integrate into the learning through work process. A further condition appears to be that the learner must have developed a spirit of inquiry such that the intention to learn from experience is foregrounded.

# Empirical research: Chester College (UK)

The Alverno research identifies, among others, the following key features of the learning process:

- Knowledge is retained and reinforced through practical application
- Learning is a holistic process, crucially involving the self-awareness of the leamer
- Learning is best achieved through collaboration with others

These findings are corroborated by recent research carried out by the Centre for Work Related Studies at Chester College of Higher Education into the student experience of Work Based Learning. This involved a structured questionnaire survey of full-time undergraduate students on non-vocational degree programmes on completion of a six-week placement, and semi-structured interviews involving 31 students, the majority of whom were in full-time employment, undertaking Work Based Learning at either undergraduate or postgraduate levels.

#### Theory/practice interplay

The idea that knowledge is retained and reinforced through practical application was confirmed by some of the Chester learners when they identified the theory/practice interface as an important place for learning. A number of the respondents indicated that theory really only made sense to them when informing a practical purpose. Thus, effective learning may be best facilitated by a curriculum which presents learners with the opportunity to become involved in the relationship between theory and practice, and not where the two are regarded as being in some way separate from one another. The strength of Work Based Learning, and a distinctive feature of it, may be in its ability to accommodate both theory and practice and, therefore, it may be an effective vehicle for a higher education curriculum that recognises the importance for learning of the theory/practice interplay. The Alvemo research, as indicated above, shows that there is something about the integration of knowledge and action that leads to effective learning. Barnett (Boud & Garrick, 1999), from a theoretical perspective, would also appear to support the idea that learning is a complex process and is not complete unless knowing and doing are combined and, in turn, combined with reflective processes.

#### Learning as an holistic process

More than half of those interviewed as part of the Chester study claimed either that Work Based Learning had brought about growth in self-knowledge, or that it had changed their view of themselves, or that it had brought about self-examination. Much of this increase in selfawareness is undoubtedly connected with the process of critical reflection, which is a key higher order critical skill associated with Work Based Learning and one which has the power to assist individuals with the process of meaning-making. Others spoke of various ways in which Work Based Learning had influenced their lives or impacted on them as human beings. If this is the case, then it suggests that Work Based Learning is a powerful way of learning that engages the affective domain as well as the cognitive and has the potential to bring about more holistic ways of being and knowing than, arguably, is the case through more conventional forms of higher education study. The place of emotions in the learning process is commented on by Garrick (Boud & Garrick, 1999) who claims that, according to adult learning theory, "learning can be most effective if one's emotions are engaged in the learning process"(p220). He points to the role of emotion in learning found in the humanistic tradition and among those interested in emotional intelligence. If Work Based Learning does indeed impact on the affective domain, as claimed by the respondents, then this provides reinforcement to the idea that it is a much more holistic approach to learning and, therefore, one could argue, better equips people to live and work in the real world.

A note of caution, however, needs to be struck in that some, at least, of the subjects could be considered to be highly impressionable. Full-time undergraduate students, new to a form of

experiential learning conducted in the workplace, frequently undergo a steep learning curve during the course of the six weeks of the placement which makes quite an impression on them. Usually, learning in this way is an entirely new experience for them and the experience of change (from the lecture room to the workplace) can be stimulating, exciting and invigorating. My past experience of talking with students during and shortly after their placements is that, typically, they are full of enthusiasm for what they have been doing, have had, in many cases, an entirely new experience (even those students who have worked throughout their degree studies, frequently express their excitement at being able to experience work in a profession of their choosing, as do mature students with a record of employment), and often an opportunity to apply their learning to a task for an employer. All of this can have quite an impact and create the impression of having had a unique experience.

Another group of students, on whom Work Based Learning appeared to make a considerable impression, consisted of a number of people in full-time employment who had not expected to ever engage in HE level study (from the University perspective, this is a reminder of the potential of Work Based Learning as an agent of widening participation). For them, an unanticipated opportunity had opened up and their discovery that not only where they able to cope with this level of study but that some of their professional competences were actually recognised as equating with higher education level learning, proved to be highly motivational. It is perhaps, therefore, not surprising that a typical response was that Work Based Learning had impacted on them hugely and in a very positive way in that they now valued themselves more highly and recognised their capabilities and their contribution in the workplace.

For both of these groups, what I shall refer to as, the "novel" factor of Work Based Learning should not be underestimated or ignored. However, the evidence of the interviews also suggests that even some of those not falling into either of the above categories recognised something of the impact of Work Based Learning on them in terms of changed self-understanding and improved motivation. It may, therefore, be the case that, while the novel factor may play a part in the impact on the individual of the experience of Work Based Learning, it does not explain it in its entirety and that there are other factors involved. It is my contention that these other factors are concerned with the distinctive features of Work Based Learning that cause the learner to engage in a wide variety of ways of learning within the context of a community of practice.

#### Collaborative learning

There is also sufficient evidence from the Chester qualitative research to make the claim that Work Based Learning almost inevitably involves people in various forms of collaborative learning and engages them in interpersonal relationships in a variety of ways to the extent that, when combined with the impact it has the potential to make on individuals in respect of their self-understanding, supports the philosophical viewpoint that Work Based Learning is a form of ontological-relational thought (this is a position which argues that self-knowledge (knowledge of one's being) comes about as a result of relationships with other human beings). The evidence seems to suggest that most participants recognise that Work Based Learning involves learning in community and not in isolation, and that learning through work involves an awareness of inter-dependency, mutuality and collaboration (the relational dimension). This raises issues for higher education, not least in terms of the way in which assessment of learning is undertaken. It also contrasts quite starkly with the conventional culture of learning in higher education with its emphasis on individualism and personal achievement.

The significance of the evidence, however, should not be over-stated nor the differences between Work Based Learning and conventional higher education polarised. There is no reason, for example, why much learning on the University campus cannot be undertaken using more collaborative methods (many University departments now like to refer to themselves as learning communities) and sometimes learning in the workplace may be best

achieved through lone activity, such as reading a book or writing an article. However, it remains the case that a distinctive feature of Work Based Learning is that, typically, it occurs within a community of practice, which itself facilitates much of the learning that occurs and, therefore, places emphasis on the notion of relational learning. Any form of collaborative learning implies that there are two principal forms of learning occurring simultaneously: that is, (1) learning about the topic or subject under consideration, and (2) learning about the others who are engaged in learning with you which, in turn, almost inevitably leads to more self learning. This, it seems to me is the essence of the ontological-relational perspective and, therefore, the claim, that Work Based Learning is a form of ontological-relational thought, justified.

#### Scholarly support

My claim, then, is that in broad terms, the research findings from the Chester enquiry corroborate, to a large extent, the findings of the Alverno longitudinal study. I would also claim that there is general support for these empirical findings from a number of influential thinkers in the sphere of educational philosophy and psychology. For example, John Dewey, the American philosopher of education, is frequently referred to in any discussion about experiential learning in general, or Work Based Learning in particular, especially when it comes to the consideration of method. It has to be remembered, however, that Dewey was essentially concerned with the school cumculum and not adult learning. Nevertheless, the points that he made about experience being the core of the educational process, and the idea that learning which arises from experience is marked by continuity and connectedness are consistent with my contention that Work Based Learning is not only an appropriate vehicle for the delivery of higher education but is essentially a holistic and relational process.

While Dewey is often cited in philosophical support for experiential learning and Work Based Learning, Vygotsky is often identified as a key figure in supporting experiential learning from a psychological perspective. His concept of the "zone of proximal development" is pertinent to Work Based Learning in the sense that it points to the greater potential of collaborative learning over that of independent learning. Vygotsky suggests that individuals are capable of achieving much more in collective activity than they are capable of achieving on their own. His emphasis on the importance of "dialogue" as a facilitator of cognitive growth is also relevant to an understanding of the processes of Work Based Learning. Dialogue is a profoundly social process and a relational activity and is, therefore, entirely consistent with my arguments about the nature of Work Based Learning.

Carl Rogers is also a key figure in the recent "learning" debate who, it could be claimed, offers indirect support to Work Based Learning as having implicit within it an appropriate educational method. Work Based Learning is entirely consistent with the student-centred learning approach of which Rogers approved, as well as foregrounding the process of learning, given that today's new ideas become tomorrow's outmoded information. The philosophy of learning espoused by Rogers also emphasises the part that emotions play in the learning process and, thus, he advances an argument for a holistic view of learning much along the lines I have claimed for Work Based Learning.

It can be seen, therefore, that Work Based Learning is not without its support, albeit indirect and unknowing, from recent heavy-weight thinkers and clearly, if space permitted, much more could be said of their respective ideas to reinforce the contention that it is entirely justifiable that Work Based Learning should be admitted into the higher education curriculum.

#### Critical reflection

Reference has already been made to the key role of critical reflection in Work Based Learning and so it seems appropriate to comment on the evidence of the Chester qualitative research in this regard. The evidence suggests that, through critical reflection, change has been

brought about for individuals in respect of their views and attitudes towards themselves, their work and their worlds. Whereas critical thinking has always been highly prized in higher education, critical reflection has been less so. Critical thinking implies a degree of detachment and objectivity in relation to the object of (conceptual) thought, whereas critical reflection has a strong subjective element that, of course, may account for its more cautious treatment in the academic world. Critical reflection seems to me to carry with it the weight of critical thinking but brings the self into the equation. Thus, in critical reflection there is an attempt to examine the implications for the self (and, therefore, to make {construct} or to remake {reconstruct} meaning for oneself) in relation to whatever it is that is under critical scrutiny. reflective capabilities are shown to be crucial to Barnett's (1997) view of higher education when he identifies three key features of the 'critical being' which, he argues, is the responsibility of higher education to produce namely, critical reasoning, critical self-reflection. and critical action. Barnett's argument is that a University education should enable an undergraduate to go beyond the capability of critical thinking (which a conventional University education has provided for and should continue to provide for), to engage in critical selfreflection (leading to a reappraisal of beliefs and values), and to promote engagement in critical action in the world (such as might be expected from a responsible citizen). I have attempted to make the case elsewhere (Major, 2002) for Work Based Learning as a form of higher education that has the capability to produce the 'critical being' that Bamett argues should be synonymous with the concept of graduateness.

However, I am cautious about emphasising, to any great extent, the significance of the Chester findings in respect of critical reflection because of my serious concems that the level at which students on programmes of Work Based Learning may be engaging in it is not a very deep one. Almost two-thirds of the respondents (20) either did not indicate clear understanding of critical reflection or their answers indicated only a basic understanding of it. I am drawn to the observation of Boud (Boud & Solomon, 2001), concerning whether critical reflection in Work Based Learning contexts provides a sufficiently critical edge to promote the kinds of critical thinking characteristic of a University education. Boud concludes that some reflective activities may not (ibid, page 55), and his observations lead me to infer that my suspicions, on the basis of the data collected concerning the level at which students are engaging in critical reflection, may not just be a local issue but one that is pertinent to Work Based Learning at large. If this is the case, it indicates a clear need for a great deal more work to be done in this area so that the level at which students are engaging in critical reflection is consistent with the standards of critical thinking engaged in elsewhere in the University.

What is clear to me is that, whatever the situation is in respect of the level at which critically reflective activity is taking place in the context of Work Based Learning, it does not change the situation in respect of the centrality of critical reflection in learning through work. Critical reflection is the key capability of the reflective practitioner. Similarly, critical reflection is at the heart of the model of praxis espoused in liberation thinking and considered by some to be a key aspect of Work Based Leaming methodology. However, critical reflection is not necessarily an intuitive process. It is one that people have to learn, especially if they are to achieve a depth of reflection acceptable to higher education. Thus, those responsible for delivering programmes of Work Based Learning must also be charged with the responsibility for facilitating the development of students' critically reflective capabilities. reflection is a capability that develops through learning and experience is implied by one of the Chester postgraduate respondents who noticed that her peers, who had undertaken Work Based Learning previously, possessed a greater understanding and insight than she did concerning learning in the workplace. Similarly, two other postgraduate students, who had undertaken Work Based Learning as part of their undergraduate studies, noted their own development in their ability to critically reflect, suggesting that, to some extent, it is a learned process.

# The learning process

It is my view, on the basis of the evidence available, that students gain a better understanding of the learning process through Work Based Learning than they may do through more conventional forms of learning. Work Based Learning requires students to accept a considerable degree of responsibility for their own learning, and gives them greater freedom to determine how they are going to learn. The evidence of the Chester research confirms that there is a wide variety of ways in which people learn through work. Some answers tended, if anything, to emphasise practical learning over theoretical, though respondents generally took a balanced view, recognising that different learning needs required different approaches. In analysing student responses to a question concerned to elicit something of the various ways in which people learn, six categories emerge:

- Experiential learning
- Conventional learning
- Instructional learning
- Reflective learning
- Relational learning
- Other ways of learning

The question was not in any sense meant to be about the physiological workings of the brain or to engage in any form of psychological study but simply an attempt to find out about people's learning preferences and how, when free from the constraints of a more controlled learning environment (such as the University or College), they went about their learning. It was more to do with methods of learning and the idea that, through Work Based Learning, people probably engaged in a wider variety of ways of learning than they would in a more conventional form of higher education.

It seems reasonable to assume from the information given by the respondents that, when free to do so, the way in which individuals go about learning is inclined to match their preferred learning style. It also seems reasonable to assume, though the survey did not attempt to deal with this, that access to a broad range of learning styles has the potential to lead to more holistic ways of understanding learning and, thus, has the potential to lead to the capability of learning to learn. The evidence does support the view that, whatever else students learn through Work Based Learning, they also learn about themselves. This inevitably means that at least an element of emotional learning is brought into the equation. Arguably it is self-learning that gives rise to an understanding of how one learns which, in turn, leads to a greater awareness and understanding of the process of learning itself or of learning to learn.

If this is the case, then Work Based Learning is consistent with Carl Rogers (1983) holistic philosophy of learning with its emphasis on people's understanding of how they learn rather than what they learn. This is a sophisticated process and one that many learners, I suspect, may never contemplate. It is a process that a conventional University education may not require one to consider. The difficulty some of the respondents had initially in engaging with a question that asked them 'how' they learn suggests they may never have been asked that question before. The fact that most were able to engage with it to some degree, having thought about it in the context of Work Based Learning, suggests to me that having greater responsibility for their own learning, together with experiencing a broader range of ways of learning, better equips people to understand something of the learning process

#### The current debate

The existing literature on Work Based Learning is growing but not extensive and ideas to support it are currently being drawn from a range of allied fields of study. In bringing this

chapter to closure, I thought it might be helpful to point to some of the wider thinking that has relevance to Work Based Learning and which, I believe, supports the case I have been attempting to make concerning how learning occurs through Work Based Learning, what its distinctive features are and what the conditions are under which learning through work comes about

Barnett (Boud & Garrick, 1999) draws the distinction, which is becoming increasingly used, between "formal" and "informal" learning and suggests that the latter may typify the work context. He recognises, however, that this may be too simplistic a distinction to make as "both formal and informal learning constitute work" (p36). I would also argue that Work Based Learning requires that the knowledge that comes from so-called formal learning be integrated with the informal learning that derives from the experience of work. (I would also wish to draw a distinction between "planned" and "unplanned" learning and argue the case that Work Based Learning should essentially be concerned with planned learning whilst welcoming the unplanned learning that inevitably arises in a work context.) Barnett would appear to agree with this when he notes that learning can be cognitive (mastery of new concepts), operational (mastery of new skills) or experiential (accommodate to new set of relationships) and that Work Based Learning incorporates a mix of these and is, therefore, challenging in multiple ways. He suggests that it is simultaneously challenging in terms of one's knowing, one's acting and one's reflecting (p37). If we add to this the interdisciplinary nature of Work Based Learning, the mix becomes even more complex. In a sense it could be argued that Barnett is simply affirming the Alverno assertion that learning is a complex process and is not complete unless knowing and doing are combined and, in turn, combined with reflective processes. This is, in a sense, "how" Work Based Learning occurs and is a distinctive feature of it.

Senge's concept of "generative learning" (cited by Beckett in Boud & Garrick, 1999, p83), in opposition to more traditional mechanisms which he calls "adaptive learning", suggests a similar process to the Alvemo model as does the concept of "organic learning" where life at work is experienced as an integration of thinking, feeling and doing in social settings. Beckett argues that, when the worker-learner is aware of learning from these experiences, this can be called "organic learning" (p87-90), and he argues for rationality as an integrating factor in the process (p94).

In the context of "how" learning occurs in Work Based Learning the importance of facilitation must not be overlooked. This is something of a new role for the academic and one which may be regarded as being more akin to research supervision than formal teaching (Boud & Symes in Symes & McIntyre, 2000, p28). The Chester research identified, perhaps not surprisingly, the crucial role of the higher education facilitator in ensuring that effective learning occurs. Where formal teaching is not involved and students are learning in off-campus settings, perhaps where electronic means of communication are the norm, the tutor becomes something of a hybrid in terms of the combination of academic, administrative and support roles. In reality the University facilitator is not a lone facilitator in Work Based Learning, given the social nature of work and the opportunity of informal facilitation through collaboration and dialogue with colleagues. Nonetheless, however it occurs, facilitation is crucial. As Billett (Boud & Garrick, 1999) notes, "guidance in the workplace is... a key factor for the development of robust knowledge" (p158). He also notes that the "lack of available expertise has a negative impact upon workplace learning" (p158). This reinforces the point made previously and, at the same time, signals a distinctive feature of Work Based Learning, namely that learning in the context of Work Based Learning involves participation in a community of practice (Tennant in Boud & Garrick, 1999, p173). The distinctiveness of this form of learning is, according to Tennant, that it entails a different mind-set, one that moves away from the individual towards the community.

It is a moot point as to whether contemporary research into the learning process should be used to show how Work Based Learning addresses the essential requirements for effective

learning when it could equally be argued that it should be used to inform all learning and is, therefore, best seen as part of a shift in higher education from teaching to learning, with learning being foregrounded as the key activity of the University. Garrick (ibid) seems to suggest the possibility of this when he notes that contemporary research points to an unprecedented degree of convergence between workplace learning and formal education (p225).

Given this point, there may be little merit in attempting to claim for Work Based Learning more than it may rightly deserve in terms of its distinctive features. It may be, for example, that what I seek to claim as a feature of Work Based Learning is simply a reflection of a move in learning research generally towards more holistic ways of learning. After all, as Moon (1999) suggests, "learning outside and inside the classroom can hardly be different kinds of learning all together"(p22). There may, therefore, be little point in attempting to argue that the workplace presents a richer source of potential learning than the lecture room, especially in terms of all-round, holistic, development. Nevertheless, it is necessary to argue that Work Based Learning does provide for this because this is part of the justification for the inclusion of Work Based Learning in the higher education curriculum. However, it is worth noting that Work Based Learning does appear to encourage a number of significant growth points for learners, including the move from single to double and triple loop learning (Raelin, 2000), and the development of deep rather than surface approaches to learning (Vaill, 1996), given that transferability is a key feature of Work Based Learning and that only a deep approach to learning is likely to lead to knowledge transfer (Boud in Boud & Solomon, 2001, p42). It also encourages growing acceptance of responsibility for one's own learning, or the skill of metalearning (learning to learn), which is a crucial attribute of the successful lifelong learner.

# Concluding remarks

In this chapter I have attempted to make the case, largely on pedagogical grounds, for the full admission of Work Based Learning into the higher education curriculum. I have attempted to show something of the variety of ways in which people learn through Work Based Learning, pointing to what I consider to be its distinctive features and the conditions under which such learning occurs. Through conversations with those engaged in Work Based Learning, it has become clear to me that they appear to be more conscious of, and have a much better understanding of, the learning process than might be brought about through more conventional forms of learning. They appear to learn more about learning and develop the capacity of learning to learn. I have argued that this comes about, partly at least, as a result of the greater responsibility for their own learning that Work Based Learning places on the learners and that this, together with critical reflection as a key capability, leads to them developing a greater understanding as to how learning occurs. Boud &Symes (Symes & McIntyre, 2000) may well be right when they say that, where work is the curriculum, as it is in programmes of Work Based Learning, this provides "a radically new approach to what constitutes university study"(p14). Radical though it may be, I hope to have shown that there are sound educational reasons why the University should fully embrace Work Based Learning and accept it as a legitimate contributor to the higher education curriculum.

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### **Key Words**

Collaborative (or relational) learning Communities of practice Critical reflection Learning as an holistic process Learning-styles Meaning-making

Relational (or collaborative) learning Responsibility for own learning Theory/practice interface (as place of learning)

# APPENDIX D

# Towards a philosophical underpinning for Work Based Learning: the ontological perspective.

#### Summary

This paper recognises that Work Based Learning is a relatively new phenomenon in the University curriculum and takes the view that it is incumbent upon its proponents to articulate a clear philosophical and educational rationale for its existence in Higher Education. It seeks to make a case for Work Based Learning as an example of ontological-relational thought, a philosophical concept essentially concerning self-knowledge. A central argument is that Work Based Learning leads to more holistic ways of knowing and being than does the conventional University curriculum. It examines critical reflection as a distinctive feature of Work Based Learning and considers the potential of the latter as a means of facilitating meaning-making. The article concludes with comment on Vaill's concept of learning as a way of being.

#### Introduction

Theoretical perspectives on Work Based Learning are currently thin on the ground. This may be attributed mainly to the fact that Work Based Learning is something of a late-comer to the higher education curriculum. Even now, ten years or so after its introduction into HE, serious questions of a philosophical and educational nature have not been fully answered concerning its justification. Nevertheless, it is now beginning to have an impact on a wide range of Colleges and Universities, partly as a result of the introduction of such initiatives as the Graduate Apprenticeship scheme and the Foundation Degree, and also because of the Government's assurance that it will fund higher education institutions to deliver a third level of activity. Alongside knowledge generation and knowledge transmission, there is now a commitment to developing and sustaining a stream of funding in respect of knowledge application.

While there may be little doubt that Work Based Learning is in accord with the broad concept of the modern University, given that it facilitates a number of key developments that help to make up the profile of contemporary higher education (for example, promotion of partnerships with businesses and organisations, contribution to society and the economy, enhancement of students' employability, contribution to widening participation agenda, income generation), it is not without its critics, some of whom may consider that Work Based Learning is little more than symptomatic of the attempts of successive UK governments to influence the higher education curriculum. There is a consequent danger here that what will evolve is a purely functionalist view of learning through work which does not do justice to its full potential as a means of achieving higher level learning and personal and professional development.

The driving force of this paper is the belief that proponents of Work Based Learning must go beyond the functionalist view and the pragmatic arguments in favour of its inclusion in HE, to consider the philosophical and educational grounds for its existence. If this does not happen, Work Based Learning will remain at the mercy of scholarly scepticism and cynicism about its value as a means of achieving academic awards.

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Hence, this paper, which seeks to make a contribution to the theory of Work Based Learning by beginning to address some of the **ontological** issues which are pertinent to the philosophical debate concerning the justification of Work Based Learning within the higher education curriculum. While the typical view of Work Based Learning may be that it is about "doing", this paper suggests that it is as much about "being" as it is about "doing". It also takes the view that, typically, Work Based Learning, unlike much conventional learning in higher education, is not a lone activity but one that is engaged upon in cooperation and collaboration with others.

### Ontological-relational thought as a key philosophical concept in WBL

I start with the assumption that relationality is a key philosophical concept in Work Based Learning and I propose to argue that Work Based Learning may be viewed as an example of ontological-relational thought. This philosophical concept represents a way of knowing about or understanding oneself (and, as such, is a kind of epistemology relating to self-knowledge) in the context of relationships with other human beings. The idea can be found in the theological writings of Dietrich Bonhoeffer (for example, Bonhoeffer,1955) and has surfaced in some feminist discourses (for example, Loades,1990). Bonhoeffer's analysis of the concept of person shows that it is in the context of relatedness that people come to a true understanding of themselves. Relatedness provides, in Bonhoeffer's view, the basis for knowledge about ourselves, about the other person and, in the context of theological usage, about God.

Feminist theological discourse similarly emphasises relationality in contradistinction to the individualism which, it is argued, pervades the male perspective and has resulted in the domination and control approach of patriarchy. More generally, liberation theology (of which feminist theology may be considered an example) also has a strong relational perspective and, interestingly, offers the model of praxis which has to a large extent, through the influence of Freire's approach to adult education, been adopted by proponents of Work Based Learning as a key aspect of WBL methodology. The liberation model of theology was adopted by theologians working in situations of oppression and injustice who considered the Western model of theology, which is essentially an intellectual approach working from scripture, tradition and reason before deciding upon action, inappropriate for their particular circumstances.

This is not dissimilar from a central argument of some proponents of Work Based Learning who maintain that the idea of a theoretical higher education followed by application of theory when one arrives in the work setting is not necessarily the most appropriate model. Barnett (1990) makes a similar point concerning higher education in general implying that "a curriculum which first offers students theoretical components and then expects them to put theory 'into practice' in the practical situation is misconceived". He suggests that "the balance of curriculum elements should be reversed with the student learning how to practice as a professional and that the 'theory' should be derived by inviting the student to reflect on the practice to tease out the principles embedded in it" (p160).

The notion of praxis in the context of liberation is that of action (in the light of some injustice) informed by reflection. Theology as action might include a whole range of

things not necessarily associated with the Western understanding of theology. Similarly in Work Based Learning, a wider range of activities are likely to be undertaken than those which make up a conventional programme of academic study.

Again, like the liberationist who sees the community (the church base community) as the key to successful action, so too in Work Based Learning the community of practice is seen as crucial in the learning process. (The term 'situated learning' may also be used of Work Based Learning to express the notion that learning in this context results from a process of participation in a community of practice.) Given that 'work' is typified by a network of relationships, Work Based Learning, as a form of learning, almost inevitably involves learning achieved in the context of collaboration, cooperation and partnership. As Raelin (2000) notes, the organisational qualities that facilitate Work Based Learning are those where collaboration is valued over individualism (p44). This is in contrast to the highly individualistic model of most University learning. However, that model itself is constantly under review and, in recent years, there has been a shift in teaching and learning methods in higher education, including some with a more relational bent, and a notable shift in assessment strategies which typically now contain a much broader range of ways of assessing students. The point is that the move to accommodate the relational-style learning that characterises Work Based Learning is no longer the huge jump that it may have been under the higher education system of twenty or more years ago.

I wish to maintain that, whereas conventional forms of higher education may inform and liberate the mind, Work Based Learning offers a more holistic way of knowing, a way of knowing which embraces action as well as thought and, more pertinently in terms of its distinctive characteristics, a way of being. Whereas the conventional approach in higher education is very much about the individual's learning, Work Based Learning has a stronger relational edge to it, recognising that work is rarely a lone activity. Solomon (Boud & Garrick, 1999) refers to the "foregrounding of the human" in the workplace and says that the "primacy of the technical is being overshadowed by the social and the cultural"(p121).) Thus, in Work Based Learning there is a stronger notion of interdependence and mutuality where learning is concerned and this, I would argue, constitutes a distinctive approach to learning and one that leads to a far more holistic way of being and knowing than may be found in other areas of University learning. Hence my claim that Work Based Learning is essentially an example of ontological-relational thought in that it has the potential to impact on not only the developing knowledge of the individual but also on the individual as a person providing, overall, a more rounded being-in-relation who is aware of the presence and power of community as part of his/her own make-up. This awareness could be construed as a spiritual dimension to Work Based Learning and, again, indicate a distinctive feature of this way of learning.

Individuals exist in social contexts and, therefore, it makes sense that learning occurs in social contexts. As Matthews and Candy (Boud & Garrick, 1999) point out, "conventional views of learning and of the nature of knowledge, especially those which consider learners as isolated individuals without a social context, are inconsistent with recent advances in the development and management of 'learning organisations'" (p60). I would go further and maintain that this applies equally to learning per se as well as to learning organisations. In other words, we need to move beyond the realms of the private learning and knowing which has been the product of

conventional University learning to more collaborative forms of knowing and learning, where relationships as well as text-based learning impact and, I maintain, Work Based Learning is an example of how this can happen. Such learning may well help to create the learning organisation but the learning organisation would not exist without the learning individual.

# The centrality of critical reflection in Work Based Learning

l propose to move now in my argument to focus on critical reflection and to examine this capability in the context of meaning-making and, therefore, as a way of understanding one's own being. My contention is that any programme of Work Based Learning must see critical reflection as central and have as a key intention the development and enhancement of the students' critically reflective capacities. In addition, I contend that the powers of critical reflection are central to any concept of graduateness and that this capability is implied, though not referred to explicitly, in the descriptor for a Bachelor degree award provided in the Quality Assurance Agency qualifications framework (2001).

It is only in recent years that the idea of critical reflection has been the focus for serious scholarly critique and much work has still to be done in this area especially in the context of Work Based Learning. Barnett's Higher Education: A Critical Business (1997), Moon's Reflection in Learning & Professional Development (1999), and Brockbank & McGill's Facilitating Reflective Learning in Higher Education (1998), have opened up the debate but there is still a serious need for a study which examines critical reflection in the context of Work Based Learning. If there is a single, most important, capability relevant to Work Based Learning, I would argue that critical reflection is a strong contender for the accolade. It is clearly a key and distinctive feature of any programme of learning through work. Whereas critical thinking has always been highly prized in higher education, critical reflection has been less so. Critical thinking implies a degree of detachment and objectivity in relation to the object of (conceptual) thought, whereas critical reflection has a strong subjective element that, of course, may account for its more cautious treatment in the academic world. Critical reflection seems to me to carry with it the weight of critical thinking but brings the self into the equation. Thus, in critical reflection there is an attempt to examine the implications for the self (and, therefore, to make (construct) or to remake (reconstruct) meaning for oneself) in relation to whatever it is that is under critical scrutiny. It seems to me, therefore, that critical reflection is justifiably considered in the context of ontology, given its focus on the self in relation to the object of enquiry, whereas critical thinking (thought applied to the object of enquiry) may be more of an epistemological matter.

Critical thinking promotes development of the mind and thus relates well to the understanding of the purpose of the University in conventional thought, whereas critical reflection is about a much more holistic way of being and knowing and is, therefore, consistent with my understanding of the outcomes of programmes of Work Based Learning, which I also maintain is consistent with a contemporary understanding of higher education. Mentkowski et al (2000) note that self reflection brings together knowing and doing (p8) and cite Perkins (p148) who argues forcefully that reflective intelligence can be developed. This suggests that a legitimate aim of

programmes of Work Based Learning is to assist learners to develop and refine their abilities to critically reflect.

The object of critical reflection, 1 would argue, is the self in relation to knowledge acquired and applied and not reflection on the self per se. As Barnett (1990) observes, criticism leads to critical self-reflection where students stand back and place their knowledge and accomplishments in a larger perspective, that is, conduct a critical dialogue with themselves (p171). Herein, some would argue, lies a fundamental difference between Work Based Learning in higher education and so-called vocational training in that Work Based Learning involves conscious reflection on actual knowledge and experience. This is a learned and not necessarily an intuitive process and so part of the responsibility of the Work Based Learning facilitator is to assist the learner to develop his/her critically reflective capacities.

The much celebrated work of Schon concerning the reflective practitioner is about ways in which reflective processes in the context of practice can be increased and enhanced. Raelin (2000) argues that the most important competency of Work Based Learning is that of reflective practice (p47). Barnett (1990) argues that every student should be a reflective practitioner (though he has some criticisms of Schon's concept of reflective practice) in that only in self-reflection can any real state of intellectual freedom be attained (p160). Boud (Boud & Solomon, 2001) raises the question as to whether critical reflection in Work Based Learning contexts provides a sufficiently critical edge to promote the kinds of critical thinking characteristic of a University education, and concludes that some reflective activities may not (p55). However, there seems no reason why, with appropriate facilitation, work based learners cannot be encouraged to pursue the deeper critique that Boud maintains will lead to appropriate levels of critical reflection demonstrated in improved and transformed work situations where productivity is enhanced and where taken-for-granted assumptions held by self and others are noticed and questioned (ibid). As Matthews & Candy (Boud & Garrick, 1999) note, the effective practitioner actively seeks out opportunities for new learning which they describe (following Botkin et al, 1979) as 'generative' or 'anticipatory' rather than 'reactive' or 'maintenance' learning (p50). Boud also argues for the qualities of critical self reflection that take the learner beyond the context of learning "so that they are not trapped by the specificities of their context" (Boud & Solomon, 2001,p56). When this happens, Work Based Learning proves its potential to achieve the same outcomes as any other programme of higher education and thus further justifies its place in the higher education curriculum. For Garrick (Boud & Garrick, 1999) recognition is given to "the nonroutine that forces professionals into the kind of reflective thinking that changes beliefs, values and assumptions" (p227).

### The potential of Work Based Learning for meaning-making

All of this is highly pertinent to the matter of ontology, as Raelin (2000) indicates when he refers to the "meta-competence" of "learning to learn" (a reflective activity) as "new" learning which has "a personal, even spiritual side" based as it is "on the self-reflexive principle of becoming"(p11). In this context, Raelin goes on to consider reflection in the context of meaning-making observing that "reflective judgment entails acknowledging that one's understanding of the world is not a given but must be actively constructed and interpreted" (p59). He reinforces this by expressing the

view that "higher level reflection may not occur naturally" and therefore "educational opportunities need to be provided within the work place to provoke critical reflection on current meaning perspectives" (p60).

Raelin refers to Mezirow and the concept of transformative learning (that is, learning that takes us into new meanings) and, of course, it is in this context that questions of ontology become especially pertinent. If Work Based Learning has the power to bring about transformative learning then it is especially powerful and important in terms of the more holistic conception of higher education that I have been arguing for, and offers further warnings about the potentially subversive nature of Work Based Learning. In transformative learning issues concerning being are transformed into issues of 'becoming' and the matters of emancipation, empowerment and self-realisation that Barnett (1994) speaks of (p191). Barnett (Boud & Garrick,1999) refers to the learning challenges faced through work which he describes as increasingly of the supercomplex kind. This requires of people that they learn more than new techniques, ideas and practices by widening the very frameworks through which they interpret the world. It is demanded of us, argues Barnett, that we become different kinds of human being and notes that change is daunting because it often calls for fundamental changes in self-conception (p37).

Work Based Learning, then, in my argument has the potential to bring about high level learning about the self in relation to the knowledge base appropriate to the work context. That learning, if it is sufficiently powerful, it is maintained, has the capacity to be transformative with all that that implies for change to one's being. My view is that Work Based Learning has the potential to address directly Barnett's view of what the outcomes of higher education should be with its potential to challenge students to come to understand themselves in a new light, to understand the world, and to act in the world in new ways (Barnett, 1997). In his chapter in Boud & Garrick (1999), Barnett discusses his ideas in the context of learning and work but does not go so far as to offer an endorsement of Work Based Learning. There is a strong epistemological issue here regarding the nature of self-knowledge, and the way in which such knowledge is generated, as well as for the body of knowledge relevant to the work context. My view is that such knowledge is developed in relation to critical thinking processes which are part of my understanding of what is entailed by critical reflection.

In addition, through critical reflection in a Work Based Learning context, a number of other potentialities exist. For example, the concept of metacognition (or, thinking about one's problem-solving processes) which may be seen as fundamental to the process of Work Based Learning. Barnett (1994) refers to metacriticism (or, thinking about thought already formed) which, again, is a process, while not unique to Work Based Learning, is found in it. Perhaps more generically there is the concept of metalearning (or, learning about learning or learning how to learn) which applies equally – perhaps more so – to Work Based Learning where acceptance of responsibility for one's own learning is an absolute requirement. Butler (Boud & Garrick, 1999) approaches this slightly more cautiously when she says that "the dominant (western) discourse of work-related learning now focuses on individuals increasingly taking responsibility for their own learning" (p137). Thus, critical reflection in a Work Based Learning context is a powerful tool for developing self-understanding, for creating the context for meaning-making with consequent changes

to being, as well as for increasing one's learning and problem-solving capacities while drawing on and thinking critically about an area or areas of knowledge appropriate to the work context.

# Learning as a way of being

Before concluding this paper, some reference needs to be made to Peter Vaill's (1996) concept of learning-as-a-way-of-being, given its potential to reinforce what I have had to say about Work Based Learning from the ontological perspective. For Vaill, learning is, above all, an ontological issue. He is critical of, what he terms, institutional learning which he perceives to be a control system and "not a truly educational system in which liberation of mind and spirit of learners is the primary objective"(pxv). He uses the metaphor of permanent white water to refer to the situation of constant change in which learners today find themselves, and observes that the only way of coping with it is to become an extremely effective learner (p20). His contention is that learning, in our macrosystem environments, must become a way of being, "an on-going set of attitudes and actions employed to keep abreast of the surprising, novel, messy, obtrusive, recurring events thrown up by these macrosystems" (p42). Vaill argues that, "at the very least, learning as a way of being must supplement institutional learning and often it must supplant it as the fundamental philosophy and practice of human learning" (p42). He stresses the concept of learning as a way of being by commenting that "being" refers to the whole person and, therefore, "learning extends into all aspects of life and all levels of awareness" (p43) and includes the interpersonal.

It seems to me that the sort of philosophy of learning espoused by Vaill supports the ideas that I have articulated in relation to the ontological arguments in favour of Work Based Learning, especially the notions of holism and relationality as key features of learning through work. Moreover, Vaill, in citing the kinds of learning that are important in conditions of permanent white water (for example, self directed, creative, expressive, feeling, reflexive), refers to learning which contributes to meaning-making and which has a spiritual dimension (p179). Dualistic understandings of learning (such as the cognitive, affective distinction honoured in institutional forms of learning) are deemed by Vaill to be unfortunate and, while recognising that some learning needs to occur in formal educational settings, he argues that permanent white water conditions demand that we find new ways for learning to occur through work and life (p76).

While not entirely agreeing with Vaill's implied definition of spirituality, he does have some interesting points to make with regard to the spiritual as a way of learning and meaning-making. He notes that the spiritual "seeks to get beyond materialist conceptions of meaning" (p179) and speaks of it as "the willingness to enter into a process of dialogue about meaning within oneself and with others" (p180). It appears to be that, for Vaill, the spiritual dimension is an ingredient essential to holistic perception. It is something that profoundly enhances, enriches, strengthens and intensifies normal meaning (p183). Whether or not the spiritual is construed as essentially a religious phenomenon (and I suspect Vaill may be leaning in that direction) or as an aspect of human being alone, without the baggage of religion, it is a helpful way of looking at what is implied by holistic modes of learning and, therefore, I believe, a helpful way of seeing the potential of Work Based Learning.

#### Concluding remarks

My main concern in this paper has been to draw attention to some ideas that I consider might go some way towards providing a potential philosophical underpinning for Work Based Learning in the area of ontology. I reiterate my view that it is of vital importance that those involved in Work Based Learning in Higher Education debate openly the case for its justification within the HE curriculum, and that we move beyond the pragmatic arguments in an attempt to establish clear philosophical and educational reasons for its inclusion.

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# APPENDIX E

# REPORT FOR CHESTER COLLEGE OF HIGHER EDUCATION WORK BASED LEARNING PROVISION

#### Introduction

This report arises out of research into Work Based Learning in Higher Education carried out by the Centre for Work Related Studies during the past two years. The report may be considered timely in view of the recently published White Paper on the future of higher education which foregrounds Work Based Learning and HE-Business interaction, and in view of the considerable growth of the Centre since its establishment in July, 2000. The Report makes a number of recommendations that CWRS would wish SMT to consider concerning the future of Work Based Learning at Chester College in the light of the Centre's research findings and the White Paper.

# Background: WBL at Chester & Warrington campuses

In recent years Chester College has established a reputation as an innovator in Work Based Learning. Arguably, its Work Based Learning provision for full-time undergraduate students is the largest and most sophisticated model of its kind in UK higher education. It has been praised recently by the College's retiring External Examiner for Work Based Learning, as "worthy of dissemination to other institutions" with the recommendation that the "Chester model be disseminated through academic journals as successful practitioner research". The success of Work Based Learning is due in no small measure to the farsightedness of College management in ensuring (a) that the College's timetable structure allows for it and (b) that it is appropriately resourced.

New opportunities arise for the College resulting from the merger with the HE faculty of Warrington Collegiate Institute which itself has an equally strong record in Work Based Learning and operates a scheme sufficiently similar to the Chester model to facilitate a smooth integration of the two by the academic year commencing September, 2004.

As well as Work Based Learning for its full-time undergraduate students, the College has also developed an innovative approach to Work Based Learning for those in employment through its Work Based & Integrative Studies framework. Recently this has been employed by CWRS in the service of further ground-breaking work in partnership with other HEIs involved in two government WBL initiatives, namely the Graduate Apprenticeship (developed in collaboration with the Department of Computer Science & Information Systems), and the University for Industry Learning through Work scheme. This work has further enhanced the reputation of the College as a national leader in the field of Work Based Learning

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## **Background: WBL Nationally**

It is clear that, nationally, there is now significant engagement with Work Based Learning on the part of many HEIs including growing numbers from the pre-1992 Universities which, on the whole, have been slower than the post-1992 Universities and Colleges of Higher Education in engaging with Work Based Learning initiatives. For example, a recent HEFCE report on Foundation Degree funded projects cites, among others, Lancaster, Hull, Brighton, Southampton, Leicester and Warwick Universities as in the forefront of developments and collectively more or less equalling the number of new University participants receiving funding for this initiative. Similarly, development funding was awarded through HEFCE in respect of the Graduate Apprenticeship scheme to, among others from the pre-1992 Universities, Cambridge, Bristol, Sheffield, Leicester and Hull.

The emergent notion of the corporate university with its demonstrable preference for Work Based Learning will have a significant impact on both further and higher education in future years. An example of this is the NHSU, with whom senior members of CWRS staff have been in conversation in recent weeks, which is clearly in favour of Work Based Learning as the central approach to learning for the NHS' 1.1 million employees, all of whom are potential learners.

#### Implications of the White Paper for CWRS and WBL

In the White Paper The Future of Higher Education (January, 2003), it is made abundantly clear that the government wishes to see growth and variety in Work Based Learning provision and increased HE-business interaction, both of which it is prepared to support through funding mechanisms. Chester College is well placed to capitalise on these forthcoming opportunities. Much that the White Paper has to say about the Work Based Learning provision of the future is already being delivered by CWRS and the values and ideals underpinning the White Paper in respect of 'second chance' opportunities, widening participation, continuous professional development, tailor-made and short and more focused courses, and so on, are shared by CWRS and realised through the learning opportunities that the Centre already offers and is delivering. CWRS is also working cooperatively with businesses and organisations (either on its own or with other College departments) to assist them with meeting their staff development and education/training needs, and sees considerable potential for increasing this activity in both volume and range. In addition, CWRS also has experience of working with sector skills councils, Business Link and the local RDA on the design and delivery of sector specific education/training programmes for (further demonstrating the Centre's contribution to development), as well as networking widely with other HEIs. All of this suggests that Chester College should be in a strong position to make realistic bids for substantial amounts of third stream funding as and when opportunities become available. The White Paper makes it clear that funding will be available for :

- The development of Foundation Degrees with associated ASNs (The Foundation Degree being "the major vehicle for expansion in HE", according to the White Paper p43)
- HEIF to work with employers locally, regionally, nationally

 HEIF for Knowledge Exchanges to reward and support HE business interaction

This suggests that there should be real opportunities for CWRS and other College departments to develop proposals in line with government aspirations that will result in significant income generation for the College. In particular, in respect of Foundation Degrees, CWRS is concerned that the College should now focus its attention on developing Foundation Degrees for part-time students in full-time employment that are genuinely work based and derive from a close understanding of the workforce development needs of various sectors which are compatible with College expertise. This would go some way towards addressing the White Paper's interest in "more work-focused degrees" (p60), with more opportunities for "mature students in the workforce developing their skills" (p60) and the expectation that "more people (will) study while at work" (p63).

# Recent research into WBL undertaken by CWRS

Aware that limited empirical research has so far been undertaken in the UK or elsewhere in respect of WBL, CWRS, during the past two years, has carried out a research project in order to gather evidence concerning the impact and the effectiveness of programmes of WBL. The overall purpose of the research was to conduct a critical inquiry concerning the justification of programmes of Work Based Learning in the Higher Education curriculum. The key issues for investigation related to:

- Philosophical and educational underpinning for Work Based Learning
- Empirical research into the student experience of Work Based Learning

The principal methods of research were:

- Literature search
- Questionnaire to 312 self-selected full-time undergraduate students on completion of a 6 week WBL placement (June, 2002)
- Semi-structured interviews with 31 self-selected students, including full-time, undergraduates (on completion of a 6 week WBL placement) and part-time undergraduate and postgraduate students (on Work Based & Integrative Studies programmes) including those relatively new to work (i.e. in their first 18 months of employment) and experienced professionals (June to December, 2002)

#### Publications resulting from the research:

- Major, D; A More Holistic Form of Higher Education: the Real Potential of Work Based Learning; December, 2002; article in Widening Participation and Lifelong Learning: The Journal of the Institute for Access Studies and The European Access Network; Staffordshire University; Vol.4, No.3; ISSN 1466-6529
- Major, D; Learning About Learning through Work Based Learning (provisional title); proposed publication date Spring 2004; chapter in Learning About Learning (provisional title); Institute of Learning and Teaching in Higher Education; Kogan Page

- Major, D; The Place and Status of Knowledge in Work Based Learning;
   November, 2002; in Knowledge, Work and Learning;
   Conference Proceedings of the Work Based Learning Network of the Universities Association for Continual Education; p162-170
- Major, D; Towards a Philosophical Underpinning for Work Based Learning

   the Ontological Perspective; unpublished (currently under consideration for publication)

# Summary of some of the research findings

The research generated findings in a number of categories, including that:

#### (a) Learning

- Work Based Learning makes a distinctive contribution to the higher education curriculum through engaging learners in more holistic ways of being and knowing
- the central role of critical reflection in Work Based Learning is recognised by learners, though it is a process to be learned and much work needs to be done in terms of the facilitation of that learning
- the nature of Work Based Learning is essentially inter-disciplinary and not only does it transcend the knowledge boundaries of any single discipline but it also engages learners in development in terms of self knowledge and knowledge of other people, thus leading to more holistic learning
- a distinctive feature of Work Based Learning is its engagement with both theory and practice and moreover that the theory/practice interface is an important site of learning
- Work Based Learning offers a distinctive form of learning, entirely worthy of HE, that combines knowing and acting with critical reflection
- in placing greater responsibility for their own learning on the learners, and through the wide range of potential ways of learning through Work Based Learning, learners develop the capability of learning to learn

#### (b) Curriculum

- there is every justification for HE to recognise the workplace as a bona fide site of learning, where learning occurs principally through communities of practice
- on epistemological grounds there is no reason why Work Based Learning should not be retained as part of the HE curriculum (where it already exists) or fully admitted into it (where it does not exist at present)
- Work Based Learning has the potential to provide for a more holistic view of knowledge, including its potential to engage individuals in critical self reflection and critical action as well as in critical thinking
- knowledge input is an important feature of all programmes of Work Based Learning and that such knowledge inputs aid the creation of knowledge through Work Based Learning

#### (c) QA/national

- Work Based Learning contributes significantly to the Government's widening participation and lifelong learning agendas
- the status of the knowledge generated through Work Based Learning is safeguarded by appropriate quality control mechanisms such as Learning Agreements and negotiated learning outcomes and quality assured through the external examination process
- through engagement in Work Based Learning activities HE adds to its own intellectual capital and, in turn, contributes to the intellectual capital of the businesses and organisations with whom it works

## The case for WBL in HE

- (a) WBL as a method and process. Underpinning WBL is a method and process that, arguably, students do not encounter elsewhere in the HE curriculum. Students on WBL are expected to assume a high degree of responsibility for their own learning and they are faced with tasks, and with encountering people, that require them to draw on their academic learning and their human relationship skills in equal measure, moving them out of the safety of the controlled learning environment and frequently out of their "comfort zone". They are required to develop their skills of critical thinking, and critical self-reflection in ways that inform or determine future response and action. This experience of what is becoming known as 'blended learning' is fundamental to employability and to citizenship, and is facilitated through WBL giving it its uniqueness as an element of the HE curriculum.
- (b) WBL as a 'subject'. While the limitations of the research findings are clearly recognised, along with the recognition that this research can do little more than feed into the much wider debate that needs to take place concerning Work Based Learning in higher education, nevertheless, CWRS is of the view that it does move the argument for the full acceptance of WBL in HE beyond that of the pragmatic position to a more solid evidence base and one that is also supported philosophically and educationally. It is the view of CWRS that the research findings support the case for WBL beyond that of the prima facie to a position where it should be regarded in the same way as any other legitimate field of study embraced by HE. The view of CWRS is that Work Based Learning is more than a method of learning, involved, as it inevitably is, in knowledge co-creation and in engaging learners in holistic ways of learning that lead to critical self-awareness and critical action as well as critical thinking. In other words, there are significant epistemological and ontological issues to be explored in the context of Work Based Learning as well as pedagogical ones, making it inappropriate to reduce WBL simply to a matter of methodology. This, CWRS would argue, makes it entirely appropriate for Work Based Learning to be firmly located within the curriculum as a "subject" in its own right, and CWRS recognises that this is essentially the position provided for by the College.

## Work Based Learning for full-time undergraduates at Chester College.

There is an issue for SMT to consider in respect of WBL within the HEFCE Schools as an option for level 2 students at Chester and as a compulsory element of level 2 at Warrington. In 1994 a Working Party set up by the College reviewed the situation of Work Based Learning within the curriculum and agreed that its status should be changed from that of a compulsory element of the curriculum to an optional one. However, to ensure that a Chester degree continued to have a distinctive flavour, a compromise agreement was reached whereby departments offering alternatives to WBL would have to do so in the context of the distinctive features of Experiential Learning in order to replicate, as far as possible, the learning outcomes of the WBL double module. While WBL continued to recruit well under this new order, over the years, some departments have increased the range of their EL alternatives and some have used persuasive means to encourage recruitment. All of this is understandable, given that funding follows students and that recruitment is considered a measure of success. The effect of this, over the past few years, has been to reduce the percentage of students opting for WBL so that, while the number of students registered for WB2002 has been relatively stable since 1999, settling around the 500 mark per annum, there has been a percentage reduction in the share of the market. Thus, in 2000/01 WBL registrations equalled 67% of the cohort, in 2001/02 that figure was down to 57%, with a further fall predicted for 2002/03. If departments continue to offer a wide range of EL alternatives and engage in aggressive marketing tactics, conceivably that percentage will reduce even further in the years ahead.

If SMT consider it important that there should be a distinctiveness about a Chester award, and that a feature of that distinctiveness is its WBL provision, then it may consider this to be an opportune time to review the composition of the level 2 curriculum. If WBL is to continue to be an option at Chester,

- I. the College will need to consider the status of Work Based Learning at its Warrington campus if there is to be equitable treatment of students.
- 2. it might also be advised to review the Experiential Learning double modules to satisfy itself that they are delivering a genuinely compatible alternative to WBL with the effect that students are being moved out of their "comfort zones" in order to face the challenges of employability.
- 3. it might take some measures to ensure that students are given balanced advice in respect of their choices and not placed under pressure to take a subject-based EL double module.

While CWRS is not itself presently over-anxious about student numbers, it does consider that there is a serious issue for the College to reflect on. In recent Subject Reviews most departments drew heavily on WBL to support their case for employer links, key skills delivery, employability issues, broader student experience, and so on, and the reports of reviewers, both oral and written, indicate that WBL served them well. The College has also been able to cite its extensive WBL provision in support of funding bids and other contexts where it has been in its interests to do so. In the light of the numerous comments made in the White Paper concerning the responsibilities of HE in respect of preparing graduates for work and in increasing the contribution of HE to society and the economy, a demonstrable trend away from Work Based Learning, by a College known nationally for its innovation and provision in this field, might appear somewhat perverse and as bucking a trend in the wrong

direction. The White Paper (at 3.17, p42) is worth consideration in respect of this issue, with its reference to the University of Brighton as an example of excellence with "over half (55%) of all first-degree and diploma students.....undertaking formal work experience placements as part of their courses". Chester College will not achieve this level of activity this year. While CWRS does not wish to challenge the status quo which, on the surface, appears to be working well, it feels that it would not be acting responsibly if it failed to draw the attention of SMT to the present situation.

### Analysis of scope for future activity

The Foundation Degree. Given the pledge in the White Paper (3.21, p43) that development funding will be provided to key employment sectors, HEIs and FECs to assist with the design of new FDs to extend the FD coverage, and further that ASNs for FDs will be offered in preference to traditional honours degree courses (5.17, p61), there is clear scope for significant development in terms of FD provision. CWRS is aware that, laudable though the work of the College is on FD provision to date, a narrow view has been taken of their design and delivery for various understandable reasons, which include the issue of articulation to level 3 Honours as well as the declared delivery preferences of our FEC partners. However, the White Paper makes it abundantly clear that the model of FD that apes Honours degree provision is not the model that is being sought. The issue of articulation to level 3 is being relaxed (3.21, p44) and greater emphasis is to be placed on the FD as a qualification in its own right, with the workplace as the principal site of delivery. Chester College has the expertise to enable it to meet this challenge, and CWRS would willingly work with other College departments and our FEC partners to further this work.

Strengthening WBL provision at undergraduate level. CWRS considers that the time is right for the College to make WBL more widely available as an elective at level 1 and as a "project" at level 3. Since 1999, this has been theoretically possible given that, in 1998, WBL was approved as a minor strand within the curriculum for students on non-vocational degrees. In reality, it has been marginalized during recruitment for level 1 and has had little success in promoting work based dissertations with subject departments. Sufficient WBL modules are already validated at all 3 levels to facilitate the operation of WBL as a minor strand, and so the issue revolves more around (a) the will of the College to see this happen, and (b) ensuring that time table structures are in place to facilitate it.

If Chester College were to offer WBL as a minor strand for students on non-vocational programmes, within either a single honours or combined honours degree, it would be offering something quite distinctive within the sector. Such a move would be entirely consistent with the sorts of curriculum development that the White Paper is urging HEIs to undertake.

Doctorate in Professional Studies. CWRS is convinced that, if the College is to work in partnership with other providers/facilitators of learning such as the NHSU and the University for Industry Learning through Work initiative, it needs to be able

to offer the full range of academic awards achievable through Work Based Learning. It is also convinced that there is potentially a huge market for professional doctorates both locally, regionally and nationally, and that further delays in establishing this type and level of award will represent a significant loss of business for the College. CWRS has the expertise to design a professional doctoral level programme to complement the Work Based & Integrative Studies framework which currently offers the full range of academic awards up to and including Master's level. While CWRS would prefer to seek validation through the usual channels, it has been approached by Coventry University to develop a common D.Prof. programme and it might be possible to negotiate some kind of franchise arrangement for delivery at Chester College through CWRS if other validation routes are closed.

CWRS would welcome the opportunity to discuss this proposed initiative with SMT to identify the possibilities and challenges for the development of a D.Prof. award.

Proposed restructuring. CWRS understands that SMT, for the purposes of consistency, line management, and other quality issues, needs to consider the location of CWRS within a School. However, it requests that, whatever arrangement is made, the independence of CWRS to operate across the College as an autonomous unit be assured. The range of activities with which CWRS has the potential to engage requires that it be free to work with any of the College's departments and schools, and that it should not be bound to serve the interests of any one School alone.

CWRS at Warrington. With the approval of SMT, CWRS at Chester would be keen to dialogue with colleagues involved with Work Based Learning at Warrington, with a view to setting up the equivalent of CWRS at Padgate. Recognition has already been given in this report to the excellent work that is undertaken at Warrington with regard to WBL, as well as noting that by September, 2004, a common Chester/Warrington model of WBL will need to be available for operation across both campuses. There is also potential for the Work Based & Integrative Studies framework to be operated from Warrington, as well as for the type of activity currently undertaken by CWRS through HEIF and ESF project funding. If SMT considers such a proposal desirable, CWRS would be pleased to open up discussions with interested parties to move the initiative forward.

**HEIF/Knowledge Exchanges.** As indicated earlier, CWRS is of the view that the expertise of the College should mean that it is well placed to bid for substantial amounts of third stream funding. CWRS awaits with interest the publication of the prospectus setting out the range and scope of projects to be resourced and is willing to work with others to secure funding for the College.

#### Summary of recommendations

It is recognised that the SMT of Chester College has been enormously supportive of CWRS and has allowed it to grow and diversify, enabling it to respond to market demand and to secure non-traditional sources of funding. However, it is the

considered view of CWRS that, in particular in the light of the White Paper, the College should now seek to build further on the strong record of Work Based Learning established at both of its campuses and not allow the advantages it has to slip from its grasp. It is hoped that the recent research carried out by CWRS will assure the College of the probity and credibility of Work Based Learning as an academic activity entirely worthy of higher education, and that it will encourage it to confirm its commitment to Work Based Learning and to the further development and enhancement of its WBL provision.

In order that the College is in the strongest position possible to bid for, so-called, Third Leg funding as and when further opportunities become available for it to do so, CWRS makes the following recommendations, that:

- the College makes clear that the expectation is that its students on full-time non-vocational degrees will normally undertake Work Based Learning as part of their level 2 studies unless there are clear and valid reasons for them not so doing. This will ensure that the distinctiveness of a Chester College degree is maintained and that the College is in full compliance with the aspirations of the White Paper.
- the College supports the expansion of its activities in respect of Foundation Degree provision through the design and delivery of entirely work-based models that meet the requirements alluded to in the White Paper.
- the College seeks to introduce, at the earliest possible opportunity, a Doctorate in Professional Studies as the highest level of award aligned with its existing Work Based & Integrative Studies framework.
- the College's Work Based Learning provision be strengthened in the undergraduate curriculum by ensuring the viability of a minor WBL strand (within full-time non-vocational programmes) operating across the three levels.
- in the light of proposed restructuring within the institution, that the College ensures that the independence of CWRS to operate College-wide is maintained
- the College gives consideration to the establishment of the equivalent of CWRS at the Warrington campus.
- when it is appropriate for it to do so, the College bids for substantial funding from HEIF to further develop its interaction with businesses and organisations.

Centre for Work Related Studies March, 2003

# APPENDIX F

# Appendix Chapter 4 (a)

#### ONTOLOGY

#### Detailed comment on Question 1

#### Impact on self

Of the 31 candidates interviewed, 14 claimed that WBL had had an impact, or a significant impact, on them, or had influenced them in some way, though they did not always go on to define in precise terms what that impact or influence had been. One female student said, on completing her 6 week placement:

I feel it has had a massive impact now but I don't think that I'll feel the true value of it because it's a life long impact, when you go back into a natural work situation when you've qualified then you'll start to notice things.

16 of the respondents claimed either that WBL had brought about growth in self-knowledge or that it had changed their view of themselves, or that it had brought about self-examination. For example, a female student in full-time employment, for whom HE was a new experience, said:

I've grown as a person which I wouldn't have done unless I'd done this really because I've been involved in so many multi-disciplinary groups working together with a common aim really so it certainly has changed me ...... Like it's been a huge struggle I can't deny that but, from a personal point of view, it's been great. In the year I've learnt so much and, as I said before, I believe in myself and I'm much more confident and my essays are fine now.

A full-time undergraduate, on completion of her 6 week placement, had this to say :

One thing I realised during WBL was that, you are sort of forced to look at yourself and I've never really done anything like that before.

13 respondents spoke of gaining a greater awareness of their own capabilities, and a growing confidence in their own abilities, through WBL. For example, a male student, following a 6 week placement responded to probing in this way:

Do you know that you do a competent job?

Definitely, yes.

Did you know that you could do a competent job before you did it (i.e. WBL)?

No, I wasn't sure actually before I went in to do it. I wasn't sure what I was capable of and then I realised that I could actually do the job. And a lot comes out of that as well - I actually feel valued as well.

10 respondents claimed that WBL had led to an overall growth in self-confidence. For example, a mature female student in full-time employment, following an undergraduate WBL programme notes:

I mean I feel I am more confident and I'm really enjoying this way of learning. It's good when something can do that for you.

Similarly, another mature female student had this to say about WBL:

Can I say that, as a mature student, I didn't want to do undergraduate WBL. I kept thinking shall I do it or shall I take another subject module? I'm so glad I did because it convinced me that I could get back into work; it gave me the confidence I needed.

In similar vein, respondents spoke of the feeling of being valued (as in a quote above) for the contribution they had made in the workplace and of experiencing a rise in self-esteem. For example, a qualified nurse who had not expected to study for a degree, had this to say:

So in one respect it's made me feel a little bit better about myself because I had a feeling that we were becoming a two-tier system and perhaps, educationally, I wasn't on a par with the girls with degrees or diplomas. So it's a positive thing in that respect. ..... I feel proud to tell people that I'm working towards my Diploma, to work towards my Degree.

A full-time undergraduate male student spoke of the positive impact WBL had had on his self image:

They just involved me in day-to-day activities I suppose and I felt part of what they were doing and I was worth something to them. They would say 'You go and do this' and they would take me off somewhere and say you join in the Department team, and do this scheme and if I did that in the timescale then I felt that obviously I had something to offer.

Yes, it builds confidence.

Exactly, yes.

I suppose ultimately it raises self esteem?

Yes, as I was going through the placement I got to feel more confident and where before I wasn't exactly sure how competent I was of doing this job and if I really was the type of person to be doing it, afterwards I realised how easily I could do the job. I was valued in the job.

What we might say is that it's had a positive impact on your self image?

Yes. If I went off now to apply for a job I wouldn't worry about it whereas before I would be scared and not know what I was expecting — not prepared. Whereas now if I went off to apply for a job say at an environment agency again, when I went to the interview I would be able to talk about a lot more topics relevant to the job and I'd be able to talk about what the employer wanted to talk about as well.

You'd be able to draw on the experience.

Feelings of **empowerment**, through gains in knowledge and, for some part-time students in full-time employment, through the process of submitting a claim for prior learning, were expressed. For example, an experienced hospital administrator had this to say concerning her APEL submission:

when I actually put it all down I thought wow, I knew I had a lot but I didn't quite know how relevant it would be or whether I would be able to claim for a lot of the stuff. And I must admit it took me a while to understand how to get it set up and deliver it and show how I've done it and provide the evidence and everything else because I just do it and haven't thought how I did it or why I did it this way instead of that way and question myself as well.

The experience of increased motivation was also commented on by a number of students. For example, a female student undertaking a 6 week placement in a secondary school said:

I would say the biggest thing is just motivation..... It just motivates you; you've got to get up and go to work and do your 9 to 5 job, you've got to do your work afterwards and if you are lucky enough to be in a placement you're really enjoying then it gives you that extra motivation. I think that's what it was for me, basically

## **Opportunities**

A number of undergraduate students in full-time study commented on the opportunity WBL had given them of testing out a career aspiration and of raising their awareness of the discipline of work. For example, one female undergraduate on a 6 week placement responded to probing, as follows:

Can I ask you why you chose that placement?

Because I've always wanted to be a teacher so I just thought that the obvious thing to do would be to get some extra experience at any time I could, so it was the perfect opportunity.

And did it confirm your ambition?

Oh yes, definitely. They were so good at the school. They let me do more than I could have hoped to have done and get so involved. It was really good.

Another female student on a placement some distance from Chester commented:

I think I'm more independent and I've had to be more on time as I had to catch the train every morning at 7am. I had to get up at 20 to 6 which was really hard for me because I'm not a morning person but I think a lot of times when I've got lectures etc, I'm tempted to go back to sleep but because I had to go to work I had to pull myself out of bed and I think that was an important discipline.

Interestingly, two students on full-time degree programmes noted how WBL had provided a welcome **break from conventional study**. One female students had this to say:

You know, because it comes at quite a good time – at the end of your second year – and I think that, from my experience and most of the people that I know, the end of your second year is always a bit of a down point. You know you've got a really hard year ahead of you and a lot of people are really down and WBL comes at just the perfect time just to give you a boost, kind of thing.

4 part-time students in full-time employment noted how, through WBL, they had been given access to higher education and to an opportunity that they thought had been denied them. For example, one female student said:

when I was asked to do this course I must admit I wasn't the first one in the queue purely because I had never expected to be able to do a degree.....I thought, I don't think I could do this. However, my line manager, who knew I'd been doing some study, asked me directly. He said why don't you just sit in on a few sessions. You don't have to do any more about it if you don't want to. So I did sit in and I started to think maybe yes, maybe I can do this. It was partly the way it was handled, the support seemed right and it seemed the perfect opportunity. Everything was explained carefully and we were told what was expected of us. So I thought I'll give it a chance. If I'm not good enough I can walk away from it. It was amazing to think that I'm going to do this and I thought I'm not going to let anything stand in my way, so I made a start.

#### Detailed comment on Question 6

Reinforcing responses cited above for Question 1 in the context of WBL more generally, 5 respondents suggested that the development of their reflective capabilities had increased their **confidence** levels. One postgraduate female student in full-time work noted:

I think critical reflection is another way of giving you confidence in work as well as deciding that you don't work too well in an area. That kind of perception has been a lot more helpful.

5 respondents claimed that critical reflection had brought about a more positive attitude to self. One female student in full-time employment, for whom HE was a new and unexpected option, commented:

Probably twelve months ago I'd have said I just sit there typing and answering the telephone but now it's like I've got more of a role within the directorate. I recognise that my job is probably of more value than I think it is. Do you know what I mean? It's that awareness isn't it really?

Others commented on the way in which they felt **empowered** through the reflective process. One female undergraduate in full-time employment gave a lengthy report on an incident of conflict in the workplace and how she had dealt with it. In summing up what she had said, I noted:

The reflective process has clearly had an impact on the way in which she handles situations, and the ability to deal with a situation using reflective practice gave her a feeling of empowerment.

There were also encouraging responses which relate both to the influence critical reflection has had on the attitude of students to work and on their professional development, and on their attitude to issues arising in the context of the wider world. Thus, 8 respondents commented on how they now view issues from multiple perspectives and adopt more balanced viewpoints. A female undergraduate student in full-time employment had this to say:

I've always had very strong views about things that I've seen on the I'V. I was a Union representative – a Union steward, so I'd done that before. I think now I can look at the two sides a bit more, you know, whereas before it was cut and dried. That's how it was. Now I do look at two sides.

Another female student in full-time employment, but studying at postgraduate level comments:

I think I can see clearer. I think I saw things before but I tend to see the whole picture of what's going on, of the whole organisation, and not just from my one perspective.

And a female undergraduate in full-time employment studying at undergraduate level notes:

I also try to see things from other perspectives and I don't' just believe what is reported in the newspapers or on the television. I try to sit back and think and reflect and I try to consider other people's beliefs and consider what drives them to do the things that they do.

18 respondents noted their greater awareness of the **relational** perspective. For example, one full-time female undergraduate noted:

It made me think more about where other people are coming from, especially to do with communication. Not only why am I reacting in this way but why are they reacting in this way; why do they feel that they need to behave in a particular way.

While another female undergraduate, reflecting on her observations of workplace relationships notes:

One thing that makes you stop at university is that you have to get on with people whether you like them or not, like your housemates for example, and it's the same at work. If you know that your personality clashes with somebody then you just have to get on with it. I didn't experience that myself but there were two people who I worked with who have always sort of clashed, I noticed how much effort they seemed to make with each other when they were around each other and I thought, yes, one day there is going to be somebody who I am not going to get on with, you just have to accept that you just don't get on with some people. Their influence on me made me think that I have to make the effort.

Only 2 respondents commented on their willingness to take **critical action** in the world based on their beliefs and values though, as this was not a direct area of questioning, it may not represent a true picture. A female postgraduate in full-time employment noted:

But there are some people who reflect on things and don't do anything about it and say oh well that's it. But I think I do use that reflection to go on to develop on what I've experienced or whatever I've been doing.

A female undergraduate also in full-time employment said:

I do spend time thinking about the big wide world out there and I do get involved when I can. Both my husband and myself are Green Peace activists. But I'm aware that not everyone has the same values that I have. There are a lot of people who are very positive about life but wouldn't get involved in things that I do.

# **APPENDIX G**

## Appendix Chapter 4 (b)

#### **EPISTEMOLOGY**

#### Detailed comment on Question 2

#### Knowledge gains

An understandable division was evident in terms of knowledge gains between full-time undergraduate students undertaking a short placement experience and part-time students in full-time employment. More than three-quarters of the full-time students focused, in particular, on gains in their academic subject knowledge. 14 respondents, in all, made this claim. One PE/Sports Science student undertaking a module of WBL which includes an NVQ award, had this to say:

In the sense of knowledge and skills I've learned so much that I couldn't list it you know, for my NVQ. Absolutely tons. Diet is one of the major ones. I've learned lots about diet; what you should and shouldn't eat, why you should and shouldn't eat certain things.

For full-time students, placements were often directly relevant to their subject discipline and, as well as gaining subject knowledge through application, they also gained a greater **theoretical understanding** of their subject. A female student on an animal behaviour degree programme noted how, through WBL, she had gained,

general knowledge about reptiles and animals in captivity. Working at Stapeley I got to talk to lots of different people in different positions and also people that came in as visitors and quite often you would get talking to someone who had some sort of animal background or an animal-related background, or something like that.

Part-time students in full-time employment, on the other hand, tended to speak of gains in **professional knowledge**. Each of the 10 respondents who commented on this were already engaged in professional practice. One midwife noted:

I really enjoyed the work on maternal surveillance, especially the study days and working on the unit. There were things connected with midwifery but the unit gave me a real insight into IC.

A similar preponderance of full-time students over part-time noted knowledge gained through application in real situations. This is the all-important knowledge acquired through WBL, which is perhaps much more readily realised and appreciated by full-time students, possibly with not a great deal of work experience, than perhaps by those thoroughly familiar with the routine of work and perhaps for that reason not so receptive to the idea that they are learning through work and that knowledge is generated through work. 9 respondents in all made this claim. A full-time undergraduate student reported, thus:

Skills such as in fitness assessments we've done with people. How to take blood pressure using a stethoscope. I couldn't do that before. I also learnt how to use a new piece of equipment, it's what we call a Swiss Ball or Fit Ball which people can have in their homes to exercise on. I'd never even heard of them before but now I know loads of exercises that I can prescribe to people and it's great, it's completely new.

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5 respondents also claimed that knowledge was achieved in the area of WBL theories and their application. As commented on elsewhere, the Chester College model of undergraduate WBL includes, what is considered to be, crucial input, prior to the placement, on various concepts and theories considered relevant to work and to learning through work. Work Based Learning for those in employment, also includes a module on WBL Methods & Processes, which performs a similar, though more extensive, function. A female full-time undergraduate noted:

The basic knowledge that most people gained, I would say, was just the work theories and the research theories, the learning curves and everything that we went through in the Support Programme before we started. But I think if you're not on some kind of marketing or business management course, you don't really come across anything like that so things like that are hard to know. When you have to do a project at the end of them you use the material and it helps you to do your work — it's about what you didn't know before.

Although only 5 out of the 31 interviewees commented on WBL theories generically, in section 2 below (skills gains) there is much evidence of claims concerning skill development in relation to, so-called, WBL theories.

## Skills gains

A broad distinction can be made in this area between what are sometimes termed 'soft' skills (with a likely focus on self-understanding and interpersonal relationships) and 'hard' skills (with a clearer focus on technical or task management abilities). Given that a decision was taken to deal principally with self-understanding and interpersonal relationships under the ontological dimension, some comment concerning the justification of their treatment in this section also is called for. The 'soft' skills discussed here are principally what I would consider to be second order to those discussed under ontology. By that I mean they are related to matters of self-understanding and reflect self-understanding but are not directly concerned with it. Thus, in this category, I would consider communication skills, people management skills, and negotiating skills to be examples of what I am, in this section, referring to as 'soft' skills. These, it seems to me, are best dealt with in a discussion on epistemology, given that each is subject to theoretical perspectives which are broadly humanistic but not so much concerned with personal development.

There is also something here that is quite distinctive of Work Based Learning, I believe, namely, that in response to a question about knowledge and skills gained through an area of the curriculum, there should come, in fairly equal measure, answers which include a mix of 'hard' and 'soft' skills. This points not only to the inter-disciplinary nature of WBL but the realisation, of those engaging in work, of the significance of the human dimension.

Of the 31 respondents, 11 referred to skill development which I have broadly classified as 'soft'. For example, a full-time undergraduate student said:

I think time management is probably the main one, because especially during the first three weeks, it was so intense I had to know what I was doing all the time and I found it really, really hard. But its carried on -I'm still working two jobs now over the summer so obviously I've had to keep

that up and know where I am all the time and I've learnt that in WBL - it's helped me all the time - just keeping diary notes and everything was something that was beyond my comprehension before I started.

And a part-time undergraduate student who holds an administrator position comments:

So I would say that understanding and greater knowledge of people's perceptions of things is what I've learnt.

9 respondents referred to the development of their communication skills. One female full-time undergraduate commenting on her negotiated learning outcomes notes:

One of them was communication skills. I initially started doing things like that to achieve my learning outcomes but then long after I had achieved it I still used it.

People skills was also identified in the analysis of responses and, while this area could have been classified with the more generic 'soft' skills reported on above, it was decided to leave it as a discrete area. Thus, 11 respondents commented on skill development in this area. A part-time undergraduate in full-time employment had this to say about one of the modules she had studied:

I really enjoyed the conflict module. That's really shown me how, when you come into a difficult situation, you can deal with it. It made a lot of sense actually. So much about relationships in all sorts of ways, and I learnt a lot about myself as well.

1 part-time undergraduate referred to negotiating skills as an area which he had developed through Work Based Learning

You go into a situation where you've got a staff dispute or something. I'm much more level-headed now because...... the skills that we've learned so far I'm able to put those into context. I think that out of everything we've done so far is what I've learnt to do the best really.

With regard to 'hard' skills, 4 respondents identified gains in the area of technical, including ICT, skill development. A female student on a 6 week placement with a radio station noted:

I learnt how to work the control panels with all the CD players, mini disc players, microphone feeders and all the different channels for the computer and the turntables as well.

While a female part-time undergraduate student noted development in computer literacy:

Computer literacy – I can actually type on the computer now and I've learned other skills on the computer which I didn't have. In work we have a computer for patients' notes and things like that, but we didn't actually type a lot into it. You know, so I have bought a computer and, as each module goes on, I'm getting more skilled at cutting and pasting and doing things like that through just doing it.

3 respondents commented on improvement in terms of time management. One female undergraduate on a full-time programme noted:

I think I can manage my time a lot better than I could before. In what sorts of ways?

I make a list of what I need to do and prioritise and work out what time I have for each task and stick to it. I used to just go ahead and work through it and end up rushing at the end. Do you think this is going to last into your third year having learnt how to do it in the work place?

Yes. I think it will because I always think I've got loads of time and end up rushing at the end but if you actually assign a task a time then you realise that you can't let that task overrun so it keeps your motivation focused as well.

2 interviewees noted skill development in respect of task and project management. One female postgraduate student had this to say of her undergraduate WBL experience when a full-time student:

This was a huge learning curve right at the beginning of the placement to develop my own knowledge if I was going to go out to train other people in the use of the internet. There were project management skills as well, using Gantt charts, and planning my time effectively which, again, I hadn't done before. In previous jobs I'd been told that this needs doing and I was given work to do and given deadlines and didn't have the opportunity to create my own deadlines. When you only have six weeks then you have to decide what you're going to do in the first week and so on.

2 respondents reported on the development of their **problem-solving skills**. For example, a male postgraduate student commented on one of the modules he had studied:

During the ISM 105 module which is the professional skills, the topics I chose in that ranged from team-working to creative thinking, problem-solving, all those kind of things that you need to have at your disposal. The actual skills and the knowledge that you need to apply, I've learnt through those modules which has been very helpful.

5 students recognised development in terms of their study skills and research skills, including 3 professional practitioners who spoke, in particular, of the importance of the development of their research capabilities. One female undergraduate on a part-time course spoke of how her writing abilities had improved.

Yes, I'm much more in tune with how to write academic essays..... I think I understand far better now a proper academic essay, how to reference, how to structure an essay, because I've had to do it in so much more detail.....My standard of work I think is sharper through WBL.....now, with WBL, I'm using the projects that I actually do in work towards an academic qualification as well, I think it's made it a tad sharper.

In addition to Question 2 of the interview, Questions 1, 5, 7 & 8 also relate to knowledge and skill development in various ways. In Question 1, for example, where respondents cited knowledge acquisition as having an impact on them, and Question 5 where much unplanned learning was related to knowledge and skill development. Question 7 with its focus on the application of WBL theories inevitably brought forth responses concerning knowledge and skill development, as did Question 8 with its

focus on knowledge and skill transferability. Although many of the same types of knowledge and skills are commented on, I propose to treat responses to each of these questions separately so that something of the context in which the answers were given can also be considered.

### Detailed comment on Question 1

The way in which responses to Question 1 were categorised is reported on in Appendix F above. This section relates to (2) the impact of WBL on knowledge and skill development (the epistemological dimension). A broad range of responses was received under this category with the impact knowledge and skill development had had in the area of personal and professional development being the thread holding them together. In each class identified there is, as might be expected from the question itself, a strong link to the ontological dimension and, in some cases, the decision to report on them here might be considered to be somewhat arbitrary.

Thus, 5 respondents commented in general terms on the impact WBL had had on them in terms of **personal and professional development**. One female part-time undergraduate in full-time employment, who had no previous experience of HE, had this to say:

I like the idea of learning through your working environment and I think I've definitely developed through it both professionally and personally. It's good to question yourself and what you are doing.

7 interviewees spoke of the impact WBL had made on them in terms of their raised awareness of the importance of interpersonal skills and the relational dimension in work contexts. A female postgraduate in full-time employment commented:

....in another way, it has changed me in that I am more aware of other people, and more tolerant, if you like, of their opinions, and more open to listening to what they say from their perspective.

With a similar area of enquiry in mind, 1 full-time undergraduate spoke of the impact WBL had made on him in terms of awareness of the importance of human relationship skills.

Firstly the fact that I was working with a team of four other students and I had never actually met any of the students before and there was obviously a task to complete, so I think just interacting with those people who I'd never met before had quite an affect on me, confidence wise and communication wise.

The impact of WBL was also reported on by 4 respondents in the context of raised awareness of the importance of **team working** and the way in which WBL had made an impact in terms of **professional integration**. One part-time undergraduate in full-time employment had this to say:

It was a new start for everybody really. The 16 who were with us were all from very different backgrounds although I knew them all a lot of the clerical staff and the nurses hadn't actually integrated before and so I think some of them felt a bit inferior but then, as time has gone on, we

realised well they haven't got a degree, they haven't got half the stuff probably that we've got. We actually now work as a very good group and interact very well indeed.

With more of a focus on the individual, 3 respondents spoke of the impact of WBL in terms of improvements in the ability to self manage and to work independently.

Yes, and managing your time as well because I only saw L a few times during the placement and it was never a case of her saying well this is what you do next and this is what I want you to do during the week. Yes, we told her about our progress and she'd say get on with it and do what you have time to do. So it meant that I had probably more opportunity to put in what I wanted to learn as well, and fit in with my objectives too, which was quite good.

2 interviewees spoke of the impact WBL had made on their ability to be more self-reliant. A male postgraduate in full-time employment suggests a difference between WBL and more conventional HE when he notes:

.....in...WBL where you're more pro-active than lecturers, which is different from most other education. So, to that extent, I've challenged myself a lot more and I don't look to other people so much as I used to, more looking for myself, what I prefer to do, what I enjoy doing.

With 2 students noting the impact WBL had made in terms of their acceptance of responsibility for their own learning. One female part-time undergraduate engaged in conversation with the interviewer thus:

I must admit it's taken me some time to get used to the style of learning. I'm used to the old-fashioned style where you sit and be spoken to and you just take notes and go away, you read your notes and you maybe read up more about it....

Yes, its interesting isn't it that it's a style of learning that places the responsibility on the learner to learn but, as you said, it's been an adjustment, but you're coping with that?
Yes

Presumably the idea of putting power in the hands of the learner is an appropriate one. Do you feel that's right? Is it appropriate that you should have the power?

I think so because we used to just sit and you'd have it written up on the blackboard and you'd take their word as gospel but I think ...... it is a better way. First of all I didn't think it was but I do think it is.

As in the section above, there was reference by 3 respondents to the impact WBL had made on them in terms of their abilities to **communicate** more effectively. A male undergraduate in full-time employment commented:

They know what I can do but it's all down to communication. It's how you put your point across and I think certain theories and certain ideals we were discussing... are very handy in that way.

From the above evidence, Work Based Learning can, then, be seen to impact on students in a variety of ways including those which are essentially concerned with growth in knowledge and skills capability.

#### Detailed comment on Question 5

Responses to this question were categorised under three principal headings: (1) skill and knowledge development, (2) self knowledge, and (3) relational learning. Again, the latter two categories are closely aligned to issues that have already been discussed in the section on proposition 1, the ontological dimension, but are discussed here because they are considered to be of the second order type discussed under Question 2 skills gains.

#### Unplanned skill & knowledge development

A number of the skills identified in response to this question have already been considered under Question 2. Where this is the case, reference will be made to them here but they will not be discussed further.

In terms of 'hard' skills, 4 respondents commented on the way in which unplanned learning for them had occurred in respect of skill development in ICT generally and the use of the internet in particular. 3 students commented on the learning they had acquired either from engaging in the Support Programme or through the module on WBL Methods & Processes. 5 interviewees spoke of unplanned learning occurring for them in terms of the development of their communication skills, and 5 spoke of learning achieved in relation to professional knowledge.

1 female full-time undergraduate noted that unplanned learning had occurred for her in respect of **organisational skill** development. She noted:

....so when I came to writing my assignment which we did in the last week because we didn't have any other time, and I was looking at all my organisational skills and I realised how organised I am in the fact that I keep a diary and I write everything in it.

1 student had unexpectedly developed team management and leadership skills.

I learnt quite a lot about team management. Watching how, because I was working in a team, I was watching how the team leader manages and again I didn't think it was effective. I tended to learn a lot more when I disagreed with what somebody else was doing.

3 interviewees commented on how unplanned learning for them had been driven by the needs of the projects in which they were engaged, including one part-time undergraduate who noted what she had learned as a result of encountering bureaucratic processes. Another student (male full-time undergraduate) noted how, in order to get the information he needed for his project, he had to learn some human relationship skills.

I think I learnt to be assertive because I needed to be in some situations.

#### self knowledge

In terms of this category, 11 out of the 31 interviewees spoke of unplanned learning occurring for them in the context of greater self knowledge and self appreciation. One male part-time undergraduate spoke of gaining knowledge in this respect.

I have come to realise that I'd perhaps undervalued my own ability in learning and perhaps I still do to an extent, but there has been a realisation that I can, and have, developed. I was unsure when I first came to see you that perhaps I hadn't got the ability to do this.

5 respondents claimed to have developed the skill of learning through reflection which they had not anticipated doing. One female undergraduate in full-time employment and new to HE commented thus:

Oh yes, one our modules was on like Self Review and it's just how you sort of reflect on things and you know the importance of reflection. You know you do various things and you don't think about it and if you just took a bit of time and thought about why did that go OK or if it didn't work, why didn't it. Just things like, just very simple things like that and I hadn't actually planned to learn anything like that but I use that now. I was quite surprised really. I think about the things I do. I think more about things and think well could I have done that better. I'd never have thought like six months on that I would actually remember some of the Self Review and reflection module, so that's a bit of a surprise really.

2 interviewees found that learning can be **motivational**. For example, a female full-time undergraduate noted that:

I think motivation. It wasn't in my original learning outcomes but I think I did learn how to motivate myself more. I had become quite de-motivated with my work and sometimes I find it quite hard to motivate myself with my College work. I leave things to the day before because the more I think about it the harder it seems. I can't motivate myself to do it.

And a male undergraduate on a 6 week placement unexpectedly discovered that work can be fulfilling.

I think in the office environment I learnt that it could be fun. I'd done some jobs in the summer which were quite menial tasks and I hated it. I had some mates in there and we had some really good laughs with each other and we enjoyed it, it was a nice atmosphere. I've learnt that that's important.

#### relational learning

Some of the unplanned learning pointed to in this category has been discussed elsewhere. For example, I interviewee spoke of unexpected learning occurring about people and 4 spoke of developing interpersonal skills. 2 respondents referred to unplanned learning occurring for them in the context of team working and collaborative learning and I spoke of unexpectedly developing skills of negotiation and diplomacy.

In addition, a female undergraduate on a 6 week placement referred to discovering the value of networking.

You make new contacts which is useful and bump into old ones, it's also definitely good to keep in with everybody.

And a male postgraduate in his first 18 months of full-time employment unexpectedly gained learning through attending meetings and engaging in conference calls.

I think one of the clear things that sticks out for me is meetings. The first time I was in a conference call and things like that you don't know what to expect. It's not part of your learning outcomes because you may say you want to become better at meetings but I'm not quite sure what you'd be talking about there. And suddenly you'll be in a meeting and your ears will prick up and you'll realise something that... I wasn't expecting that. The way that someone's gone about doing something to get an answer from somebody else, for example.

## Detailed comment on Question 7

Of the 31 candidates taking part in the interviews 28 said that they had had cause to apply WBL theories during their placement experience or in the course of their daily work. 4 students admitted to adopting a functionalist approach to WBL theories by saying that they applied a theory or theories for the sole purpose of the assignments. 5 candidates spoke of the value of the Support Programme and the Methods & Processes module in the context of the overall WBL experience, with 1 postgraduate student commenting explicitly on the value of the level 3/level M WBL Research Methods module.

Again, there is considerable overlap of data if considered only in terms of named skills or knowledge areas. However, in this question, respondents were asked to identify and comment on the WBL theories they had had cause to use in the context of WBL. Nevertheless, where there is repetition of the same or similar skills and knowledge, unless there are clear grounds for doing so, direct quotes from students will not be used.

Thus, 2 students commented on the application of theory in respect of communications and 1 identified theory applied in respect of time management. 3 of those interviewed referred to theories in relation to project management and 4 to theories relating to team working. 7 respondents spoke of the application of theory in respect of interpersonal skills and in terms of gaining a better understanding of others. 5 identified theoretical perspectives on the use of reflection in learning, and 3 referred to the application of theory relating to their subject knowledge. Problem solving (1) and leadership (2) were also identified as areas where theory had been applied and, in terms of the focus on the self, 3 respondents spoke of using theories in respect of self analysis.

8 out of the 31 respondents identified the Kolb learning cycle as a theoretical perspective that they had used during the course of their WBL. A female undergraduate in full-time employment commented:

Yes, I mean the learning cycle, realising where I am on that cycle, always trying to remember where I've been to get there and planning where I want to go. Trying to keep that in mind and always thinking of that and working out what are the inner strengths that I need to get there. The learning cycle is the big one and critical reflection.

4 students spoke of the application of theoretical frameworks for understanding and interpreting experience and the impact that these had had on their work and

their learning. For example, the contribution of one female full-time undergraduate in this area was summed up in the following way:

(She) speaks of her framework of learning changing over the years to indicate a more balanced approach to learning

3 interviewees identified **Transactional Analysis** as a theory which they had either used or seen the outworking of in the workplace. A male undergraduate in full-time employment admitted to using it himself.

I also use the adult-parent thing (prompted with Transactional Analysis) quite a bit. I actually identify which one I'm using at any given time, which is even more embarrassing. It's not so good when you do it with someone else who is actually on the course with you, because they can identify what you're doing. Anybody who hasn't, you can tend to get away with playing the parent or becoming child-like trying to get them to do things for you. So yes, I consciously use quite a few of them. The ends justify the means.

l interviewee in each case identified applying theories in respect of business models, organisational analysis, stress management, and conflict resolution with 1 respondent commenting on his understanding of theory/practice reinforcement.

## Detailed comment on Question 8

#### Knowledge and skill transferability

Where there is, again, overlap in terms of named skills or knowledge these will be identified but quotations from the respondents will not be cited. Thus, 2 interviewees identified time management as a transferable skill, with 4 identifying the ability to engage in team work as essentially transferable, as well as, for 1 respondent, the ability to manage teams. 3 students spoke of the transferability of interpersonal skills, 4 of communication skills being immediately transferable and 3 referred to ICT skills in this same context. A further 3 respondents felt that the project management skills they had gained through WBL were immediately transferable to other contexts, with 2 describing skills associated with conflict resolution as having the same potential. Other individual respondents made reference to the transferability of decision-making skills, of skills in problem solving and of creativity, with 2 interviewees pointing to the way in which the research skills they had developed would continue to be of use to them in other contexts.

4 full-time undergraduate students spoke of gaining greater understanding of their subject discipline from the application of knowledge and how they felt that this would feed into their final year studies. One male full-time undergraduate noted this would be the case, though went on to speak of ICT gains as well:

Yes. The physiological side of it but for me the most beneficial was the computer side of it because they're always growing and going to be a big part of the future. It's not so long ago that I wasn't even word-processing my assessments, which isn't a good thing at degree level. Now I've done my placement I can use various programmes, like SPSS. I've just got word, excel, spreadsheets and

I've got a lot faster at typing. I think that's what deterred me from typing before because it was easier to write.

# Knowledge and skill transferability with either ontological or pedagogical implications and issues concerning life enhancement

9 students out of the 31 interviewed referred to the transferability of study skills acquired through WBL and 6 full-time undergraduates made reference to the ideas and/or data gathered through Work Based Learning that would be of benefit to them in respect of their final year dissertation. A female undergraduate on a 6 week placement comments:

I'm doing Ethics & Evolution for my dissertation which is more literature based but I suppose there is definitely an ethical side of zoos. A lot of people are against zoos. But then there is the conservation work they do. Actually that's a good point (she sounds as though she has surprised herself by an intelligent comment. She goes on to say that she has included material about the political side in her report — animal rights. Zoos raise such questions).

3 respondents spoke of having developed, through WBL, the skill of learning to learn which would benefit them in the future. A male postgraduate in full-time employment expressed his views in this way:

Most of the skills are immediately transferable across anywhere that ever needs a project which is anything but a manufacturing line and when they change the project it can go everywhere. So heaps of transferable skills. You just need to be aware of what you've actually learnt.

2 students referred to having acquired the ability to manage their own learning, which would be of on-going value to them. A female undergraduate on a 6 week placement noted:

The employer left us fairly autonomous, once she knew we knew what we were doing and because we were both inputting information and ideas, getting the job done that was important because I realised whilst doing this that this was possibly the first area where I've worked with a more or less horizontal management structure. So it was important to be able to work within that sort of environment for me because that means in future should a post come up in that sort of structure again it might not be as intimidating as it might once have been.

6 interviewees referred to the greater self-knowledge they now possessed as a result of WBL and of the benefit that that would be to them in the future, and a further 6 respondents spoke of the ability they had gained in respect of reflection on own learning and how that would have on-going value. 1 candidate referred to the ability to view things from multiple perspectives which she had gained through WBL and spoke of the way in which that would be of continuing importance in her life. These three points are dealt with in more detail in the section on the ontological dimension and will not be further illustrated here.

In terms of life enhancement, with its implication that something of value has been carried over from one context to another, 4 full-time undergraduate students referred

to the value of WBL in terms of aiding them with their career choices. A male student commented thus:

Yes. I've definitely found my working environment. I've done 'A' Levels and I've done science for two years and it was the first time I've actually used this knowledge in a job and decided that I liked doing that kind of work, and I'm quite passionate about it as well, so it's definitely confirmed that.

And a further 3 full-time undergraduates spoke of the value of WBL in providing important work experience and a wider awareness of work for the uninitiated, with 1 respondent feeling that WBL had enhanced her prospects of the sort of employment she was seeking.

I think being able to tell an employer that you have completed a placement and that you have developed a reflective analytical approach to learning and work is going to blow them away isn't it? It's something that they will love to hear, it's wonderful, so I think it's really important and I have definitely been converted to work based learning. When I was told that I had to do the placement I wasn't impressed — I thought it would be more useful to have a couple of modules where I would be learning academic things, but I don't agree with that now.

The overall conclusion, on the basis of the responses to this question, is that the vast majority of learning gained through Work Based Learning would appear to have immediate transferability to other contexts and so prove to be of on-going value to the learner.

# **APPENDIX H**

## Appendix Chapter 4 (c)

#### PEDAGOGY

#### Detailed comment on Question 3

#### (1) experiential learning

This is a broad category with various alternative descriptions being proffered. 24 out of the 31 respondents claimed to learn in this way, with some describing it as practical learning or practice as a way of learning, others referring to active learning and a number speaking of "hands on" learning. A female undergraduate in full-time study noted:

Hands on approach really. I think just because you are thrown into it and you have to do it. People are there to help you and everything but, at the end of the day, it's you that has to do the research and the work and you've got to get a mark at the end of it. I think that just by throwing yourself into it, that was the best way I did my learning really.

Another form of experiential learning was referred to as "trial and error" with 8 respondents claiming that they learn in this way. A female postgraduate in full-time employment had this to say:

Looking at all the learning styles, I think my best one is an Activist kind of learning, which is by doing the processes. You can watch so much if I want to get my teeth into it then I have a go and learn by making mistakes and moving forward in that direction. So that's how I'd say I feel I have progressed.

4 respondents spoke of the importance for them of the way in which positive experience reinforces learning. A mature female undergraduate on a 6 week placement commented:

But actually doing it and getting results from it, because it was a positive experience, it means that I am not going to forget that again. So it was actually having the interest to go and find out for myself, taking that on board, going away and playing with the idea and then having a positive result from using it, so that was one stream of learning.

The opposite side of the same coin would appear to be the importance of motivation or of having a definite goal or a particular challenge. 6 interviewees referred to this as important in learning.

The first three weeks wasn't 'how' it was 'having to'. Motivation is probably a major thing for me. If I don't want to do something then I generally tended not to do it, I wanted to do it because I was getting a qualification at the end of it and I was also interested in doing it.

#### (2) conventional learning

This is another broad area and one which is an important corrective to the idea that there may be no place for more conventional forms of learning in WBL. I have stressed elsewhere in this report, and in my paper on epistemology (written as part of my D.Prof. studies – see Appendix B), the importance of knowledge input into the Work Based Learning context. Theoretical perspectives are of paramount importance,

in my view, both in terms of generic ("soft") workplace learning and in terms of underpinning disciplinary or inter-disciplinary knowledge ("hard") which informs practice and vice versa. The evidence of the interviews would appear to suggest that this is also the view of at least some of those engaged in Work Based Learning.

6 respondents spoke of the importance for their learning of having direct teaching as part of WBL and/or access to tutors. A female undergraduate in full-time employment and new to higher education noted:

Yes, to get that feedback. If I get encouragement I flourish on that. If I'm not getting it I will constantly doubt myself, am I doing this right? Is it what the tutor wants? Have I got the answer right? And that sort of thing. When you have contact you know whether you've got the right idea and when I get positive feedback I know I've got the strength I need to carry on and to learn whatever I have to learn.

21 interviewees spoke of the importance of being able to access appropriate literature when learning through work, with reference being made to books, journals and access to libraries. A female postgraduate in full-time employment said:

I learn mainly by reading and then discussing with colleagues and getting their views on things as well. I think that's how I learn.

And a male undergraduate on a 6 week placement noted:

Initially I met with the web team and they told me basically that is what I need to use and the thing with that package was that it was quite generic, it was Microsoft, so if you can use the main packages its not too difficult to pick up. But then, basically reading around books like 'Learn FrontPage in 7 Days' or something like that and then you have got on-line tutorials and then of course there are so many people in the College who can use it.

By the same token, 3 respondents spoke of the importance of the internet (see also comment immediately above) for accessing information and 8 spoke of the importance to them of accessing appropriate theories when learning through work. A male postgraduate in full-time employment spoke of the way in which he had forcibly changed his learning habits to accommodate theoretical perspectives.

My approach was initially when I first started looking at my approach to learning, I was very practical – a practical person – a doer and then I would very much try and work things out my own way, whatever, and my theory side of my approach was very weak. I recognised that and now – well, at first I had to forcibly change the way I worked to make sure I didn't just rush into things and so I would research things and then try to find practical applications, which is exactly what my job entails.

11 interviewees referred to the importance for their learning of **theory/practice** reinforcement with a number making the point that they found theory unrelated to practice difficult to remember. A female undergraduate on a 6 week placement commented:

Yes we mixed it in at the same time, the theory behind what we were doing and they both fitted together they helped each other. They went hand in hand. You know "We are doing this because and you need to do this because..."

The evidence cited above would seem to suggest that, for some learners at least, the theory/practice interface is an important place for learning. It is perhaps a reminder to those responsible for shaping the HE curriculum that theory may be best understood, at least by some learners, when informing a practical purpose. This is how some of the respondents say they best learn theory. Thus, effective learning may be best facilitated by a HE curriculum which presents learners with the opportunity to become involved in the relationship between theory and practice, and not where the two are regarded as being in some way separate from one another. The strength of Work Based Learning may be in its ability to accommodate both theory and practice and, therefore, it may be an effective vehicle for an HE curriculum that recognises the importance of the theory/practice interplay.

# (3) instructional learning

It is interesting to see the emergence of this category which is so often considered by educational purists as being associated with training rather than education. I have argued elsewhere (Major, (2002), prepared as part of my D.Prof studies — see Appendix A), about the non-sense of establishing such divisions and the pointlessness of engaging in debates about what is training and what is education. Learning is learning in whatever context it occurs and HE, as much as any other form of education, is essentially about creating learning opportunities for students. Perhaps uninhibited by such concerns, my respondents had no compunction about referring to learning through what I have termed instruction. Thus, 7 respondents spoke of the importance, in terms of their learning, of receiving instruction and/or being given advice by experts. A female postgraduate in her first 18 months of full-time employment spoke of the expertise residing within the workplace.

Yes I think so because you have to have your own style of how to approach things but also it's nice to have other people's opinions and stuff. I mean the people I work with, they've been in the industry for ten to twenty years and so they know certain things and they'll see things I'll not notice, things I'd probably brush aside. So, I'll ask for their advice and most of the time they'll probably tell me to read through a journal or certain paper on a certain mineral and how it's formed and they'll sit down with me and explain different things and different processes.

5 interviewees spoke of the importance of being able to **ask questions** when learning. A male undergraduate on a 6 week placement noted:

Yes, but this time I didn't have any questions and he taught me quite well because he was quite an expert, and I wasn't afraid to ask questions.

That's another example of how we learn isn't it, we ask questions of the expert?

Yes, I thought if I'm working on this project which was quite significant I don't want to make any mistakes so I wasn't scared to ask

17 students referred to the importance of **observation** when learning. This suggests that the much ridiculed "sitting by Nellie" mode of learning is still in vogue. In answer to the question below, a part-time undergraduate in full-time employment has this to say:

Are you also quite a practical learner, a 'hands-on' learner?

Yes, I'm more interested to see, you observe and then you do it.

Another way of observing in order to learn was described by a female full-time undergraduate, thus:

I do quite a lot of sport psychology and so I am very interested in professional and social relationships so a lot of the time it was watching people. Quite a lot of observation and then I'd ask people. I noticed things like body language, people talking to each other and then when I questioned staff about them I wanted to see what they thought they were projecting was the same as what they actually were to an outsider.

## (4) reflective learning

It is interesting to consider that, prior to undertaking Work Based Learning, not many of the students had the language to express their learning as resulting from reflection. (The part-time students in the medical profession I interviewed were familiar with the notion of reflective practice though, perhaps surprisingly, not all of them seemed to have considered this to be a serious mode of learning other than perhaps in a narrowly defined way.) However, it was recognised by 2 students as an intuitive or common sense approach to learning, suggesting that even if people do not have the language to express what they are doing it does not mean that they are not engaging in it.

5 respondents stated explicitly that learning occurs for them through critical reflection. A female postgraduate in full-time employment noted:

I mean sometimes it is just by looking at the whole situation at work, seeing what's going on and then in your mind's eye you've got all this theory and you can see people behaving exactly as you have read about someone's theory or personality or different traits and you can see it exactly coming through in the workplace or outside the workplace. So, it's all a mixture really. It goes across the board. It's more of an unconventional learning in that sense, it's not learning as in a school or college environment, it's more a learning in society such that you feed in one with another and it doesn't necessarily go from the book to the workplace, it could go from the workplace back to the book.

With 3 students stating that learning occurred for them through the application of the reflective learning cycle. A female undergraduate in full-time employment had this to say:

The other way I'd say I've learnt is my tutor has handed so much information to me and wonderful articles, really interesting, but I just pore over them when I read and actually I'm using one of the reflective cycles that he identified to me when I was doing the research methods module and I'm using one of those titles because I've really taken to it and he said, well a lot of people don't like it but I actually really like it, so that's another way I personally learn, is just by reading lots and lots and gleaning information like that. I'm not into directive learning — chalk and talk.

2 interviewees referred to learning as occurring for them through the evaluation of their own performance and/or the evaluation of the performance of others. A female undergraduate on a 6 week secondary school placement commented thus:

...but I think definitely reflecting back after each lesson, doing the evaluations – I did an evaluation at the end of each lesson – and at the end of each lesson that I observed another

teacher doing, I evaluated it, and by looking at them then I felt more prepared for when I came to do my lesson, when I came to teach my lesson. Just learning from mistakes or, may be not mistakes, things that you want to build on next time or slightly adjust. But evaluating, I'd never actually evaluated anything before.

3 candidates spoke of learning occurring through self knowledge. A male undergraduate in full-time study commented:

... I ..... also know from the way I learn - since doing the support programme - that I'm a reflector and that was quite useful. And he (his employer) used to talk to me as well and when I was on my own I used - I've never really thought of this before - to work, it was by a system of trial and error really, sitting on my own, working through problems using some knowledge from before and probably intuition, and I taught myself a lot as well. I would probably have done that anyway but I've actually identified that I did that which I never thought before.

An approach to learning which I consider to be essentially reflective was that spoken of by 2 respondents who referred to the importance when learning of defining the context of the learning and of arriving at a more holistic viewpoint (essentially seeing the learning needed within a broader context)

The general thing that I've found for each of the individual tasks that have required learning is to have a brief of the general process and of the goal you want to achieve and then it's a question of breaking it down into manageable, real, things that you can actually monitor and evaluate. So you've got to organise what it is you want to do and then break that down into ways in which you'll be able to assess yourself to show you can actually do it.

3 respondents spoke of learning through writing including keeping a learning log. A female postgraduate in full-time employment had this to say:

I do have to read through a lot of journals and stuff like that and when I read through stuff I sometimes – it's like words coming into your head – and so I jot down notes and keep a file of certain stuff – a log – just to keep myself right and also keep a list of different things I've done during the month – this and that – if there's any mistakes why did I do that on such and such a day. It's just to keep everything right and if anyone needs to check for something I can help.

#### (5) relational learning

This category testifies to the fact that learning is not always a lone activity and perhaps, in Work Based Learning, is rarely so. It also points to the importance of mutual support in the learning context. I recognise, however, that not all of the interviewees spoke of learning in this way, which does not give as much weight to my argument as I might have wished, that collaborative learning is a distinctive feature of WBL (see also my article on Ontology {Appendix D} prepared for my D.Prof studies). It may, of course, be the case that the interviewees were taking for granted the learning support offered by workplace colleagues, but I cannot be certain of that.

5 respondents referred in some way to collaborative learning, mainly referring to learning through discussion. A female part-time student in full-time employment noted:

I think I learn more in the seconds when we discuss things. I am terrible for going to get a book out of the library and never looking at it. I find that hard. I could read something three or four times and it wouldn't sink in but if we discuss it then it will actually sink in.

The same student commented on the importance for learning of sharing ideas and information.

Luckily one of my colleagues – one of the midwives I work a lot with – we will often go through books and discuss it as we're going. Whereas if I just sit and read it, I'll take notes but I couldn't tell you twenty minutes later what I'd written because it just doesn't sink in so I do need the talking and the group.

4 respondents spoke of gaining feedback from others as an important way of learning and 1 interviewee referred to engaging in debate and argument as an important way of learning (implying a dialectical mode of learning). A female undergraduate on a 6 week placement said:

It was very much hands on and I learnt to just accept criticism. I was very grateful for him just to be blunt and say no you're not doing that right, do it like this or I would do it like this, which was a great help as well.

2 respondents spoke of learning through teaching others and 5 interviewees referred to learning through modelling the behaviour of others (this is an important learning technique in Neuro Linguistic Programming, though students may not necessarily have known this). A female student on a 6 week school based placement noted:

There was one of the youngest teachers there who the kids really liked but that was because she was not very hard on discipline and then there was the extreme, the head of department, who even though some of the students hadn't met her, there was a reputation, that if you went to her that was to get shouted at and so they didn't like her. There was also one type in the middle that I really liked who had the rapport with pupils but still got on professionally with all the staff and I found myself trying to copy her sometimes.

## (6) other ways of learning

This is something of a 'catch-all' but does point to the diverse range of ways in which people learn. Some of the theories identified below could apply to one or more of the above categories and are placed here for convenience.

2 interviewees identified interest in the subject as a prerequisite for learning and a part-time undergraduate in full-time employment spoke of having confidence in one's own abilities as a pre-requisite for learning

Well I can't think of an example (i.e. of how she learns) but somehow it's all seemed to come together for me. I can't think of any one thing that made me say oh, this is how I've learned something. It's just about having confidence and feeling that you can do something.

I student spoke of her preference for learning through bite-size chunks and a female postgraduate in full-time employment spoke of tapping into the tacit knowledge of the workplace to access learning.

I mean the people I work with, they've been in the industry for ten to twenty years and so they know certain things and they'll see things I'll not notice, things I'd probably brush aside. So, I'll ask for their advice and most of the time they'll probably tell me to read through a journal or certain paper on a certain mineral and how it's formed and they'll sit down with me and explain different things and different processes. (Also quoted above.)

2 respondents referred to "teach yourself" as an important way of learning for them, with 1 interviewee saying that learning occurred for her through knowledge transfer. 2 students noted how repetition was an important way of learning in some instances and 1 referred to brainstorming as a way of learning. For example, a female undergraduate on a 6 week placement commented thus:

Before meetings I worked with a colleague, a fellow student, and before meetings we got together and we brainstormed ideas, what we were going to do, how we were going to achieve it and how we were going to achieve it in the time and then when we went into the meeting we had a series of questions that we wanted answering and a series of topics that we wanted to have some clarification on and that meant that the meetings flowed and had some structure.

### **Detailed comment on Question 4**

## (1) Attitudes to learning

Some of the points made here are a repetition of those referred to under Q3. Where this is the case, I propose to identify them but not to support them with student quotations. 2 respondents, for example, spoke of the importance of motivation and of having the right attitude to learn. 2 spoke of confidence as being important if effective learning is to occur, and 1 spoke of the importance of reflection as part of the learning process, with a further student commenting on the importance of self-assessment in learning.

2 respondents referred to the importance of **pro-activity** if new learning is to occur, and of **creating learning opportunities** for oneself. For example, a female full-time undergraduate had this to say:

That was an attitude (i.e. to learning) rather than a physical skill or something. I think that worked quite successfully. By giving enthusiasm and interest and bringing ideas, the particular placement that I was in appreciated that and it also meant I got a lot more out of the placement, I was able to do a lot more by being pro-active rather than letting things pass me by, and from that myself and my colleague were able to almost indulge in other opportunities.

1 interviewee commented on the importance of receptivity to new learning opportunities and 2 students spoke of the need for adopting a flexible approach towards new learning. For example, a male full-time undergraduate noted:

I just went in there and thought I will do the job as best I can, and I'll try and get stuck in and wherever I am going I am willing to learn and whatever I do in the process I hope I learn some new skills. And that was part of the placement as well because I knew the placement would be useful to me. I could have gone off and done something totally irrelevant but it wouldn't have been any use to me.

### (2) planning learning

It seems quite clear that Work Based Learning can be viewed very much in terms of the unplanned for and incidental learning which occurs for individuals in and through their work. Often claims for credit for prior learning are made up of this sort of learning and it is learning to be highly prized and highly valued. However, when Work Based Learning is seen in terms of the higher education curriculum, there is a clear need for rigorously planned learning with individually negotiated, pre-defined, learning outcomes clearly articulated. There is, of course, still room for unplanned for and incidental learning but WBL should not be viewed as learning by chance but learning by design.

9 respondents spoke of the importance of planning for new learning. A female full-time undergraduate noted:

Well I suppose I set out to learn, obviously through the learning outcomes and identifying areas I wanted to learn in.

And a female postgraduate in full-time employment gave her reasons for choosing a negotiated programme of learning in preference to one that was prescribed:

I wanted to learn something new but something new that was relevant to my life, something new that was relevant to my work life and which had implications, if you like, for my social life or other life. Which, in one sense, the course that I chose, which was not a defined course, was something new in that I was able to pick out elements that I wanted to look at so I deliberately chose that pathway, if you like, in that sense.

8 interviewees referred to the specific **needs of a project** as driving the new learning agenda. A female undergraduate on a 6 week placement noted:

In a sense, I did set out to do it deliberately because I knew it was part of the course and we had to do it.

And a male postgraduate in full-time employment said:

What I would say is I generally look at .... I have a practical reason for wanting to approach it, in the work framework anyway, and then I tend to like to research and gather the theoretical materials, find out if anybody's done this stuff before and approaches and what's been learnt before.

3 students spoke of the need for developing a framework for new learning (perhaps similar to the point included under reflective learning at Q3), with 3 commenting on the need to have a clear focus on the new learning to be achieved. A female undergraduate on a 6 week placement provided an interesting if somewhat broad comment:

Aside from my learning outcomes I wanted to get a whole experience of the work place. I think that's why the programme is so good because you're learning more about what a job entails and learning about yourself within the job. I wanted to get the whole experience in addition to learning about myself.

1 respondent identified the need to monitor the progress of new learning and another pointed to the importance of an awareness of learning methods where new learning is concerned. For example, a male postgraduate in his first 18 months of full-time employment noted:

Because the job is so different from University, the course that I did wasn't able to cover anything really that I needed but it did instil some methods of learning which you can then apply once you're in the workplace which I think is equally as important as having the knowledge.

### (3) ways of learning

As indicated above, this section may be dealt with fairly summarily in that it repeats, to some extent, some of the ways of learning identified at Q3 above. However, it is important in that it adds reinforcement to that data. For example, 8 respondents claimed to access new learning through reading, with 5 identifying the internet as a way of gaining new learning. 6 respondents said that they would acquire new learning through instruction and through asking questions of experts, with 1 referring to the "teach yourself" method. 5 interviewees spoke of new learning occurring through practice and 1 referred to "trial and error" methods. 2 identified observation as a way of acquiring new learning and 3 respondents spoke of new learning being accessed through knowledge application.

#### (4) relational learning

What I am terming relational learning was identified by a number of respondents as being important in terms of accessing new learning. This reinforces some of the points made at Q3. For example, 2 respondents made reference to gaining feedback from others as a source of new learning, and 2 spoke of achieving new learning through discussion. 2 interviewees referred to the importance of collaboration with other learners when new learning is needed. For example, a female undergraduate on a 6 week placement (which included undertaking an NVQ level 3 in preparation for work in fitness training) reported thus:

Watching people and we went to different circuit classes at different gyms in the free time that we had and watched the way they did it and we asked Stuart to do a couple and we watched him and then we all did some and watched each other.

5 respondents commented on learning from the experiences of others as a source of acquiring new learning. A female undergraduate in full-time employment undertaking level 3 studies noted:

I'm in e-mail contact with people nationally to do with domestic violence so if it's particularly about that I'd pick the most appropriate place where I think the opinions or the information I would value is. I mean, I wouldn't go to someone whose opinion I didn't value whatever the subject was.

#### (5) use of prior learning

A number of respondents spoke in terms of themselves as important sources for new learning with 2 recognising the significance of drawing on prior knowledge and

experience. Similarly, 3 interviewees referred to drawing on theories already known to them. For example, a female student on an animal behaviour degree programme taking a 6 week placement commented:

I'd designed (a type of diagram is referred to) that were lists of behaviours and behavioural categories, so it means that you have to watch what is going on with the animals, what they are doing, identify different behaviours but the categories used have to be mutually exclusive so that you are not crossing over when you see, when you are watching an animal, you can say that is the behaviour it is doing now and it doesn't cross into any other type of behaviour – its just a way of being specific about what's going on.

#### Detailed comment on Question 6

Some of the points made in answer to Q6 repeat those made at questions 3 and 4. Where this is the case, reference will be made to them but the evidence of student quotations will not be given, for example, 4 respondents spoke of critical reflection as an intuitive process and 5 claimed to make use of the reflective learning cycle as a means of accessing learning. The remainder of the data I have roughly divided into 2 sections: (1) putting critical reflection to use in learning, and (2) issues concerning critical reflection and learning.

#### (1) putting critical reflection to use in learning

2 candidates referred to critical reflection as a tool of analysis. A female undergraduate in full-time employment noted:

Yes, analysing what happened in a situation. Well, with an incident at work you look at what the situation was, how you felt, how they felt, how you reacted, how you would react in the future, what would you do about a similar thing in the future. Would you do the same again and what could you do better?

3 students felt that the critically reflective process helped in decision-making and 1 made a similar point by claiming that critical reflection facilitates a more considered approach to issues.

I think it (i.e. critical reflection) gives you a more considered approach and gaining an insight into the way people might think generally does change your approach to the way you deal with people, the way you deal with interpersonal relationships.

4 students referred to the usefulness of critical reflection in **problem-solving**. For example a female undergraduate in full-time employment and new to HE said:

I think it's... the occasion that springs to mind the most is the one I talked about earlier with the conflict between me and my manager. It was a very serious issue and I think I handled that as well as I could because I used the technique of critical reflection. I decided I had to sit back and think about this and work out what was going on and how to handle the situation. I knew I had the information and the knowledge and I knew I had to be in control of the situation. I believe that over a period of months, and using the reflective learning cycle, I was able to gain control of the situation and ensure that something good was going to come out of it.

4 students considered critical reflection to be an important means of identifying areas for improvement with a further 4 perhaps making a similar observation by identifying the importance of critical reflection for future planning. For example, a part-time undergraduate in full-time employment noted:

Yes, it (i.e. critical reflection) helps you to progress because you know, well, I've done it that way and it didn't work so now I need to look at what else to do, because whatever the event will occur again and anybody's the same, any sort of administration worker, domestic worker, whatever happens I think everybody reflects in one way or another, but they don't recognise it as critical reflection.

1 student spoke of critical reflection as a means of identifying unplanned learning and 2 respondents felt that critical reflection at least ensures some engagement of thought in relation to issues. For example, a female postgraduate in her first 18 months of employment, who had also undertaken an undergraduate WBL placement, had this to say:

Yes, and you try again, and then reflect and try again. Yes, I do remember that and I do think that is quite a useful model. If you don't sort of... many times you reflect and ask how many things have I learnt without realising it, or without intending to. If you don't reflect then... if you hadn't like suggested any theories then I wouldn't have realised myself what I'd actually learnt. So there are just things that you pick up along the way and they can get forgotten about and so you need to reflect to see what and how you've learnt and how far you've come.

## (2) issues concerning critical reflection and learning

1 respondent recognised that critical reflection is a **challenging and demanding** process with 2 interviewees expressing the view that critical reflection is essentially **personal** and that personal reflections are difficult to communicate to others. For example, a part-time undergraduate in full-time employment notes:

I think the problem with reflection is it's very personal. The way you approach reflection critically or not it's very personal, so whoever's reading it you know – whatever style or model you choose – the reader mightn't understand really. You know, the exercise that you've done. If you follow my meaning – it is very personal. That's a very difficult obstacle to get over really, especially when you're doing it for an exam situation or when you're doing it, the way we're doing it now, for the module. We're trying to write the way the tutors expect us to write, you know, whereas really when we're doing our own personal reflection we wouldn't write like that at all. So it's a bit of a false situation but we're used to that anyway.

2 candidates made the pertinent observation that critical reflection is really only relevant to substantive issues, while a female part-time undergraduate spoke of the constructive nature and purpose of critical reflection in WBL. She notes:

Well I think I've learned how to reflect in a constructive way, to learn from experience. I mean, reflection is learning isn't it from mistakes or from what you've done well, it's not always about the mistakes you make. I think I've learnt how to reflect in a constructive way.

4 respondents identified critical reflection as an important professional competence. A full-time fire-fighter on a part-time undergraduate programme, although at first minimising the significance of critical reflection in his work, goes on to identify its importance.

As far as work goes, the practicalities of it and issues surrounding doing the job, there's not really a great deal of need for critical reflection other than reviewing outcomes afterwards and ensuring that methods and processes used for achieving outcomes are suitably sufficient to meet those outcomes, if they can be adapted in any other way then that's something that we do sit down and de-brief after incidents. I suppose we do it on a routine basis as well if we find that something doesn't work we sit back. I tend to be of the opinion that other people have got an input on that and I'm very much allowed to do so. It's not something that I want to do on my own. It's a team effort and I'll engage the other two officers on the watch and say well, we've got this to do, we're doing it this way, can we do it this way, what other ways can we do it?

More general comments were made by 3 respondents about the potential of critical reflection for learning and the way in which it ensures that people take responsibility for their own learning.

#### Further comment in respect of Questions 2, 7 and 8

A few points relevant to the discussion in relation to this proposition arose in the context of answers to questions 2, 7 and 8. My intention is to offer a brief summary, mainly without citing evidence of student comment, given that most of the points have been raised and discussed elsewhere. Thus, in response to Q2, 1 respondent referred to gaining skills in **team working** and **collaborative learning** and 2 interviewees noted that they had acquired the ability of **learning to learn** through WBL. For example, a male part-time postgraduate in full-time employment had this to say:

I'm very much a self-driven learner anyway. I have to be (a) to get where I have in my job so far, I had to be somebody who picked up the skills quickly. The reason that I do my very job and I invented the department I work in was because I could move faster than other people in terms of the way I learn so rather than learn a specific skills set I've learned how to learn which is one thing that is quite useful. I've grown to understand the way I learn, therefore I can structure my learning in a way to make sure I pick stuff up quickly.

At Q7, 12 respondents referred to the implications for learning of a greater awareness of theories concerning learning styles, and 1 candidate made reference to the way in which knowledge of the Herrmann Whole Brain Model had similar implications for learning. A further reference to learning styles was made by 1 respondent in the context of Q8. This was essentially to the effect that knowledge of this area was immediately transferable to other contexts, and 2 respondents commented similarly on the transferability of knowledge about learning methods.

# APPENDIX I

## Centre for Work Related Studies

## Work Based Learning 2001-2002

#### Questionnaire

The Work Based Learning team is interested in finding out about some of your experiences of the programme – both before and during the placement. We should be grateful if you would answer the questions below. There are no right or wrong answers.

## Reflection on learning:

- 1. (a) Did you keep a record of your experiences on the placement? YES 96.5 NO 3.5
  - (b) If YES, was it in the form of

| A learning journal     | 33.2 |
|------------------------|------|
| A diary of events      | 47.2 |
| bullet points          | 15.6 |
| brief notes            | 39.7 |
| a mental note          | 24.8 |
| [tick all which apply] |      |

- 2. (a) Did you deliberately set aside time to reflect on your progress towards achieving your learning outcomes? YES 74.9 NO 25.1
  - (b) If YES, how often did you do so?

| At the end of each day              | 31.2 |
|-------------------------------------|------|
| At the end of each week             | 30.3 |
| At the end of the placement         | 11.7 |
| As and when appropriate to my needs | 26.8 |

- 3. (a) Were you aware of the way your learning style preferences affected the way you went about your work? YES 32.1 NO 67.9
  - (b) If YES, did you

| Stay within your preferred style(s)                  | 70.2 |
|--|------|
| Deliberately try to use your less preferred style(s) | 29.8 |

- 4. (a) Did you refer to any theoretical concepts to help you make sense of your work-based experience? YES 67.0 NO 33.0
  - (b) If YES, were the theoretical concepts

| in the Support Programme handbook       | 83.9 |
|---|------|
| in other texts                          | 42.4 |
| in journals                             | 16.1 |
| in other sources (newspapers, popular   |      |
| magazines, television programmes, etc.) | 11.5 |
| [tick all which apply]                  |      |

What is distinctive about work based learning? 5. (a) Did you find learning in the workplace different from learning in your taught courses at College? YES 100 NO If YES, please respond to the following items: (b) In WBL, you are able to structure your learning to meet your personal and professional needs TRUE 87.8 FALSE 12.2 (c) In WBL you can devise your own programme of learning FALSE TRUE 70.5 29.5 (d) In WBL, accepting responsibility for devising your own learning programme is EASY 34.0 DIFFICULT 66.0 (e) At College, tutors assume responsibility for making decisions about what will be learned, how it will be learned, and when it will be learned. TRUE 84.6 FALSE 15.4 (f) In WBL you are involved in the planning and evaluation of your own learning.

TRUE 93.3 FALSE 6.7

(g) WBL enabled you to acquire knowledge, skills and attitudes that have immediate relevance to your job future and personal life.

TRUE 92.6 FALSE 7.4

(h) College-based modules enable you to be a self-directing person. TRUE 56.8 **FALSE 43.2** 

(i) WBL requires you to be more reliant on your own resources than in Collegebased modules. TRUE 94.2 FALSE 5.8

(j) In WBL you are able to apply knowledge gained through College modules. TRUE 88.6 FALSE

(k) Through WBL you became more aware of the relevance of practical experience for learning. TRUE 96.8 FALSE 3.2

(1) WBL is more motivating in terms of learning than classroom learning at College TRUE 80.2 **FALSE 19.8** 

(m) In College courses your previous life experiences are of use to you and valued by tutors. TRUE 56.9 FALSE 43.1

(n) In WBL you are able to focus on what you need to know TRUE 75.3 FALSE 24.7

### What support were you able to call on during the placement?

- 6. You were always able to rely on your line manager/supervisor for advice and help when needed. TRUE 84.9 FALSE 15.1
- 7. You tended to ask people other than your manager/supervisor for advice on aspects of work. TRUE 58.7 **FALSE 41.3**
- 8. What other sources of support and help did you use?

WBL supervisor,

39.1

Other College tutors, 11.5

fellow students

50.6

parents

28.8

other ...... 17.3

### Planning learning in WBL

- 9. (a) Did you deliberately plan to learn certain skills and understandings? YES 61.3 NO 29.8
  - (b) If YES, did this help you to make significant changes in learning? YES 77.3 NO 22.7

## Transferable Skills and Career Development

- 10. Do you think that you have developed skills which you will be able to use in your third year studies at College? YES 81.3 NO 18.8
- 11. Do you think that through WBL you have developed skills which you will be able to use in other jobs which you will undertake in the immediate future? YES 93.6 NO 6.4
- 12. (a) Would you say that you improved your abilty to meet deadlines while on the placement? YES 67.9 NO 32.1
  - (b) If YES, do you think this will help you to meet assessment deadlines when back in College? YES 82.2 NO 17.8
- 13. Did you find it difficult to adapt to a regular 9 to 5.00/5.30 job? YES 48.9 NO 40.1 DIDN'T HAVE REGULAR HOURS 11.0
- 14. (a) Has the WBL placement helped you with making a career decision? YES 73.4 NO 25.0
  - (b) If YES, was the decision positive (i.e. you identified work that appeals to you) or negative (i.e. you identified work that does not appeal to you)? POSITIVE 73.4 **NEGATIVE 24.5**

15. Was your experience of learning in the workplace one that involved careful planning, identification of goals and problem solving, or did your learning generally occur almost in a random, unpredictable manner?

CAREFUL PLANNING 34.5 RANDOM 65.5

### Use of WBL materials

- 16. Did you read the Student Handbook before making the decision to apply for the placement? YES 46.7 NO 53.3
- 17. (a) Did you read the Support Programme Handbook during the placement? YES 85.8 NO 14.2
  - (b) If YES, did you read it to meet:

| work-based issues                     | 4.1  |
|---------------------------------------|------|
| assessment issues                     | 47.8 |
| both work-based and assessment issues | 45.5 |
| other issues e.g.                     | 2.6  |

## The Learning Agreement

- 18. Were any of the learning outcomes you set yourself too ambitious? YES 22.6 NO 77.4
- 19. Were any of the learning outcomes you set yourself too unambitious? YES 22.6 NO 77.4
- 20. Did you change any learning outcomes after the start of the placement? YES 50.5 NO 49.5
- 21. (a) Did you add new learning outcomes to the Agreement during the placement? YES 36,3 NO 63.7
  - (b) If YES, how many? 1 27.1 2 49.5 3 23.4
  - (c) If YES, did you ask your employer to agree to the change(s)? YES 90.3 NO 9.7
- 22. Did you have a job description to refer to during the Support Programme? YES 76.3 NO 23.7
- 23. In your opinion, was there a close link between your job description and your Learning Agreement? YES 72.4 NO 27.6
- 24. When you began your placement, did your employer discuss your Learning Agreement with you in any depth? YES 51.8 NO 48.2

#### Assessment

- 25. (a) Did your employer work through the assessment form with you towards the end of the placement? YES 62.0 NO 38.0
  - (b) If YES, did s/he give you detailed feedback on your work performance during the placement? YES 85.1 NO 14.9
- 26. Did you enter the WBL placement with the specific intention to achieve your learning outcomes in order to gain a good mark in assessments? YES 63.0 NO 37.0
- 27. When you come to be assessed in WBL, the <u>content</u> of your assessments will be unique to you. Does this prospect worry you, please you or not bother you? WORRY 43.4 PLEASE 25.0 NOT BOTHER 31.6
- 28. Do you think that you must be successful in achieving all your learning outcomes in order to achieve a good mark in the WBL assessments? YES 26.8 NO 73.2

## WBL generally

- 29. (a) On the placement, were you ever asked to do something with which you disagreed? YES 18.8 NO 81.2
  - (b) IF YES, did you
    Carry out the task without making any comment?
    Carry out the task but only after expressing disagreement?
    Turn down the request?
    [please tick as appropriate]

    41.7
    25.0
- 30. Did you learn something that has possibly made a lasting change in you? YES 75.8 NO 24.2
- 31. Did you at any point have a sudden insight which made you realise that you had learned something new? YES 76.8 NO 23.2
- 32. (a) At any point in the placement, did you feel that you left your 'comfort zone'? YES 34.0 NO 66.0
  - (b) If YES, did you persevere with your learning after this incident or did you abandon the attempt? PERSEVERED 97.1 ABANDONED 2.9
- 33. (a) Before embarking on WBL, did you hear any opinions expressed by Third Year Students about WBL? YES 39.4NO 60.6
  - (b) If YES, were the opinions positive or negative?

    POSITIVE 71.8 NEGATIVE 28.2

- 34. (a) Was WBL what you expected? YES 48.0 NO 52.0
  - (b) If NO, was the experience better than expected or worse? BETTER 66.9 WORSE 33.1
- 35. Please indicate any personal gains achieved through WBL:

| Confidence         | 73.5 |
|--------------------|------|
| Knowledge          | 82.4 |
| Understanding      | 57.8 |
| Physical skill     | 21.9 |
| Self-understanding | 40.5 |
| Other              | 13.1 |

# **APPENDIX J**

#### INTERVIEW GUIDE

## Qualitative Survey - semi-structured interviews

- Q1 I'd like you to think about the impact WBL has had on you as an individual. Has it changed your view of yourself in any way? If so, in what way(s)?
- Q2 Can you briefly outline the knowledge and skills you think you have gained through WBL?
- Q3 How do you think you acquired this knowledge and these skills?
- Q4 In what ways did you deliberately set out to learn something new?
- Q5 Can you give an example of something you learned which was unplanned?
- The idea of critical reflection was introduced in (Support Programme or Methods module). Can you give an example of critical reflection in which you engaged during the (placement or project)? To what extent has reflecting critically changed the way you view (a) work, (b) yourself, (c) the world generally?
- Q7 Did you consciously, or unconsciously, apply any WBL theories? If so, can you identify them and then describe how you were able to utilise them?
- Q8 Can you identify any knowledge and skills you gained from WBL that you have been able to use in other areas of study/contexts?

# APPENDIX K

# Interview with D. A., p/t, p/g

(who has also undertaken undergraduate WBL)

Question 1: We'd like you to think about the impact WBL has had on you as an individual and we're wondering if it has changed your view of yourself in any way and, if so, in what ways?

Central themes

Yes, I feel WBL has had quite an impact and I'm not sure whether it's necessarily to do with how it was delivered to me or whether it's my own particular interests in this sort of thing coming together, but I found the reflection side of things quite a heavy impact because it was a lot more structured in terms of the way you looked at how you reacted to situations. I also found quite a lot of influence in terms of the looking at your strengths and weaknesses or your learning styles, and things like that, and how they are appropriate in different situations and so I found the whole thing quite interesting and I've done quite a bit of further reading around it over time, things like Brookfield's Critical Thinking and Goleman's Emotional Intelligence, stuff like that, because I found it quite an interesting process.

WBL has had an impact, especially developing the skill of critical reflection and learning about other WBL theories.

From what you've been saying you've obviously considered this far more than just superficially. You've read round it. Do you feel that it has changed your view of yourself in any way?

I think undoubtedly it has but I think the difference with me is that I've encountered it at several points over a couple of years. The thing I find is that the initial one (reference to u/g WBL) - I found one or two things interesting particularly the first time I came to it in terms of team roles, Belbin because, at the time I was also running for election with the Student Union for something when I first came across it and I found it quite interesting for the team role that I played and it very much fitted the role and that was quite interesting. Then I've come back to these kind of things in various courses or returning to WBL staff in College over time, or supervising work-based learners and I feel the set of repetition of these things over a few years finally meant that it was something that I thought about regularly in what I've done, instead of a one-off exercise.

Considers WBL has caused him to change his view of himself.

Some WBL theories have become ingrained in his thinking.

That's very interesting.

Summary Question 1. DA feels that WBL has made an impact on him, especially through developing the capability of critical reflection and learning about other WBL theories. He considers that WBL has caused him to change his view of himself and notes that some WBL theories have become ingrained in his thinking.

1

Ouestion 2: Can you briefly outline the knowledge and skills you think you've gained through WBL? Do you feel that you are learning through this WBL programme? Are you gaining knowledge and developing skills?

I think there are two points that come out of this in my own understanding of it: one, I'm very much a self-driven learner anyway. I have to be (a) to get where I have in my job so far, I had to be somebody who picked up the skills quickly. The reason that I do my very job and I invented the department I work in was because I could move faster than other people in terms of the way I learn so rather than learn a specific skills set I've learned how to learn which is one thing that is quite useful. I've grown to understand the way I learn, therefore I can structure my learning in a way to make sure I pick stuff up quickly. The other important thing is maybe now, in terms of my role as a manager, I've been able to apply these things to other people as well, because I run a projects team so I have to get other people to learn quickly and I have to be quite adaptive in these situations so I've learnt also to apply these things in my job in terms of facilitating other people rather than just facilitating myself.

Describes himself as self-driven learner who has learned how to learn

Claims to understand the way he learns.

Helps others to learn how to learn

Summary Question 2. DA talks about having developed the skill of learning to learn. He describes himself as a self-driven learner who has learned how to learn, and he claims to understand something of the way in which he learns. From his own experience, he finds that he can also help others to learn how to learn. (This response relates more to Question 3.)

Question 3: You've started to answer the next question which is, how do you think you acquired this knowledge and these skills? In other words, it may be content in terms of what you learn but how do you think you learn? You were just giving me a response there, in some ways, which was addressing that. You're selfdriven you were saying and you've found a way of structuring your learning.

Yes, that's right. My approach was initially when I first started looking at my approach to learning, I was very practical – a practical person – a doer and then I would very much try and work things out my own way, whatever, and my theory side of my approach was very weak. recognised that and now - well, at first I had to forcibly change the way I worked to make sure I didn't just rush into things and so I would research things and then try to find practical applications, which is exactly what my job is about. Technology is often very much a set of theories or processes and the practical application of them in terms of perspectives.

Self-driven learner who has found a way of structuring own learning.

Initially a practical learner.

Found his theoretical understanding weak.

Forcibly changed his learning style to accommodate theoretical

how to do stuff that is beneficial for your business or your project or whatever you're up to at any given point, is about taking theory and then looking at the practical, at the same time. So it's very much about what I do day in and day out to earn my living.

Now takes theory and looks at its practical application.

You were talking in the first question about some of the reading that you've done, do you feel that just reading a theory for theories sake is something that perhaps you find less appealing than where you can see the application of a theory? I'm putting words in your mouth, which I oughtn't to do.

Values theory but constantly seeks practical application.

I would say that whenever I look at anything theoretical I always immediately view it in terms of a practical application. That's why I tend to look these sort of things because you can see immediately the practical application or maybe I could modify my behaviour to use that, or maybe I, or somebody at work, could learn from that approach. Things like that. Although I appreciate the theoretical side of things is needed in terms of giving a structure and a framework in approach, I think that I would say that I'm constantly striving then to say well, how can I actually apply that?

Summary Question 3. DA thinks of himself as a self-driven learner who has found a way of structuring his own learning — he has learnt how to learn. Initially he was a practical learner — a doer — but he realised there was an imbalance in that his theoretical understanding was weak. He, thus, forcibly changed his learning style in order to accommodate theoretical perspectives. He can now start with theory, and values theory, but constantly seeks its practical application.

Question 4: In what ways did you deliberately set out to learn something new? If you've got something new to learn, how do you go about it? I guess it's a repetition of some of the things you've been saying really.

Just to get my head round it, say that one again.

Yes, the actual wording of the question is, in what ways do you deliberately set out to learn something new?

I would say that it's very odd to try and answer that because it is something that is – maybe I'm lucky – naturally part of my job. What I would say is I generally look at .... I have a practical reason for wanting to approach it, in the work framework anyway, and then I tend to like to research and

Learning new things is part of his job. Starting point is practical need. gather the theoretical materials, find out if anybody's done this stuff before and approaches and what's been learnt before. I then actually get on and try and create something out of it rather than instantly try to throw things together, maybe I'm not an atypical male any more in that I would probably read the manual if I didn't feel I had an understanding. And that is definitely a change in approach from the first time I did any of this kind of measurement in terms of looking at learning styles and personalities and approach and so on, and I think I could say that the approach is modified based on the understanding that I've got of myself, I have of myself, through WBL.

First researches in order to gather underpinning theory.
Finds out if ideas previously trialled. Then creates own practical approach. Feels WBL has brought about this change in approach.

#### Thanks.

Summary Question 4. DA explains that learning new things is part of his job. His starting point is practical need. He first undertakes research in order to gather information about the underpinning theory, and he attempts to find out if similar applications of theory have been trialled elsewhere. He then creates his own practical approach. DA considers that he has changed in his approach to problem-solving largely as a result of undertaking WBL. It has reinforced for him the importance of theory.

Question 5: Can you give us an example of something you've learnt which was unplanned? I suppose both of these questions - the one we've just looked at and this one - come from the idea that if you're working say on a learning through work project, you work with the University and the employer to negotiate learning outcomes. You say these are the things I need to learn to be able to do this job, these are the things I need to know, and then when you've done all of that planning, there are things which still crop up, because of the nature of the workplace, which are unplanned, which might even catch you by surprise, which might actually be quite significant, and I suppose this question is there really to try and tease out whether or not you can plan all that you're going to learn through work or whether there is always going to be incidental learning, unplanned for learning. That's really where this question is coming from.

There is so much that you can learn that you never plan to learn in terms of work, but if you have the framework to see it, it becomes a little easier. In the latest round of WBL that I've done — my project — it was entirely practical in terms of what it was supposed to be doing and yet I discovered an awful lot about the way you treat people and the way you motivate them in terms of ... I was looking at a way of

Multiplicity of unplanned learning occurs through work.

Having a framework for learning helps to capitalise on producing a framework for planning for work and what came out of it was an awful lot of understanding about the kind of things that motivates and drives people who are experts in a situation. It's not like when you're head of a team and you're in charge of people who are ... when you're the most technical person there or whatever, often in the kind of environment that I work in you are in a team of peers and yet it's your ultimate responsibility to get the job done and so you can sit there and talk about all the basic things to do with project management and so on but there are many other lessons in there which are quite easy to learn in terms of what motivates people and how you have to train them in these situations. There's so much there outside the realms of what you immediately plan to learn.

unplanned learning.

Learnt much about inter-personal relationships through an entirely practical project.

Thanks.

Summary Question 5. DA feels that work yields a multiplicity of unplanned for learning opportunities and this learning can be best capitalised on if you have a framework for learning. He cites the example of an entirely practical WBL project which provided him with much unplanned learning in the area of interpersonal communications and interpersonal relationships.

Question 6: The next question is about something you've already mentioned in your answer to the first question when you talked a little bit about reflection and it says, the idea of critical reflection will have been introduced to you as part of your WBL programme and we're wondering whether you can give us an example of critical reflection that you've engaged in recently as a way of starting off but then the question is asking whether or not reflecting critically has changed the way you view work, yourself, and the world generally. I don't mind how you deal with the question either as a general response to that lot or we can break it down if you want to start off with an example, if there's one that springs to mind.

I have a specific example; something that was today, of all things. It was an interesting situation. I am in something of a war of attrition with a fellow manager in my workplace where the phrase chalk and cheese just does not go well enough. Unfortunately we are required to work together very closely and the situation in terms of the cold war has kind of got a little out of hand. And upon reflection of the wider extent of the detriment this is having (a) on my general working day when I have to deal with this particular person and (b) on the technical department as a whole. As part of my career development programme that I'm on at the moment, I've raised this with my director just today in terms of the fact that we need to go through some kind of trust and

Claims that critical reflection has enabled him to evaluate a situation of conflict in the work place.

confidence-building exercise between the two of us to try and break this situation. It is one thing being told to work with each other and another thing to actually be able to do that sensibly. So it's practical examples of where you're able instead of just blindly working on emotions to be able to evaluate practically a situation and approach it differently realising the wider issues, maybe.

This is interesting. I imagine that your situation is not an unusual one and that up and down the land there are hundreds of people in this situation. We actually have someone working with us now who is an expert in, what he calls conflict transformation, and he's doing some work at the moment with the NHS and having quite an impact actually where people are involved in situations of potential conflict or real conflict and how to address those, so if you need anybody to talk it through further, give us a shout.

He might provide an interesting insight. In all fairness I realise the situation but I still haven't got a clear view as to how we move it forward. So that's an interesting one whereby if there wasn't that level of reflection as part of the way I approach problems, then I would probably say I will crush you or I will run away. They are the immediate options when you end up in this kind of situation. So that's an area where you have to try and approach the situation.

Critical reflection has enabled him to take a more balanced view.

Thank you. Do you feel that this ability that presumably you've acquired, this competence or whatever it is, this capability of critical reflection, does have an influence on how you see work?

I don't know because I can't imagine what I'd be like if I didn't. However, I could say that it does change my approach to developing other people in work. I run a team and the kind of tools I give them to work in a situation, or to resolve conflict, which is a bit rich coming from me, whether it be to resolve conflict or work out situations or try to understand the situation they're in, I would say that a lot of the things that I try and pass on to my staff would be things like, what you would call critical reflection tools and self-understanding and stuff like that.

What about the impact this sort of thing has on yourself? Again once it's become part of your normal processes, it's difficult to imagine what it's like not doing it, but do you think it does impact on yourself as well?

Yes, I think it does. I think it affects the way you approach interpersonal relationships eventually because you become ... well, put it this way, I've never met anybody who I would consider a professional working in the WBL situation who's not

Process of critical reflection has become ingrained in his own thinking.

Attempts to pass on skill of critical reflection and self understanding to his work colleagues.

Feels that critical reflection has impacted on him in a positive way been quite amiable and thoughtful. Generally, I mean you might be an axe murderer at the weekend, but I've never met anybody who doesn't seem to have the level of thought or approach and who tends to be a blind reactionary. They tend to be considered in their approach and either have to be very upset or drunk before they go off the handle. I think it gives you a more considered approach and gaining an insight into the way people might think generally does change your approach to the way you deal with people, the way you deal with interpersonal relationships.

And if you extended that to what you see going on in the world, politics or anything really that's happening in the world again do you apply those same sorts of reflections to what's going on?

I'd say so, because I bore people rigid quoting Brookfield's theories on being a true member of a democracy which requires critical thinking, otherwise you're just a puppet, so I'd say that I suspect it does.

I'm preaching to the converted here I can tell! I tell you why I'm asking these questions, you can perhaps appreciate that some of them were designed with undergraduates in mind and the QAA has recently published a new framework for awards which describes the characteristics of a graduate and one of the things they seem to be hinting at is this broader concept of a graduate than just the person who's competent in a subject and I sort of have a shrewd idea, I suppose – and I think this is particularly true of undergraduates, especially if they haven't had much work experience when they actually do WBL – going out into a placement does have quite an impact on them and, if they learn to critically reflect, and if they extend that competence beyond the immediacy of what they're doing, it starts to affect the way they see themselves and the way they view the world.

I still remain, having taken one or two people through this stuff and having studied it myself and so on, I still remain to be convinced as to how much of that can be preached and how much you're semi-converted when it comes to this style of approach as I've had - what I would consider successes and failures in terms of the mentoring process and what I actually believe to be an appropriate approach. From one or two people who immediately discount it as rubbish to people who just find it very difficult to grasp the idea of looking at themselves in a structured manner, to the people who take to it like ducks to water. One of the interesting things I've found about the graduates into IT programme (the version of WBL he is currently on) is that I immediately took to that side of things because it was something that I was already in to, it wasn't alien to me, and I think lots of

and affects the way he deals with interpersonal relationships.

Feels that critical reflection enables people to take a considered approach.

Feels that critical reflection influences the way he views the world.

From his experience, notes different reactions of people to critical self reflectionsome negative, some positive.

other people found it quite interesting and so on, but I remember talking with my team and said if I actually got you to try and do all of this stuff would you be interested in going on this kind of a course and a lot of them had the attitude that it was entirely within my remit to try and cram as much knowledge about computers into them as possible, but there was nowhere within my role or remit to try to persuade them to do any kind of self-critical thinking or whatever. They were very much like 'No, that's not part of it', yet it very much does appear under the banner of WBL and it's an interesting one. I think it's one of those things where the first few steps on the path have to be made by the individual, very much so, before it becomes of any long-term benefit to them, which is a shame. I argue with L (his partner, a teacher) all the time that they should ban Religious Education and replace it with critical thinking instead which tends to go down well with everyone apart from the RE teacher.

Observes importance of 'soft' skills in WBL.

Thank you for that response — one borne of experience and that is much appreciated.

Summary Question 6. DA claims that, through critical reflection, he has been able to evaluate a situation of conflict in the work place, and that critical reflection has enabled him to take a more balanced view of the situation than he might otherwise have done. He feels that the process of critical reflection has become ingrained in his own thinking and he considers it so important that he attempts to pass on the skill of critical reflection and of self-understanding to his work colleagues. His view is that critical reflection has impacted on him in a positive way and influences the way he deals with interpersonal relationships. He feels that the capability of critical reflection enables people to take a more considered approach to issues. DA is of the opinion that the way he views the world is influenced by his critically reflective capabilities. From his experience of mentoring students and colleagues, he notes the different reactions of people to the idea of critical self-reflection with some being negative towards it and others positive. He observes the importance attached to the development of 'soft' skills in programmes of WBL.

Question 7: Have you consciously or unconsciously applied any WBL theories? If so, can you identify them and describe how you were able to use them? You've actually been talking about this quite a bit.

In terms of myself, I think I've already said I've done that. Some of the tools that I've picked up in terms of WBL and study and so on and actually apply them back onto my own staff whether it's just the simplest one, which I always get them to do, the old-fashioned Belbin's team-roles to get them to think about the way they work within the team, the kind of roles they take on together and one of the most interesting things recently I

Refers to conscious application of WBL theories as means of staff development.

had a member of staff who said this is a load of rubbish and then when we said well, this is really funny because within the team you're the person who is the critical, highly technical etc. etc. That's your exact personality profile isn't it? And they're like, 'I'm not my personality profile, I'm my own person' but eventually, once they'd calmed down a bit, they took to their given role rather more than I would have liked them to have done. Anyway, it was quite interesting, but whether it's that or whether it's learning styles, I get my people, when they come on board, to have a look at their learning styles and then when we're choosing the type of training they are to receive, we take into account the way they learn, and so on. Sometimes we find it quite interesting in terms of the team I run that we're nearly all visual learners who are able to convey stuff to each other through models and it's diagrammatical and we're all sort of resource investigators and so we'd be far happier with a book than ever with a lecture and so on. But there are one or two people who are different and when they come and work with us they struggle with that and when you go back and look at them at first they thought it was just some exercise I ran through because I was a poncy graduate, which is fair enough, they may have got me right there, but the exercise works anyway in terms of getting people to stop and look at themselves and every time we come to the end of a project we have to do the financial kind of wrap up making sure that we've turned a good investment and that sort of stuff. I always try to make sure that I do a session looking at the interpersonal stuff so, did we make any enemies and allies? How did you react to that situation? Were you treated differently, and so on. And although I don't sit down and say we're going to have to have a critical reflection session where you come up with a few Kolb learning cycles or whatever, it's essentially what I'm doing. So I do get quite practical with the theories.

Uses WBL theories to help identify compatible styles of staff training.

Attempts to get staff to use reflective learning cycle for project review.

Summary Question 7. DA refers to his conscious application of WBL theories as a means of staff development. He claims to use WBL theories to help identify training opportunities for staff which are compatible with their preferred learning styles. He attempts to get staff to use the reflective learning cycle for project review, both in terms of 'soft' (e.g. interpersonal relationships) as well as 'hard' issues.

Question 8: The very last one is whether or not you can identify any knowledge and skills that you've gained through WBL that you feel are transferable to other contexts, either you'll be able to go on using them in your work or future study or, as I say, that they'll have transferability to other contexts?

A narrow question that one. Yes, I've picked up many skills that are very transferable, particularly in terms of the project management side of my role, rather than the IT side of my role. It's the way of getting people to work together and providing frameworks rather than orders and the way to be able to cope with decision-making, creativity out of people without necessarily telling them what to do, without losing the quality control. Most of the skills are immediately transferable across anywhere that ever needs a project which is anything but a manufacturing line and when they change the project it can go everywhere. So heaps of transferable skills. You just need to be aware of what you've actually learnt.

Yes indeed. Thank you very much indeed. You've given me some really thoughtful and thought-provoking responses to these questions and you haven't just treated it as a glib exercise and off-the-cuff responses, there's been some engagement there and I appreciate that and thank you for it.

Feels he has developed many transferable skills, especially in respect of project management. Identifies: -facilitating team-working, -decision making, -creativity, as transferable skills. Points to importance of awareness of own learning.

Summary Question 8. DA feels that he has developed many skills that are immediately transferable to other contexts, especially in respect of project management and its associated skills. He identifies, as transferable skills, the abilities he has developed in terms of facilitating team-working, decision making, and creativity, and points to the importance of being aware of your own learning as a key transferable skill.

# APPENDIX L

| HZ | ЭH          | LA     | RS | .A.S | DA | ıВı | GT | ₹ | MS | H          | HIM | СP       | MŢ         | JM | DW | ST | ΝŪ | JВ       | Α        | ВМ | CW         | CC    | 죾 | HEL | HJ         | MD | RA             | SR | T'B | ٧A |  |
|----|-------------|--------|----|------|----|-----|----|---|----|------------|-----|----------|------------|----|----|----|----|----------|----------|----|------------|-------|---|-----|------------|----|----------------|----|-----|----|--|
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|    | \           |        |    |      |    |     |    |   |    |            |     |          |            |    |    |    |    |          |          |    |            |       |   |     |            |    |                |    |     | \  | Not changed but influenced                         |
|    |             |        |    |      | •  |     |    |   | `  |            | -   |          |            |    | `\ | ~  |    |          | `        | /  | `          | \ \ \ |   |     | ~          |    | 1              | \  |     |    | Has changed view of self                           |
|    |             |        |    |      |    |     |    |   |    |            |     |          |            |    |    |    |    |          |          |    | . —        |       | • |     |            |    |                |    |     | \  | Welcome break from conventional study              |
|    |             |        |    | ~    |    | -   |    |   |    | \<br> <br> | `   |          |            | `  | <  |    |    |          |          |    |            |       |   |     | `          |    |                |    | ~   |    | Brought about self-<br>examination                 |
|    |             |        |    |      |    |     |    |   |    |            |     |          |            |    |    |    |    |          | <b>Y</b> | ~  |            | <     |   | _   |            |    |                |    | _   |    | Aware of importance of interpersonal skills        |
|    | _           | _      |    | <    |    |     | \  |   |    | \<br>_     | \   |          |            | Α. | \  |    |    | ۲,       |          |    |            |       |   |     | \<br> -    | \  | \              | \  | \   |    | Greater realisation of own capabilities            |
|    |             | . ,    |    |      |    |     |    |   |    |            |     |          |            |    |    |    |    | j        |          |    |            |       |   | \   |            |    |                | \  |     |    | Raised self-estcom/<br>feeling valued              |
|    |             |        |    |      |    |     |    |   |    |            |     |          |            |    |    |    |    |          | -        |    |            | `     |   |     |            |    |                | <  |     |    | Positive impact on self image                      |
|    |             |        |    |      |    |     |    |   |    |            |     |          |            | j  |    |    |    |          | _        |    |            |       | ` | •   |            |    |                |    |     |    | Aware of work & discipline of work                 |
|    |             |        |    | `    | -  |     |    |   |    |            |     |          |            |    |    |    |    |          |          |    |            |       |   | `   |            |    | -              |    |     |    | Development of self-<br>reliance                   |
|    | <del></del> |        |    |      |    |     |    |   |    |            |     |          |            | -  |    |    |    |          | _        |    |            | `     | ` | \   |            |    |                |    |     |    | Increased motivation                               |
|    |             |        |    | `    |    | `   | `  |   |    | \          | <   |          | \<br>      |    | \  | <  |    |          | ~        |    |            |       |   | `   |            |    |                |    |     |    | Growth in self confidence                          |
|    |             |        |    | •    |    |     | j  |   |    |            |     |          |            |    |    |    |    | `        |          |    | 1          |       |   | _   |            |    |                |    |     |    | Ability to self-<br>manage & work<br>independently |
|    |             | }<br>] |    | į    |    |     |    |   |    |            |     |          | i<br> <br> |    | \  |    |    |          | `        | \  | }<br> <br> | `     |   |     | )<br> <br> |    | <br> <br> <br> |    |     |    | Aware of potential of team working                 |
|    |             |        |    |      |    |     | ]  |   |    |            |     |          |            |    |    |    |    |          | 1        |    |            |       |   |     |            |    |                | _  |     |    | Development of<br>human relationship<br>skills     |
|    |             |        |    |      | `  |     |    | ` |    | _          | _   | `        |            |    | `  |    | `  | ٠,       | <u> </u> |    | `          |       |   |     |            |    | \              |    | \   | -  | Impact of WBL                                      |
|    |             | -      |    |      |    |     |    |   |    |            |     |          |            |    | `  |    | `  |          | ~        |    |            |       |   |     |            |    |                |    |     |    | Development of communication skills                |
|    |             |        |    |      |    |     | ~  |   |    |            | \   |          |            |    | •  | `  | •  |          |          |    |            |       |   |     |            |    |                |    |     |    | Personal & professional development                |
|    |             |        |    |      |    |     |    |   | 1  | `          | `   |          |            |    | `  |    |    |          |          |    |            |       |   |     |            |    |                |    |     | T  | Given access to HE                                 |
|    |             |        |    |      |    |     | `  |   |    |            |     |          |            | `  | `  |    | -  |          |          |    |            |       |   |     |            |    |                |    |     |    | APL empowering                                     |
|    |             |        |    | `    |    |     |    |   |    |            |     | `        |            |    |    |    |    |          |          |    |            |       |   |     |            |    |                |    |     |    | Responsibility for own learning                    |
|    |             |        |    |      | `  | \   |    | _ | _  | \          | \   | <u> </u> | <          | <  | \  |    | <  |          |          |    |            | \     |   |     | ļ          |    |                | \  |     |    | Knowledge gains<br>empowering                      |

| H     | £Έ     | [,A,]                                 | RS | AS | DA | JBa | GT  | JК | SM       | ЪF | MΗ | CP | M.)   | Mſ   | DW | S.J. | 85    | - Br | ΑF | ВМ       | CW | 8 | KE    | H | H   | ĕ | R.A      | SR | K.I.       | ΛΛ     |                                     |
|-------|--------|---------------------------------------|----|----|----|-----|-----|----|----------|----|----|----|-------|------|----|------|-------|------|----|----------|----|---|-------|---|-----|---|----------|----|------------|--------|-------------------------------------|
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|       |        |                                       |    |    |    |     | \   |    | 1        |    |    |    |       | `    |    |      |       | `    |    |          | 1  |   | `     |   |     |   |          |    | \<br>\<br> | \<br>  | Knowledge<br>through<br>application |
|       | `      |                                       |    |    |    | /   |     |    | < ·      |    |    |    | \ \ \ |      |    |      |       | _    | ~  |          | 1  | < |       | 1 | ~   |   | <b>\</b> | 1  | \<br>      |        | Academic<br>subject<br>knowledge    |
|       |        | /                                     | ¥  |    |    |     | 1   |    | 1        | }  |    | \  |       |      | `  | `    | \<br> |      |    |          |    | \ |       |   |     |   |          | }  | ^          |        | People skills                       |
|       |        |                                       |    |    |    |     |     |    |          |    |    |    |       |      |    |      |       |      |    |          |    |   |       |   |     |   |          |    | _          |        | Collaborative<br>learning           |
|       |        |                                       |    |    |    |     |     |    |          |    |    |    |       |      |    |      |       |      |    |          |    |   | <<br> |   |     |   | ~        |    |            |        | Careers<br>options                  |
|       | 7      | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |    |    |    | 1   |     |    |          |    | `  |    |       |      | •  |      | \     |      |    | \        | 1  |   |       |   |     |   | · ·      |    |            |        | Communicati<br>on skills            |
|       |        |                                       |    |    |    | /   |     |    |          |    |    |    |       |      |    |      |       |      |    |          |    |   |       |   | _ / | 1 |          |    |            |        | Time<br>management                  |
|       |        |                                       |    |    |    | · · |     |    |          |    |    |    |       |      |    |      |       |      |    |          | ļ  |   |       |   |     | \ |          |    |            |        | Task &<br>Project<br>management     |
|       |        |                                       |    | `  |    | \   | <   |    | ~        |    |    |    |       |      | \  |      | _     | 1    | `  | <b>\</b> |    |   |       | ` | 1   |   |          |    |            |        | 'soft' skill<br>development         |
|       | \<br>\ |                                       |    | •  |    |     |     |    |          |    |    |    |       | _    | _  |      |       |      |    |          |    | 1 | /     |   |     |   |          |    |            |        | WBL theories<br>& application       |
|       | \<br>  |                                       |    |    |    | 7   | < - | 1  | <b>√</b> | 1  |    |    |       | \    | •  | \    | _     | ~    |    | \        | ~  |   | 1     |   |     |   |          |    |            |        | Learning<br>about self              |
|       |        |                                       | j  |    | \  | `   |     |    |          |    |    |    |       |      |    |      |       |      |    |          |    |   | ~     |   |     |   |          |    |            |        | Knowledge<br>of a<br>profession     |
|       |        |                                       | \  |    |    |     |     |    | 1        |    |    |    |       |      |    |      |       |      | •  | `        |    |   |       |   |     |   |          |    |            |        | Technical<br>skills                 |
|       |        |                                       |    |    |    |     |     |    |          |    |    |    |       |      |    |      | ^     |      |    |          |    |   |       |   |     |   |          |    |            |        | Negotiation<br>skills               |
|       |        |                                       |    | ~  |    |     |     |    |          |    |    |    |       |      |    |      | ~     |      |    |          |    |   |       |   |     |   |          |    |            |        | Problem<br>solving                  |
| \<br> |        |                                       | `  | \  |    |     | 1   | <  |          | <  |    | `  | `     | `    |    | \    | i     |      | !  |          |    |   |       |   |     |   |          |    |            |        | Professional<br>knowledge           |
|       |        |                                       |    | ~  |    |     |     | ~  |          |    |    |    |       |      |    |      |       |      |    |          |    |   |       |   |     |   |          |    |            |        | Self<br>assessment                  |
|       |        |                                       |    | \  | \  |     |     |    |          |    |    | )  |       |      |    |      | j     |      |    |          |    |   |       |   |     |   | j        |    |            |        | Learning to learn                   |

| HN | EE.      | LA       | RS | AS | DA       | JBa      | CI | JK       | SW       | 171      | HM       | CP | I'M    | JM | DW       | TS       | RD       | ЭB       | ΑF       | ВМ       | CW       | လ        | KF | LaH | HT | M | R <sub>A</sub> | SR | H | ٧A         |                       |
|----|----------|----------|----|----|----------|----------|----|----------|----------|----------|----------|----|--------|----|----------|----------|----------|----------|----------|----------|----------|----------|----|-----|----|---|----------------|----|---|------------|-----------------------|
|    | 1        |          |    |    |          |          | İ  |          |          |          |          |    |        |    |          |          |          |          |          |          | ~        |          |    |     |    |   |                |    |   | ~          | Many ways of learning |
|    |          |          | ~  |    |          | <        | <  |          | 1        |          | _        |    | <      |    |          |          | <        | <        |          | 1        | ٩        | ~        | _  |     |    | \ | ~              | \  | _ | ~          | Observation           |
| \  |          | `        | \  | <  | \        | `        | \  |          | 1        | `        |          | 1  | \<br>\ | •  | `        | ~        |          |          | ~        | 1        |          | <        | ~  | ~   | ~  | * | -              |    | < | 7          | From experience       |
|    |          | \        |    |    |          |          | <  |          |          |          | `        |    |        |    |          |          |          |          |          |          |          | <        |    | ١.  |    |   |                | <  |   | \          | From experts          |
|    | ~        |          |    |    | \        |          | <  |          |          |          |          | _  |        |    |          |          |          |          |          |          |          |          |    |     |    |   |                |    |   | `          | Positive              |
|    | _        | _        |    |    |          |          |    | ļ        |          |          |          |    |        |    |          |          |          | <u> </u> |          |          | `        | <u> </u> |    |     |    |   |                | _  |   | `          | Asking Qs             |
|    |          |          |    |    | L        |          |    |          |          | ^        |          |    |        |    |          |          |          |          |          | <b>\</b> |          |          |    |     |    |   |                |    | 1 | ζ.         | Receiving             |
|    |          |          |    |    |          |          |    |          |          |          |          |    |        |    |          |          |          |          |          |          |          |          |    |     |    |   |                |    |   | \          | brainstorming         |
|    | ۸,       |          |    |    |          |          |    |          |          |          |          |    |        |    |          |          |          |          |          |          |          |          |    |     |    |   |                |    |   | \<br>      | Teaching<br>_others   |
|    |          |          |    | `  |          |          | _  | `        |          | `        |          |    |        | _  |          |          | Ľ        |          |          |          |          | _        | `  |     |    |   |                |    | _ |            | Motivation            |
|    |          |          |    |    |          |          |    |          |          |          |          |    |        |    |          |          | \        |          |          |          |          |          |    |     |    |   |                |    | ` |            | Interest level        |
|    |          |          |    |    |          |          |    |          |          |          |          |    |        |    |          |          |          |          | ١.       |          |          |          |    |     |    |   |                |    | ` |            | By repetition         |
| _  | <u> </u> |          |    |    | `        |          | <  | <        |          | <        |          |    |        | \  |          | \        | \        |          | `        |          |          |          |    |     |    |   |                |    | \ |            | Theory/               |
|    |          | \<br>\   |    |    |          |          |    |          |          | `        |          |    |        |    | \        |          |          |          |          |          |          |          |    |     |    | ` |                | ~  | < |            | Direct teaching       |
|    |          | `        | <  |    |          | <        |    | `        |          |          |          |    |        |    |          |          |          |          | <        |          |          | <        |    |     |    |   | \              | `  |   |            | Trial & error         |
| -  |          |          |    |    |          | `        | `\ |          |          |          |          |    |        |    |          |          |          |          |          |          |          |          |    |     |    |   |                | \  | _ |            | Self-knowledge        |
|    |          |          |    |    |          |          |    |          |          |          |          | Γ  | -      | _  |          |          |          |          |          | •        |          |          |    | \   |    |   |                | \  |   |            | Intuition             |
|    |          |          |    |    |          |          |    |          |          |          |          | _  | Γ      |    |          |          |          |          |          |          |          |          |    | \   |    |   |                | `  |   |            | Teach self            |
|    |          |          |    |    |          | _        |    |          |          |          |          |    |        |    |          |          |          |          |          | <        | _        | ^        |    |     |    |   | `              |    |   |            | Modelling             |
| Ľ  | `        | \        | _  | \  |          | \        | `  | <        | ^        | `        |          | \  |        | \  |          |          | \        | ^        | ^        |          | `        | \        |    |     |    | \ | \              |    |   |            | Literature            |
| _  | `        |          |    |    | \        | <        | `  |          |          |          |          |    |        |    | \        |          |          |          |          |          |          | `        |    |     | 1  |   |                |    |   |            | From theory           |
|    |          |          |    |    |          |          |    |          |          |          |          |    |        |    |          |          |          |          |          |          |          |          |    | _   |    |   |                |    |   |            | Knowledge<br>transfer |
|    |          |          |    | \  |          |          |    |          |          |          |          |    |        |    |          |          |          |          |          |          |          |          | `  |     |    |   |                |    |   |            | Self assess           |
|    | \        |          | `  |    |          |          | 4  |          |          |          |          |    |        |    |          |          | `        |          |          |          |          |          | 4  |     |    |   |                |    |   |            | Reflection            |
|    |          |          |    |    |          | \        |    | <        |          |          |          |    |        |    |          |          |          |          |          |          |          |          | \  |     |    |   |                |    |   |            | Learning cycle        |
|    |          |          |    |    |          |          |    |          |          |          |          |    |        |    |          |          |          |          |          |          |          | `        |    |     |    |   |                |    |   |            | Knowledge             |
|    | `        |          |    |    |          |          |    |          |          |          |          |    |        |    |          |          |          | <        |          |          |          | \        |    |     |    |   |                |    |   |            | Internet              |
|    |          |          |    |    |          |          |    |          | <        |          |          | `  |        |    |          |          | `        | <        |          |          |          |          |    |     |    |   |                |    |   |            | Discussion            |
|    |          |          | L  |    |          |          |    |          |          |          |          |    |        |    |          | \        |          |          |          |          |          |          |    |     |    |   |                |    |   |            | Self confidence       |
|    | ^        | \        |    | L  |          | <u> </u> |    |          |          |          |          | _  |        |    |          | _        |          | _        |          |          | L        |          |    | L.  |    |   |                |    |   |            | Writing               |
|    |          | <u> </u> |    | \  |          |          |    | _        |          | <u> </u> | _        | _  | _      |    |          |          |          |          |          |          | <u> </u> |          |    |     |    | L |                |    |   |            | Bite-size chunk       |
| _  | _        |          |    | _  | -        |          |    |          | ^        | _        | _        |    |        |    |          |          | _        | -        | <u> </u> | <u> </u> | <u> </u> | <u> </u> | L  | _   | _  | _ |                |    |   |            | Sharing ideas         |
|    | `        | 1        | _  | ^  | <u> </u> |          | -  |          | <u> </u> | _        | _        | _  | _      | _  |          |          | _        |          |          | _        | -        |          | _  |     |    |   | L              | _  | _ | ļ          | Define context        |
|    | L        | \        | _  | _  | -        | -        | -  | <u> </u> | _        |          | L        |    |        |    | <u> </u> | <u> </u> | <u> </u> | L        | _        | <u> </u> | -        | -        |    |     |    |   | _              |    | _ | <u> </u> _ | Tacit knowl.          |
| _  | 15       |          | _  | _  | L        |          |    | L        |          |          | <u>L</u> |    | İ      |    |          | L        |          |          | _        |          |          |          |    |     |    |   | 1              | 1_ | _ | <u> </u>   | Argument              |

| H. | 33 | LA | RS | AS | DA         | JBa | GT                                    | × | SW | LF      | МН | CP     | M.I. | M | DW  | TS | RD | JB       | ĄF  | ВМ    | CW  | CC    | Ş | LaH | НЛ     | ¥. | RA | SR | H.I. | VA     |                                 |
|----|----|----|----|----|------------|-----|---------------------------------------|---|----|---------|----|--------|------|---|-----|----|----|----------|-----|-------|-----|-------|---|-----|--------|----|----|----|------|--------|---------------------------------|
|    |    |    |    | <  | 1          |     |                                       |   | -  |         |    |        |      |   |     |    |    |          |     |       |     |       |   |     |        |    |    |    |      | \<br>\ | Develop learn-<br>ing framework |
|    |    |    |    |    |            |     |                                       |   |    |         |    |        |      |   |     |    |    |          | - 1 |       |     |       |   |     |        |    |    |    |      | `      | Motivation/<br>attitude         |
|    |    |    |    |    |            |     |                                       |   |    |         |    |        |      |   |     |    |    |          |     |       |     |       | \ |     |        |    |    |    |      | ~      | Pro-activity                    |
|    |    |    |    |    |            |     |                                       |   |    |         | ~  |        |      |   |     |    |    |          |     |       |     |       |   |     |        |    | _  |    | ~    |        | Observation                     |
|    |    |    | 1  |    |            |     | <                                     | < |    | \       |    |        |      |   |     |    |    |          |     |       |     |       |   |     |        | <  |    |    | ~    |        | Instruction from experts        |
|    |    |    |    |    |            |     |                                       |   |    |         |    |        |      |   |     |    |    |          |     |       | - 1 | \ \ \ |   |     |        |    |    |    | _    |        | Collaboration with others       |
|    |    |    |    |    |            |     |                                       |   | `  |         | \  |        |      |   |     |    |    |          |     |       | -   |       | 1 |     |        |    | ~  |    | <    |        | Practice                        |
|    |    |    |    |    |            |     |                                       |   |    |         | <  |        |      |   |     |    |    |          |     |       |     | _ !   |   |     |        |    |    |    | <    |        | Feedback                        |
|    | <  |    |    | `  | `          |     |                                       |   | _  |         |    |        |      | 1 |     |    |    | <        | `   |       | `   |       |   |     |        |    |    | <  |      |        | Planning                        |
|    |    |    |    |    |            |     |                                       |   |    |         |    |        |      |   | ··· |    |    |          |     |       |     |       |   |     |        |    | `  | `  |      |        | Flexibility                     |
|    |    |    |    |    |            |     |                                       |   |    |         |    | L      |      |   |     |    |    |          |     |       |     |       |   |     |        |    |    | `  |      |        | Receptivity                     |
| Ц  |    |    |    |    | `          |     |                                       |   |    |         |    |        |      |   |     |    |    |          |     |       |     |       |   |     | \<br>_ |    |    | `  |      |        | Drawing on<br>theory            |
|    |    |    |    |    |            |     |                                       |   |    |         |    |        |      |   |     |    |    |          |     |       |     |       |   |     |        | \  |    |    |      |        | Through self-<br>assessment     |
|    |    |    |    |    | ļ          | `   |                                       |   |    |         |    |        |      |   |     |    |    |          |     |       |     |       |   | `   |        |    |    |    |      |        | Through<br>confidence           |
| Ц  |    |    |    |    | ۲          |     |                                       |   |    |         |    | L      |      |   |     | `  |    |          |     |       |     | _     | < |     |        |    | `  | `  | `    | <      | Project needs<br>drive learning |
|    |    |    |    | `  |            |     |                                       |   |    |         |    | _      |      |   |     | _  |    |          | <   |       | `   |       |   |     |        |    |    |    |      |        | Clear focus on<br>learning      |
|    |    |    |    |    |            |     |                                       |   | _  |         |    |        |      |   |     |    |    |          | ~   |       | _   |       |   |     |        |    |    |    |      |        | Monitor<br>progress             |
|    |    |    |    |    |            |     |                                       |   |    |         |    |        |      |   |     |    | `  | `        |     |       |     |       |   |     |        |    |    |    |      |        | Draw on prior experience        |
|    |    |    | `  | `  |            |     |                                       | 1 |    |         | •  | _      |      | _ | _   | _  |    | <b>\</b> |     |       |     |       |   |     |        |    |    |    | _    |        | Through<br>reading              |
|    |    |    |    |    |            |     |                                       | _ |    | _       |    | L      |      |   |     |    | ۲, |          |     |       |     |       |   |     |        |    |    |    |      |        | Through reflection              |
|    |    |    |    |    | <u> </u>   |     | \<br>-                                | ` |    |         |    | _      | `    |   |     |    |    |          |     |       |     |       |   |     |        |    |    |    |      |        | Use of internet                 |
| Ш  |    |    |    |    | ļ ,        |     | Α.                                    |   | •  |         |    | \<br>_ |      | L | !   |    |    | ]        |     | J<br> |     |       |   |     |        |    |    |    |      |        | Knowledge<br>application        |
|    |    |    |    |    |            |     |                                       |   |    | \<br> - |    | _      |      |   |     |    |    |          |     |       |     |       |   |     |        |    |    |    |      |        | Teach yourself                  |
|    |    |    | <  |    | <b>√</b> ] |     | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | < |    | _       |    |        |      |   |     |    |    |          |     |       |     |       |   |     |        |    |    |    |      |        | Experience of others            |
|    |    |    |    | `  |            |     |                                       |   |    |         |    |        |      |   |     |    |    |          |     |       |     |       |   |     |        |    |    |    |      |        | Learning<br>methods aware       |
| _  |    |    |    | `  |            |     |                                       |   |    |         |    | _      |      |   |     |    |    |          |     |       |     |       |   |     |        |    |    |    |      |        | Discussion                      |
|    |    |    | <  |    |            |     |                                       |   |    |         |    |        |      |   |     |    |    |          |     |       |     |       |   |     |        |    |    |    |      |        | Trial & error                   |

| H          | EE    | LA | RS | AS | DA | JBa | CT | JK       | MS | LF | НМ | CP | MT        | MC | DW    | TS | æ | JВ       | ΑF  | MB | CW | CC        | 잒 | LaH | HT    | MD | RA         | SR  | B.I. | VA |  |
|------------|-------|----|----|----|----|-----|----|----------|----|----|----|----|-----------|----|-------|----|---|----------|-----|----|----|-----------|---|-----|-------|----|------------|-----|------|----|--|
|            |       |    |    |    |    |     | 1  | /        |    | ~  |    |    | <br> <br> |    |       | ~  | < |          | · / |    |    |           | 1 |     | \<br> |    | \<br> <br> |     |      | <  | Greater self<br>knowledge              |
|            |       |    |    |    |    |     |    |          |    |    |    |    | _         |    |       |    |   |          |     |    |    |           |   |     |       |    |            |     | ~    |    | Organisational<br>skills               |
|            |       |    |    |    |    |     |    | \        |    |    |    |    | \<br>     |    |       |    | • |          |     |    |    |           |   |     |       |    |            | \   |      |    | Derived from<br>S.P. &<br>Methods mod. |
|            |       |    |    |    |    |     |    |          |    | 1  |    |    |           |    |       | !  |   |          |     |    |    |           |   |     |       |    |            | / _ |      |    | Work can be fulfilling                 |
|            |       |    |    |    |    |     |    |          |    |    |    |    |           |    |       |    |   |          |     |    |    |           |   |     |       |    |            |     |      |    | Team<br>management/<br>leadership      |
| !<br> <br> |       |    |    |    |    |     |    |          |    |    |    |    |           |    |       |    |   |          |     |    |    |           | \ | _   |       |    |            |     | 1    |    | Learning can<br>be motivational        |
|            | !     |    |    |    |    |     |    | <u> </u> |    |    |    |    |           |    |       | }  |   | <u> </u> | •   |    |    |           | \ |     |       |    |            |     |      |    | Skills of communication                |
|            |       |    |    |    | _  |     |    |          |    |    |    |    |           |    |       |    |   | _        |     |    |    |           |   |     |       |    |            |     |      |    | Project drives<br>learning             |
|            | <br>  |    |    | <  |    |     |    |          | \  |    | \  | _  |           | (  | j<br> |    |   |          |     |    |    | _         |   |     |       |    |            |     |      |    | Through<br>reflection                  |
|            | )<br> |    |    |    |    |     |    |          |    |    |    |    |           |    |       |    |   |          |     |    | \  |           |   |     |       |    |            |     |      |    | Learning about people                  |
|            |       | ^  | <  |    |    | _   |    |          |    |    |    |    |           |    |       |    |   |          |     | ~  | `  |           |   |     |       |    |            |     |      |    | Professional<br>knowledge              |
|            |       |    |    |    |    |     |    |          |    | \  |    |    |           |    |       |    |   |          |     | _  |    |           |   |     |       |    |            |     |      |    | Through team<br>work                   |
|            |       |    |    |    |    |     |    |          |    |    |    |    |           |    |       |    |   |          |     | <  |    |           |   |     |       |    |            |     |      |    | Value of<br>networking                 |
|            |       |    |    |    | ~  | ~   |    |          |    | \  |    |    |           |    |       |    |   |          | 1   |    |    |           |   |     |       |    |            |     |      |    | Interpersonal<br>skills                |
|            |       |    |    |    |    |     |    |          |    |    |    |    |           |    |       | ,  |   | <b>\</b> |     |    |    |           |   | 1   |       |    |            |     |      |    | 'soft' skills                          |
|            |       |    |    |    |    |     |    |          |    |    |    |    |           | \  |       |    |   |          |     |    |    |           |   |     |       |    |            |     |      |    | Bureaucratic processes                 |
|            |       | 1  | 1  |    |    |     |    |          |    |    |    |    | \         |    |       |    |   |          |     |    |    |           |   | -   |       |    |            |     |      |    | Internet/ICT                           |
|            |       |    |    | •  |    |     |    |          |    |    |    |    |           |    |       |    |   |          |     |    |    |           |   |     |       |    |            |     |      |    | Meetings & conference calls            |
|            |       |    |    | `  |    |     |    |          |    |    |    |    |           |    |       |    |   |          |     |    |    | <br> <br> |   |     |       |    |            |     |      |    | Negotiation & diplomacy                |

| HN     | ĒĒ     | LA           | RS | AS       | DA | JBa      | CI         | ¥        | SW      | F | МН       | СP   | ML    | M        | DW | ST     | ₽D | EL       | ΑF       | ВМ | CW    | 8     | 주     | LaH                                   | H          | M        | RΑ       | SR | ТВ       | ٧A       |   |
|--------|--------|--------------|----|----------|----|----------|------------|----------|---------|---|----------|------|-------|----------|----|--------|----|----------|----------|----|-------|-------|-------|---------------------------------------|------------|----------|----------|----|----------|----------|---|
|        |        |              |    |          |    |          |            |          |         |   |          |      |       |          |    |        | 1  |          | <b>\</b> | 1  |       |       |       | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |            | 1        | ~        | 1  | ~        | <        | No clear under-<br>Standing of c.r.     |
|        | _      | <u> </u><br> | _  | _        |    |          |            |          | \<br> - |   |          |      | _     | _        |    |        | ~  |          |          |    |       | _     |       |                                       |            |          |          |    |          |          | Helped in decision making               |
|        |        |              |    |          |    | `        |            |          |         |   |          | 1    |       |          |    |        |    | _  <br>  |          |    |       |       |       |                                       |            |          |          |    |          | ^        | Change claimed                          |
| <br>   | _      | _            | _  | <br> -   | `  |          | _          | ļ<br>    |         | ` | \        |      |       | _        |    |        |    |          |          |    |       | -<br> |       |                                       |            |          |          |    | 1        | `        | More positive                           |
| \<br>- | `      | _            |    | \<br>_   | \  | \        |            | _        |         |   |          |      |       |          |    | <      | _  |          |          |    | \<br> |       |       |                                       |            |          |          |    |          | 1        | Changed attitude                        |
| <br>   |        |              |    | _        |    |          | `          | _        |         | ^ | _        | <    |       | _        | <  | <      | `  |          |          |    | _     |       | \<br> | _ '                                   |            | <u> </u> |          | L  |          |          | Changed attitude                        |
| `      | ^      | \            |    | `        |    | \        |            | \<br>  ` |         | \ | <        |      |       | `        | ^  | `      |    |          |          |    |       | 1     | _     | \                                     | 1          | · ]      |          | `  | `        |          | Changed attitude                        |
| _      | ^      |              | _  |          |    | _        | \<br> -    |          |         |   |          |      |       |          |    |        |    |          |          |    |       |       | _     |                                       |            |          |          |    | _        |          | c.r. an intuitive                       |
|        |        | `            | •  |          |    | `        | \          |          |         |   | `        |      | 1     |          | 1  | •      |    |          |          |    |       |       | \     |                                       | \          |          |          |    |          |          | Basic under-<br>Standing of c.r.        |
| <      | `      |              | _  | \        | _  | _        |            |          |         |   |          |      | _     | ^        |    | _      |    | \<br>_   |          |    |       |       |       |                                       |            |          | <u> </u> |    | _        |          | Grasp of process                        |
| L      |        |              | `  |          |    |          |            |          |         |   |          | ^    |       |          |    |        |    |          |          | \  | \     |       |       | _                                     |            |          |          |    |          |          | Uses reflective                         |
| ۲      | ^      | `            | ^  | `        | `  | _        |            |          | \       |   | ^        |      |       |          | 1  |        | _  | 1        | _        |    |       | \     |       | \                                     | _          | \        | _        |    | <        |          | Aware of                                |
| _      | L      |              |    | _        |    |          | _          | L        | _       | L |          |      |       |          |    |        |    | <b>'</b> |          |    |       |       |       | L                                     |            |          |          | _  |          |          | Responsibility for                      |
|        | ^      |              | _  | _        | \  | L        |            | L        | \       | \ | _        | L    | _     | <        | ^  | ١      | \  |          |          |    |       |       | _     | L                                     | _          |          |          |    | L        |          | Multiple<br>perspectives                |
|        |        |              | _  |          | _  | L        |            | L        | L       | L |          |      |       |          |    | \<br>_ |    |          |          |    |       |       |       | L                                     | _          |          | L        |    |          |          | No clear under-<br>standing of c self r |
|        | _      |              | `  | L        |    | _        | L.         | L        |         |   | _        |      |       |          |    | `      |    |          | L        |    |       |       | `     | \                                     | L          | _        |          |    | L        |          | Increased                               |
|        |        |              | _  | ^        |    |          | <u> </u> ` |          |         | L | _        | '    |       | <u> </u> | ^  |        |    |          |          |    |       |       |       |                                       |            |          |          |    | L        |          | Learning potential                      |
|        | _      | -            | L  | \<br>-   |    |          | _          | L        | L       |   |          | _    |       | `        |    | _      | `  | $\Box$   | <u> </u> |    |       |       | _     | _                                     | L          | _        | L        | _  |          |          | Uses c.r. for future planning           |
| `      | <br> - | L            | _  | _        |    | _        | \          | L        | _       | _ | <u> </u> | <br> |       | \<br>-   |    | ļ<br>Ļ |    |          |          |    |       |       |       | _                                     | L          | _        | -        | L  | L        |          | c.r. a professional                     |
|        | _      | _            | L  |          |    |          | _          | L        |         | L | <u> </u> |      | _     | ^        |    | _      |    |          |          |    |       |       |       | ļ<br>                                 |            |          |          | L  |          |          | c.r. challenging                        |
| _      | _      | `            |    | \        | _  | _        | _          |          |         | L | _        |      | _     | _        |    | _      |    |          |          |    | _     |       |       |                                       | _          |          |          |    | _        |          | c.r. for                                |
| _      | _      | _            | L  | _        |    | L        |            | _        | L       | _ |          | _    |       | `        |    | -      |    |          |          | L  |       |       |       | L                                     | L          |          | L        |    |          |          | c.r. personal                           |
|        | L      |              | _  | _        |    | L.       | [<br>      |          |         | L | _        | _    | `     | -        |    | _      |    |          |          |    |       |       | L     |                                       |            |          | _        |    | _        |          | A tool of analysis                      |
|        |        | <u> </u>     | Ļ. | <br>     |    | L.       |            | <u> </u> | _       | _ |          | `    | \<br> |          |    |        |    |          |          |    | _     | L     |       |                                       | <br>       | _        | <u> </u> |    | _        |          | Ensures engage-<br>ment of thought      |
|        | <br> - | _            |    | <u> </u> | _  | _        | _          | L        | _       | _ |          | \    |       | _        | _  |        |    |          | _        |    | _     |       | L     | -                                     | L          |          | <br>     | _  | <u>_</u> |          | Constructive cellection                 |
| _      |        | <u> </u>     |    | ļ        | `  | <u> </u> | `          | `        | -       | _ |          |      | _     | _        |    |        | _  |          |          |    | _     |       |       |                                       |            |          | _        |    | <br>     |          | Problem solving                         |
|        | `      | -            | _  | L        | _  | <u> </u> | L          | _        |         | ` | <br>     |      | <br>  | )<br>    | _  |        |    |          | _        |    |       |       | _     |                                       | _          |          | -        | L  | _        |          | Beliefs/values                          |
|        | _      | Ļ            |    | _        |    | _        |            | _        | `       | ^ |          | <br> | L     | )<br>    |    | _      |    |          |          |    |       |       | L     |                                       | <u> </u> _ | _        | _        |    |          |          | Empowerment                             |
|        |        |              |    | _        |    | _        |            |          | -       | _ |          |      | L     | _        |    |        | -  |          | _        |    |       |       | _     | _                                     | _          |          | _        |    | _        | <u> </u> | refers to<br>substantive issues         |
|        | _      | L            | _  | _        | `  | <u> </u> | -          | _        | -       | _ | _        | _    |       | _        |    |        |    |          |          |    | -     |       | _     | _                                     | _          |          | <br>     |    | _        |          | Considered                              |
|        | L      |              | _  |          |    |          | _          | L        | L       | _ | _        |      |       |          |    |        |    |          |          |    |       |       |       |                                       |            |          | _        |    |          | L,       | Identifies un-                          |

| ZH | 33 | LA                                    | RS | AS | DA | JВа | GT | ¥ | SM | T.F | HW    | CP | MT | ΜĽ | WQ     | ST | RD | JB       | ΑF       | ВM       | CW     | ငင | KF       | LHa | H | MD      | RA | SR | B.J. | ٧A |                               |
|----|----|---------------------------------------|----|----|----|-----|----|---|----|-----|-------|----|----|----|--------|----|----|----------|----------|----------|--------|----|----------|-----|---|---------|----|----|------|----|-------------------------------|
|    | <  | ~                                     | ~  | `  | `  | 1   | `  |   | ~  | 1   | \     |    | 1  | 1  | \<br>- | <  | \  | <        | `        | <        | `      | `  | 7        | <   | ` | _ /     | 7  | ~  | _    |    | Applied WBL<br>theories       |
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|    |    |                                       | <  |    |    |     |    |   |    | _   |       |    |    |    | ~      |    | 1  | <u> </u> |          |          |        |    |          |     |   |         |    | <  |      |    | Use of reflection             |
|    |    | ,                                     |    |    |    |     |    |   |    |     |       | ~  |    |    |        |    |    | `        |          |          |        |    |          |     |   |         | `  |    | `    |    | For assignment                |
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|    |    |                                       |    |    |    |     |    | ! |    |     |       |    |    |    |        |    |    |          |          |          |        |    |          |     |   |         | }  |    |      |    | Time management               |
| L  |    |                                       |    |    |    |     |    |   |    |     |       |    |    |    |        |    |    |          |          |          | 1      | 1  |          |     | ~ |         |    |    |      |    | Project<br>management         |
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|    |    |                                       |    |    |    |     |    |   |    |     |       |    |    |    |        |    |    |          |          |          |        |    | <b>\</b> |     |   |         |    |    |      |    | Business models               |
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|    |    |                                       |    |    |    |     | ~  |   |    |     |       |    |    |    |        |    |    |          |          |          |        |    |          |     |   |         |    |    | 1    |    | Stress<br>management          |
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|    | `  |                                       |    |    |    |     |    |   |    |     |       |    |    |    |        |    |    |          |          |          |        |    |          |     |   |         |    |    |      |    | Research methods              |
|    | \  |                                       |    |    |    |     |    |   |    |     |       |    |    |    |        |    |    |          |          |          |        |    |          |     |   |         |    |    |      |    | Theory/practice reinforcement |

| NH | EE | LA | RS       | AS       | DA | JВа | GT | ¥ | SM | LF | HW | CP     | M.I. | MĽ   | W        | TS | KD | JВ | ΑF | ΜB | CW  | CC | KF  | LHa      | LH | MD     | RΑ | SIS | EΠ         | ٧A    |                                 |
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|    |    | _  | j        | <        |    | ζ.  |    |   |    |    |    | 1      |      |      |          |    |    | ~  |    | 1  |     |    |     | 1        |    |        |    |     |            | \<br> | Study skills                    |
|    |    |    |          |          |    |     |    | ` |    |    |    |        |      |      |          |    |    |    |    |    |     |    | - " |          |    |        |    |     |            | \     | Manages own<br>learning         |
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|    |    |    | <u> </u> |          |    |     |    |   |    |    |    |        |      |      |          |    |    |    |    |    |     |    |     |          |    | 1      |    |     |            |       | Learning methods                |
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|    |    |    |          |          |    |     |    |   |    |    |    |        |      |      |          |    |    |    | ۲  | 1  |     |    |     |          |    | \<br>  |    | _   |            |       | Subject<br>knowledge gains      |
|    |    |    |          |          |    | _   |    | • |    |    |    |        |      |      |          |    |    |    |    | 1  |     |    |     |          |    |        | •  | _   |            |       | Career choices                  |
|    |    |    | \        | <b>\</b> |    |     | L  |   |    |    |    |        |      |      |          | _  |    |    |    |    |     |    |     |          |    |        |    | `   | L          |       | Work experience                 |
|    |    |    |          |          |    |     |    |   |    |    |    |        |      |      |          |    |    | `  |    |    |     |    |     |          |    | `      |    |     |            |       | Time management                 |
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|    |    |    |          |          |    | _   |    |   |    |    |    |        |      |      |          |    |    | 1  |    |    |     |    |     |          |    |        |    |     |            |       | Employment<br>enhanced          |
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|    |    |    |          |          | Υ. |     |    |   |    |    |    |        |      | <br> |          |    |    |    |    |    |     |    | l   |          |    |        |    | _   |            |       | Creativity                      |
|    |    |    | \        |          |    |     |    |   |    |    |    |        | -    |      |          |    |    |    |    |    |     |    |     |          |    |        |    |     |            |       | Problem solving                 |
|    |    | `  |          |          |    |     |    |   |    |    |    |        |      |      |          |    |    |    |    |    |     |    |     |          |    |        |    |     |            |       | Multiple<br>perspectives        |

# **APPENDIX M**

# Question 1 responses

1'd like you to think about the impact WBL has had on you as an individual. Has it changed your view of yourself in any way? If so, in what way(s)?

### Full-time undergraduates

Although V.A. does not feel that WBL has changed her hugely, she recognises its value for her in that it has given her the opportunity to test out a career aspiration and to confirm that she is going in the right direction. She found WBL timely in the context of her degree studies, where pure theory was becoming tedious, and WBL provided her with "solid work" and "real activities".

T.B. claims that WBL has changed her. She admits to not having anticipated that it would have an impact on her but it has made her undertake self-examination and to examine her behaviour towards others. She now feels more confident in interpersonal relationships and now has more confidence in the knowledge she possesses, having had it tested and applied in a work context.

Initially S.R. is not certain if WBL has changed him but then, with prompting, he speaks of realising his own capabilities as a result of the experience. He admits to feeling valued as a result of the contribution he was able to make in the workplace. He has gained in confidence and self esteem and, generally, WBL has had a positive impact on his self-image. (He appears to have gained positive feedback as a result of team membership.)

R.A. claims that WBL has changed her view of herself. In particular, it has made her proud of herself for being able to cope with a demanding job that she now aspires to do as a career. She refers to the emotional challenge of her particular placement and notes how she drew strength and support from her colleagues (relational perspective).

M.D. speaks of gains in confidence in her own ability as a result of being given responsibility and discovering that she could handle situations not previously experienced. She also notes that she has become more assertive.

L.H. feels that WBL has forced her to look at herself. There is the suggestion, in what she says, of unconscious learning made conscious through reflection. The experience has made her more aware of ways in which she learns. She recognises the focus on the 'self' in WBL and now has a greater realisation and better appreciation of her own skills and abilities.

La.H. says that WBL has raised her awareness of work and of the discipline of work. She speaks of a raising of her self-esteem as a result of her ability to establish good relationships with colleagues. The experience has made her more self-reliant and meeting new people has given her more self-confidence. She also feels that her motivation has improved, as has her ability to self-manage and to work independently.

KF found the experience of WBL to be motivational. She also found the discipline of work important at a time when study in the University was proving tedious. WBL

provided her with the opportunity to gain experience of a career to which she aspired and confirmed for her the appropriateness of her ambition.

C.C. recognises that his view of himself has changed as result of WBL. He now has a more positive self-image and is a more reflective person. The opportunity to apply the knowledge gained on his degree studies has given him a greater sense of purpose in respect of his University course, and his involvement in team working has raised his confidence regarding inter-personal relationships.

C.W. feels that WBL has had a huge impact on her as an individual and that it is one that will last into the future. She refers to it as a "deep experience". Although an activist by nature, she is now aware of the importance of being a reflector. As a result of WBL, she feels that she is now a more reflective person and this has changed, to some degree, her view of herself.

B.M. says that WBL changed her. In particular, it made her aware of what it is to be a member of a team. This was a new experience for her and one which she valued (relational perspective).

A.F. claims that WBL did have an impact on him, especially in respect of the development of human relationship skills. WBL gave him the experience of teamworking, where negotiations led to the allocation of tasks and the sharing of roles and responsibilities. He notes gains in confidence and in his ability to communicate effectively.

J.B.'s WBL experience reminded her of her broader-ability base. It made her realise that she is not just a scientist but that she is also good at other things as well. The experience gave her a greater sense of responsibility for her own learning and confirmed for her that she has the ability to manage effectively her own learning. It also confirmed her career aspiration and gave her a confidence boost regarding her own ability.

### Part-time undergraduates in full-time employment

RD claims that WBL has had a huge impact on him. He has found that much of his new learning has related directly to his new job role. In this respect, he has found the idea of 'reflection' particularly helpful, especially in analysing issues and problems. Certain theories that he has learnt about have also aided his interpretation of internal politics. He feels that the biggest impact has been in the area of communication skills.

ST claims that WBL has changed her view of herself, though she does not say in what ways. It has, according to her, helped her develop both professionally and personally. She says she finds learning through work congenial and claims that it has boosted her self confidence.

DW says that WBL, as study, has had a major impact on her. It has helped her to develop a new job role and it has given her more self confidence and self esteem. She regards access to higher education through WBL an opportunity and as important for

her in her new position. Initially she found the Self Review module hard and lacking a clear structure but, overall, the APEL process has proved empowering. She has found working with a mixed group of professionals beneficial and feels that the shared experience of WBL has aided professional integration and brought about better communications and improved team working. Studying alongside others has also helped her to value more her own skills. She claims to have experienced growth in knowledge and knowledge application and she says that work has also helped her to improve her self image. Her senior manager is a keen advocate of staff development through formal education and persuaded her to undertake the WBL programme. Initially she found it a frightening experience, having been out of education for 17 years, but she is now enjoying it.

WBL has caused JM to take stock of her learning to date. She had not realised the worth, in HE terms, of her learning and skill level. She agrees that the process of Self Review has been affirming and that recent CPD has been motivational and has brought her up-to-date. The flexible nature of WBL, with its direct relevance to her work, she has found beneficial and this is contrasted with Health Service courses which she claims are not relevant.

TM feels that WBL has helped her, especially through giving her confidence after a period when her confidence levels had been low. She claims that reflective practice has become ingrained in her thinking.

CP feels that WBL has made an impact on her and, in particular, the module on Conflict Transformation she regards as especially relevant to the work context. She agrees that WBL places responsibility for learning on the learner but she has had to make adjustments in order to accommodate this style of learning. She also agrees that it is appropriate that power over learning should be in the hands of the learner, though she confesses to being more used to a conventional, teacher-centred, model. The modules she has taken so far appear to have been work related rather than WBL and she has found that they have not integrated fully with her work.

MH claims that WBL has had an impact on her and has caused her to change her view of herself. Overall, University education has proved "a whole new experience" and, discovering that she can cope with it, has boosted her confidence, enabling her to be more assertive. She claims that considerable personal growth has occurred through WBL and she finds that she can apply, in the work situation, the knowledge and skills she has gained. MH says that she now believes in herself much more. She finds WBL to be demanding and has, so far, preferred the taught elements of her programme to project work. Overall, however, WBL has proved a very positive experience.

LF's comments indicate that WBL has made an impact on her. It has presented her with an opportunity she had not expected, namely the opportunity to study for a degree. She found WBL to be well supported by the College and she has been able to evaluate her own progress. She claims to have gained confidence in her own abilities as she has found she can cope with the demands of academic study. She has found that her studies have had immediate application and she has used the module on Conflict Transformation to self evaluate. WBL has been a very positive experience

for LF and one where she feels she has contributed to her own learning. She has been able to apply WBL theories to work and home life.

The opportunity to study through WBL has made MS feel better about herself and indeed proud that she is working for a degree award. She notes that some of the learning she is gaining has immediate application, though she observes that there is sometimes a tension for her between the priorities of work and the opportunity to learn.

JK feels that WBL has had an impact on her especially through the opportunity it has created for her to integrate work and learning. She also recognises a financial benefit in that, because of its relevance to her work, her employer is willing to pay her study fees. JK feels that WBL is helping her towards a possible career development or career change opportunity through the potential she feels it has of assisting her to realise an ambition to teach in adult education.

WBL has given GT confidence in his ability to do his job. He describes his recent learning as building blocks which have been brought together into a structure through his programme of WBL. The module on Self Review, in particular, helped him to pull together his learning to date. GT was surprised at the amount of credit awarded to him for his prior learning. He had considered his learning to be limited and narrowly job specific and agrees that, prior to Self Review, he had generally undervalued his knowledge and abilities. Initially he did not think that he had a sufficiently strong educational background to undertake a degree. His decision to undertake WBL was essentially related to his interest in professional advancement. WBL has enabled him to broaden his study beyond that related to a narrowly defined job role.

# Part-time post-graduates (who have also done full-time undergraduate WBL)

J.Ba. claims that WBL gave her confidence and an increase in her level of knowledge. She points to her original reluctance to undertake WBL but it proved extremely worthwhile, not least because it gave her the confidence to re-enter the job market.

DA feels that WBL has made an impact on him, especially through developing the capability of critical reflection and learning about other WBL theories. He considers that WBL has caused him to change his view of himself and notes that some WBL theories have become ingrained in his thinking.

# Part-time post-graduates (who have also done full-time undergraduate WBL and are in first 18 months of employment)

AS feels that WBL has prompted him to be pro-active and to take responsibility for his own learning. As a result, he has challenged himself more and is more independent as a person. He claims that freedom in his job enables him to be a more self directed and autonomous learner and that, through WBL, he has gained confidence at work and developed self knowledge, thus enabling him to better plan his future directions.

RS explains that she has had three experiences of WBL and feels that she did not benefit a great deal from the first two. She agrees that this had given her a negative attitude towards WBL. However, her present job is offering her a much more positive WBL experience and this has made her realise the importance of WBL. She claims that she learns more through experiential and WBL than she does through sitting in lectures where her span of concentration is spasmodic. In her view, WBL offers a clearer focus for learning but she agrees that, if WBL is to be successful, the employer needs a clear understanding of what it is about.

# Part-time postgraduates in first 18 months of work

LA has become aware of a wider range of learning styles and techniques than she was previously aware of and has been challenged to develop her own range of learning styles. This has enabled her to become more reflective while retaining her preference for practical learning. She is now more aware of how businesses work and she claims that her University education had not prepared her for this.

# Part-time postgraduates

E.E. feels that, in one sense, WBL has not brought about a change in her but, in another sense, change has occurred in respect of inter-personal skills. She now has a greater awareness of the importance of seeing things from different perspectives, carefully examining assumptions and of taking a balanced view.

WBL has made NH stop and think about work practices and interpersonal communication. It has also given her the opportunity to look at issues relevant to the area covered by the Trust.

#### Question 2 responses

Can you briefly outline the knowledge and skills you think you have gained through WBL?

# Full-time undergraduates

- V.A. feels that WBL has helped her to develop her study and research skills, especially in the use of academic learning resources. She gained knowledge through the application of the scientific method to a real situation.
- T.B. speaks of considerable academic subject knowledge acquisition through WBL as well as development of people skills and knowledge/skills gains through application in the work place. She gives an example of collaborative learning and speaks of learning reinforcement (may relate to Q3).
- S.R. refers to gains in academic knowledge and of skill development as a result of WBL (special reference is made to statistics, and its use in real-world situations, and ICT). He has been able to draw on and apply academic knowledge learned in his degree course, and also speaks of gains in knowledge which will feed back into his academic subject.
- R.A. feels that she gained some academic knowledge but the placement mainly brought about skill development. She gained valuable insight into various career options associated with working with children with special needs. Her skills of communication especially in the form of non-verbal communication developed as a result of the placement. (R.A. learnt by observing others and modelling their behaviour applies to Q3.)
- M.D. identifies time management as a key skill she developed as a result of WBL. She learnt to list tasks, prioritise, and assign a time to each task. As a result of this greater efficiency, she found that her motivation improved.
- L.H. has noted an increase in subject knowledge as a result of WBL. She also identified knowledge and skill development in the 'soft' areas and, in particular, identified strategies for time management that will benefit her in the future.
- L.Ha. gained practical skills in relation to animal welfare but also gained some knowledge about animal behaviour (i.e. WBL gave her both theory and practice). She also recognised gains in personal skills through WBL.

Through the Support Programme, KF gained knowledge of WBL theories, including research theories appropriate to the work context, as well as gaining knowledge of the application of those theories in the practical situation of work. She also gained knowledge, through direct experience, of what it is like to be a teacher. The opportunities she was given to engage in teaching, led to much learning about teaching content and methods as well as much learning about herself. Gains in knowledge about pupil control and discipline also resulted in more gains in self knowledge.

C.C. is able to identify a number of areas where gains in knowledge and skills have been made including those from the S.P. and his academic subject. He makes a perceptive observation about the greater awareness he now has of the need to take into account the human dimension when seeking to apply theoretical knowledge.

C.W. found that she gained knowledge through the application of knowledge from her degree course. She found that theory made sense in a practical context. Her communication skills developed through WBL and she made gains in self-knowledge. She speaks of the interrelatedness of knowledge in a work context (a perceptive and apposite comment).

B.M. feels that WBL suited her learning style. She is keen on experiential learning, feeling herself to be a "practical learner". She admits to not learning much from textbooks and conventional academic study. In respect of knowledge and skills gained, she claims to have developed technical skills relating to media and also communication skills. In particular, she used her ability to empathise in order to communicate more effectively with her client group.

A.F. refers to the development of knowledge and skills in both 'hard' and 'soft' areas, including ICT skills and those within his academic subject area of physiology, where he gives a clear description of knowledge gains.

J.B. referred to the development of both subject-specific knowledge and more generic skills gained through WBL. She felt that, in particular, the WBL experience had given her both the confidence and the opportunity to apply learned theory. She also said that she felt good about being able to make a contribution to the workplace, i.e. she had been able to use her knowledge and skills to improve things for her employer.

### Part-time undergraduates in full-time employment

RD identifies gains for him in the area of communication skills where he feels there has been marked development. His skills of negotiation and problem solving have also increased. He says that he now has a greater awareness of the importance of understanding other people's perceptions of things and events if issues and problems are to be resolved effectively, and he relates this to his own development in terms of the reflective process and speaks of how others can be encouraged to engage in this technique.

ST claims to have gained professional knowledge and skill development through WBL. She speaks of developing skills in inter-personal relationships as well as experiencing growth in self knowledge.

DW has gained the ability of critical reflection through undertaking WBL. She has also developed the skill of presentation giving and has found the acquisition of new skills empowering. Her understanding of other people has, she feels, been enhanced through her knowledge about learning styles.

JM claims that WBL has given her confidence. In particular, having found that she can cope with a programme of HE has been a real confidence booster. She claims to

have found variety in her WBL programme and has gained new knowledge and has learnt new concepts which, she finds, can be applied in work and life more generally.

TM claims that she has gained clinical knowledge through WBL by being forced to go beyond some of the superficialities of practice to understand more about underlying theory.

CP claims to be gaining knowledge through WBL and agrees that her interpersonal communications have improved through working and discussing with a mixed group of colleagues.

MH claims that she has developed her communication skills through presentation-giving.

LF's overall growth in confidence, through undertaking WBL, has raised her self esteem. She has gained new knowledge and learnt new skills that have application in her work situation.

MS claims that WBL has enabled her to see things from other perspectives. She is also now more measured in her response to situations. She has developed in computer literacy and has become more discerning about the quality of published research findings. She now values herself and her qualities more as a result of reflection and she finds that she now supports her arguments with evidence. MS agrees that, through WBL, she has become more confident as a person.

JK acknowledges that WBL has helped her to develop her writing skills and she feels that generally the standard of her work is sharper through her WBL programme than it was in the work she did for the Open University and another local University. She recognises that WBL has caused her to pay more attention to the detailed requirements of her job. She also feels that she is able to evaluate her own progress and development in her learning. Publications have resulted directly from JK's WBL project modules and success in this, she feels, has caused her to tighten up even further on her skills capability.

GT claims that WBL has given him knowledge and skills, especially in the area of management. He had found that professional examinations were essentially about rote learning whereas WBL has given him understanding. This new understanding enables him to apply his learning to practical situations. He claims that WBL has widened his interests and made him a more confident manager. GT considers that he is now able to question and to reflect upon his own management decisions. He finds that possession of knowledge gives him confidence and this confidence makes him more approachable and open to multiple perspectives and broader outlooks.

### Part-time postgraduates (who have also done full-time undergraduate WBL)

J.Ba. found that negotiating her own learning agenda provided her with knowledge gains. A personal aspiration was to work towards improving her communication skills, and she was able to do this through WBL. WBL also provided her with the opportunity to gain further experience of working life, and she notes that she was, at times, pushed beyond her comfort zone but realised this was necessary if she was to

progress in the area of personal skills. There were knowledge gains in respect of her academic subject of ICT as well as deployment of 'softer' skills, such as empathy, which she used in preparing the internet training resources. In addition, she identifies project management skills, the use of Gantt charts, and time-management skills as areas where personal and professional improvement was made.

DA talks about having developed the skill of learning to learn. He describes himself as a self-driven learner who has learned how to learn, and he claims to understand something of the way in which he learns. From his own experience, he finds that he can also help others to learn how to learn. (This response relates more to Question 3.)

# <u>Part-time postgraduates (who have also done full-time undergraduate WBL and are in first 18 months of employment)</u>

Through his answer, AS implies that he has developed the ability of learning to learn. He claims to have gained knowledge in methods of learning, information gathering, target-setting, and the assessment of learning through his WBL programme. Specific knowledge has been gained through the Professional Skills module in terms of teamworking, creative thinking and problem-solving.

RS claims to have made gains in terms of growth in her technical skills and business knowledge. She agrees that there have also been gains for her in terms of interpersonal skill development.

# Part-time postgraduates in first 18 months of employment

LA has developed the skill of presentation giving which is relevant to her work. She also feels that she has developed other communication skills relevant to the business context. The course has made her realise the importance of communications if businesses are to run smoothly. She again makes the point that University had not prepared her for entering the workforce and, again, she makes reference to her activist learning style.

#### Part-time postgraduates

E.E. points to gains in academic knowledge and theoretical understanding. She also identifies gains in presentation skills and record keeping. In particular, she feels that her information retrieval systems have improved and that this will lead to greater efficiency on her part in the future. She speaks of self learning in this regard.

NH claims to have gained knowledge and skills in respect of research methods and research topics. She has also increased her knowledge in professional areas already familiar to her.

# **Question 3 responses**

How do you think you acquired this knowledge and these skills? (It might help you if you can think of an incident when you think you learned something new.)

### Full-time undergraduates

- V.A. shows good understanding of the question in her response. She notes that there is no single process but many and varied ways of learning. She claims to have learnt through observation, and from the experience of actually performing a task. Receiving instruction and advice from experts was another source of learning and she found that learning was reinforced by having positive experiences. She also learnt by asking questions and gaining feedback and ideas from others. The technique of brainstorming also featured in her learning as did the teaching or instructing of others.
- T.B. speaks of the importance of motivation in learning, of being interested in the subject and having a goal (e.g. a qualification). She refers to learning by repetition and she found that theory reinforced application/practice and vice versa. Some of her learning occurred as a result of direct teaching, with the use of conventional as well as less conventional methods. In the workplace, she learnt through experience and through the novelty of new experiences. Learning occurred also in the context of receiving feedback from others, and she learnt through observation, especially through observing the behaviour of others.
- S.R. was aware that new learning was taking place but did not feel that there were any moments when he was stopped in his tracks by the realisation of new learning. He learnt some theory through the SP, and learnt through receiving instruction, through observation of others' working practices, through self-knowledge gained through the SP, and using trial and error. Some learning was, he felt, by intuition and, at other times, he deliberately taught himself a new skill. Although he was made aware of the availability of supporting literature, he did not have recourse to it, preferring to ask questions of his expert employer.
- R.A. recognises that some of her learning resulted from observing others and modelling their behaviour but also feels that she learned as much through trial and error, and learning through direct experience. She refers to the development of practical knowledge relevant to the placement. Although she did not read much, she recognises literature as an important source of information, and raises the difficulty of finding time to develop theoretical knowledge in a demanding placement.
- M.D. learnt through teaching given as part of the SP, including use of the Gantt chart, which she felt lacked specificity. She also read relevant literature and used the skill of observation. From observation, she undertook an analysis of the way in which her employers managed their time, though found that they were not receptive to her findings (potentially more learning here about how to handle sensitive situations).
- L.H. referred to the work on learning styles introduced in the SP and spoke of the knowledge about herself that she has gained from this. Having identified herself as an activist, she became more aware of the value of reflection and claims that, as a result, she has learnt to think before acting. She feels that this will now apply in other areas

of her life. While L.H. accepts the danger of the pigeonholing effect of the learning styles questionnaire, she sees the potential of it as a means of identifying areas for self-development.

L.Ha. gained some knowledge by receiving instruction from workplace colleagues. She also feels that she used common sense and intuition in making decisions about work practices and in learning to work independently. She makes reference to the transferability of learning from one situation to another. In terms of the development of personal responsibilities, she feels that self-discipline and learning from experience are key.

KF learnt through "hands on" experience and through being presented with a challenge where she had to apply herself to achieve a specific goal. She also learnt through the technique of evaluation of her own performance and the performances of others, and she used the method of evaluation to inform her future practise. Undertaking self evaluation was a new experience for her. KF feels that the type of placement she was in (a school) demanded that she learn through a process of critical reflection. Learning also occurred for her through the observation of others' performance, but she tried not to model herself on others in case this stifled the development of her own individual style.

CC learnt by drawing on and extending previous knowledge and experience. He consulted text books and used other non-human resources (e.g. the web). He also learnt by drawing on knowledge already existing in the workplace (asking questions and observing) and through trial and error (spoke particularly of "hands on" experience). Some self knowledge was acquired through the S.P. (e.g. learning styles) and some personal skills were developed through observation of others' behaviour patterns. He became particularly aware of the need for sensitivity in interpersonal relationships. (N.B. response to Q5 adds "modelling" to 'how' he learned (i.e. adopting the methods of others.)

C.W. identified a number of ways in which she had acquired knowledge and skills. She did so through observation and asking questions of those she observed. In particular, from her interest in professional and social relationships, she wanted to find out if the image people projected was the one they intended to project. Through watching the behaviour of others, she became more conscious of her own behaviour which, in turn, brought about self-knowledge. She used the technique of 'modelling' by copying the behaviour of someone she thought to be professionally successful. She also gained knowledge through reading relevant literature, and she learnt that policies do not always reflect the practice and vice versa.

B.M. learnt by observation and 'modelling' the behaviour and working patterns of others. Learning resulted from hands-on experience. She also learnt to accept criticism from the person who acted as her mentor and coach.

A.F. refers to practice as a means of learning. He notes that reading and studying text books and test manuals was crucial but it was necessary to repeat procedures in order to be confident of undertaking them correctly (work involved was to do with the health screening of patients). In working with computers, he refers to trial and error learning techniques.

Initially J.B. seemed to find this question hard to answer. She did, however, with prompting, refer to the use of literature and web-based information. She said that she had also learned through observation and talking with others. In respect of the latter, she felt strongly that collaborative learning (in this case, the mutual sharing of insights and understanding with others), had been an important part of the overall learning experience for her.

### Part-time undergraduates in full-time employment

RD claims that his ability to learn is directly related to the interest level he has in the subject. If he has a keen interest in something he will be motivated to learn about it. He learns through reading and also through talking with others and observing their behaviours/performances. He has the ability to learn and retain theory if it is relevant to practice. Reflective learning appeals to him because he can see its immediate relevance to the workplace.

ST requires some prompting throughout this question. She suggests that confidence in one's own abilities is a pre-requisite for successful learning. Her preference is to learn in practical ways and she suggests that she is not so comfortable with book learning, though will undertake reading if that is the best way to access knowledge. Theory only really makes sense to her in the context of practice.

DW has increased her understanding of how she herself learns through being aware of the range of learning styles and learning preferences. She claims to prefer direct contact with a tutor and regards herself as learning best through "hands on" experience.

Prior to undertaking WBL, JM claims to have thought of herself as a practical learner. Through her course, she now appreciates the importance of practice being grounded in research. She now accepts that she must study to be an effective practitioner and finds helpful the realisation that knowledge is needed to back-up practice. As a result of this realisation, she now spends more time learning through reading.

TM has found that her programme of WBL requires her to read more than she has done previously and she learns through reading. However, she considers herself to be a practical learner, learning through "hands-on" experience and through observation of others

CP has learnt through reading, discussion work and writing, finding that a combination of all three reinforces learning for her. She agrees that she is a 'handson', practical, learner.

MH finds that she learns through observation of others and she considers this to be her preferred learning style. She learns best when someone purposefully shows her how to do something and she considers this to be an appropriate teaching/learning method for WBL.

LF claims to learn best by putting ideas into practice. (She provides an example related to Question 2 when she says how she has learnt to develop an argument in an

essay.) She also learns through reading but finds theory unrelated to practice difficult to remember and she grasps concepts more easily when material is presented to her in small chunks. She agrees that she learns in a practical and active way and is motivated when she gains immediate feedback. Frequent contact with a tutor is important to her and it is through receiving positive feedback that she gains the strength to carry on. She says that she has amazed herself by her own progress.

MS claims that she learns best through discussion. She finds attempting to learn through reading alone quite difficult. For her, reading, to be effective, needs to be reinforced by discussion. Only then does she feel that she learns from it. She values the sharing of ideas and information and notes how, in her experience, some learners are reluctant to do this. MS agrees that she is principally an active learner who learns through observation and hands-on experience. MS claims that she learns best through discussion. She finds attempting to learn through reading alone quite difficult. For her, reading, to be effective, needs to be reinforced by discussion. Only then does she feel that she learns from it. She values the sharing of ideas and information and notes how, in her experience, some learners are reluctant to do this. MS agrees that she is principally an active learner who learns through observation and hands-on experience.

JK claims that she learns best through trial and error. She also learns through reading and has made use of a reflective cycle to aid her learning. She says that she does not find directive learning at all appealing and agrees that she enjoys engaging in the interplay between theory and practice. Her success in publication of her work is clearly highly motivating in terms of her learning and she makes further reference to the publications which have emerged from her WBL projects.

GT says that he has learnt through prescribed reading. He finds that if knowledge has practical application then greater learning benefit is derived from it. His understanding is enhanced, he feels, when knowledge is used in action. GT identifies a number of WBL theories which he has used practically and so learnt from. He reiterates the point that knowledge makes sense to him when he can see the practical application of it. He also claims to have had his learning style broadened through gaining theoretical knowledge as part of his WBL programme. This enables him to adapt his learning to the extent that he can now first theorise before practical application or engage first in practice leading to theoretical consideration. He contrasts this with his previous experience of learning through observation, demonstration and hands-on experience, though recognises that this way of learning is still something of a preference. He claims that he is now capable of reflective practice and he can see the distance he has travelled in terms of broadening his outlook.

# Part-time postgraduates (who have also done full-time undergraduate WBL)

J.Ba. learnt in a variety of ways, including through trial and error. She refers to the SP and to her use of the Kolb learning cycle. She makes reference to learning through experience and notes that she also learnt through observation of others and through the technique of 'modelling' behaviour on those regarded as successful in their field. Some use was also made of literature as a means of learning.

DA thinks of himself as a self-driven learner who has found a way of structuring his own learning – he has learnt how to learn. Initially he was a practical learner – a doer

- but he realised there was an imbalance in that his theoretical understanding was weak. He, thus, forcibly changed his learning style in order to accommodate theoretical perspectives. He can now start with theory, and values theory, but constantly seeks its practical application.

# Part-time postgraduates (who have also done full-time undergraduate WBL and are in first 18 months of employment)

AS finds learning more manageable when an overview of the process is made explicit and when the goal of the learning to be achieved is clearly defined. The learning can then be broken down into manageable proportions which can be monitored and evaluated. He finds the setting of challenging targets better done collaboratively, thus ensuring that they are realistic and achievable. AS identifies himself as a practical learner but notes that his degree was balanced with more theoretical studies. He feels that this broader study base both helps and hinders him in terms of professional development. He agrees that such a learning profile makes him a good team player and feels that his breadth of knowledge might be more important to him than specific technical knowledge alone given that he hopes to progress to a management position.

RS identifies herself as an activist in terms of learning style. She learns best through a "hands-on", trial and error, approach and also through observation and reflection. She agrees that she accesses some learning through reading.

# Part-time postgraduates in first 18 months of employment

LA claims that she has learnt through a "hands on" approach. She speaks of practical learning and learning through trial and error. She also learns through reading journals and text books and through recording information and thoughts in a learning log. Reference is also made to learning from others, especially as a result of asking questions and she has learnt to tap into the pool of tacit knowledge which exists in the workplace. At University she found lectures impersonal and about information gathering. She claims that she starts learning when she is able to say to someone that she doesn't understand something and then has it explained to her.

### Part-time postgraduates

E.E. feels that she acquired knowledge in a variety of ways both conventional (e.g. reading books and journals, use of internet, etc.) and unconventional. She sees the interaction of knowledge with reflection on experience as one way in which she has learnt. Learning has also occurred for her in the process of writing or presenting an argument, or justifying her position to self or others. She points to the multiple ways of information gathering and of making sense of information. She also speaks of taking a holistic view of the work situation and of seeing theory in the context of what is going on in the workplace. WBL is referred to by E.E. as "unconventional learning", of learning in society where theory informs practice and vice versa.

NH says that she learns through reading and then discussing related issues with colleagues. She agrees that she can absorb theory and then consider its application and, since promotion, her job now requires her to do precisely this. She also agrees that she learns through practice but sees this as part of the role of a nurse.

# Question 4 responses

In what ways did you deliberately set out to learn something new?

# Full-time undergraduates

V.A. provided an interesting response to the question. Her WBL placement created a new area of work for her and she aimed to find a framework for study that was new which she could then apply elsewhere. She refers to Bloom's affective domain and her concern to change her attitude to life to a more positive one. Her thinking was that to look at a new topic in a new way and to establish new thought processes would impact positively on her and her work. She acknowledges this is essentially attitudinal. Overall her view is that she took a pro-active stance towards her own learning, creating learning opportunities for herself.

T.B. had to learn and develop new skills through WBL. This was achieved through observation, requesting demonstration from an expert, and collaborative learning in that each would take a turn to practice the skill and then receive peer feedback (relational perspective).

S.R. spoke of his learning agenda being driven principally by the needs of his project. He did plan his learning beforehand, and had found that useful, but also found that he needed to change his Learning Outcomes once in placement in order to reflect more accurately his actual learning needs. He spoke of the need to be receptive to new learning opportunities. He felt that the SP had been helpful in planning learning, especially in the area of personal development and, overall, felt the SP was to be valued as part of the WBL experience.

R.A. feels that the whole experience was new. She is of the view that the skills she developed were basic (yet they were of crucial importance in the placement). Her attitude was to learn by doing and she seems to have felt it important to be able to turn her hand to all of the tasks that had to be undertaken.

M.D. did not find the LOs which she negotiated for herself that relevant once in the workplace. In order to access new learning in her academic subject area, she asked questions of her employer and workplace colleagues. She claims to have gained self-knowledge through periodic self-assessment and feels that change in herself in this respect was subtle and gradual rather than incremental.

L.H. identified communication skills, especially listening skills, as an example of identifying something new to learn. She undertook some research on 'concentration' in order to aid her learning in this respect.

L.Ha. identifies a new learning experience and it appears that success in this raised her self-esteem and her confidence.

KF's planned learning was focused on matters to do with teaching (e.g. lesson planning, lesson evaluation, teaching styles and pupil control). Her unplanned learning included learning gained through the opportunity to plan, teach and evaluate some lessons herself, and developments in her knowledge and understanding of ICT.

C.C. did not give a clear answer to this question. He was more conscious of his learning being driven by the needs of the project. He was clear about growth in his understanding of the relational dimension to WBL (especially people management skills, team working and delegation of tasks.

C.W. refers to the negotiated learning outcomes which reflect her planned learning. In particular, she focused on time management and the use of the Gantt chart which, she considers, will be useful to her in the future. A deliberate intention was to gain a whole experience of work and the workplace and she found that, through WBL, she learnt about what is involved in a particular job as well as learning about herself.

B.M. says that she deliberately planned to learn technical skills through WBL.

A.F. intended to increase his knowledge and understanding of ICT which he feels that he did successfully. Although he set LOs, and monitored his progress against them, he used them mainly in the context of assessment.

J.B. did not provide a clear answer to the question. She made reference to advanced planning of learning and drawing on previous knowledge and experience, as well as accessing information through literature.

### Part-time undergraduates in full-time employment

RD relates his example of new learning to a new job opportunity. He was required to learn the skill of questionnaire design. He learnt this skill from studying previous questionnaires that had been used to elicit similar information. The experience saw further application of his reflective capabilities as well as a growth in confidence in his own abilities.

ST says that she has not acquired much new clinical knowledge but she has achieved new learning in respect of inter-personal skills. She finds that work based projects engender much new learning but are also time consuming.

Recent work promotion, coinciding with her engagement with WBL, means that much of her learning is new and has presented DW with a major learning challenge. She is deliberately setting out to come to terms with the requirements of higher education.

JM claims to have gained new learning through planning her research module. She has found the process of planning research, with a view to its potential application, an illuminating one. The new knowledge she has gained has helped her to be more discriminating concerning the matter of the quality of research which finds its way into publications. She notes that this power of discrimination is particularly important if research is used to inform practice. JM has some ambition to publish her own research findings in the future.

TM identifies clinical up-dating as planned learning. She now makes use of the internet to gather information and to gain knowledge as well as reading text books and journals.

CP is not clear on what she has learnt that is new but she notes that her learning has been reinforced through knowledge application and she seems to suggest that the interplay between theory and practice has brought about new learning for her. The module on Conflict Transformation has given her new skills that relate to work. She refers to this in the context of a culture shift within her organisation, with the implication that the module has helped her to deal with this.

MH learnt the skill of presenting by observing other people giving presentations, by gaining information from text books on the subject, and through practising the skill, and gaining feedback from peers. She feels a sense of achievement and pride in herself for succeeding in giving a well-received presentation.

When learning something new, LF likes to have it explained to her and then be left to get on with it herself. She is motivated to learn at her own pace and she likes to teach herself.

MS does not really engage with the question. Initially she makes the observation that, for many, writing about themselves (as required in the Self Review module) does not come easily. She then refers to the new learning (especially in respect of her own modes of behaviour) she has achieved through the module on Conflict Transformation. In commenting on this, she implies that she developed skills in dealing with conflict through application and practice. She agrees that she has gained self knowledge through WBL.

JK makes the point that her choice of resources would depend on the nature of the new learning to be achieved. Where appropriate, she would make use of the library and the internet to gather information, and she would glean further information and insights from colleagues and other experts in the relevant field of enquiry.

GT says that, when learning something new, he would go first to expert sources before using the internet as a means of gathering information. He implies that learning is generated for him through the assimilation and practical application of knowledge.

### Part-time postgraduates (who have also done full-time undergraduate WBL)

J.Ba. realised that she needed to gain confidence in her own abilities in order to be able to offer training to others. She deliberately set out to improve her confidence levels.

DA explains that learning new things is part of his job. His starting point is practical need. He first undertakes research in order to gather information about the underpinning theory, and he attempts to find out if similar applications of theory have been trialled elsewhere. He then creates his own practical approach. DA considers that he has changed in his approach to problem-solving largely as a result of undertaking WBL. It has reinforced for him the importance of theory.

# <u>Part-time postgraduates (who have also done full-time undergraduate WBL and are in first 18 months of employment)</u>

AS says that his University course did not provide him with knowledge relevant to his work but it did instil in him methods of learning. He claims to learn by first identifying the area of learning to be covered then, through talking with others, through reading documents and books, a broad understanding of the learning is gained and it is put in context. He then focuses in on the specific area of learning needed in order to achieve depth of understanding.

RS learns new ICT functions through reading manuals and trial and error techniques. She also consults experts via telephone help-lines.

# Part-time postgraduates in first 18 months of employment

LA has found that her new job, together with her programme of WBL, has put her on a steep learning curve. She has acquired new learning in respect of sound business practices, especially inter-personal skills and record-keeping.

# Part-time postgraduates

E.E. believes that aiming to learn something new is a necessity for an informed mind. She was not able to identify a particular example of new learning, though she speaks of gaining self-knowledge as important for her. She wanted any new learning to be relevant to her personal and professional life and deliberately chose a programme of WBL as it gave her the ability to structure her own learning pathway, which was also, in a sense, new learning for her. E.E. believes that aiming to learn something new is a necessity for an informed mind. She was not able to identify a particular example of new learning, though she speaks of gaining self-knowledge as important for her. She wanted any new learning to be relevant to her personal and professional life and deliberately chose a programme of WBL as it gave her the ability to structure her own learning pathway, which was also, in a sense, new learning for her.

When faced with learning something new, NH says that she undertakes relevant reading from magazines, journals, books, as well as by searching the internet and discussing issues with colleagues. She will also seek to examine the working practices of similar work-sites to discover what can be learned from them and to look to possible application or adaptation in her own workplace.

# Question 5 responses

Can you give an example of something you learned which was unplanned?

# Full-time undergraduates

The example given is in the area of self-awareness. V.A. had not previously realised her negativity towards reflective learning which appears to have built up as a result of personal life traumas and a previous career. She speaks of her reluctance to engage in reflective learning as a result of this but, nevertheless, the implication is that she has reflected on her reasons and learnt something, albeit unplanned, about herself.

T.B. has learnt to appreciate and value her ability to organise herself. Through WBL she has discovered that she has a reservoir of organisational skills that she did not previously realise that she had (unconscious competence made conscious).

S.R. learnt that work can bring about enjoyment, which seems to be contrary to his other experiences of work. He refers to unplanned learning derived from the SP, with the implication that informal delivery was also more enjoyable than he had anticipated.

Answer implies that nothing could have prepared RA for the experience. She is prompted regarding gains in self-knowledge, and her response indicates that her self esteem has probably grown.

M.D. gained unplanned learning about team management and leadership by observing and analysing the behaviour of others and forming a view as to how she would behave in similar situations. She checked out this view with others to see if her proposed alternatives were considered reasonable.

Although L.H. does not deal directly with this question, she does focus on the way in which WBL has helped her to realise and appreciate/value the skills and abilities she already has. She speaks of gaining self-knowledge through talking issues through with a friend.

The example of unplanned learning that L.Ha. gives is that of motivation. She claims that she learnt to motivate herself; having become de-motivated by College work, WBL proved motivational.

KF was required to prepare an interactive lesson through the use of powerpoint. This required her to engage in research for lesson content and to develop skills in the use of powerpoint. She points again to the motivational effect that WBL had on her and implies that it raised her self esteem and her self confidence.

C.C. was able to identify some areas of unplanned for learning which he only became aware of as learning after the learning had occurred (implying a sort of unconscious learning). He spoke of learning driven by need (i.e. he did not know what he had to learn prior to engagement with the project).

C.W.'s unplanned learning included much about people and communication skills. Again, she learnt much of this through observation. She also learnt a lot that was unplanned about teaching and teaching styles. The absence of a colleague gave her the opportunity to conduct a lesson through which she learnt a great deal about herself. Her success in this activity raised her self esteem through her possession of relevant subject knowledge, her ability to control a situation, and the trust that had been placed in her.

B.M. feels that her learning through participating in team work was unplanned learning. She also gained a much greater insight into the workings of local radio more generally than she had expected, including the opportunity to perform live. Another example of unplanned learning was developing and seeing the value of net-working.

A.F. refers to the area of oral communication skills where he recognises, with hindsight, that he may have misjudged his comments to individuals over what were essentially sensitive issues. He claims that he has learnt to think more before speaking as a result of this experience.

J.B. gave an example of unplanned learning and raised the issue of accessing academic credit for it. The implication of J.B.'s response is that this particular example of unplanned learning (in the area of 'soft' skills) was driven by need.

# Part-time undergraduates in full-time employment

RD points to self learning as the most significant area of unplanned learning which has occurred for him during his WBL programme.

ST is unable to identify any particular examples of unplanned learning but speaks instead of her own personal development occurring in a more holistic way through WBL.

DW feels that much of her recent learning has been unplanned, given that she has taken on a new job role and has begun to engage with HE for the first time. These conditions have presented her with "totally new experiences".

JM claims that unplanned for learning occurred in relation to her application to the Ethics Board. She says that she is learning all the while.

TM cites her use of the internet and the skills she gained generally in ICT as unplanned for learning. Through the WBL Methods & Processes module, she also learnt some social psychology that she had not expected to learn.

CP is initially unclear as to what the question is asking of her (this is perhaps partly to do with the fact that she has not yet taken negotiated project modules). She does, however, identify a current project on reflective practice which appears to be yielding new and unplanned for learning opportunities both for her and the other project participants.

MH gives the example of learning about critical reflection, which she had not expected to do. For her this was unplanned learning, though she now realises its importance in WBL.

Unplanned learning for LF included having to give a presentation. She found that she was good at presenting and enjoyed the experience. She also gained new and unplanned for learning when she had to deal with a difficult colleague and manage a problematic situation. LF implies that she has learnt the value of group enquiry/learning and the benefits that come from it in terms of the sharing of information. (She says that she learns through contact with others. Question 3 refers.) She found the possession of knowledge and the sharing of that knowledge with others an empowering experience.

MS' unplanned for learning includes the development of computing skills and she now finds that she has an appetite for learning in this area. She implies that new and unplanned learning has occurred for her in respect of the type of reflective learning encouraged in WBL and suggests that much unplanned and incidental learning is recognised through reflection of this type. She agrees that the skill of reflection enables you to analyse situations and that, through reflection, a more balanced view of a situation can emerge.

JK gained unexpected and unplanned for learning about herself through the Self Review module. Under guidance, she used the techniques of NLP to help her to overcome a difficulty.

GT feels that most of his recent learning has been new and, therefore, to an extent, unplanned. He describes it as a process of realisation rather than unplanned learning. He agrees that WBL has brought about for him much self knowledge that was unplanned. His view is that he had previously undervalued his own learning and he has now arrived at the realisation that he has developed as a person. He is also now reassured that he has the ability to undertake HE level study which previously he had doubted. But he admits to having found the process of self learning an uncomfortable one.

#### Part-time postgraduates (who have also done full-time undergraduate WBL)

J.Ba. identifies an incident where she was able to develop her inter-personal skills. In a situation of potential conflict, she found a way of dealing with the situation where conflict was avoided and where no one was placed in the position of losing face. She felt this was a definite development in the area of her professional skills.

DA feels that work yields a multiplicity of unplanned for learning opportunities and this learning can be best capitalised on if you have a framework for learning. He cites the example of an entirely practical WBL project which provided him with much unplanned learning in the area of interpersonal communications and interpersonal relationships.

# Part-time postgraduates (who have also done full-time undergraduate WBL and are in first 18 months of employment)

Unplanned learning occurred for AS in the context of meetings and conference calls. He learnt through observation and reflection, and talking with colleagues about skills of diplomacy, negotiation, including what and what not to disclose.

RS explains that unplanned learning occurs for her quite frequently in respect of ICT functions.

# Part-time postgraduates in first 18 months of employment

New and unplanned for learning occurred for LA in two areas: IT and statistics. In IT she was involved in setting up an email system, servers and learning new software packages. In statistics she was required to develop her competence for a work project.

# Part-time postgraduates

For EE Question 5 appears to have been omitted.

NH suspects that a multiplicity of unplanned learning has occurred for her. The example of unplanned learning she proffers occurred through the application of theory to a real life situation.

# Question 6 responses

The idea of critical reflection was introduced in the Support Programme. Can you give an example of critical reflection in which you engaged during the placement? To what extent has reflecting critically changed the way you view (a) work; (b) yourself; (c) the world generally?

# Full-time undergraduates

V.A.'s answer does not seem to relate well to the question on critical reflection. Nevertheless, she speaks of WBL as having helped her to make a decision about a career change. She feels that her view of herself has changed in that she now has a more positive attitude towards reflective learning (how that has changed her view of herself is not explained). She also suggests that her view of the world and her attitude towards it has changed in that she now tries to adopt a more positive outlook to situations and to world affairs.

T.B.'s answer does not indicate whether she has an understanding of what is involved in the process of critical reflection. She claims that, given her previous exposure to work, WBL has not changed her view of work. She does, however, say that WBL has changed her view of herself in respect of her people skills. Where previously she had thought of herself as possessing excellent people skills, she now realises, through observing others in the work place, that what she has is far exceeded by some. The importance of motivation is recognised as a factor in people skills. Finally, she does not feel that critical reflection has caused her to look differently at the world.

S.R. admits to not being sure what critical reflection is. He notes that he kept a learning log during the placement. His reference to risk-taking and the way in which that has taught him about himself suggests some critical self-reflection, but his response really contains very little that relates to the process of critical reflection. He notes that WBL has given him confidence in future employment.

R.A.'s response suggests that she has done little by way of critical reflection. She shows a clear concern over universal questions about life and its purpose, but reflection would not appear to have been undertaken as a conscious process. She is particularly aware of, and concerned about, society's attitude to disabled people. Overall, her answer indicates a lack of engagement with the question yet there is a deep concern evident regarding the issues. In respect of work, she identifies job satisfaction as crucial.

It is not apparent from her answer that M.D. has a clear understanding of what is involved in critical reflection, though she does make comment that could be relevant to the process of reflection. She notes that WBL has changed her perspective on work in the respect that the ideal of perfection may be a distraction, causing some not to strive harder because the ideal seems unattainable. Her ability to handle the tasks that were presented to her helped her gain in confidence. She recognises the importance of people skills in the workplace, especially having appropriate attitudes and developing refined listening skills. M.D. considers that being listened to can be motivating whereas not being listened to is demotivating. She found that her self

esteem was raised when she realised the adequacy of her own abilities for the work she was required to do.

L.H.'s first example is not to do with critical reflection. She then refers to the way in which critical reflection has helped her with the identification of areas in her personal life for self-improvement. She contrasts WBL favourably with her school work experience, noting that the former has taught her more about herself. From observation and reflection, she identifies the importance of good human relationships as a key workplace requirement, noting that relationships may need to be worked at to be successful. Overall, L.H.'s view is that critical reflection has had a positive effect on her and she makes reference to its transferability and the use she now makes of critical reflection in her personal life.

L.Ha. did not really engage with this question. She claims that she learnt to work independently and to accept more responsibility for her own actions. She gained in confidence and motivation and feels now that she is better at time management. She also developed more of a view of herself as an adult, as a result of her experience of meeting a wider range of people and this, she claims, influenced her view of the world (though she did not say in what way).

KF refers to the way in which reflection on lesson delivery helped her to gauge the future pace of lessons and to be more specific about the focus of her lessons. She refers to finding the Support Programme useful once engaged in the placement. She speaks of valuing the discipline of work and of how WBL engendered in her an enthusiasm for work. KF claims that WBL has changed her view of herself and, in particular, of how it has given her confidence that she can achieve in her chosen career. Although she is not sure if WBL has changed her view of the world, she is, however, aware of the way in which it has raised her awareness of the world of business. She speaks of the way in which WBL has brought to consciousness critical reflection as a skill which she uses in the context of her academic discipline (Human Geography). She concurs with the view that critical reflection is something of an intuitive process.

C.C. shows a basic understanding of critical reflection in his response. In particular, he shows some awareness of how his powers of critical self-reflection have developed. He is aware of the importance of "how others see us" and suggests a less self-centred view through his awareness of the need to consider other people and their motivations. He claims that WBL has also raised his awareness of the importance of taking into account the wider influence of world affairs.

C.W. observed that she had reflected critically on the lack of critical reflection in the workplace. She suspected that this may be through lack of time and the pressure of other priorities. These observations made her aware of her own need to be more critically reflective. She claims to make use of the review cycle but admits to not being sufficiently critically reflective, and she notes the reluctance of some people to criticise themselves or to accept constructive criticism from others. In considering her experience, she shows a reflective approach on some of the problems endemic in teaching. She also shows awareness of global problems and of having thought about them.

B.M. does not really address the matter of critical reflection in her response. She does point to the importance of thinking before speaking as a crucial skill for live radio. This presumably requires a kind of reflection but at great speed. She claims to have used the Kolb learning cycle as a means of ensuring that she did reflect on her own performance. She does not feel that learning to critically reflect has changed her view of the world.

A.F. appears to be unclear as to what is meant by critical reflection and there is no engagement with the question. He notes that he impressed himself with his time management and felt that the main motivation for this was his membership of a team. He spoke of his concern not to let others down. Although he found the experience of work useful, his working pattern was not sufficiently strictly ordered for him to have really experienced the discipline of work. Overall, his response is hardly relevant at all to critical reflection.

J.B. considers that learning to be critically reflective has changed the way she views the world and has brought about a greater awareness of the relational perspective and a greater sensitivity regarding other people (their perspectives, needs, etc). She makes the more general point concerning the way in which WBL places responsibility for own learning on the individual.

### Part-time undergraduates in full-time employment

RD offers a lengthy, and often irrelevant, response to this question. It is not clear that he has a deep understanding of the process of critical reflection. He claims that his outlook on work has changed as a result of developing reflective capabilities. He also claims that reflection has made him more aware of the way in which decisions, which change working practices, can impact on others. Such decisions, he feels, are more effective when made democratically. RD claims that reflection has enabled him to develop the skill of empathy. He sees the relevance of using reflection as a way of making decisions for and about the future. With prompting, he claims to be able to look at world events and situations from a range of perspectives.

ST has learnt much through subjecting her experience to critical reflection. She claims to see things from a range of perspectives and says that this has changed her as a person, though she does not elaborate by saying in what ways. Reflective capabilities have given her confidence and given her a different outlook on work. It is not clear from her response that she has a grasp of what is entailed in critical self-reflection. Although she claims that critical reflection has changed the way she views the world, she does not say in what ways.

DW's response indicates that she is aware of the potential of reflection for learning, though it is not clear that she understands fully what is implied by critical reflection. She gives as an example of critical reflection, her experiences of inducting new staff into post. Through critical reflection she claims to appreciate some of the subtleties needed of the trainer and she says that it has enabled her to take a more incremental view of staff training/induction. She alleges that WBL has changed her view of work, though the example she provides is about changing her working practices. In respect of self, she feels that reflecting critically has provided her with important self

knowledge, and she regards it as important not to take things which happen in the wider world at face value but to take a balanced view on issues.

JM claims that critical reflection is a professional competence and, therefore, a requirement in nursing. She considers it to be a demanding and challenging skill but one that is beneficial and helpful within the professional context though, because of what she considers to be its personal nature, critical reflection is difficult to communicate to others. JM claims to critically self reflect, though gives no example of this. She agrees that critical reflection broadens one's thinking beyond that of one perspective, enabling issues to be viewed within a broader context. The process of critical reflection is one that can become ingrained with use in JM's view. Although it relates to past issues and events, she considers that critical reflection is important in terms of future planning.

It was hard to keep the interviewee focused on critical reflection and she appears to have only a superficial understanding of it. She claims that critical reflection prevents you from being presumptuous and from taking things for granted. (She says that she has learnt from colleagues {question 3} and that she has developed knowledge and skills through studying the module of Conflict Transformation, and she sees the potential for application of this new understanding {question 2}.) Her view is that critical reflection enables you to analyse situations and to think for yourself.

CP begins by recalling an example of new and unplanned learning. This was in the area of ICT (Question 5 refers). She makes reference to the use of different models designed to elicit reflective learning and she agrees that the process of critical reflection is an important way of analysing situations in a structured way or of providing a framework for thinking through a situation. She claims that critical reflection, in the context of WBL, has taught her to reflect in a *constructive* way, and also suggests that it has enabled her to approach work in a more thoughtful manner. She feels that she does engage in critical self reflection but it is unclear as to whether this goes beyond a superficial level and, in the wider context, she agrees that the process of critical reflection ensures that things are not just dealt with at face value.

MH does not always make clear whether she is relating her answer to critical reflection or to WBL more generally or to some aspect of work related learning that she has undertaken as part of her programme of study. In this latter respect, she has clearly gained knowledge and skills through study of the module on Conflict Transformation. She claims to be aware of something of the process involved in critical reflection and claims that this awareness has changed her view of work. She now recognises the value of her job and is more motivated in relation to her work role. WBL and/or critical reflection have given her greater confidence and interest in her work and have brought about change in the way she views herself, which is now much more positive. She claims that she is now more self assured and says that, through critical reflection, she is now more aware of the assumptions and judgments we so easily make about other people.

LF claims to have used critical reflection to help her to deal with a situation of workplace conflict. She gained background knowledge for this through a module on Conflict Transformation which she had taken as part of her course. She claims that she makes use of the reflective learning cycle and there is recognition of other WBL

theories in her comment. The reflective process has clearly had an impact on the way in which she handles situations, and the ability to deal with a situation using reflective practice gave her a feeling of empowerment. LF claims to now apply critical reflection to her work, and learning the skill has brought about change in the way she views herself, which is now in a much more positive light. She feels that the ability to reflect critically has influenced her view of world events, and she claims now to view things from multiple perspectives and no longer takes things at face value or trusts media reports. It is clear that she is willing to act on the basis of her beliefs and values.

MS claims that developing her critically reflective capabilities has brought about a change in the way she views work. She finds that, as a result of learning gained through the module on Conflict Transformation, and through the application of the process of critical reflection, she is now better able to take control of situations. She claims that critical self-reflection has given her more confidence as a professional and that, through critical self-reflection, plus the opportunity to undertake a WBL project on curriculum development in the area of her work role, she now places a higher value on her role and the work she does. In more general terms, MS claims that critical reflection and the learning she has gained through the module on Conflict Transformation, enables her to see things from more than one perspective and to arrive at more balanced viewpoints. While this does not prevent her ultimately from holding her own views, she claims to have developed her listening skills as a result of her new learning in these areas.

JK suggests that critical reflection brings a new perspective to problem solving, though she makes the observation that critical reflection, in her view, is only effective when there are things of substance to reflect on. In other words, if all goes well with a project, there is not as much purpose to critical reflection as when things go wrong. She claims to use critical reflection to examine incidents of significance which occur outside work and that impinge on home and family life. In respect of engagement with wider issues, JK says that she is selective in what she chooses to consider, but implies that she does use critically reflective capabilities when engaging with those issues that do receive her attention.

GT implies that critical reflection presupposes something to reflect on. In his case, he has engaged in critical reflection in relation to knowledge recently acquired. He considers critical reflection to be a natural process and he claims to use it, in the context of his work, to review outcomes. This, he says, is a routine part of his job and one that is done by the team. His hope is that, in reviewing an incident, participants will review and reflect on their own performance. GT finds that his self reflections tend not to lead to positive outcomes and he attributes this to his personality and his unwillingness to take appropriate action. He claims that he does reflect critically on wider issues.

# Part-time postgraduates (who have also done full-time undergraduate WBL)

J.Ba. admits to having not been certain at the outset of WBL as to what is entailed in critical reflection. She sought help to rectify this gap in knowledge/understanding. She sees critical reflection as a method of personal and professional improvement. An example is given where she reflected on a work situation and what she learned

from that. Overall she does not think that critical reflection has changed her view of work. She sees critical reflection as something of an intuitive process and feels that she has always been reflective. But she seems to align this with self-criticism, which appears to have had a limiting influence on her development. Although she does reflect on world events, she is not certain that this is more or less as a result of engaging in critical reflection as part of WBL. She admits to sometimes being brought to the point of wanting to take action in respect of world issues. On balance, she feels it is likely that being required to reflect critically on WBL issues has influenced other areas of her life and work.

DA claims that, through critical reflection, he has been able to evaluate a situation of conflict in the work place, and that critical reflection has enabled him to take a more balanced view of the situation than he might otherwise have done. He feels that the process of critical reflection has become ingrained in his own thinking and he considers it so important that he attempts to pass on the skill of critical reflection and of self-understanding to his work colleagues. His view is that critical reflection has impacted on him in a positive way and influences the way he deals with interpersonal relationships. He feels that the capability of critical reflection enables people to take a more considered approach to issues. DA is of the opinion that the way he views the world is influenced by his critically reflective capabilities. From his experience of mentoring students and colleagues, he notes the different reactions of people to the idea of critical self-reflection with some being negative towards it and others positive. He observes the importance attached to the development of 'soft' skills in programmes of WBL.

# Part-time postgraduates (who have also done full-time undergraduate WBL and are in first 18 months of employment)

AS claims that he has developed the skill of critical reflection. He notes the development of this skill from superficial to more sophisticated levels. His view is that critical reflection is aided when learning is organised and when specific tasks are identified. It is then possible, he argues, to make more detailed reflections and judgments. AS claims that, through critical reflection, he has gained a deeper level of understanding in relation to the skills of communication. He points to the limitations of critical reflection if it is only backward looking, arguing that critical reflection needs a forward looking aspect to it so that it can be used in the determination of areas for future improvement and development. AS agrees that associating learning with work may prove motivational for some people. He feels that, while he is critically self reflective, this is at a more superficial level than the level he applies to work. His view is that both his studies in English Literature and WBL have provided him with the facility to engage in critical reflection on wider issues in the world.

RS considers that learning from mistakes is an example of critical reflection. She agrees that the Kolb learning cycle is a useful model for engaging in critical reflection. Her view is that much learning is unplanned and unrealised and she considers that the process of critical reflection can help to uncover and to identify much of that unplanned and unrealised learning. She seems to suggest that, with planned WBL, if critical reflection is too focused on planned learning outcomes there is the danger that unplanned learning can be missed out and, therefore, not considered in that same critically reflective way. On balance, RS does not think that critical

reflection has changed her view of work but she suggests that the views of others about you and your performance, when shared with you, helps to inform your own critically reflective thoughts about yourself and your abilities and enables you to make more balanced judgments about yourself and your own performance. She considers this to be more helpful than relying on your own thoughts alone. Her view is that the opinions of others about you help you to form a view of yourself and she regards critical reflection as another way of gaining confidence as well as identifying areas for improvement. RS considers that she uses critical reflection in contexts other than work and, when considering wider issues, she values the views and opinions of others in arriving at her own decisions.

# Part-time postgraduates in first 18 months of employment

Overall LA appears to have a fairly superficial view of critical reflection. She refers to keeping a journal as an aid to critical reflection and says that she is able to look back on her learning log and reflect on what she has learned. She claims that her involvement in the WBL programme has not changed her view of work. She does, however, feel that learning to reflect critically has made her more aware of looking critically at her self, the way she does things and how she can improve her performance. It has also made her more aware of other people and of the importance of sound inter-personal skills, especially in the business context. LA claims to be aware of what is going on in the world in respect of politics and current affairs but does not attribute this, in particular, to WBL and the development of her critically reflective abilities. In further discussion she claims that WBL has taught her how to be professional. She notes that some others on the course are past Chester College students who have undertaken undergraduate WBL and she claims that this is apparent in that they were better prepared to enter the workforce. She compares this with her own experience of University where WBL was not an option and she feels disadvantaged. Finally, she recognises networking as an important skill in business.

### Part-time postgraduates

E.E. speaks of the use she has made of critical reflection in the context of project work and she notes how it aids future planning. She refers to critical reflection as an intuitive process in her case, and sees WBL as formalising this process rather than teaching her the skill. However, she speaks of her personal reluctance to share her critically reflective thoughts with others, while recognising that some people share their thoughts more freely. She sees the value of critical reflection as guide and as facilitating change for the future, and notes her own inclination to take action following critical reflection. In relation to her organisation, she feels that critical reflection has given her a more holistic view of it and from multiple perspectives but she notes also the limited vision of others who may work to their own narrow agendas. This leads to the challenge of helping others towards achieving multiple perspectives, which is a challenge to the skill of inter-personal communication. For her, WBL has brought about the realisation that she needs to find ways of being more assertive. Overall, she is not sure that critical reflection has changed her view of the world but, in reflecting on theoretical perspectives gained through WBL in relation to world issues, she feels that she can better appreciate what is happening.

NH claims that critical reflection is a professional competence, thus a way of thinking that is thoroughly familiar to her. She feels that the ability to reflect critically has changed her view of herself and that it also helps her to be non-judgmental. She considers that, once you have the skill, it influences all areas of your life, and so agrees that critical reflection does influence the way she views issues occurring in the world.

# Question 7 responses

Did you consciously, or unconsciously, apply any WBL theories? If so, can you identify them and then describe how you were able to utilise them?

#### Full-time undergraduates

V.A. says that she did not apply any WBL theory to the placement, though refers to the learning styles questionnaire, with which she was already familiar, and notes changes to her "framework of learning" over the years to indicate a more balanced approach to learning.

T.B. claims that she undertook theoretical research in order to improve her communication skills, though she admits that she did this mainly because of the assignments (and presumably because of her interest in gaining good marks), and that without that constraint she would not have done it. (This raises an important issue in respect of the effectiveness and the depth of learning through work, that without the requirements of assessment that effectiveness and depth may be limited.) She agrees that it would be a good idea for her to build reflection into her working day but suggests she may not do this because of the time factor.

S.R. says that he did not intentionally go out to apply WBL theories. However, through reflection, he realised that he had gained something from the theory. He suggests that some of the theory gave him a framework for understanding and interpreting his experience.

R.A.'s answer provides little evidence of the conscious application of theory, though she admits to using some theory on her assignments (perhaps consciously for credit purposes).

M.D. applied the Kolb learning cycle and found the concept of testing-out newly formulated theories helpful. She claims to have found other WBL theories confusing and admits to not understanding them sufficiently to try them out. However, with prompting, she refers to the way in which she made use of self-knowledge gained through the learning styles questionnaire. Knowing her tendency was toward the reflector type, and finding that limiting, she tried out the activist role. This proved to be a good experience, though she admits to finding that working outside your comfort zone can be "quite scary".

L.H. refers to the way in which WBL helps you to identify the unconscious skills and abilities you may have. She considers that WBL has instilled in her the need for planning and recording. She makes reference to the Gantt chart as something which she may deploy in the future. While questioning the focus of the SP, she recognises its value as part of the WBL experience.

L.Ha. identifies the theory associated with learning styles as having relevance. The questionnaire pointed to her being a theorist but the placement required an activist and she became aware of conscious modification to her learning behaviour. She also said that she was aware of some theories from her degree course which had practical application to her work context.

KF refers to her use, during the placement, of business models and of the Kolb learning cycle. When prompted, she also refers to her use of the Honey & Mumford learning styles questionnaire which, she claims, increased her awareness of the potential range of preferred learning styles to be found in any one group.

C.C. spoke of the <u>conscious</u> application of some of both 'hard' (e.g. project management) and 'soft' (e.g. learning styles, team working) theories introduced in the Support Programme, though felt that the value of the S.P. was better appreciated after the placement. It was regarded as particularly valuable in respect of the development of interpersonal skills. He also referred to the <u>unconscious</u> application of theories from the S.P. For example, his awareness, after the placement, of a broadening of his learning preferences. He also made an observation in respect of critical reflection that, to some extent, this was, for him, an intuitive process.

C.W. claims to have consciously applied theories from her academic subject (especially in respect of sports coaching and sports psychology), as well as theories from the SP (e.g. learning styles, the learning cycle, Gantt chart).

B.M. cites an example of home-spun philosophy about being nice to people you don't know. She also refers again to the Kolb learning cycle and claims that this has had something of an impact on her and that she has made the process her own.

A.F. identifies knowledge and theories from his academic subject area that he applied in the workplace. He refers to some of the 'soft' theories taught in the SP which he used to help him with his analysis of the organisation he was working for and another which he used for purposes of self-analysis.

J.B. made reference to the conscious application of WBL theories, though suggested that this was mainly in order to gain higher marks in her assessments.

### Part-time undergraduates in full-time employment

RD claims that he uses the process of critical reflection in relation to his work. He also refers to his use of Transactional Analysis as a way of analysing his own and others' behaviour.

ST requires some help in identifying theories, though she claims to have used the Kolb learning cycle. She says that she tends to see knowledge in the service of her better understanding rather than as compartmentalised.

DW claims to have applied Transactional Analysis and the Herrmann Brain Dominance Model to the work situation. She agrees that theories and models provide a frame of reference for understanding what is going on in the workplace. Knowing about theories also brings about self reflection and raises awareness of the assumptions we make concerning other people's behaviour patterns.

JM makes reference to Kolb as a WBL theory and imagines that WBL theories do have an impact on people's work and learning. She claims that learning gained through the Conflict module has given her a new perspective on people and situations.

TM's answer does not relate to the question but points more to the general value of experiential learning.

CP claims to have applied WBL theories, especially in the context of her assignments, though less so in the practical context of work. She thinks that knowledge of WBL theories has improved her understanding of team working.

Answer is not well focussed but MH makes reference to her awareness of people's different learning styles.

LF claims to have applied the learning cycle and critical reflection to her work and suspects that other theories have also influenced her. She says that it is important to her that learning can be applied.

As a result of learning about WBL theories, MS claims to now have a greater awareness of people's different learning styles and the implications of this for education and training.

JK claims not to have applied any WBL theories (though the overall evidence of the interview points to the contrary) but says that she would do so given the time and the appropriate circumstances. She indicates that she has absorbed such theories for later use.

GT identifies WBL theories that have arisen in context of module on Methods & Processes and module on Stress Management. He claims to have applied theory gained from the former in respect of devising appropriate teaching strategies to meet the learning styles of trainees in the workplace. He also claims to have applied theoretical understanding gained through the module on Stress Management in order to alleviate colleagues' stress levels.

#### Part-time postgraduates (who have also done full-time undergraduate WBL)

J.Ba. refers to models relevant to WBL which she was able to put to practical use in the workplace. She was aware that some theories may have become embedded and, therefore, she was not particularly conscious of them, and they may have informed her practice. Reference is made to the learning styles questionnaire and the Belbin team roles questionnaire and subsequent exercises. Through the latter she made a discovery about herself, namely that she possesses leadership qualities. This both surprised her and raised her self esteem.

DA refers to his conscious application of WBL theories as a means of staff development. He claims to use WBL theories to help identify training opportunities for staff which are compatible with their preferred learning styles. He attempts to get staff to use the reflective learning cycle for project review, both in terms of 'soft' (e.g. interpersonal relationships) as well as 'hard' issues.

# <u>Part-time postgraduates</u> (who have also done full-time undergraduate WBL and are in first 18 months of employment)

AS identifies Honey & Mumford as a WBL theory. He claims that this has influenced his view of himself and his view of others and that he applies his knowledge of learning styles to facilitate team working. Further theories are identified by AS in respect of communications, problem solving, and leadership. He finds the application of some theories useful in gaining first impressions of people.

RS identifies Honey & Mumford as a WBL theory. She does not think that she has consciously used any WBL theories apart from critical reflection and learning styles. She identifies herself as an activist learner.

### Part-time postgraduates in first 18 months of employment

LA refers to application of theory in respect of work relationships.

# Part-time postgraduates

E.E. claims to have applied some WBL theories and, in her projects, used some of the research methods that she learnt about in the taught WBL research methods module. She also found that some of her existing practises were supported by theory. Throughout, she has tried to maintain an open mind and claims to have tried a variety of theories for their usefulness.

NH is unable to identify any WBL theories that have proved relevant in her work.

#### Question 8 responses

Can you identify any knowledge and skills you gained from WBL that you have been able to use in other areas of study?

#### Full-time undergraduates

V.A. claims that much of the learning she gained through WBL will be used by her in further study and, indeed, the results of her research are to be presented at a national symposium. The findings from her project will act as a "base line for future studies" and the more generic skills of literature searching, etc. will be invaluable. She also developed some teaching skills and had her self-awareness raised in respect of the enjoyment she gains from teaching adults. The knowledge she gained as a result of the application of scientific method, she notes as being of use for the future, as will the increased ability to manage her own learning which arose from the placement requirement of autonomous learning.

T.B. identifies various areas of knowledge which she considers will be useful and relevant to her on-going studies. She agrees that the WBL experience may inform her choice of dissertation topic and aid her with that. She also reiterates her view concerning the value of the assignment for making her reflect on her learning. Without that she feels she would not have benefitted so much from WBL.

S.R. identifies both 'hard' and 'soft' knowledge that will be valuable to him in the future. He feels that, through WBL, his career aspirations have been confirmed. In particular, he enjoyed the experience of applying knowledge to a real work situation, and found himself quite passionate about the work that he was engaged in.

R.A.'s initial response is that her WBL experience will not be directly relevant to the rest of her degree studies but will be useful to her in her future career. With prompting, however, she considers that it may be highly relevant to her dissertation.

M.D. claims that all she has learnt through WBL she can apply in the future. She gives the examples of time management and her understanding of team work and of managing teams. Her experience of not being listened to has raised her awareness of how important it is to develop good listening skills, (a) because of the motivating effect it can have on individuals and, (b) because other people's ideas can bring about improvements. She claims to have made some knowledge gains in her academic subject area and believes the "hands on" experience will be valuable for the future. Overall, she found WBL to be a worthwhile and valuable experience.

L.H. identifies a number of areas of knowledge and skills, developed through WBL, which are transferable to other contexts. She refers, in particular, to the ongoing value to her of the skill of critical self-reflection facilitated ("we'd been taught how to do it") through WBL.

L.Ha. points to self-knowledge and some growth there which may help in terms of study discipline. She also identifies some knowledge which she feels will be useful for her dissertation, especially some notes she has made, and some insights she has gained, relating to her experience, which may feed in to her discussion of the ethical

questions raised by zoos. She makes reference to the value of the experience of team working before the interview concludes.

KF speaks of the way in which her positive experience of WBL and the knowledge and skills she gained through it, led her to decide to build on that foundation in her final year dissertation, where she will specialise in geography in education.

C.C. made reference to the potential transferability of the skills he had developed through WBL and expressed the view that he had gained more from WBL than he had expected.

C.W. considers that she has increased her powers of observation and her communication skills and that these gains in knowledge and skills will be readily transferable to other contexts. The ability to compile a report on her learning will provide a useful lead in to writing her dissertation. She has also developed computer skills which will help her in the future, and she is much more aware of what makes for an effective team as a result of her knowledge about learning styles and team building.

B.M. considers that the technical skills she developed in WBL will be useful to her on the rest of her degree programme. She recognises the value of WBL as part of her studies for the choice it gave her, especially the opportunity to test out a career aspiration.

A.F. identifies gains in academic subject knowledge which he considers will be useful in future study. However, he sees the main gains for him in the area of ICT where, through the requirements of the placement, his knowledge and skills have improved significantly.

J.B. feels that the knowledge and skills gained from WBL will be useful for her dissertation and for a poster presentation she has been asked to do. Her literature searching skills have also improved and developed, as have her communication and time-management skills. She is of the view that WBL will have enhanced her employment prospects and that she gained more from it than she had anticipated.

#### Part-time undergraduates in full-time employment

RD makes the generalised claim that all that he has learned so far on the programme is relevant to his work and is transferable to other contexts.

ST considers that the knowledge and skills that she has gained through WBL will be beneficial to her in the future, though she does not elaborate in what ways.

DW feels that most of her learning through work will be of enduring value to her. She identifies, in particular, inter-personal skill development and development in self knowledge. In respect of WBL project modules, she feels that these have helped her to develop project management skills crucial to her job role.

JM considers that the knowledge she has gained so far on the programme, especially in respect of research methods and Conflict Transformation, will have transferability to other contexts.

TM agrees that WBL has proved motivational and she claims that it has improved her self image.

CP suggests that she has made knowledge gains through study. She implies that she is developing the skill of learning to learn. Her reference to "reading in a constructive manner for future learning" is particularly pertinent in this respect. She feels that she will study the module on "Change" next, implying her awareness of the importance of learning in order to cope with a constantly changing working environment.

MH indicates that she feels that much of the knowledge she has gained is immediately transferable to other contexts. She says that there is so much that she "can take away".

LF feels that the knowledge she has gained and the skills she has developed have transferability to other situations. She reiterates her feeling that knowledge of the learning cycle and of the process of critical reflection are crucial for her in her life and work.

MS thinks that the learning she has gained through WBL will have on-going value for her. She claims to have learnt to market herself more effectively, and feels that learning through the module on Conflict Transformation has brought about change for the better in her.

JK claims that she has gained much knowledge and skill development through WBL that will continue to be relevant to her and which is transferable to other contexts. She does not think of WBL as a soft option and considers it a difficult style of learning to grasp if you have not experienced it. She describes her experience of WBL as the crème de la crème, measuring it against courses taken with the Open University, another local University and conventional courses at Chester College. JK claims to be learning solid, substantial, skills through her programme of WBL which she needs for her career. She finds being in control of her own learning a positive experience but also an additional responsibility and she feels that, given its flexibility, WBL requires a stronger self discipline than more conventional forms of learning.

GT agrees that some of the knowledge he has gained will be useful to him in the future. He also wishes to build upon that knowledge in order to make his working life more creative, reflective and adaptable, and to further broaden his outlook.

#### Part-time postgraduates (who have also done full-time undergraduate WBL)

J.Ba. identifies the skill of critical reflection as having on-going value to her in terms of her learning. She refers to the learning log and its importance as an aid to critical reflection. Reference is also made to the Gantt chart which, despite its limitations, she believes to be a useful tool.

DA feels that he has developed many skills that are immediately transferable to other contexts, especially in respect of project management and its associated skills. He identifies, as transferable skills, the abilities he has developed in terms of facilitating team-working, decision making, and creativity, and points to the importance of being aware of your own learning as a key transferable skill.

# <u>Part-time postgraduates (who have also done full-time undergraduate WBL and are in first 18 months of employment)</u>

AS regards learning gained through WBL as transferable to other contexts (both work and social/family) because it is developed in day-to-day working and living. He considers that WBL was an important part of his first degree. It raised for him his awareness of issues and topics related to work as well as providing him with skill development in terms of reflection and communication.

Through WBL, SR claims to have made gains in terms of her problem-solving abilities and says that she has developed interpersonal, communication and presentation skills which are important to her in her work. She concludes by emphasising her view that WBL is incredibly important as an element of the undergraduate experience.

#### Part-time postgraduates in first 18 months of employment

LA feels that she will build on her awareness of her need to develop other learning techniques by moving out of her comfort zone and developing other learning skills. She claims that the course has taught her the importance of seeing things from a variety of perspectives. She recognises her need for "learning to learn" and considers this a strange thing to say given that she has just come from being a full-time University student!

#### Part-time postgraduates

(N.B. Q8 proper appears to have been omitted). E.E. points to the importance of setting aside a time allowance for WBL study, especially given the dangers of work priorities squeezing out study opportunities. In this respect, it is particularly pertinent that the employer agrees to make time available for study while, at the same time, it is important that the student develops the skill of effective time-management. E.E. feels that it is important that the employer formally engages in an agreement to facilitate WBL study. Where agreement is on an informal basis only, then problems may arise. By the same token, she feels that, while some flexibility may be helpful, the HEI needs to be prescriptive about dead-lines for project completion. There is, in E.E.'s view, a need to strike a balance between learning time and the requirements of accreditation in any academic programme.

NH identifies knowledge of research methods as something that will continue to benefit her in the future. She implies that she has the ability to absorb theory for later recall and application, as appropriate.

## APPENDIX N

## Frequency Tables

Q01

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | Yes   | 301       | 96.5    | 96.5          | 96.5                  |
| 1     | No    | 11        | 3.5     | 3.5           | 100.0                 |
|       | Total | 312       | 100 0   | 100.0         |                       |

## a learning journal

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | No     | 205       | 65.7    | 66.8          | 66.8                  |
|         | Yes    | 102       | 32.7    | 33.2          | 100.0                 |
|         | Total  | 307       | 98.4    | 100.0         |                       |
| Missing | System | 5         | 1.6     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### a diary of events

|         |        | Frequency | Percent  | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|----------|---------------|-----------------------|
| ∨alid   | No     | 162       | 51.9     | 52.8          | 52.8                  |
| 1       | Yes    | 145       | 46.5     | 47.2          | 100.0                 |
| Ì       | Total  | 307       | 98.4     | 100.0         |                       |
| Missing | System | 5         | 1.6      |               |                       |
| Total   |        | 312       | <u> </u> |               |                       |

## bullet points

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | No     | 259       | 83.0    | 84.4          | 84.4                  |
|         | Yes    | 48        | 15.4    | 15.6          | 100.0                 |
|         | Total  | 307       | 98.4    | 100.0         |                       |
| Missing | System | 5         | 1.6     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### brief notes

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | No     | 185       | 59.3    | 60.3          | 60.3                  |
|         | Yes    | 122       | 39.1    | 39.7          | 100.0                 |
| Ì       | Total  | 307       | 98.4    | 100.0         |                       |
| Missing | System | 5         | 1.6     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### a mental note

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | No     | 231       | 74.0    | 75.2          | 75. <b>2</b>          |
|         | Yes    | 76        | 24.4    | 24.8          | 100.0                 |
|         | Total  | 307       | 98.4    | 100.0         |                       |
| Missing | System | 5         | 1.6     | 1             |                       |
| Total   |        | . 312     | 100.0   |               |                       |

#### Q02

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 224       | 71.8    | 74.9          | 74.9                  |
| }       | No     | 75        | 24.0    | 25.1          | 100.0                 |
|         | Total  | 299       | 95.8    | 100.0         |                       |
| Missing | System | 13        | 4.2     |               |                       |
| Total   |        | 312       | 100.0   | <u> </u>      |                       |

#### Q02A

|         |                                  | Frequency | Percent      | Valid Percent | Cumulative<br>Percent |
|---------|----------------------------------|-----------|--------------|---------------|-----------------------|
| Valid   | At the end of each day           | 72        | 23.1         | 31.2          | 31.2                  |
|         | At the end of each week          | 70        | 22.4         | 30.3          | 61.5                  |
|         | At the end of the placement      | 27        | 8.7          | 11.7          | 73.2                  |
|         | As and when appropriate to my ne | 62        | 19. <b>9</b> | 26.8          | 100.0                 |
|         | Total                            | 231       | 74.0         | 100.0         |                       |
| Missing | System                           | 81        | 26.0         |               |                       |
| Total   |                                  | 312       | 100.0        |               |                       |

#### Q03

|         |        | Frequency | Percent              | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|----------------------|---------------|-----------------------|
| Valid   | Yes    | 98        | 31.4                 | 32.1          | 32.1                  |
|         | No     | 207       | <b>6</b> 6. <b>3</b> | 67.9          | 100.0                 |
| 4       | Total  | 305       | 97.8                 | 100.0         |                       |
| Missing | System | 7         | 2.2                  |               |                       |
| Total   |        | 312       | 100.0                |               |                       |

#### Q03A

|         |                                     | Frequency  | Percent      | Valid Percent | Cumulative<br>Percent |
|---------|-------------------------------------|------------|--------------|---------------|-----------------------|
| Valid   | Stay within your preferred style    | <b>6</b> 6 | 21.2         | 70.2          | 70.2                  |
|         | Deliberately try<br>to use your les | 28         | 9.0          | 29.8          | 100.0                 |
|         | Total                               | 94         | <b>3</b> 0.1 | 100.0         |                       |
| Missing | System                              | 218        | 69.9         |               | j                     |
| Total   | ·····                               | 312        | 100.0        |               |                       |

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | Yes   | 209       | 67.0    | 67.0          | 67.0                  |
| ľ     | No    | 103       | 33.0    | 33.0          | 100.0                 |
| Ì     | Total | 312       | 100.0   | 100.0         |                       |

#### in the Support Programme handbook

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | 0      | 35        | 11.2    | 16.1          | 16.1                  |
|         | 1      | 182       | 58.3    | 83.9          | 100.0                 |
|         | Total  | 217       | 69.6    | 100.0         |                       |
| Missing | System | 95        | 30.4    | 1             | 1                     |
| Total   |        | 312       | 100.0   |               |                       |

#### in other texts

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | 0      | 125       | 40.1    | 57.6          | 57.6                  |
|         | 1      | 92        | 29.5    | 42.4          | 100.0                 |
| }       | Total  | 217       | 69.6    | 100.0         |                       |
| Missing | System | 95        | 30.4    |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### in journals

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Ò.     | 182       | 58.3    | 83.9          | 83.9                  |
|         | 1      | 35        | 11.2    | 16.1          | 100.0                 |
|         | Total  | 217       | 69.6    | 100.0         |                       |
| Missing | System | 95        | 30.4    |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### in other sources (newspapers, mags)

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | 0      | 192       | 61.5    | 88.5          | 88.5                  |
|         | 1      | 25        | 8.0     | 11.5          | 100.0                 |
|         | Total  | 217       | 69.6    | 100.0         |                       |
| Missing | System | 95        | 30.4    | 1             |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### Q05

|       |     | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-----|-----------|---------|---------------|-----------------------|
| Valid | Yes | 312       | 100.0   | 100.0         | 100.0                 |

#### Q05A

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | True  | 274       | 87.8    | 87.8          | 87.8                  |
|       | False | 38        | 12.2    | 12.2          | 100.0                 |
| 1     | Total | 312       | 100.0   | 100.0         |                       |

#### Q05B

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | True  | 220       | 70.5    | 70.5          | 70.5                  |
|       | False | 92        | 29.5    | 29.5          | 100.0                 |
|       | Total | 312       | 100.0   | 100.0         | _                     |

### Q05C

|         | · · · · · · · · · · · · · · · · · · · | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|---------------------------------------|-----------|---------|---------------|-----------------------|
| Valid   | Easy                                  | 103       | 33.0    | 34.0          | 34.0                  |
|         | Difficult                             | 200       | 64.1    | 66.0          | 100.0                 |
|         | Total                                 | 303       | 97.1    | 100.0         |                       |
| Missing | System                                | 9         | 2.9     |               |                       |
| Total   |                                       | 312       | 100.0   |               |                       |

#### Q05D

|       |       | Frequency | Percent      | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|--------------|---------------|-----------------------|
| Valid | True  | 264       | 84.6         | 84.6          | 84.6                  |
| -     | False | 48        | 15. <b>4</b> | 15.4          | 100.0                 |
|       | Total | 312       | 100.0        | 100.0         |                       |

#### Q05E

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | True  | 291       | 93.3    | 93.3          | 93.3                  |
| İ     | False | 21        | 6.7     | 6.7           | 100.0                 |
|       | Total | 312       | 100.0   | 100.0         |                       |

#### Q05F

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | True  | 289       | 92.6    | 92.6          | 92.6                  |
| }     | False | 23        | 7.4     | 7.4           | 100.0                 |
|       | Total | 312       | 100.0   | 100.0         |                       |

#### Q05G

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | True   | 172       | 55.1    | 56.8          | 56.8                  |
|         | False  | 131       | 42.0    | 43.2          | 100.0                 |
|         | Total  | 303       | 97.1    | 100.0         |                       |
| Missing | System | 9         | 2.9     |               |                       |
| Total   |        | 312       | 100.0   | [             |                       |

#### Q05H

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | True   | 290       | 92.9    | 94.2          | 94.2                  |
| ļ       | False  | 18        | 5.8     | 5.8           | 100.0                 |
| 1       | Total  | 308       | 98.7    | 100.0         |                       |
| Missing | System | 4         | 1.3     |               |                       |
| Total   |        | 312       | 100.0   | <u> </u>      |                       |

#### Q051

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | True   | 273       | 87.5    | 88.6          | 88.6                  |
|         | False  | 35        | 11.2    | 11.4          | 100.0                 |
|         | Total  | 308       | 98.7    | 100.0         |                       |
| Missing | System | 4         | 1.3     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

## Q05J

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | True  | 302       | 96.8    | 96.8          | 96.8                  |
|       | False | 10        | 3.2     | 3.2           | 100.0                 |
|       | Total | 312       | 100.0   | 100.0         |                       |

#### Q05K

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | True   | 247       | 79.2    | 80.2          | 80.2                  |
| 1       | False  | 61        | 19.6    | 19.8          | 100.0                 |
|         | Total  | 308       | 98.7    | 100.0         |                       |
| Missing | System | 4         | 1.3     |               |                       |
| Total   |        | 312       | 100.0   |               | <u></u>               |

#### Q05L

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | True   | 173       | 55.4    | 56.9          | 56.9                  |
|         | False  | 131       | 42.0    | 43.1          | 100.0                 |
| 1       | Total  | 304       | 97.4    | 100.0         |                       |
| Missing | System | в         | 2.6     | ļ             |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### Q05M

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | True   | 232       | 74.4    | 75.3          | 75.3                  |
|         | False  | 76        | 24.4    | 24.7          | 100.0                 |
|         | Total  | 308       | 98.7    | 100.0         |                       |
| Missing | System | 4         | 1.3     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### Q06

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | True  | 265       | 84.9    | 84.9          | 84.9                  |
|       | False | 47        | 15.1    | 15.1          | 100.0                 |
|       | Total | 312       | 100.0   | 100.0         |                       |

#### Q07

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | True   | 178       | 57.1    | 58.7          | 58.7                  |
| Ì       | False  | 125       | 40.1    | 41.3          | 100.0                 |
| ļ       | Total  | 303       | 97.1    | 100.0         |                       |
| Missing | System | 9         | 2.9     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### WBL supervisor

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | 0     | 172       | 55.1    | 55.1          | 55.1                  |
|       | 1     | 122       | 39.1    | 39.1          | 94.2                  |
|       | 2     | 18        | 5.8     | 5.8           | 100.0                 |
| Į     | Total | 312       | 100.0   | 100.0         |                       |

## other College tutors

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | Ö     | 276       | 88.5    | 88.5          | 88.5                  |
| į     | 1     | 36        | 11.5    | 11.5          | 100.0                 |
| L     | Total | 312       | 100.0   | 100.0         |                       |

#### fellow students

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | 0     | 154       | 49.4    | 49.4          | 49.4                  |
| ]     | 1     | 158       | 50.6    | 50.6          | 100 0                 |
| L     | Total | 312       | 100.0   | 100.0         |                       |

#### parents

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | 0     | 222       | 71.2    | 71.2          | 71.2                  |
| ļ     | 1     | 90        | 28.8    | 28.8          | 100.0                 |
|       | Total | 312       | _100.0  | 100.0         |                       |

#### other

|         |        | Frequency | Percent       | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------------|---------------|-----------------------|
| Valid   | 0      | 258       | 82.7          | 82.7          | 82.7                  |
| 1       | 1      | 54        | 17.3          | 17.3          | 100.0                 |
| <u></u> | Total_ | 312       | <u>100</u> .0 | 100.0         |                       |

#### Q09

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | 0      | 27        | 8.7     | 8.9           | 8.9                   |
|         | Yes    | 187       | 59.9    | 61.3          | 70.2                  |
| ĺ       | No     | 91        | 29.2    | 29.8          | 100.0                 |
|         | Total  | 305       | 97.8    | 100.0         |                       |
| Missing | System | 7         | 2.2     |               |                       |
| Total   |        | _312      | 100.0   |               |                       |

#### Q09A

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 160       | 51.3    | 77.3          | 77.3                  |
| 1       | No     | 47        | 15.1    | 22.7          | 100.0                 |
|         | Total  | 207       | 56.3    | 100.0         | :                     |
| Missing | System | 105       | 33.7    | :             |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### Q10

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 234       | 75.0    | 81.3          | 81.3                  |
| i       | No     | 54        | 17.3    | 18.8          | 100.0                 |
|         | Total  | 288       | 92.3    | 100.0         |                       |
| Missing | System | 24        | 7.7     | ĺ             |                       |
| Total   | ····   | 312       | 100.0   | <u> </u>      |                       |

#### Q11

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | Yes   | 292       | 93.6    | 93.6          | 93.6                  |
|       | No    | 20        | 6.4     | 6.4           | 100.0                 |
| L     | Total | 312       | 100.0   | 100.0         |                       |

#### Q12A

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | Yes   | 212       | 67.9    | 67.9          | 67.9                  |
| }     | No    | 100       | 32.1    | 32.1          | 100.0                 |
|       | Total | 312       | 100.0   | 100.0         |                       |

#### Q12B

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 176       | 56.4    | 82.2          | 82.2                  |
|         | No     | 38        | 12.2    | 17.8          | 100.0                 |
|         | Total  | 214       | 68.6    | 100.0         |                       |
| Missing | System | 98        | 31.4    |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### Q13

|         |                             | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|-----------------------------|-----------|---------|---------------|-----------------------|
| Valid   | YES                         | 151       | 48.4    | 48.9          | 48.9                  |
|         | NO                          | 124       | 39.7    | 40.1          | 89.0                  |
|         | DIDNT HAVE<br>REGULAR HOURS | 34        | 10.9    | 11.0          | 100.0                 |
|         | Total                       | 309       | 99.0    | 100.0         |                       |
| Missing | System                      | 3         | 1.0     | }             |                       |
| Total   |                             | 312       | 100.0   |               |                       |

### Q14A

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | 0     | 5         | 1.6     | 1.6           | 1.6                   |
| 1     | Yes   | 229       | 73.4    | 73.4          | 75.0                  |
|       | No    | 78        | 25.0    | 25.0          | 100.0                 |
|       | Total | 312       | 100.0   | 100.0         |                       |

## Q14B

|         |          | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|----------|-----------|---------|---------------|-----------------------|
| Valid   | 0        | 5         | 1.6     | 2.1           | 2.1                   |
|         | Positive | 171       | 54.8    | 73.4          | 75.5                  |
| ļ       | Negative | 57        | 18.3    | 24.5          | 100.0                 |
|         | Total    | 233       | 74.7    | 100.0         |                       |
| Missing | System   | 79        | 25.3    |               |                       |
| Total   |          | 312       | 100.0   |               |                       |

|         |                  | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|------------------|-----------|---------|---------------|-----------------------|
| Valid   | CAREFUL PLANNING | 99        | 31.7    | 34.5          | 34.5                  |
|         | RANDOM           | 188       | 60.3    | 65.5          | 100.0                 |
|         | Total            | 287       | 92.0    | 100.0         |                       |
| Missing | System           | 25        | 8.0     |               |                       |
| Total   |                  | _312      | 100.0   | <u> </u>      |                       |

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 135       | 43.3    | 46.7          | 46.7                  |
|         | No     | 154       | 49.4    | 53.3          | 100.0                 |
|         | Total  | 289       | 92.6    | 100.0         |                       |
| Missing | System | 23        | 7.4     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

Q17

|         |        | Frequency | Perc <u>e</u> nt | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|------------------|---------------|-----------------------|
| Valid   | Yes    | 260       | 83.3             | 85.8          | 85.8                  |
| 1       | No     | 43        | 13.8             | 14.2          | 100.0                 |
| ł       | Total  | 303       | 97.1             | 100.0         |                       |
| Missing | System | 9         | 2.9              | Į l           | ı                     |
| Total   | _      | 312       | 100.0            |               |                       |

Q17A

|         |                                | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------------------------------|-----------|---------|---------------|-----------------------|
| Valid   | work-based issues              | 11        | 3.5     | 4.1           | 4.1                   |
| 1       | assessment issues              | 128       | 41.0    | 47.8          | 51. <del>9</del>      |
|         | both work-based and assessment | 122       | 39.1    | 45.5          | 97.4                  |
|         | other issues                   | 7         | 2.2     | 2.6           | 100.0                 |
|         | Total                          | 268       | 85.9    | 100.0         |                       |
| Missing | System                         | 44        | 14.1    |               |                       |
| Total   |                                | 312       | 100.0   |               |                       |

Q18

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent                         |
|---------|--------|-----------|---------|---------------|---|
| Valid   | Yes    | 69        | 22.1    | 22.6          | 22.6  |
|         | No     | 236       | 75.6    | 77.4          | 100.0   |
| 1       | Total  | 305       | 97.8    | 100.0         |   |
| Missing | System | 7         | 2.2     |               |   |
| Total   |        | 312       | 100.0   | <u></u>       | . <u>.                                   </u> |

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 69        | 22.1    | 22.6          | 22.6                  |
|         | No     | 236       | 75.6    | 77.4          | 100.0                 |
|         | Total  | 305       | 97.8    | 100.0         |                       |
| Missing | System | 7         | 2.2     | [             |                       |
| Total   |        | 312       | 100.0   |               |                       |

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 152       | 48.7    | 50.5          | 50.5                  |
|         | No     | 149       | 47.8    | 49.5          | 100.0                 |
| ļ       | Total  | 301       | 96.5    | 100.0         |                       |
| Missing | System | 11        | 3.5     | :             |                       |
| Total   |        | 312       | 100.0   | <u> </u>      | <u>.</u>              |

Q21

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 107       | 34.3    | 36.3          | 36.3                  |
| ļ       | No     | 188       | 60.3    | 63.7          | 100.0                 |
|         | Total  | 295       | 94.6    | 100.0         | 1                     |
| Missing | System | 17        | 5.4     |               |                       |
| Total   |        | 312       | 100.0_  |               |                       |

Q21A

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | 1      | 29        | 9.3     | 27.1          | 27.1                  |
| i       | 2      | 53        | 17.0    | 49.5          | 76.6                  |
| l       | 3      | 25        | 8.0     | 23.4          | 100.0                 |
| ľ       | Total  | 107       | 34.3    | 100.0         |                       |
| Missing | System | 205       | 65.7    |               |                       |
| Total   |        | 312       | 100.0   | <u> </u>      |                       |

Q21B

|         | _           | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|-------------|-----------|---------|---------------|-----------------------|
| Valid   | Yes         | 93        | 29.8    | 90.3          | 90.3                  |
| }       | No          | 10        | 3.2     | 9.7           | 100.0                 |
|         | Total       | 103       | 33.0    | 100.0         |                       |
| Missing | System      | 209       | 67.0    |               |                       |
| Total   | <del></del> | 312       | 100.0   | <u> </u>      |                       |

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 232       | 74.4    | 76.3          | 76.3                  |
| -       | No     | 72        | 23.1    | 23.7          | 100.0                 |
|         | Total  | 304       | 97.4    | 100.0         |                       |
| Missing | System | 8         | 2.6     |               |                       |
| Total   |        | 312       | 100.0   | <u> </u>      |                       |

|         |        | Frequency | Percent        | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|----------------|---------------|-----------------------|
| Valid   | Yes    | 223       | 71.5           | 72,4          | 72.4                  |
| )       | No     | 85        | 27.2           | 27.6          | 100.0                 |
|         | Total  | 308       | 98.7           | 100.0         |                       |
| Missing | System | 4         | 1.3            | <br>          |                       |
| Total   |        | 312       | 10 <u>0.</u> 0 |               |                       |

Q24

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 158       | 50.6    | 51.8          | 51.8                  |
| 1       | No     | 147       | 47.1    | 48.2          | 100.0                 |
|         | Total  | 305       | 97.8    | 100.0         |                       |
| Missing | System | 7         | 2.2     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

Q25A

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 191       | 61.2    | 62.0          | 62.0                  |
|         | No     | 117       | 37.5    | 38.0          | 100.0                 |
|         | Total  | 308       | 98.7    | 100.0         |                       |
| Missing | System | 4         | 1.3     |               |                       |
| Total   |        | 312       | 100.0   | <u> </u>      |                       |

Q25B

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 177       | 56.7    | 85.1          | 85.1                  |
|         | No     | 31        | 9.9     | 14.9          | 100.0                 |
|         | Total  | 208       | 66.7    | 100.0         |                       |
| Missing | System | 104       | 33.3    |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 189       | 60.6    | 63.0          | 63.0                  |
|         | No     | 111       | 35.6    | 37.0          | 100.0                 |
|         | Total  | 300       | 96.2    | 100.0         |                       |
| Missing | System | 12        | 3.8     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

|         |            | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|------------|-----------|---------|---------------|-----------------------|
| Valid   | Worry      | 132       | 42.3    | 43.4          | 43.4                  |
| }       | Please     | 76        | 24.4    | 25.0          | 68.4                  |
|         | Not Bother | 96        | 30.8    | 31.6          | 100.0                 |
|         | Total      | 304       | 97.4    | 100.0         |                       |
| Missing | System     | 8         | 2.6     |               |                       |
| Total   |            | 312       | 100.0   |               |                       |

**Q**28

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 81        | 26.0    | 26.8          | 26.8                  |
|         | No     | 221       | 70.8    | 73.2          | 100.0                 |
|         | Total  | 302       | 96.8    | 100.0         |                       |
| Missing | System | 10        | 3.2     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

Q29

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 56        | 17.9    | 18.8          | 18.8                  |
|         | No     | 242       | 77.6    | 81.2          | 100.0                 |
|         | Total  | 298       | 95.5    | 100.0         |                       |
| Missing | System | 14        | 4.5     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

Q29A

|         |                                  | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|----------------------------------|-----------|---------|---------------|-----------------------|
| Valid   | Carry out the task without makin | 20        | 6.4     | 41.7          | 41.7                  |
|         | Carry out the task but only afte | 16        | 5.1     | <b>3</b> 3.3  | 75.0                  |
|         | Turn down the request?           | 12        | 3.B     | 25.0          | 100.0                 |
|         | Total                            | 48        | 15.4    | 100.0         |                       |
| Missing | System                           | 264       | 84.6    |               |                       |
| Total   |                                  | 312       | 100.0   |               |                       |

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 232       | 74.4    | 75.8          | 75.8                  |
|         | No     | 74        | 23.7    | 24.2          | 100.0                 |
|         | Total  | 306       | 98.1    | 100.0         |                       |
| Missing | System | 6         | 1.9     |               |                       |
| Total   |        | 312_      | 100 0   |               |                       |

Q31

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 235       | 75.3    | 76.8          | 76.8                  |
|         | No     | 71        | 22.8    | 23.2          | 100.0                 |
|         | Total  | - 306     | 98.1    | 100.0         |                       |
| Missing | System | 6         | 1.9     |               |                       |
| Total   | _      | 312       | 100.0   | ļi            |                       |

## Q32A

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 104       | 33.3    | 34.0          | 34.0                  |
|         | No     | 202       | 64.7    | 66.0          | 100.0                 |
|         | Total  | 306       | 98.1    | 100.0         | -                     |
| Missing | System | . 6       | 1.9     |               |                       |
| Total   | _      | 312       | 100.0_  | ]             |                       |

Q32B

|         |            | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|------------|-----------|---------|---------------|-----------------------|
| Valid   | Persevered | 101       | 32.4    | 97.1          | 97.1                  |
|         | Abandoned  | 3         | 1.0     | 2.9           | 100.0                 |
|         | Total      | 104       | 33.3    | 100.0         |                       |
| Missing | System     | 208       | 66.7    | (             |                       |
| Total   | <u> </u>   | 312       | 100.0   |               |                       |

## **Q33A**

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Yes    | 119       | 38.1    | 39.4          | 39.4                  |
| į       | No ·   | 183       | 58.7    | 60.6          | 100.0                 |
|         | Total  | 302       | 96.8    | 100.0         |                       |
| Missing | System | 10        | 3.2     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### Q33B

|         |          | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|----------|-----------|---------|---------------|-----------------------|
| Valid   | Positive | 84        | 26.9    | 71.8          | 71.8                  |
|         | Negative | 33        | 10.6    | 28.2          | 100.0                 |
|         | Total    | 117       | 37.5    | 100.0         |                       |
| Missing | System   | 195       | 62.5    |               |                       |
| Total   |          | 312       | 100.0   |               | _                     |

#### Q34A

|         |        | Frequency | Percent - | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|-----------|---------------|-----------------------|
| Valid   | Yes    | 147       | 47.1      | 48.0          | 48.0                  |
|         | No     | 159       | 51.0      | 52.0          | 100.0                 |
|         | Total  | 306       | 98.1      | . 100.0       |                       |
| Missing | System | 6         | 1.9       |               |                       |
| Total   |        | 312       | 100.0     |               |                       |

#### Q34B

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | Better | 105       | 33.7    | 66.9          | 66.9                  |
|         | Worse  | 52        | 16.7    | 33.1          | 100.0                 |
|         | Total  | 157       | 50.3    | 100.0         |                       |
| Missing | System | 155       | 49.7    | ,             | 1                     |
| Total   |        | 312       | 100.0_  |               |                       |

#### Confidence

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | 0      | 81        | 26.0    | 26.5          | 26.5                  |
| 1       | 1      | 225       | 72.1    | 73.5          | 100.0                 |
| [       | Total  | 306       | 98.1    | 100.0         |                       |
| Missing | System | 6         | 1.9     | l l           |                       |
| Total   |        | 312       | 100.0   |               |                       |

## Knowledge

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | 0      | 54        | 17.3    | 17.6          | 17.6                  |
|         | 1      | 252       | 80.8    | 82.4          | 100.0                 |
|         | Total  | 306       | 98.1    | 100.0         | r                     |
| Missing | System | 6         | 1.9     |               |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### Understanding

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | 0      | 129       | 413     | 42.2          | 42.2                  |
|         | 1      | 177       | 56 7    | 57.8          | 100.0                 |
|         | Total  | 306       | i 8e    | 100.0         | :                     |
| Missing | System | 6         | 1.9     |               |                       |
| Total   |        | 312       | 100 0   |               |                       |

## Physical skill

|          |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|----------|--------|-----------|---------|---------------|-----------------------|
| Valid    | 0      | 239       | 76.6    | 78.1          | 78.1                  |
| ļ        | 1      | 67        | 21.5    | 21.9          | 100.0                 |
| ļ        | Total  | 306       | 98.1    | 100.0         |                       |
| Viissing | System | 5         | 1.9     |               |                       |
| Total    |        | 312       | 100.0   |               |                       |

## Self-understanding

|         |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|---------|---------------|-----------------------|
| Valid   | 0      | 182       | 58.3    | 59.5          | 59.5                  |
|         | 1      | 124       | 39.7    | 40.5          | 100.0                 |
|         | Total  | 305       | 98.1    | 100.0         |                       |
| Missing | System | 6         | 1.9     | ,             |                       |
| Total   |        | 312       | 100.0   |               |                       |

#### Other

|         |        | Frequency | Percent - | Valid Percent | Cumulative<br>Percent |
|---------|--------|-----------|-----------|---------------|-----------------------|
| Valid   | 0      | 266.      | 85.3      | 86.9          | 86.9                  |
|         | 1      | 40        | 12.8      | 13.1          | 100.0                 |
| ţ       | Total  | 306       | 98.1      | 100.0         |                       |
| Missing | System | 6         | 1.9       |               |                       |
| Total   |        | 312       | 100.0     |               |                       |

## **APPENDIX O**

#### Appendix Chapter 5: Measures

Some comment needs to be made, in particular, on my choice of two of the measures used to judge whether or not Work Based Learning is commensurate with HE standards. The two measures in question are Barnett's analysis of the "critical being" and the QAA qualifications descriptor for an honours degree.

#### Barnett's analysis of the "critical being"

In terms of identifying appropriate philosophical perspectives to underpin my arguments, I have used, to a large extent, the work of Ronald Barnett. It seemed to me that Barnett's view of the sort of graduate that HE should be producing reflected some of the qualities that I had witnessed in full-time students following their experience of undergraduate WBL. Typically they were more self-reliant, seemed to have a better understanding of themselves and had a clearer view of what they wanted to do with their lives. Some of my colleagues also seemed to observe a similar transformation in these students who, on returning to final year studies, appeared to them to be more confident, better motivated, and better able to manage their own learning (recollections from a two year unpublished study tracking the progress of students following their WBL experience, 1993-94).

Thus, it seemed to me to be appropriate to use Barnett's (1997) analysis of the "critical being" as a measure against which to judge the extent to which my research findings in respect of Work Based Learning demonstrated its capability to deliver the more rounded graduate which Barnett maintains it is the responsibility of higher education to produce.

#### OAA qualifications descriptor

It also seemed to me pertinent to take account of the wider discussion of what constitutes a graduate (and, therefore, with what constitutes a University education), in order to consider whether or not programmes of Work Based Learning can deliver to the same agenda. Until recently it was acknowledged that there was no precise agreement on the criteria for graduateness. It was considered that this was something left to individual Universities to define for themselves in relation to the particularities of the programmes they deliver. The matter was addressed by the Higher Education Quality Council (HEQC): Quality Enhancement Group (1995) who restricted their concentration principally to what they described as 'shared' and 'generic' attributes and largely set aside questions concerning possession of a body of knowledge. The aim of the graduateness project was "to identify a set of attributes that could serve as the basis for a threshold standard for all degrees, regardless of field, and thus be used as a bench-mark for comparability of standards at the threshold level across the HE sector" (p2, 1995). HEQC were concerned to "assist those who design, teach and assess students on degree programmes to specify explicitly the expectations that they have of a graduate" (ibid).

Six years later, the Quality Assurance Agency (QAA) for Higher Education publication, *The framework for Higher Education Qualifications in England, Wales and Northern Ireland* (QAA for HE, 2001), has, to some degree, foreclosed on the issue by identifying, at each higher education level, a set of descriptors which are

to be met for the relevant award. What follows is my attempt to abbreviate the descriptor for the qualification of Bachelor's degree with Honours that I take to be essentially the QAA's concept of graduateness though, as far as I can see, the term is not used in their publication. It is noted by the QAA that the qualification descriptors are generic statements of the outcomes of study and that "further guidance on the expectations for degrees in particular subjects can be found in subject benchmark statements" (p6, 2001).

The QAA descriptor (my abbreviated version) for a Bachelor's degree with Honours says that honours degrees are awarded to students who have demonstrated:

- · A systematic understanding of key aspects of their field of study
- An ability to deploy accurately established techniques of analysis and enquiry within a discipline
- Conceptual understanding that enables the student to devise and sustain arguments and/or to solve problems and to describe and comment upon particular aspects of current research
- An appreciation of the uncertainty, ambiguity and limits of knowledge
- The ability to manage their own learning

#### It says that typically, holders of the qualification will be able to:

- Apply the methods and techniques that they have learned....and apply their knowledge and understanding, and to initiate and carry out projects
- Critically evaluate arguments, assumptions, abstract concepts and data....to make judgments and to frame questions to achieve a solution(s) to a problem
- Communicate information, ideas to a variety of audiences

#### And that they will have:

 Qualities and transferable skills necessary for employment requiring the exercise of initiative and personal responsibility, decision-making, and the learning ability to undertake further training

I felt that if my research findings demonstrated that, as a result of undertaking Work Based Learning, students were able to achieve these capabilities, as defined by the QAA, the case for the admission of Work Based Learning in the Chester College curriculum would be considerably strengthened.

#### The three propositions

The third measure used to judge whether or not Work Based Learning is commensurate with HE standards was the three propositions relating to the Qualitative survey and the extent to which they are confirmed by the evidence.

The main purpose of the empirical study was to gather evidence that might support the contention that Work Based Learning brings about a more holistic way of being and knowing than does conventional HE study. The areas investigated, and the research questions addressed, were principally concerned with aspects of ontology, epistemology and pedagogy.

Thus, in respect of **ontology**, I was concerned to find out to what extent, as a result of undertaking WBL, change had occurred in respect of students' understanding of themselves. To what extent had WBL influenced them, or had an impact upon them, as human beings. In particular, in this context, I was interested to find out to what extent, through engagement in critical reflection as a key and distinctive feature of WBL, change had been brought about in respect of their views and attitudes towards themselves, work and the world more generally. This, I felt, might provide me with some evidence as to whether or not

WBL has the potential to assist students with the development of critical self-reflection, critical thought, and inclines them more towards critical action, qualities which Barnett (1997) argues should be developed through higher education.

In respect of epistemology, I was concerned to know what students had learned as a result of engaging in WBL and what sorts of knowledge they had encountered and from where this knowledge had been accessed. A principal reason in respect of this latter point was to help in assessing the effectiveness of the Support Programme that Chester College offers its undergraduate WBL students as an integral part of the overall learning through work experience. This is the intensive one-week College-based course, taken immediately prior to students undertaking a six-week WBL experience. Similarly, though much more extensively, a module on WBL Methods & Processes, designed to fulfil a similar purpose, is offered to part-time students. In both cases, what I have called 'WBL theories' (a generalised and inaccurate description but a useful form of shorthand) are introduced and other aspects of work related knowledge make up the content of this aspect of the curriculum.

In respect of **pedagogy**, I was concerned to investigate something of 'how' students feel they learn through WBL. I was aware that this is an area of educational and psychological enquiry that abounds with difficulties. However, my concern was not so much with what goes on in the brains of people as and when they learn, but more to do with the range of ways in which learning can be accessed. My feeling here was that, through WBL, students were exposed to a far wider range of ways in which they could learn than they might be in the conventional setting of the lecture room and the library, and that this wider range of ways of learning might better meet the needs of the potentially wide range of learning styles and learning preferences of a cohort of students than might more conventional learning and teaching methods.

The 8 questions in the Interview Guide, used to support the semi-structured interviews (Appendix J), and the 35 questions of the structured questionnaire (Appendix I), were thus designed to elicit responses which might confirm or disconfirm my central research propositions which are:

#### <u>Proposition 1</u> Ontological Dimension

• that Work Based Learning has the potential to bring about change in the way in which individuals see themselves, their work and their worlds

## <u>Proposition 2</u> Epistemological Dimension

 that knowledge and skills generated through Work Based Learning are fully commensurate with HE standards thus justifying the place of WBL in the curriculum

#### <u>Proposition 3</u> Pedagogical Dimension

that individuals have access to a broad range of ways of learning through WBL and have the opportunity to use the ways that suit them best