Chapter 7

Research Driven Projects

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#### Introduction

Research methods and project modules in work based learning studies (WBLS) have brought together and further developed methods and research and development issues that are appropriate for work. The content of the WBLS research methods modules are shaped by the research issues discussed in chapter 3. WBLS project modules are driven by the research and development of a real, work based project that may be something that is already being undertaken by the student/ practitioner. The development of the doctorate in Professional Studies (see chapter 12) is refining and elaborating our understanding of work based research methods and projects.

The aim of the research and project modules in WBLS is to develop critical awareness of research issues and practical competence in applying them. To do this usually involves the 'fine tuning' of existing abilities such as co-operation, critique, reflexivity, pragmatism and flexibility and the establishment of new abilities in for example, grounded theory or ethnography. This is because these are the characteristics of a person who underpins their actions whilst doing work with an intellectual perspective that includes a realisation of the necessity for evidence-based practice. Becoming research-minded, therefore, both prepares people for their WBLS project requirement and enhances the qualities of a successful practitioner.

WBLS is defined as a field of study, which has its own peculiarities in terms of choosing appropriate methodologies for investigating work based research questions. Particular curriculum issues are the practitioner as a researcher; the organisational context and the knowledge bases that it holds; differing models of collaborative work and ethical considerations. The curriculum is discussed in three sections: content, delivery and assessment.

# **Curriculum content**

Continuing controversy, debate and argument over the nature of knowledge (see chapter 2) is particularly relevant to the issue of appropriate methodologies for investigating work based research questions. In general, the issues for work based learning discussed in chapter 3 support a paradigm shift from the positivist, 'hypothetico-deductive' testing of hypotheses set before data are obtained, to inductive analysis in which theory and hypotheses evolve from the data. WBLS research and development is more compatible with negotiating a view of reality and consulting with participants over emergent theories than it is with controlling and testing variables. The new paradigms are relevant to any researcher in any subject area. However, the underlying premise of work based research and development is its recognition of the influence of context, including the perspectives of the particular profession and community of practice in which the worker researcher works. WBLS operates in a paradigm that has shifted to a more inductive analysis approach but also has its own particular version or perspective within this approach.

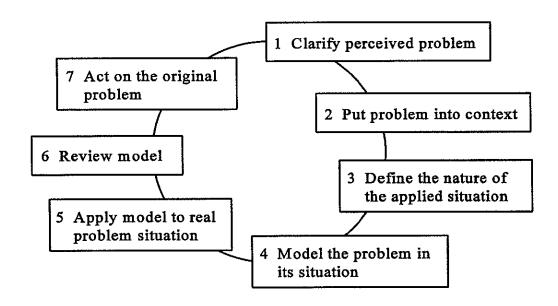
As noted in chapter 3, WBLS has drawn its own perspectives from various methodologies which emphasise the importance of the context and support the concept of the worker researcher.

An example is appreciative enquiry (Cooperrider and Srivastva, 1987), which is a further development of action research. This is a theory of organising and a method for changing social systems. Like discourse analysis it contends social and psychological reality is a product of the moment, open to continuous reconstruction. These ideas are then incorporated into the action research cycle. Its emphasis on using practice as a process for developing new theory is an important development of action research.

The macro and micro organisational and individual influences on the design of a work based research project, illustrated in chapter 3, interweave and affect each other to form a rich picture. By investigating emergent issues in WBLS programmes some of the important implications of this rich picture are informing research methodology.

Worker researchers have practical experience and insider knowledge and so are more aware of a whole range of variables that are impacting on their chosen research problem. This means that they can feel over-laden by the intricacies of the problem. Often, they know the detailed background and try to tackle too much. The challenge is to find or develop a methodology that will take into consideration the complexities of the situation and be feasible. Soft systems methodology (Checkland and Scholes, 1990) attempts to tackle this by concentrating on clarification of the problem and the context. Figure 7.1 illustrates the seven stages in the soft systems process. By laying emphasis on defining and modelling the problem, worker researchers are able to deconstruct and help make explicit the variables impacting on the situation under investigation.

Figure 7.1: The Soft Systems Process



(Checkland and Scholes, 1990)

Increasingly, multi-methodologies (Mingers and Gill, 1997) are being used to cope with the complexities of multi and inter disciplinarity and work based research. The context of the research problem, the institutionalisation of interests that includes the academy and the community of

practice (itself a possible mix of interests from professional bodies and/or trade unions and/or employers and/or community groups) includes inter-professionality. The high level, large-scale work undertaken in the Master and Doctorate in Professional Studies is extending our experience of the use of multi-methodology (see chapter 12). However research tools commonly used in work based projects are most closely associated with qualitative data collection. This is because there is an emphasis on reaching depth of meaning both from the practitioner/researcher (reflexivity) and from others. Quantitative data collection tools can also be very important in these projects. For example, a rich source of data often already exists in terms of financial, statistical and codified information within the community of practice.

In addition to using reflexive practice to make sense of data, triangulation of data sources, by making comparisons of at least two views of the same event/behaviour can help to validate results (Robson, 1993). In WBLS, practitioner/researchers are encouraged to use several different data collection methods and check results so that reliability can be improved and the issue of subjectivity can be further explored.

Work based research projects must include ethical awareness and take account of complex and interrelated needs of the community of practice, the practitioner and the university. When working with other professions, the university and its students consider the ethics and practices of both the university and those at the site of their work based research. Values underpin the influences of the various interested parties identified in chapter 3; also, they are at issue in how the field of study identifies which practices are worthwhile. WBLS has identified practices that have a 'fitness for purpose' but not necessarily identified which projects have a 'fitness of purpose' (O'Reilley et al 1999). 'Fitness of purpose' must be decided on a case-by-case basis and go through university and professional, quality and standards procedures. Student, university and community of practice decide the nature of the projects that students undertake in a learning agreement. The ethical considerations related to operationalising projects are accounted for when the project's methodology is justified.

Work based projects aim to develop personal and professional practice by research and development and to discover and develop knowledge embedded in that practice. Students are worker researchers and are thus enabled to make a contribution within their communities of practice ie. in employment, for the community, in a family or voluntary organisation and are therefore context bound. The reality of the project and the particularities that contribute to it create a situation where the student as worker researcher is closely involved in the internal specificities of the work. A more traditional university project would involve a leap of the imagination, a more removed stance.

The 'benefit' element of doing work based projects is often a compelling factor for the work based learning student who is undertaking a piece of work both time consuming and exacting but which has several components of usefulness. These are that the project has benefits for the individual's personal and career development, it has practical benefits to the organisation or community and it meets the academic requirements of the university that results in the award of academic credit.

There is an end product or creative outcome to the project that generates a purposefulness that in turn engenders an ability to approach a problem or task with a particular impetus. The most effective means of arriving at the outcome or product is to take the whole context of a situation (including expert opinion and common sense matters) into account. Projects often have an impacting or change-making function and may transform for a particular purpose but may also have relevance in other similar situations. Appropriate and relevant research projects are identified by individuals or groups and negotiated between students, university and the community of practice. This ensures inclusion for the students in their situation and empowerment, as they become agents of change.

The communicative style adopted in the projects inevitably reflects the intended audience i.e. the particular community of practice and academic community. The project uses a communicative style that has to be a reconciliation between academic language and that used in the student's particular work situation. The project is negotiated to be appropriate for and fulfil the requirements of the community of practice, individual need and the university. However, making such a broad selection of cultural knowledges acceptable is often made problematic by university protocols (see chapter 4).

# **Curriculum delivery**

We have seen that methodologies such as action research and soft systems that include action learning, organisational theory and collaborative learning have particular relevance. Individuals or groups incorporate a matrix of methodologies and epistemologies relevant to the project on which they are focused. The findings and recommendations from work based projects continue the production and building of knowledge within a work based context. In this way WBLS programmes incorporate a balanced relationship between the academic, the work environment and knowledge.

To enable the curriculum focus on project work, research methods and project modules are compulsory for all students whose target award is a degree, honours degree, postgraduate diploma or masters degree in Work Based Learning Studies. The programmes require that students engage in autonomous learning within their communities of practice and know how to select and study a phenomenon from their own work situation.

WBLS Research Methods is popular and runs every semester of the academic year. There are three modes of delivery:

- On campus workshops
- 'in house' programmes for corporate cohorts, and
- distance learners, working from a free-standing distance learning pack.

All students may have two 1:1 tutorials with their course tutor/advisor to discuss the development of their research portfolio and the research proposal that they will submit for assessment. This personal time is important because of the exclusive nature of each proposal. For those able to access group sessions, the module comprises five group workshop sessions of two hours each, spread over a fifteen-week semester.

The broad content of these sessions reinforces the distance learning resource pack and continually considers the research issues. Session 1 lays the foundations by describing the research process and outlining the issues around researching at work. Session 2 applies this to a range of methodologies. Session 3 explores the data collection techniques or tools that can be employed and how they relate to research approaches employed at work and session 4 returns to the basic issues in work based research related to interpreting results and drawing conclusions. The final session is reserved for short presentations of the research proposal that each person has been developing throughout the course, which they will subsequently undertake. Tutors and peers offer written feedback on the content of these presentations, which is then incorporated into the portfolio, and where appropriate into the proposal itself.

Key to the process of the group sessions is peer group working. At the outset students are paired or grouped in threes with other members of the group and throughout the module jointly undertake assignments in preparation for presentations and discussion in the group sessions, and as part of

the module's assessment scheme. This adds another dimension to the knowledge bases used by work based learners to develop their research methodology that were described in chapter 3. Mixed professional groups, which occur on-campus or sometimes in the corporate cohort groups, whose specialist knowledge and/or roles may be in such diverse areas as health or marketing, teaching or consultancy, have the opportunity to learn from each other about their approaches to problem solving. The small, mixed, peer group work, often poses difficulties for the participants, but it provides a valuable learning experience that often produces some innovative work. Groups with a very similar professional background can benefit from sharing in-depth professional knowledge, but tend to find it more difficult to explore approaches that have not traditionally been used in their subject area. The results of the peer group exercises form one part of the portfolio.

WBLS project modules are researched and developed in the work place. Students receive a projects guideline that covers aims, objectives, introduction, methodology, activities, findings, conclusions, recommendations, appropriate referencing and appendices. Students are advised to send drafts of their project report to supervisors and receive tutorial support during the stages of the project.

In our experience, distance learning students can produce very high quality work with the tutorial support described above; often through telephone, fax, e-mail and land mail. However, the opportunity to share thoughts on the development of individual research capability and on the research processes is likely to enhance learning. Information technology and communications are essential in achieving this, and some of our own research in this area focuses on helping ensure that work based learners can obtain maximum benefit from networks such as the Internet and other electronic communication.

#### **Curriculum assessment**

The modules are worked on progressively by students and assessed formatively and summatively by means of a portfolio, in the case of research methods and by means of a project report and presentation, in the case of project modules.

The portfolio has distinctive sections, which together accumulate into a valuable research resource for the student's subsequent studies. The overall assessment also includes the short presentation of the student's research proposal described above. The following Figure (7.2) outlines the different parts of the assessment and their content, with the major learning outcomes for each mapped across. The portfolio is assessed as a whole; that is, any learning outcome can be demonstrated in any part of the portfolio.

Figure 7.2: WBLS Research Methods Assessment Related to Learning Outcomes

Assessment Portfolio	Contents	Learning Outcomes
Diary	Chronological description and analysis of research insights about methodologies, tools etc., generally, and specifically related to the individuals' project proposal. Reflection on the process of learning, collaborating etc.	<ul> <li>consider and take account of the philosophical and practical issues in work based learning research</li> <li>assess ethical, resource and access issues in work based research</li> </ul>
Research Notes	Notes on books, articles, reports; annotated newspaper articles etc.; critiques	- outline research methods, their limitations and uses
Peer Group Exercises	Log of the development, collaboration, presentation and critique of 3 exercises:  1 - design a research proposal  2 - choosing methodologies  3 - critique a research proposal	<ul> <li>recognise and value</li> <li>collaborative workplace research</li> <li>present and critically evaluate</li> <li>research findings</li> </ul>
Research Proposal	Document outlining the research question, methodology to be applied, ethical considerations, resource issues etc. of the research to be undertaken in a subsequent project module	<ul> <li>select and justify the use of appropriate research approaches and techniques for collecting and analysing research data in the workplace</li> <li>design and undertake research</li> <li>devise and use research techniques</li> </ul>
Reflective Essay	500 word overview on the module learning and becoming research minded and competent	- reflect on learning
Oral Presentation Research Proposal	5 minute presentation of the research proposal, concentrating on justification of the research methodology with written feedback from tutor and peers.	- verbally summarise research questions and appropriate methods on investigating them

The focus of the portfolio is on developing the research proposal for a project, but also to illustrate the development of research-mindedness. The diary and the reflective essay offer the opportunity to engage in reflection on the process, which is very important given the subjectivity issues discussed in this chapter. The research notes section is included to enable a more 'objective' survey of literature and documents related to the prospective project area and methodologies to be evaluated, and the peer group exercises acknowledge the importance of collaboration.

# The project report

The content, delivery and assessment of work based research and project modules reflect the issues impacting on worker researchers outlined in this chapter. Obviously these researchers are subject to a number of influences and the WBLS curriculum endeavours to take account of this.

The written project is usually in a standard format, as described in Figure 7.3. In addition, final projects must include a presentation of the results. The written and verbal parts of the assessment should demonstrate certain abilities which we believe make the individual a more effective work based learner. All of these abilities, also summarised in Figure 7.3 below, should be demonstrated in the project modules. Most of the abilities are demonstrated in most parts of the project.

Figure 7.3: Standard Format for Projects and Work Based Abilities Demonstrated Within Them

Proj	ect	Strn	cture
LIV	CUL	$\omega \mathbf{u}$	Cluic

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Summary

Chapter 1 Introduction

Chapter 2 Terms of Reference/

Objects and Literature Review

Chapter 3 Methodology

Chapter 4 Project Activity

Chapter 5 Project Findings

Chapter 6 Conclusions and

Recommendations

Notes and References

Appendices

#### Work Based Learning Abilities

- 1. Identification and appropriate use of sources of knowledge and evidence
- 2. Analysis, synthesis and evaluation of information and ideas
- 3. Application of learning
- 4. Selection and justification of approaches to task
- 5. Action planning leading to effective and appropriate action
- 6. Effective use of resources
- 7. Effective communication
- 8. Working and learning with others
- 9. Self appraisal / reflection on practice
- 10. Ethical understanding

In summary, work based learning is true to the project-based nature of work activity. The significance of the university's intervention in this normal practice is to correct, improve and enhance how that project work is undertaken and to make available methodologies which suggest new topics or areas for project work.