Teaching Research Methods: a pragmatic approach

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Introduction

Research Methods modules are normally a compulsory component of undergraduate and postgraduate business and management modules, often designed with the intention of underpinning dissertations or research projects. Previous studies suggest that students often find such modules challenging and difficult to relate to, and recommend a number of different approaches to lessen these difficulties and to improve the student experience of research methods modules. This paper describes an approach to teaching research methods to a particular type of student that has proved successful both in terms of student appreciation and in improving the submission rate and quality of the associated dissertations. It is not suggested that this approach is universally generalisable, but it contains features that may benefit other institutions and research methods tutors.

Context

The author assumed the responsibility of leading an MBA module in a post-1992 University in 2000, with the intention of developing the module and increasing student numbers. Analysis of student feedback revealed that students were generally happy with the module, but feedback from the three external examiners was not quite so positive. In particular, the standards of the dissertations was causing some concern, with several fails and many marks clustered around the pass mark of 50%. Of concern to the University was the low rate of submissions of the dissertations; of those able to submit at the first opportunity only 50% chose to do, despite a six-month period allowed for writing and submitting the dissertation.

This situation does not appear to be unusual. It has been acknowledged that students have learning difficulties with research methods modules, including difficulty linking the abstract nature of research methods modules to other modules or to real life situations (Kelly 1992, Thompson 1994), or to the requirements of the dissertation (Benson and Blackman 2003). However, the literature concerning the teaching of research methods is fragmented. Authors discuss difficulties at undergraduate level (for example Edwards and Thatcher 2004), and postgraduate

level (for example Murtonen and Lehtinen 2003). The literature is also divided over many disciplines, for example, sociology (Burgess 1981, Takata and Leiting 1987), Information Science (Morris 2005), Business Studies (Hughes and Berry 2000), and Biological Science (Kelly 1992). This fragmentation perhaps contributes to the conclusion that,

> *'there is little agreement as to the appropriate way to teach research methods or indeed its role and place in the curriculum'* (Booth and Harrington 2003: 24).

This paper describes the design and operation of the new research methods module, and discusses the results of the first five years of delivery. Reasons for the success of the new module are reviewed in the light of the literature and issues concerning generalisability are further discussed.

Method

The methodological approach for the re-design of the research methods module is grounded in the author's own experience of teaching such modules. As such it is best described as an outcome of experiential learning (Kolb 1984) and contains features of action research (Eden and Huxham 1996). A further influence was Yin (2003) in that a picture of the situation was built up by drawing on data from several sources, including student records, student surveys, external examiners' reports and examination of best practice from other institutions. The author therefore was not bound by a methodological approach, rather the author undertook a series of actions, which may be related to well documented methods of enquiry, but were focussed solely on the objective of improving the submission rate and quality of the dissertations. Subjectivity is therefore acknowledged, and generalisability cannot be claimed.

The student profile

The students formed a cohort of approximately 30 mature students (average age 32), studying for the MBA degree in part-time evening mode. Most worked within the City of London, and considered themselves potentially high achievers. A survey of students' motivation revealed that most students had pursued the module in order to gain the MBA qualification to further their careers. Few were interested in becoming professional researchers or wished to take further masters level qualifications or embark on doctoral studies. These students therefore epitomised 'strategic learners' (Entwhistle and Ramsden 1983). All were in employment, and almost all used their employing organisation as the object of their research. Some, but not all students, perceived that the production of a good dissertation would be very useful for career advancement within their organisation. Often the employing organisation sponsors the student's fees for the MBA, and sometimes directs students to an area of research from which it is likely to benefit.

Module design

The design of the new research methods module and the link to the dissertation was greatly influenced by the author's own experience of doctoral studies. To be admitted to a Doctoral (PhD) programme students had to initially register for a Master of Philosophy (MPhil) programme. Students were subjected to a transfer process to register for the PhD stream. The author's experience suggests that such a process is common in UK institutions with research degree awarding powers. On enquiring about the reason for this process the author found that in practice it was used to minimise risk of failure or non-submission of the PhD thesis, which could affect a University's research funding.

The MPhil document contained the background to the proposed research, a critical review of the literature relevant to the research topic, and a derived methodology suitable for the proposed research. Universities felt that once a transfer from MPhil to a PhD had been completed, the probability of a successful PhD submission was markedly increased.

The design of the research methods module at the author's institution followed this approach. The outcome of the module is a research proposal of 4500 words, containing a description of the research topic, background and context, a critical review of the literature, a methodology section which includes appropriate research methods, and a project plan for production of the dissertation.

The original research methods module contained many of the typical features of such modules (Edwards and Thatcher 2004, Morris 2005). Table 1 lists the content of the original and new research methods modules and their assessment strategies.

*Table 1* Original and New Research Methods Modules

	Original Research Methods module	**New research methods module**
Content	Research philosophy Literature review Quantitative methods Qualitative methods Quantitative data analysis techniques Qualitative data analysis techniques	The research process Topic generation Literature review Research philosophy Most common methods Evaluation of former proposals Proposal workshops
Assessment	1) Exam (quantitative data analysis) 2) Critique of a research article 3) Research proposal (1500 words)	1) Research proposal (4500 words)

In the original research methods module the research proposal, the third component of assessment, could be little more than a good idea. Indeed, student anxiety about the first two components of assessment, particularly the quantitative methods exam, meant that the research proposal was relegated in the students' perception of the relative importance of the components of assessment. In contrast, in the new research methods module the proposal is a piece of work that contributes significantly to the subsequent dissertation of 15000 words. Students are even encouraged to write more than 4500 words if they had made sufficient progress in their studies.

In terms of methods content, the new module focussed on two methods, interviews and the case method. Mature MBA students are familiar with interviews through their career development and tend to use methods with which they are familiar. The Case Method (Yin 1993, 2003) uses multiple methods of enquiry to describe an organisational situation, and has obvious relevance for organisationally based dissertations. Unfortunately experience suggests that quantitative techniques are commonly used only if students are already familiar with them, despite help with data analysis being offered to students. One session is devoted to quantitative methods, with an additional, non-compulsory SPSS workshop. Few students used any other methods, but all students are referred to specialist texts that explain their chosen method in depth. This helps to facilitate a professional approach to data collection and analysis.

Results

The impact of the new research methods module on the dissertation is depicted the following graph:

MBA Dissertation Results 2001 - 2005
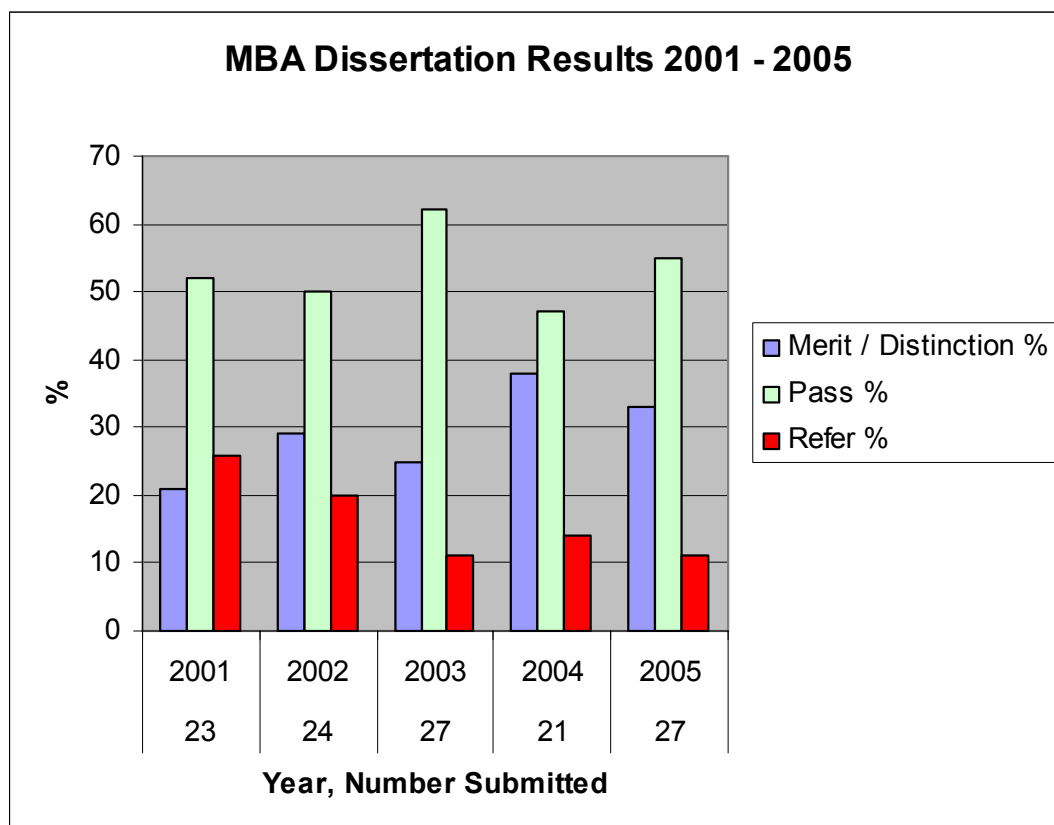
The submission rate rose from 50% to 75% at the first submission opportunity, and the referral rate was reduced to 12% (half of these students subsequently re-submit and pass). The percentage of students awarded the equivalent of a merit (over 60% to 69%) or a distinction (70% or over) in the dissertation increased to a third of submissions. In academic years 2001 and 2002 there was one mark of over 70%; subsequently there were more than one every year. Consequently, though the proportion of students gaining a pass mark remains relatively constant, a further conclusion to be drawn from the data is that the new research methods module enabled more students to achieve higher marks. Needless to say, the external examiners were complimentary and the University pleased with the improved submission rate.

Process

The new research methods module and the dissertation are intended to form one continuous learning experience. If the proposal is passed, a dissertation supervisor is appointed. However if the proposal is failed (assessment practice is not to encourage poor proposals to progress) no supervisor is appointed. This has a number of advantages.

Firstly, the appointment of a supervisor acts as a considerable incentive for students to submit good proposals. The dissertation supervisor receives a copy of the successful proposal and assessment feedback form, with comments typed against each of the assessment marking criteria. Secondly, the dissertation supervisor is assured a minimum quality of proposal, and therefore little remedial work is required concerning the topic, literature, or methodology. Instead the supervisor can concentrate on data collection, data analysis, findings, conclusions and recommendations and presentation. The process results in a more uniform standard and quality of proposals at the dissertation supervision stage. Thirdly, the possibility of plagiarism is reduced as the research process has been monitored from the generation of a research topic through to the research proposal through to the submission of the dissertation. If students wish to change their topic, which is rare, they have to submit a new proposal.

Discussion

Despite the fragmentation of the literature and the lack of consensus regarding the teaching of research methods, as Booth and Harrington (2003) acknowledge, there are several themes and commonalities of issues and approaches. The new research methods module contains many features that relate to the conclusions of previous research.

First of all, it can be seen that a straight forward choice was made between emphasis on teaching research methods and emphasis on producing a good proposal. In courses in which research methods are taught in one short module or unit such content choices have to be made (Nyden 1991, Takata and Leiting 1987). The design

of the module reduces the tensions of competing inputs (Booth and Harrington 2003), complexity, and the over-packing often found in traditional modules (Booth and Harrington 2003, Murtonen and Lehtinen 2003, Nyden 1991).

Students' unease with quantitative methods is very well documented (Morris 2005, Murtonen and Lehtinen 2003, Hughes and Berry 2000, Ware and Brewer 1999, Murtonen and Lehtinen 2003, Lehtinen and Rui 1995, Thompson 1994, Kelly 1992, Garfield and Ahlgrewn 1988). Their difficulties with quantitative methods, often arising from a poor background on mathematical education and an inability to relate the techniques taught to a practical research project. In the author's experience few students choose a quantitative method as a result of learning quantitative techniques from a research methods module. The author acknowledges that these issues concerning quantitative methods were resolved largely by reducing the teaching of quantitative techniques and removing the associated component of assessment.

In agreement with one of the main themes developed from the literature, the new research methods module encourages students to 'take ownership' of their research, thus avoiding problems of lack of relevance of the research methods module to their own project (Booth and Harrington 2003, Murtnen and Lehtinen 2003, Benson and Blackman 2003, Winn 1995). It is thought this ownership and more student centred approach (Edwards and Thatcher 2004, Synder 2003) helps to maintain interest in the research methods module, often a problem (Benson and Blackman 2003, Ware and Brewer 1999, Winn 1995). Most importantly, students engage in real research study, or 'learning by doing', an approach recommended by most researchers in this field (Edwards and Thatcher 2004, Booth and Harrington 2003, Benson and Blackman 2003, Murtonen and Lehtinen 2003, Hughes and Berry 2000, Simon and Alexander 1997, Winn 1995, Tataka and Leiting 1987). Output is directly linked to the assessment and to the dissertation (Benson and Blackman 2003), so that the students are always aware of the purpose of the module. Students are also supported by their peers, being encouraged to present their ideas and discuss their progress with their colleagues in the proposal workshops (Morris 2005, Benson and Blackman 2003).

Not previously mentioned in the literature is the careful management of the expectations of the students. These are formed by the discussion of passed proposals and assessment exercises based on them, as well as direction to dissertations in the University library (only dissertations awarded a merit or distinction are catalogued). The students are therefore given a very clear idea of what is required for the research proposal. The career benefits of the dissertation are made clear to all.

To conclude, it is strongly argued that this pragmatic approach to research methods module design has been successful in what it set out to achieve. Its emphasis on focussed research competence rather than an appreciation of research methods

(Rose 1981) has resulted in greatly improved dissertation results and more appreciation by students.

Transferability to other courses

The approach to teaching research methods described in the paper has been adopted by all masters level modules in the author's department. However, the students on all these modules are mature part-time students undertaking management related business modules for professional development. It is recognised that this type of student is unusual, and that the approach described in this paper may well not be suitable for younger, less experienced students pursuing non-vocational degrees. By being able to undertake research in the student's own organisation, the problem of data access is avoided and student interest maintained. Sadly, most students do not have such easy access to data. The approach described in this paper will also be of less interest to those students who wish to pursue a higher degree or to undertake professional research. It is also recognised that different disciplines are often associated with specific research methods. For example for scientific research a working knowledge of quantitative techniques is necessary. However, the findings of earlier researchers concerning linking research methods teaching to real life situations, activity based, student-centred learning and clarity about learning outcomes should be of value to research methods tutors in most situations.

References

Benson, A and Blackman, D (2003) *'Can research methods ever be interesting'* Active Learning in Higher Education, 4 pp39-45

Booth, C and Harrington, J (2003) *'Research Methods Modules and Undergraduate Business Research: An Investigation'* The International Journal of Management Education 3(3) pp19-31

Burgess, R (1981) *'Objectives in teaching and using research methodology'* Sociology 15 pp490-490

Eden, C and Huxham, C (1996) *'Action Research for Management Research'* British Journal of Management, 7(1) pp75-86

Edwards, D and Thatcher,J (2004) *'A Student-centred Tutor-led Approach to Teaching Research methods'* Journal of Further and Higher Education 28(2) pp195-206

Entwhistle, N and Ramsden, P (1983) *'Understanding Student Learning'* (London: Croom-Helm)

Garfield, J and Ahlgrewn, A (1988) *'Difficulties in learning basic concepts in probability and statistics: implications for research'* Journal for Research in Mathematical Education 19 pp 44-63

Hughes, M and Berry, A (2000) *'Learning by Doing: A Case Study of Qualitative Accounting Research'* Accounting Education 9 pp157-174

Kelly, M (1992) *'Teaching Statistics to Biologists'* Journal of Biological Education 26 pp200-203

Kolb, D (1985) *'Experiential Learning: Experience as the Source of Learning and Development'* (Englewood Cliffs, New Jersey: Prentice Hall)

Lehtinen, E and Rui, E (1995) *'Computer –supported complex learning: an environment for learning experimental methods and statistical inference'* Machine-Mediated Learning 5 pp149-175

Morris, A (2005) *'Research Methods in Teaching in Information Science: UK Experiences'* World Library and Information Congress: 51th IFLA general Conference and Council August 14-18 Oslo, Norway

Murtonen, M and Lehtinen, E (2003) *'Difficulties Experienced by Education and Sociology Students in Quantitative Methods Modules'* Studies in Higher Education 28(2) pp171-185

Nyden, P (1991) *'An Interview with Phil Nyden'* Teaching Sociology 19 pp396-402

Rose, D (1981) *'Methods for whom?'* Sociology 15 pp512-519

Simon, J and Alexander, D (1997) *'Education Empiricism and the Ethical Dimension – A Real Life Student-Centred Research Report'* Accounting Education 6 pp163-175

Synder, K (2003) *'Ropes, poles and space: active learning in business education'* Active Learning in Higher Education 4(2) pp159-167

Tataka, S and Leiting, W (1987) *'Learning by doing: The Teaching of Sociological Research Methods'* Teaching Sociology 15 pp144-150

Thompson, B (1994) *'Making Data Analysis Realistic: incorporating research into statistics modules'* Teaching of Psychology 21 pp41-43

Ware , M and Brewer, C (Eds.) (1999) '*Handbook for Teaching Statistics and Research Methods'* (London: Lawrence Erlbaum)

Winn, S (1995) *'Learning by Doing: teaching research methods through student participation in a commissioned research project'* Studies in Higher Education 20(2) pp203-214

Yin, R (1993) *'Applications of Case Study Research'* (London: Sage Publications)

Yin, R (2003) *'Case Study Research: Design and Methods'* (London: Sage Publications)

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