Research Teaching and Learning *in* Higher Education

EDITED BY
BRENDA SMITH
AND SALLY BROWN

Staff and Educational Development Series

Research Teaching and Learning *in* Higher Education

EDITED BY
BRENDA SMITH
AND SALLY BROWN

Routledge
Taylor & Francis Group
LONDON AND NEW YORK

The Staff and Educational Development series
Series Editor: Sally Brown

Assessing Competence in Higher Education Edited by Anne Edwards and Peter Knight

Assessment for Learning in Higher Education Edited by Peter Knight

Research, Teaching and Learning in Higher Education Edited by Brenda Smith and Sally Brown

Reprinted 1997

First published in 1995 by Kogan Page Limited

This edition published 2012 by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN
711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

---

British Library Cataloguing in Publication Data

A CIP record for this book is available from the British Library.

ISBN 0 7494 1412 X

Contents

Notes on Contributors

Dorothy Bell is Information Assistant in MARCET, the Materials and Resources Centre for Enterprising Teachers, in the Educational Development Service of the University of Northumbria at Newcastle.

David Boud is Professor of Adult Education at the University of Technology, Sydney, Australia.

Angela Brew is Director of the Educational Development Unit at the Academic Development Centre of the University of Portsmouth.

Reva Berman Brown is Co-director of the MBA programme in the Department of Accounting and Financial Management at the University of Essex.

Sally Brown is an Educational Development Adviser in the Educational Development Service of the University of Northumbria at Newcastle.

Marshall Elliott is Director of Research in the Business School of the University of Sunderland.

Lewis Elton is Professor Emeritus of Higher Education at the University of Surrey and Higher Education adviser to the Department of Employment.

Della Fazey is a Lecturer in the School of Education at the University of Wales, Bangor and the Project Director for the two-year Guidance and Learner Autonomy Project, funded by the Department of Employment.

John Fazey is a Senior Lecturer at the University of Wales, Bangor and is Director of the Staff Development Unit there.

David Garnett is the Director of Teaching and Learning in the Faculty of the Built Environment at the University of the West of England at Bristol.

Graham Gibbs is the Head of the Oxford Centre for Staff Development and Professor at Oxford Brookes University.

Michael Gregory is the Head of the Faculty of Business and Management at Suffolk College.

Roy Gregory is Principal Lecturer in Engineering Education in the Mechanical and Aero Engineering Division of the University of Hertfordshire.

Irene Harris is Business Development Manager in the Faculty of Management and Business of Manchester Metropolitan University.

Roy Holmes is Professor of Facilities Management at the Faculty of the Built Environment at the University of the West of England at Bristol.

Terri Kelly is the interim Director of the Centre for Continuing Education, Development and Training at the University of Hull.

Sean McCartney is Co-director of the MBA programme in the Department of Accounting and Financial Management at the University of Essex.

Liz McDowell is an Educational Development Adviser in the Educational Development Service of the University of Northumbria at Newcastle.

Ian Moore is a Staff and Educational Developer at the University of Ulster.

Mike O'Neil is Principal Lecturer in Higher Education at the Nottingham Trent University.

Phil Race is Professor of Educational Development at the University of Glamorgan.

Brenda Smith is Teaching and Learning Quality Manager at the Nottingham Trent University.

Peter Smith is Professor of Computing in the Department of Computer and Information Systems at the University of Sunderland.

Lin Thorley is Head of Learning Development at the University of Hertfordshire.

Frank Walkden is Head of the Learning System Institute of the University of Salford.

Tom Wengraf directs the Higher Education Action Research and Design Unit at Middlesex University.

Foreword

This book is based on sessions and keynote speeches at the SEDA (Staff and Educational Development Association) Conference on Research Teaching and Learning held at Dyffrwn House, Cardiff in November 1993. SEDA conferences are active and participative, so these chapters are not for the most part papers that were read at the confence; rather they represent the reworked and distilled thoughts of the presenters after they had had the experience of leading a workshop on a related topic.

Leading a participative conference session is not the same kind of activity as writing or reading aloud a learned paper. The designation 'workshop' recognizes, as does good teaching practice in universities today, that effective learning in higher education is not a matter of passive reception of ideas from a single authority, but of sharing, cooperation and interaction between a group of adults, guided by a sensitive facilitator who is able to manage the process of learning as well as contributing from his or her own personal experience, knowledge and expertise.

Thanks are due to the organizing committee for the conference, led by Joyce Barlow and Richard Kemp. We are grateful to all those who have contributed to this publication, either by writing chapters or by helping us in its production, particularly Trisha Little of the University of Northumbria at Newcastle; we also recognize the leadership and support the organization SEDA gives to all those who are committed to ensuring the effectiveness of those working in higher education in all facets of their academic practice.

Sally Brown

This page intentionally left blank

SECTION ONE

THEORETICAL PERSPECTIVES

This page intentionally left blank

Chapter 1

Research, Teaching and Learning: Issues and Challenges

Brenda Smith and Sally Brown

INTRODUCTION

This book is timely, originating as it does from a lively and well-attended conference exploring the relationships between research, teaching and learning in the academic environment. It is in two halves, the first seven chapters exploring some theoretical perspectives on the key issues and chapters 8 to 18 demonstrating how some of these ideas work in practice in universities.

In this first chapter, we take the opportunity to review some of the fundamental questions affecting the research and teaching functions of British universities in the 1990s, in times which in terms of the Chinese curse are 'interesting'. In so doing, we aim to introduce some of the key themes and also to argue our particular view that research and teaching should be equally valued as complementary and essentially mutually supportive activities at the heart of the work of academics in higher education.

In Chapter 2 Graham Gibbs writes about what we can learn about student learning, using significant existing research that, although available, is all too often unrecognized or ignored. Angela Brew and David Boud write next about the need to develop an understanding of the relationship between research and teaching in order to maximize the potential for both. This is followed by a chapter in which Lewis Elton explores the effects the policies of the Funding Councils have on teaching quality.

Next David Garnett and Roy Holmes look at what they see as the symbiotic relationship between research, teaching and learning, demonstrating really fruitful interaction between undergraduate and postgraduate teaching and learning. In Chapter 6, Peter Smith and Marshall Elliott discuss the current and future importance of applied as opposed to basic and strategic research, which has resulted in a much more applied and practical orientation to many research projects.

In the final chapter of this section Frank Walkden writes about ways of improving learning by training individuals to be proactive in their approaches to study, rather than relying overmuch on sequential models of teaching.

Section Two commences with Phil Race's lively gallop through the tensions between academic research and student-centred learning, teasing out the broad competences which underpin both good quality teaching and research.

The next three chapters are concerned with research students and their supervision: Chapter 9 by Lin Thorley and Roy Gregory addresses the development and problems of a research methodology course for research students and looks at some of the mechanisms in use to help them to cope with researchers who also teach while completing their research theses. Ivan Moore next describes how they are trying to provide staff development for the supervisors of such students at the University of Ulster and in Chapter 11 Irene Harris explains how the Business and Management faculty at Manchester Metropolitan University has set up and run a programme for research-related staff development.

The next group of chapters describe initiatives to research the effectiveness of teaching and learning: the first of these outlines a SEDA-funded small scale research project by Dorothy Bell, Sally Brown and Liz McDowell using repertory grid techniques to explore lecturers' perceptions of what makes a good lecturer. This is followed by Mike O'Neil's chapter which includes essential principles for enhancing high quality learning in higher education and suggestions on how to foster a learning environment in which deep learning can take place.

Next Michael Gregory writes about the background and design of an MA in Human Resource Management where action learning and action research provide the model for accrediting professional development. In Chapter 15, Della and John Fazey report some key outcomes of their work on a sport, health and physical education programme in which commitment to teaching stems from the need to apply knowledge about learning to the course itself, putting into practice the principles they prescribe.

In Chapter 16 Sean McCartney and Reva Berman Brown review the use of research learning on self-identified projects on a part-time MBA at Essex University, where students become more effective learners by adopting a deep approach, thereby enabling the tutors to become facilitators rather than content deliverers. Tom Wengraf next describes how 49 of his first-year students were asked to interview a sample of students and tutors on how best to improve a specific module on a course and then to produce a report to a strict format: the results are fascinating!

Finally Terri Kelly discusses the often troubled relationship between

staff and educational development and provides an idiosyncratic view of the way this is progressing in her own institution. We conclude with a brief Afterword in which we make some proposals on the way forward in the coming years: a manifesto for research, teaching and learning in higher education.

WHY DO OUR UNIVERSITIES WANT US TO CONCENTRATE MORE ON RESEARCH?

The Research Selectivity exercise puts urgent pressure on universities to encourage lecturers to become active researchers in order to secure associated funding. The system is still in a state of flux, but the race for a starred 5 looks set to be a pressure on all traditional universities. At the same time, institutions which in the first exercise were quite happy to have achieved a 2, given the comparatively minimal research funding previously available to them under the old system, now feel the pressure to do much better, if they are to maintain the funding they have got.

The system is so susceptible to all kinds of political pressures that it seems certain that some universities will make grave errors of judgement in the decisions they make in how they direct their efforts. Lewis Elton's chapter on the effect of Funding Council policies on teaching quality is most illuminating in this respect. Current thinking seems to suggest that institutions which have traditionally been badly funded for research and which have insubstantial backgrounds in research would be foolhardy to invest too much time or money in improving their research ratings at the expense of their teaching quality. It seems certain that the changing system is still likely to privilege the former high flyers at the expense of those lower down the scale. We must not, however, give up the fight to be effective in research too.

CONFLICTING PRESSURES: RESEARCH AND TEACHING QUALITY

Perfectly competent university lecturers who see teaching as their principal function are now being made to feel unproductive and undervalued if they do not have a string of publications to their names. This is being felt particularly badly in the former public sector institutions, which have traditionally had a stronger bias towards teaching, whereas lecturers in the old universities have always been required to be active in research and publishing. Lecturers from the new universities, however, are nowadays expected to be as active in research as they are in teaching, although

rarely is compensatory time allowed to enable meaningful research activities to be undertaken.

Simultaneously, lecturers from the older universities are being exhorted to concentrate more on the techniques of effective teaching, a pressure that is not always welcome. A letter from a lecturer in a large civic university in the North East, quoted in Evans (1993), illustrates such a view:

> I am not a teacher. I am not employed as a teacher, and I do not wish to be a teacher. I am employed as a lecturer, and in my naivety I thought that my job was to 'know' my field, contribute to it by research, and to lecture on my specialism. Students may attend my lectures but the onus to learn is on them. It is not my job to teach them.

Apocryphal stories are common of advice given by old hands to newly recruited lecturers in old universities to have as little to do with the students as possible, to leave lectures promptly without allowing time for questions and to maintain a closed office or lab door so as to preserve from contamination the precious time available for research. In this way they will be able to achieve academic success and career advancement. The new universities are not immune from such thinking: a respected senior research chemist known to the editors was heard to advise a group of new lecturers on a postgraduate teaching certificate course that if they worked hard and achieved success in research, they might, like him, be able to get out of teaching completely.

To academics for whom involvement with students has often been seen as a tangential rather than a central task, the movement towards student-centred learning is a radical one and just as disruptive to their view of what they are supposed to be doing as is the experience of teachers in the old public sector now being cajoled or coerced into active research.

How can we balance our research and teaching activities?

This is perhaps the hardest question to deal with. Many university lecturers are finding that they are under pressure to teach more and more students with no more resources, just at a time when they are expected to produce graduates with a range of skills and abilities attractive to employers: simultaneously lecturers are urged to adopt new, creative and student-centred teaching approaches. To be expected to undertake meaningful research as well is proving to be the last straw for many.

In some disciplines and departments it is relatively easy to ensure that the research one is undertaking is so closely linked to the subjects one is

teaching that the two activities support each other. Elsewhere, hard-pressed academics are trying to keep up with their research interests, while their teaching areas are becoming more and more divergent. For many, the research they are doing is often unrelated to their teaching load, and instead of enhancing and reinforcing it, research work actually ends up as a competitive demand on their limited time. We frequently hear of lecturers, especially in the new universities, who are given teaching timetables at the last minute which require detailed preparation, often *ab initio*, with no assurance that they will be teaching the same material again in the following year, or indeed, ever again.

Most universities have an element of research and scholarly activity as a specified requirement within a lecturer's workload: in some cases, this can lead to lecturers seeking out areas to research which have minimal long-term value in their contribution to scholarship, but which are undertaken because they are manageable and achievable. This kind of drudgery benefits no one.

Publications which are produced as a result of a need to fulfil an annual quota of research output will tend not to be ground-breaking or exciting. In science, technology and engineering research, it is now considered better to split a set of research findings into ten short papers published in a selection of journals, rather than to compile an excellent and substantial single contribution to the discipline ('salami slicing'). Just as people had got used to the idea that it was important to produce as many publications as possible, the rules changed again and now the watchword is quality not quantity, with active researchers being asked to put forward for consideration their four best publications within a set period rather than all of their publications. It is no wonder that academics feel themselves stretched to the limits.

One of the problems of those who are trying to break into publication is that many journals act as a closed shop, only publishing papers by what the police call KTUs (Known To Us), whether this is an overt process or what Belbin terms 'elective homogeneity' (Belbin, 1981) by which groups tend to perpetuate themselves by recruiting to their own image. Reputedly, one of the unfairnesses of the first research selectivity exercise was the way in which publications only counted if they were in designated 'reputable journals', and this list of journals has been established by the panels, based on their own preconceptions and opinions, rather than any more balanced view (Cross, 1994). This view can be crudely paraphrased as 'If we haven't heard of this journal and we don't know any of the names on the editorial panel it can't be much good'.

Journals are springing up around the country which have been devised purely to provide refereed and therefore countable publication outlets for researchers (within the grounds of profitability, of course). Those

involved in editing any kind of academic publication can testify to the massively increased submission rate of materials for publication and also the increased number of slightly desperate phone calls one receives enquiring whether items have been accepted, so that people can include them in their research ratings.

In the former polytechnics, people who have quietly been ticking away, publishing sometimes quite arcane texts, often regarded by their colleagues as perhaps slightly self-indulgent and certainly rather odd, suddenly find themselves sought after and celebrated. There are rumours of a lucrative transfer market for academics with good publications track records, and people who haven't seriously addressed themselves to writing since the early days of their academic careers are suddenly feeling the hot breath of the departmental head of research on the backs of their necks!

The authors even know of a small, active, original but rather off-beat social science research group which has split itself into two halves, one half being the editorial panel of the International Journal of XX and the other half acting similarly for the British Journal of XX. Thus members of each half can submit papers to the other half for publication without unnecessary interference from hostile referees!

Not surprisingly, respected journals not only are heavily over-subscribed with potential contributors, but also have long waiting lists of accepted papers. We know of authors being told, 'Yes, we will be delighted to publish this, but it will have to be in an issue towards the end of next year!' The result of such pressure is a new kind of performance indicator for journals, that of speed of publication. After all, researchers could be entitled to think that the most important criterion is that the paper is published in time for the next research selectivity exercise, which is only interested in papers in print, not accepted or at press.

WHAT IS SCHOLARLY ACTIVITY?

As the pressure to be 'active' grows (were we all so inactive before?!), the definition of what comprises research is being reviewed; correspondence in the *Times Higher Education Supplement* (Frayling, 1994), for example, begs the question whether 'arty facts', that is writings about art, are really superior in output terms to artistic artifacts. Should the definition of what research consists of take greater account of the diversity of academic practice in universities? Should not works of art, sculptures, paintings, fashion garments, etc. be permitted to count in the same way that creative writing (novels, poems, plays) often are?

We believe it is time to review the hierarchies: to look again at the

relative value of letters in the press, in-house publications (often effectively vanity presses), conference presentations, workshops and keynote speeches. How can we compare the relative merits of writing and editing publications? Can we find ways of breaking down the old boys' networks (sadly there is often a gender dimension) which control access to publication in many disciplines? What constitutes an international publication and are some countries of publication more reputable than others?

Frequently co-authored texts are seen as being inferior to those that have single authors: is this necessarily the case? Naturally we, the co-editors of this book, feel that there are unarguable benefits to cooperation in writing and research. Indeed, we have found that co-authoring with a range of colleagues has been one of the most significant sources of our own professional and personal development. To write collaboratively is a highly developed skill, requiring negotiation, tact, teamwork, sensitivity, all the kinds of abilities that we would hope to promote in our students. And yet we are warned to be cautious about over-reliance in our publications records on joint work, which is often deemed to be rather dubious. ('How can we know how much she was *really* responsible for?')

Of course there are also games that can be played with joint publication: we all have heard of the researchers who tactically co-publish even when collaboration has been minimal in order to bulk up their individual paper counts. We also know of more sinister activities when research supervisors claim credit for the work of their research students by insisting on their names going first in the author order of co-written texts, even when their actual contribution to the writing has been nil.

We would argue that the rules that govern what does and does not count as scholarly activity in universities need to be dismantled, redesigned and rebuilt, so that the system does not unfairly privilege the conventional over the innovative. Those of us who currently work in the old public sector keenly feel a sense of injustice, that we are not competing for research funding on an even footing with the old universities. If we are all to be able to compete on equal terms for research funding (and there is some question about whether this will continue for long to be the case), then the proverbial playing field must be a level one, and the goal posts, once fairly fixed in place in properly regulated positions, must stay still, at least until the system is established and understood by all parties.

RESEARCH ABOUT TEACHING AND LEARNING

If we are to improve the quality of teaching and learning in our universities, we need to find out about the relative merits of the different

techniques available to us. Graham Gibbs' chapter reminds us that most of the major questions many of us would like to see answered about teaching and learning in higher education have already been addressed in the past 20 years, particularly in the USA.

In Britain in the last ten years there has been considerable research into what works and what does not in university teaching, but it is only recently that the disciplines of staff and educational development have become a recognized and respectable area. Only comparatively recently have we seen the appointment of professors of educational development at one end of the scale and of research students looking into issues of pedagogy (and androgogy) in higher education at the other. However, the field is growing, as the success of SEDA, the Staff and Educational Development Association, can testify. At one stage the establishment of staff and educational development units was largely to be found in former polytechnics, but now, due in part to the pressures of the HEFC quality assessment exercise, which directs attention to the quality of teaching in all universities, these are becoming more commonly found in old universities too.

Only by applying rigorous and relevant research techniques to teaching techniques will we ever be able to convince doubters of the efficacy of the methods many of us believe in with passionate conviction. Such research is currently piecemeal: we need to organize and participate in much more systematic approaches to research about teaching and to be much more effective at disseminating such research as already exists.

REFERENCES

Cross, M (1994) Unpublished lecture material from a presentation given at the University of Northumbria at Newcastle, 28 January.

Belbin, RM, (1981) *Management Teams: Why they succeed or fail*, London: Heinemann.

Evans, C (1993) *English People: the experience of teaching and learning English in British Universities*, Buckingham: Open University Press.

Frayling, C (1994) 'Artifacts or arty facts' Opinion Column, *Times Higher Education Supplement* May 20.

Chapter 2

Research into Student Learning

Graham Gibbs

At a CVCP/SRHE research seminar on teaching and learning, Noel Entwistle said: 'much of the work on innovations in teaching and learning has a rather weak research base' (Entwistle, 1993). In the same week the National Commission on Education reported and recommended that more research into effective teaching and learning practices should be undertaken and that some kind of national unit be set up to undertake and coordinate this research. We need to ask ourselves whether more research is really necessary and if so, of what kind and undertaken by whom.

We already know a good deal. The evidence shown in Table 2.1 comes from a very large-scale piece of educational research. What might Condition C be that it results in such a dramatic improvement in student performance?

In fact the 'experiment' involved the whole of higher education in the UK over 21 years and the three 'conditions' are the years 1969, 1979 and 1990 (MacFarlane, 1992). The point about this evidence is that few believe that standards have actually improved and it raises far more questions than it answers. It would be helpful to have some evidence about some of these questions. For example haven't the larger classes which have mushroomed since 1979 led to poorer performance, not better performance? Well actually they have, and we have clear evidence about this. For example in a study of the relationship between module enrolment and student grade on 1,500 modules involving 37,000 students over five years, students in large classes were found to have a significantly lower chance of getting good grades (see Table 2.2).

Table 2.1 *Student performance under three conditions*

	Condition		
	A	B	C
Proportion of students gaining 1sts or 2:1s	29%	32%	49%