

Approved

University of Derby
Research Operational Strategy 2010-2014

INTRODUCTION

1. The role of research and scholarship at Derby

Research plays a major role at Derby. It is an intrinsic characteristic of higher education that it should be based upon research and scholarship. The former is the development of new knowledge and the latter is the appreciation of where research has taken the subject. This means that delivery in higher education should take students close to the cutting edge of the subject. Engagement in research enables the tutor to enliven teaching by infusing understanding and excitement generated through her/his own experience. Research activity also helps with the recruitment and retention of high quality staff who are attracted to universities that support and value research. For these reasons the University of Derby is strongly committed to curriculum related research and scholarship. All academic staff are expected to undertake scholarship and, aspirationally, a substantial majority (85%) should engage in research. The primary aim is to promote and resource research activity which underpins curricular developments at undergraduate and postgraduate levels. The University wishes to align teaching and research.

2. Research quality at Derby

The results of the Research Assessment Exercise 2008, in which four units were submitted, provided independent evidence of the quality of the strongest research carried out at the University. At least 50% of all submitted research was judged to be of international class and some world class research was identified in two of the units of assessment submitted. This has resulted in HEFCE funding income of £548 k in 2009/10 and announced funding of £526 k in 2010/11. The high ratings reflected the quality of the research outputs but ratings for the research environment and esteem were generally lower. This fact is taken into account in this strategy document. It is an imperative to strengthen the **research environment** over this planning period.

The peer recognition of the high quality of the best research is of critical importance to the University because this judgement is respected by academic staff across the sector. The strongest academic staff wish to work in a research-active environment and so continued peer recognition of their contribution to their chosen discipline is important. HEFCE has now proposed the basis for the next major assessment of research quality under the Research Excellence Framework in 2013/2014 (subject to confirmation). This will be a critically important opportunity for the University to test its progress in raising its reputation for research.

THE RESEARCH STRATEGIC PLAN 2010-2014

This strategic plan confirms the broad direction of plan approved by the Executive in June 2009. However, there are important additions. This five-year plan recognises that the pace of research activity is accelerating and there is an urgent need for new support developments to match demand. This document also integrates the preparation for the Research Excellence Framework into the plan.

3. The aims of research, the objectives and the measures of success

The overall aim of the University's research strategy is to create a highly research active learning environment in which the products of research contribute widely, and substantially, to the success of the institution. The outcomes of research are expected to benefit the taught curriculum, the student learning experience and pedagogic practice in learning, teaching and assessment. In addition, the University will increasingly use its research expertise to inform strategic business decisions.

The specific aims of the research strategy are:

- To increase the range, quality and quantity of research across the institution.
- To increase the impact of research upon the design and development of programmes and modules, pedagogic practice in learning, teaching and assessment and the student learning experience.
- To increase the use of the research expertise at the University to inform the decision making regarding some strategic business decisions
- To perform well in the Research Excellence Framework (REF) in 2013/2014 (date subject to confirmation)
- To strengthen the research environment.

Measures of success:

- Impact on curriculum as evidenced through the audit exercises of the Research Inspired Curriculum Fund and other audit tools, as appropriate;
- Research quality as measured in the Research Excellence Framework (REF). The University will aim to enter between 100 and 130 researchers in 2013. The target quality profile for re-entered units is 0% unclassified; 30% at 1*; 30% at 2* and 40% at 3* or 4*. The target quality profile for first time units in 2013 will be 0% unclassified; 50% at 1*; 40% at 2* and 10% at 3* or 4*. The University will aim to achieve 2* scores for research environment. Furthermore, subject to government policy permitting, the QR funding in 2014/15 should exceed the QR funding in 2009/10.
- Research productivity as reflected by the number of conference papers, refereed journal articles and edited chapters and research volumes. A notional target of 250 publications has been set for 2009/10. The target will be reset in 2010/11 to take into account of the actual number in 2009/10 with a planned 10% increase in the number of publications in each of the next 3 years.
- A comprehensive and coherent programme of professional development for all staff researchers is in place by September 2011.
- External funding income for research increases by an average of at least 10% per year over the planning period.

DISCUSSION OF THE PRINCIPAL DEVELOPMENTS

4. The need to increase the volume of research

The four units of assessment submitted in RAE 2008 represented only a small proportion of the fields which are offered in undergraduate and postgraduate programmes. There is good research in a number of areas which were not selected for submission to RAE 2008 but, overall, the volume of research activity is modest compared to many other universities. The strategy initiated in 2009, aims to extend teaching-related research and scholarship much more widely across the University.

A cornerstone for the research strategy is therefore the proactive encouragement for the formal recognition of new communities of researchers in the form of research centres and groups. There has been significant progress with the upgrade of Identity, Conflict and Representation to research centre status and the approval of five new research groups in 2009/10.

- (i) Visual Communications
- (ii) Law and Society
- (iii) Academic Practice
- (iv) Distributed and Intelligent Systems
- (v) Mechanical and Manufacturing Engineering and Industrial Design

The total number of centres and groups has increased to 16. Over the planning period this is expected to rise to around 20.

5. Subject health: matching the growth of research against the curriculum offer

As research and scholarship activity extends and deepens, its capacity to support the taught provision is improved. The University aims to increase *subject health* by underpinning all taught provision, at all levels, with relevant scholarship and research. In order to bring this about, the research centres and groups will be matched against the schools, the subject areas and the academic programmes. This will enable a more proactive approach to the recognition of new research groups and also help to identify any mismatch or gap. The current relationships between research centres/groups and the schools are illustrated in Table 1.

Faculty and School or Department		Research Centre or Research Group	
	Quality Enhancement Department	1	Academic Practice RG
	The School of Flexible and Partnership Learning		
Faculty of Arts, Design and Technology			
1	School of Art and Design	2	The Open Studio RC
		3	Visual Communication RG
2	School of Humanities	4	Identity, Conflict & Representation RC
3	School of Technology	5	Signal Processing Application RG
		6	Mech/Man Eng & Industrial Design RG
Faculty of Education, Health and Sciences			
4	School of Education	7	Education and Career Management RC
5	School of Health	8	Applied Mental Health RG
6	School of Social Care and Therapeutic Practice	9	Society, Religion and Belief RG
7	School of Science	10	Biological Sciences RG
		11	Human and Physical Environments RG
		12	Psychological Research RC
Faculty of Business, Computing and Law			
8	Derbyshire Business School	13	Systems Thinking and Organisational Change RG
9	School of Computing	14	Distributed and Intelligent Systems RG
10	School of Law and Criminology	15	Law in Society RG
University of Derby Buxton			
11	School of Further Education (Buxton College FE)		
12	School of Culture and Lifestyle	16	Culture, Lifestyle and Landscape RG

Figure 1: This figure lists the schools and the current research centres and groups. The figure shows that most schools have at least one research centre or group. Over the planning period this matching process will be extended to subject level and to major programmes. Please note that several research groups have cross-faculty membership. The Academic Practice Research Group operates across the entire University.

The University has now completed two successive annual audits of research funded by the Research Inspired Curriculum Fund which is derived from University income (December 2008 and 2009). This has demonstrated the benefits for student learning and the taught curriculum. Thus there are indications that teaching-related research is working and that the volume of research productivity is increasing.

6. The postgraduate research environment (PGR/PGP)

One of the key indicators of the vitality of the research environment is the volume of postgraduate research (PGR) training which encompasses postgraduate research (PGR) and postgraduate professional (PGP) students. The University has 135 PGR researchers and about 150 PGP doctoral students. In comparison with other universities, the number of PGR students is low but the number of PGP students is high. The University has the potential for a moderate increase in PGR students and, possibly, a *greater* potential for increasing the number of PGP doctoral students. There is considerable scope for a series of postgraduate professional programmes at doctoral level in the health sciences, in business, technology and in law and criminology.

A major factor for postgraduate research and professional activity at the doctoral level is a suitable research environment which must be well established *before* PGR and PGP students are recruited. PGR and PGP students are only recruited to areas with a recognised research centre or group. A related factor is the supervisory capacity. Academic staff can only supervise research if they are research engaged and are suitably prepared to undertake the supervisory role. Strategically, it is now a top priority to put into place a comprehensive programme of professional practice support for staff so that the University can be confident that it equips staff to be effective research supervisors.

The University aims for recognition of the high quality of the postgraduate research training provision. The PGR provision has gained the full confidence of the Quality Assurance Agency following the Institutional Audit of November 2009. The University has also submitted an application for the accreditation of a Doctoral Training Unit in the Social Sciences by the Economic and Social Science Research Council based upon the strongest areas of University research. The outcome of the application will be known in August 2010. Although approval of a DTU will not guarantee studentships, it will provide a recognised unit to which education, business and other areas can be added in due course.

7. Research investment priorities if funding opportunities arise

The University anticipates a tough financial climate for several years. As a consequence the University has no plans to offer a development fund in 2010. However, if an opportunity to invest around £250 k arises, there are two priorities. The first is to provide more funds for academics to buy out time to undertake more research under the existing funding frameworks (TIR and RICF). The second is to fund PGR University Studentships which can enable students to pursue research investigations desired by the University. Investment in 2010 or 2011 would be in sufficient time to bring research environment benefits to the REF submission in 2013.

8. Continuing Professional Development - Academic Practice in Research

A high priority at present is the development of new programme in Academic Practice in Research which is under preparation within the Continuing Professional Development framework. This programme will be available to all University staff who are engaged in research and members of staff of collaborative partners. The programme is principally designed to be taken on an elected basis following Developmental Performance Reviews but those wishing to supervise PGR/PGP students for the first time will be required to take the module in *Research Supervision*. This will help them become familiar with the regulations, procedures and arrangements that apply to PGR and PGP students. The programme which will lead to master's level and doctoral level awards, is expected to be validated in 2010 for full implementation in September 2011.

9. The need to make research financially viable

Over the past few years, the transparency financial data (TRAC) have indicated that research activity is significantly in deficit. The annual deficit for 2007/8 was calculated to be £954 k. Action was taken to correct the academic workload weighting for PGR supervision and place PGR fees on a more sustainable basis. The annual deficit for 2008/9 has improved by over £150 k. A further major improvement is expected in 2009/10 when the new HEFCE funding is included. It is now known that the improvement will extend to 2010/11. The aim is to bring research finance to a balanced position.

10. Collaboration with the East Midlands University Association and ESRC recognition

The University is an active member of the East Midlands University Association at Steering Committee, Research Strategy Committee and the Postgraduate Committee. This has led to collaboration in significant matters. In September 2009, University of Derby PGR students attended a jointly held EMUA conference at Loughborough. A second EMUA PGR conference in September 2010 will enable a small number of PGR students at Derby to present papers at the conference.

The University has also used its EMUA contacts to strengthen its submission for the ESRC Doctoral Training Unit.

11. A revised strategy for internal funding and support

Since 2003, the University has channelled three strands of funding for the purpose of funding research which will benefit teaching. All University funding for research is granted on the understanding that one intention is that the resultant research will benefit the student learning experience.

First, the annual excellence fund known as the *Promising Researchers' Fund* has awarded circa £350 k over 7 years. Secondly, the *Teaching Informed by Research Fund* has allocated about £500 k in small grants to researchers since 2006. This has been used in particular to support more pedagogic research. Thirdly, the *Research Inspired Curriculum Fund* has channelled around £400 k in small grants since 2006, mainly for discipline related research.

Three broad categories of research experience are recognised.

- (i) **Research areas of proven international class:** The peer recognised quality research in the four units submitted to RAE 2008. These areas will benefit from the re-investment of the greater part of the quality related funding. All members of the research groups and centres that contributed to the submitted entries can potentially benefit from these funds. The funds to be allocated will be subject to a satisfactory plan for the use of the funds over the planning period. The progress will be monitored through the annual reports of the research centres and groups. These researchers will be expected to win external funds but they may also apply for TIR/RICF funds. Early career researchers and mid-career research starters may apply for monies from the Promising Researcher's Fund.
- (ii) **Research areas of good quality:** These are areas of good to very good research which did not enter RAE 2008 but may reasonably expect to prepare for entry to the Research Excellence framework in 2012/13 (or 2014/15). Researchers in these areas may apply TIR and RICF funds. Also, early career researchers and mid-career research starters may apply for monies from the Promising Researcher's Fund. In addition the University will aim to make modest amounts of monies available as strategic investment growth funds to commence in 2009/10.
- (iii) **Emerging Research areas:** These are areas where research activity is relatively light and the majority of researchers have limited experience. Researchers in these areas may apply TIR and RICF funds and early stage researchers and mid-career research starters may apply for monies from the Promising Researcher's Fund. In addition the University has made modest amounts of monies available as strategic investment seed funds in 2009/10.

Consideration of applications for University grants through RICF and TIR take into account the funds that the applicant already holds from other University sources.

In 2009/10, 75% of the quality related research funds were re-invested, subject to the standard contribution rate, in the areas of proven international class. The remaining 25%, also subject to a contribution rate, was formed into a Central Research Fund which has been used to support postgraduate research training and for strategic investment. The latter has been used to support all areas in applying for external funding and also as growth funding for new and developing areas of research. In 2010/11, the University aims to sustain the re-investment strategy and has increased the relative proportion for re-investment from 75% to 80% and reduced the corresponding proportion in the Central Research Fund from 25% to 20%.

All experienced researchers are encouraged and *expected* to apply for external grants. The teaching-related RICF and TIR small grant funds will remain accessible to all researchers. The Promising Researchers' Fund is now focused in support of early stage researchers and mid-career research starters and is not available to more experienced researchers. All internal grants are subject to monitoring the effectiveness of the use of the funds through an annual audit conducted in November. This audit is as light touch as possible to avoid unnecessary bureaucracy. The RICF

Panel has now submitted two audit reports to the Executive. In addition, the outcomes of research supported by University funds has been presented at the Annual Research Conferences 2009 and 2010 and in the Research Review published in July 2009.

12. External Funding

External income for research from research councils, charities and others was very low in 2008/9. This was due to several difficulties which have now been addressed. The University now has a policy on contribution rates which takes into account the requirements of the funding bodies. This year there has been an increase in applications and, already, an order of magnitude improvement in success.

This year part of the Central Research Fund has been designated for the purposes of strategic investment and a sum of £20 k has been used primarily, to support faculty initiatives to strengthen expertise and also to run a University Conference on refining individual researcher's grant application skills, organised by the External Funding manager in the Business Development Unit. This is regarded as essential investment and will be repeated in 2010/11.

13. The critical importance of the Development and Performance Review process

There is a normal staff development allowance of 200 hours out of 1600 hours in the academic contract for scholarship and research. Hitherto, the appraisal of scholarship and research activity has been patchy and sometimes regarded of secondary importance. Faculty managers are now expected to encourage, help facilitate and appraise the use of this time through the annual Development and Performance Review (DPR) process. This involves the setting of targets for research project applications, completions, out-puts and for scholarly activity. Academic staff are expected to demonstrate the beneficial impact of their scholarship and research upon the modules that they teach. From 2011, staff will be able to plan how they would like to take advantage of the new programme in Academic Practice in Research.

14 Research Governance

Research governance is the term used in the NHS to refer to the effectiveness of good research management in the conduct of research. The University is strongly committed to good practice in all research, irrespective of whether or not the research is connected to the NHS. Research governance therefore encompasses the planning of research, careful consideration of ethical aspects of the research, an assessment of the risks, the use of safe practices and the application of the most appropriate research methods. The University Research Ethics Committee has implemented a research ethics policy and has created subject and school Research Ethics Committees which are responsible for giving consideration to all proposed research with ethical implications. Further work is required in 2010/2011 to embed the new procedures and ensure that all research is encompassed by the new procedures. The administration of research ethics considerations will also require attention in 2010/2011. The University has also implemented the NHS Passport Scheme which requires researchers who wish to carry out research relating to patients in the NHS but who are not employees, to obtain a NHS Passport as well as the approval of an NHS Ethics Committee.

15. The University objectives in the Research Excellence Framework 2013/2014

There are two fundamental reasons for entering in REF 2014. First it is essential for our research engaged academic staff to have peer recognition for the quality of their output. Failure to gain peer recognition could damage the future recruitment of academic staff and the quality of the taught provision. Secondly, any QR funding income generated will enhance the University's ability to underpin teaching by research.

It is acknowledged that securing QR income will be a major challenge given the competition from the 1994 group and the Russell Group in particular. However, some of our research is as strong as

theirs and should gain recognition and some funding. In recent years, staff confidence in research at Derby has lifted. Our researchers know that they can compete, and many more are beginning to become engaged in research. We should be able to increase the volume of research substantially. Nevertheless the University will have to be selective and ensure that the quality of *submitted* research is 2* or higher. There must be no risk of a long performance tail which depresses the ratings.

16. The current research centres and groups

	Research Centres	Researchers
1.	Education and Career Development	20+
2	Identity, Conflict and Representation	20+
3	The Open Studio (<i>under review</i>)	12+
4	Psychological Research	15+
	Research Groups	
1.	Academic Practice	18+
2	Applied Mental Health	8+
3	Biological Sciences	6+
4	Culture, Lifestyle and Landscape	12+
5	Distributed and Intelligent Systems	6+
6	Human and Physical Environments	10+
7	Law and Society	7+
8	Mech/Manufacturing Engin. & Industrial Design	6+
9	Signal Processing Applications	12
10	Society, Religion and Belief	8+
11	Systems Thinking and Organisational Change	9+
12	Visual Communications	8+
	Total	177+

Figure 2: A list of the research groups and centres. The right hand column indicates the approximate number of principal researchers and researchers but does not include associate researchers. It is not implied that this number of researchers will be entered in REF 2013. The University will have to be selective.

The number of research centres and groups has increased to 16. There is in excess of 170 principal researchers and researchers who are members of these centres and groups. It would be premature to estimate how many of these researchers are consistently producing of at least 2* standard, but the figure is likely to be significantly higher than the 50 researchers who were entered in RAE 2008.

The University should also aim to achieve an increase in its quality related funding. However, it would be ill-advised to quantify this when the external factors are so uncertain. Any improvement would have to be seen as success. Peer recognition remains precious and important.

17. Strategy for submission of units of assessment

The University will need to give careful consideration to the decision as to which units of assessment to submit. There will be fewer sub-panels in REF 2014. It is planned to invite each centre and group to evaluate its own prospects for entry applying agreed University criteria. The University will also wish to consider submission to units of assessment which draw upon two or more research groups or centres. This was very successful in the case of Communication, Cultural and Media Studies in RAE 2008. A similar approach should be considered in REF 2014, especially where it is thought that there is a case for demonstrating significant progress since 2008.

There will be no point in entering a unit of assessment where the majority of researchers are judged to rate in the 1* category. While research of this quality is likely to make a very useful and valued contribution in support of teaching, we know that the REF is about the recognition of

international class research. So the overwhelming majority of researchers will need to be in the 2* category or higher. The University will need to give full attention to the requirements for equality of opportunity but at the same time the criteria must allow for possible variation between the units of assessment. A particularly strong prospective submission may be weakened by the inclusion of any 1* quality research; a slightly less strong submission might need to include a small amount in order to demonstrate critical mass. We may wish to make a submission where nearly all the research submitted is judged to be 3* or 4*. Clearly, a significant task will be to draw up the criteria to be applied.

18. The University's position on the impact of research

The University understands and accepts the need for those who undertake research to be accountable to those who fund research. There is full agreement on the necessity to demonstrate significance of research but there are mixed views on the measurement of the impact of research. This is unproblematic in some social science and health related disciplines but it is much more problematic in some sciences and other disciplines where the focus on economic and societal benefits appears utilitarian.

HEFCE has included the assessment of impact at the insistence of government. It is clear that the process of measurement is proving very complicated and so HEFCE is conducting pilot exercises. It is not yet clear what the outcome will be. HEFCE may reduce the weighting from the proposed 25% and a new government could withdraw the aspect altogether. At this stage the University must assume that impact will be assessed and that our best interests will be served by obtaining early experience of presenting relevant evidence and making the case for impact.

6. Suggested actions in preparation for REF 2014

The following actions are recommended:

- Organise University REF Workshops to present and explain the Research Excellence Framework and discuss strategy (early 2010 – completed)
- Continue to recognise new research communities
- Use TIR, RICF and QR funds to invest in research which supports teaching
- Strengthen support for researchers applying for external funding
- Ask each research centre to incorporate within its plans the way in which it intends to prepare for future research assessment, either in 2013 or subsequently.
- Each centre or group to give an indication of the number of researchers who would satisfy the University criteria for inclusion by October 2013.
- When the timescale is confirmed later in 2010, it will be necessary to prepare a full schedule for preparation for submission.
- From this information develop a full REF strategic plan through a consultative exercise in 2010 and have it approved by Executive.
- Make trial attempts at preparing impact statements and case studies so that we can fully appreciate the challenge that this component will present.

SUMMARY

16. Planned Actions for Research in 2010- 2011

- (i) Pro actively encourage new research groups and centres
- (ii) Prepare the REF action plan and commence implementation
- (iii) Embed the research governance and ethical procedures and arrangements
- (iv) Continue to invest in assisting researchers secure more external funded grants

- (v) Continue to audit the effectiveness of all internal expenditure to ensure that research is realising the planned benefits for the taught curriculum and the student learning experience.
- (vi) Strengthen University policy on the recruitment of research active teaching staff and ensure that research forms a normal part of the Developmental Performance Review process which is experienced regularly by all academic and academic support staff.
- (vii) Validate and implement a comprehensive programme of academic practice in research for all staff researchers and staff of collaborative institutions.
- (viii) Take steps to strengthen the coherence of the PGR/PGP provision and secure ESRC accreditation of a Doctoral Training Unit at the University, in EHS in 2010 (or at the next opportunity in 2012).
- (ix) Create a repository for all journal publications produced by University staff and PGR/PGP theses.
- (x) Introduce and establish website research profiles for staff engaged in research.

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