

# Summary of Research Organisation Reporting on Career Development and Skills (Roberts) Payments 2005

## 1 Introduction

In 2002, Professor Sir Gareth Roberts reported on the supply of people with science, technology, engineering and mathematics skills. The Government responded positively and significant funding was provided for a range of recommendations (amounting to £150 million in total for the period from 2003/4 to 2005/6). There were two recommendations relating to enhancing the career planning and transferable skills training (or employability) of research students and postdoctoral researchers (4.2 and 5.3). This report focuses on these aspects.

### 1.1 Reporting Process

The Councils co-ordinate activities regarding career development and training via the RCUK Research Careers and Diversity Unit. Research organisations have nominated an individual to act as the primary contact for skills training issues, and to act as the named contact for skills training funds, often at VC level or in a central group. Reporting has taken the form of:

- in 2004, a strategy for implementation of additional training in transferable skills for PhD students and postdoctoral researchers and progress towards implementation of the strategy.
- in 2005, progress against the strategy, use of the funds and the innovative practices arising from implementation of the recommendations.

In 2005, a web-based database was also developed and made available by UK GRAD (at [www.grad.ac.uk](http://www.grad.ac.uk)). This is intended to provide a national resource and research organisations were asked to enter their practices. Up to December 2005, 220 examples of practices associated with SET for Success (Roberts) recommendations had been captured.

This report provides an analysis of the reports submitted in 2005 along with excerpts from the 2004 strategies. There are also references to entries in the database of practices (DoP) and a statistical summary of the DoP entries is appended to this report.

## 2 Overview

The 2005 reports provide a picture of research organisations responding positively to the challenge to advance transferable skills training for early career researchers in the UK. The combination of funding, the QAA Code of Practice for research degree programmes and building capacity to deliver skills using the existing UKGRAD programme has provided a basis for real improvement.

Significant attention and effort has been spent in strengthening existing practices and introducing new programmes of career development and transferable skills training. The enthusiastic uptake by the staff already in place and those newly recruited (around 80 FTE) has resulted in much innovation and wide-spread sharing of practices with a view to improving transferable skills training nationally.

### **3 Context**

The UK has made a significant contribution to the EU charter for researchers and hosted the event in September 2005 about turning this policy into practice, as part of the UK Presidency. At the conference, the view was expressed that the UK is seen, by the rest of Europe, as an example of good practice in terms of national quality assurance mechanisms, research degree training programmes and researcher career management.

The EU Charter on Researchers is to be mapped against current frameworks and practices and the work will inform a decision on whether to develop a new Concordat for Career Management of Contract Research Staff.

The Joint Skills Statement is part of the QAA Code of Practice and this provides the framework for research degree programmes and is mentioned in a large majority of the 2005 reports. This outlines categories of skills (such as research skills and techniques, research management, personal effectiveness, communications skills etc).

The fixed-term directive is intended to prevent discrimination against staff employed on fixed-term contracts and limit the use of successive fixed-term contracts to four years. Staff posts funded through research grants have tended to be on fixed-term contracts. When the directive applies to staff with more than four years fixed term employment from July 2006, research organisations must consider the arrangements and conditions for their staff. The further-sighted employers will consider not only the contractual arrangements for research-only posts, but workforce planning and staff development.

UCEA have recently developed sets of profiles for research posts, as part of the preparation for revisions to researcher pay scales, available at <http://www.ucea.ac.uk/index.aspx?ContentId=24&bc=JNCHES&p=JNCHES>. These may also help inform career planning and training programmes.

The changes from 2003 have been very significant. Many organisations have developed existing programmes, but others have started from scratch. The Research Councils are looking for a well-founded set of indicators for measuring the broader impact.

Following the 2004 Roberts Policy Forum, a sector-led group called the Rugby Team (after its first meeting venue) undertook to propose a meaningful and workable way of evaluating the effectiveness of skills development within research degree programmes and this has since been broadened to include researchers at postdoctoral level, prior to an academic appointment. This team is looking at employability within research careers and elsewhere, based on consultation across the sector, including universities, student organisations, QAA, Funding Councils, Research Councils and other relevant organisations.

The lead by the sector on this issue is encouraging and the willingness to work together, as evidenced by sharing of practices, is a very positive indicator for the next phase.

### **4 Funding**

Funding was provided in the Science Budget from 2003/04 for Research Council funded students and postdoctoral researchers. The Councils have adopted a common approach where allocations are pro rata to the number of eligible Research Council PhD students and postdoctoral researchers at individual institutions.

Whilst the initial funding for students was based on expected new starts, that for postdoctoral researchers was based on numbers current, with uptake of training expected to increase in the first three years. Together, these have now reached steady state at around £20 million a year, based on plans of £850 per researcher per year.

The 2005 reports show a pattern of spend of the “Roberts” skills training funds across all institutions for the initial period from 2003 to September 2005 as follows:

	Students	Post-doctoral Researchers
Employment of Co-ordination staff	21 per cent	13 per cent
Co-ordination costs	4 per cent	1 per cent
Training Delivery costs	25 per cent	15 per cent
Employment of Training Staff	12 per cent	9 per cent
Annual Funding from 2005/6 (approx)	£20 million	

The Research Councils, in aggregate, fund around 30 per cent of full-time research students and a similar proportion of postdoctoral posts. Some research organisations have raised an issue regarding

*“The university is acutely aware of the need to ensure equity of provision for all PhD students and post-docs, and not simply those who are funded by the research councils.”*

embedding processes relating to career development and skills training when these will apply, in most cases, to a minority of researchers. However, it can be seen from the above table that universities are also developing infrastructure (39 per cent of funds used for co-ordination staff and activities).

*“Our primary concern has been to co-ordinate and enhance generic training across the university, providing efficiencies of scale where possible and bringing the different disciplines together.”*

Practices such as co-ordination across research organisations, web sites for conducting training needs analyses, improved information and evaluation mechanisms will have broader benefits.

## **5 Reporting 2005**

### **5.1 Analysis**

To date, over 180 research organisations have received career development and skills training funds. Those receiving funds for the first time in 2005 were not required to report on activities in the preceding two years. A total of 108 reports were received by December 2005, including all but one of the top 50 recipients of skills training funds. These “top 50” accounted for just under £18 million of the £19.3 million to be issued in 2005/06.

The reporting consisted of a table of finance, supported by a summary to put the figures into context. Research Organisations have also entered details of practices into the Database of Practice (DoP) available from the UK GRAD web site at [www.grad.ac.uk](http://www.grad.ac.uk).

Research organisations were not asked to answer specific questions and omissions cannot therefore be taken to mean that a practice is missing, rather that it is not reported.

The text provided with the financial summary was, in most cases, not split between postgraduate and postdoctoral researchers. The main issues and themes referenced below are therefore assumed to apply to both, unless specifically mentioned.

The text section of the reporting was analysed in two phases, the first being against the headings given from paragraphs 5.3 to 5.8 below (as used in 2004) and the second to identify “new” common themes, or indeed where themes were expected but not mentioned much (such as career planning for postdoctoral researchers). Where these align with issues raised frequently with the Research Careers and Diversity unit this will be flagged as “by anecdote”.

## 5.2 Overview of 2005 Reports

Many new practices have been enabled by the funding. Raising the profile of transferable skills training continues to be a theme with around half the 2005 reports mentioning this.

The national picture for postdoctoral researchers is, generally, less developed. Anecdotes indicate many research managers see the development of the individuals being in conflict with the pursuit of research, with time spent on career planning and training as time taken away from their post on the grant or contract. The database of practice shows nearly a third (31 per cent) of practices are open to supervisors. The next period includes a challenge to clarify evidence and convince research managers that better trained researchers do better research.

UK GRAD has been helping universities develop capacity for training through regional networks (Hubs) and this has helped to develop an environment capable of making good use of funds.

Universities are also using the career development and skills funding to develop infrastructure (with 34 per cent of funds used for co-ordination staff). In most instances, the infrastructure will apply to all researchers at the research organisation - not only Research Council funded researchers.

## 5.3 Where the activity sits within the university

Around 80 per cent of the larger institutions have reported setting up new university-wide working groups or committees to co-ordinate and oversee progress. For example at Leeds the Staff and Departmental Development Unit is working in partnership with faculties through the Roberts funded Postgraduate Training and Development Officer not only on training needs analyses, training design, personal development planning and course development, delivery and planning. It also assists with the development of local strategies for training researchers.

*[this] funding has been key to enabling the University to develop and expand its existing provision...*

*Awareness raising is paramount, alongside the need to ensure skills training information is cascaded to the academic community.*

*The Skills Training Agenda, for both postgraduate and postdoctoral researchers, articulates well with [our] commitment to providing support for students and staff to ensure that we continue to produce the best international scholars and, as far as possible, individuals equipped to contribute to the global social and economic environment.*

The most frequent “home” is with the Graduate School, but some organisations run their programmes from the research or registrar’s office. The database of practice shows 75 per cent of practices relate to cross-HEI provision and 11 per cent to inter-HEI provision. This latter might be on a regional basis or between particular research organisations or groups of research organisations.

#### 5.4 Integration with Research Degree Programmes

The extent to which training is embedded in research degree programmes varies. There is no apparent link to the level of RC funding that the university receives, indeed there are some highly innovative practices at universities with lower levels of RC funded students and postdoctoral researchers. The database of practices shows examples which include ongoing review of personal development plans, review of training needs on a regular (often annual) basis, and evaluating the impact of skills with reference to employability outside research as well as employability and capability as a researcher.

There are many examples of training logs or development plans being reviewed on a regular basis and training continuing throughout the research period. The 2005 reports had several examples linking the skills development programme to employability. The reports did not show links being made between employability and research project planning, writing skills, use of libraries etc and improving the quality of research and publications.

*changes are designed to “enhance student success, decrease the time taken by the student to complete their programme, and emphasise the need for regular monitoring of progress and individual development”.*

In some instances, the integration of skills training has been formalised by use of credits or a requirement to undertake skills development before progressing (for example before transfer from MPhil registration to PhD).

*[the] Research Student Log is a tool by which students might reflect on their research and additional skills development and is an adaptation of the document which has existed for a number of years at UCL.*

In 2004, 29 per cent of research organisations said course attendance would be compulsory (37 per cent in Research Institutes), Credit-rated 10 per cent and Optional attendance 30 per cent. In the database of practice in 2005, 56 per cent of practice is optional, 35 per cent recommended, 18 per cent compulsory, 11 per cent credit rated and 5 per cent is linked to progress.

#### 5.5 Training Needs Analysis

In 2004, reports showed 53 per cent of organisations undertook training needs analysis. Many research organisations mention including this in the initial induction, often in discussion with the supervisor or principal investigator.

Some universities have instituted on-line systems for assessing training needs (such as the electronic Research Student log at UCL) or a looking to do so (as at LSE). There are also several examples of web-based systems being set up (as at Edinburgh) to inform researchers about their options and help them identify suitable programmes. There are also

*a Development Needs Analysis is intended to be repeated at quarterly intervals throughout the PhD*

instances of staff (or consultants) recruited to audit current skills requirements and provisions.

Some of these approaches are structured and link to a need for ongoing monitoring. Whilst some transferable skills programmes contribute directly to the PhD through a credit system (for example as at Liverpool) a systems where training is optional may still include regular review and training needs assessment.

In the database of practice, training courses were the most common form of practice, followed by researcher support activity. TNA formed 7 per cent of the foci of practice.

## 5.6 Feedback

In 2004, 76 per cent of organisation reported feedback mechanisms were in place with equal numbers of universities using annual questionnaires (38 per cent) or progress reviews (39 per cent). Whilst at research institutes, the predominant mechanism was progress review (68 per cent).

*expenditure part-funded the preparation of software tools to formally record the outcome of training needs analyses and to monitor skills development against personal development programmes.*

Most practices include some form of assessment by attendees and in many instances (for research students) this is rolled into ongoing reviews with supervisors. There is also a theme of developing or improving web-based tools for capturing comments.

## 5.7 Evaluation

In 2004, there was some form of evaluation (post-course) in 90 per cent of organisations (99 per cent of universities). The references to capturing the post-course views of supervisors or principal investigators remain rare (only 9 per cent in 2004).

A key stage is assessing whether the overall programme of practices is meeting the needs of the target audiences. With many organisations developing a strategy for use of the funds from 2003/04, the degree to which the overarching programmes have developed varies. There are, however, a few examples of such programmes having been set up and reviewed already. There are also some examples of consultancy being used to assess provisions.

*positive feedback would serve as the principal performance indicator with respect to the enhancement of the skills training provision for research students. In 2004-05 feedback... was gathered during the review of the programme.*

In the context of evaluation, it is worth noting that the sector-led “Rugby Team” will provide:

- Key Performance Indicators to measure the impact of the recommendations relating to career planning and skills development
- Benchmarks of current practice to measure progress against
- Strategy paper giving recommendations for the future direction
- Mechanisms for sharing good practice
- Recommendations (and possible funding bids) for research projects in this area

## 5.8 Integration of PGR and PD Provisions

Career planning and skills development can be seen as a continuum for the early stages of research careers. However, there are few reports where this is brought out.

Nationally, the career development and skills training funds and EU Charter have helped to foster increasing attention to the provision for postdoctoral researchers, particularly in the context of career paths and recent changes applying to fixed term appointments. It is also seen by groups such as UK HERD as the area that is in need of increased attention.

*The Staff and Educational Development Unit and the Graduate School have begun to open up their provision to each others client groups and this has improved access and developed greater coherence in the training and support offered.*

Bristol provides many examples of practices for postdoctoral researchers and training programmes for research staff are in a context of *an employment culture of empowerment for research staff*.

The database of practice shows 200 practices relating to postgraduate researchers and 111 relating to postdoctoral researchers, but these are not exclusively for these groups. If we compare the numbers of courses recorded as being open only to postdoctoral researchers and those for postgraduates only, the numbers are 26 and 115 respectively.

*only a small number of the projects that commenced in 2004 were focussed on the enhancement of skills training provision for postdoctoral researchers...More projects tailored to the skills training needs of postdoctoral researchers have been introduced in 2005.*

## 5.9 Career Development Planning

Personal Development Plans are mentioned explicitly in 20 per cent of the 2005 reports. In some organisations this is only for research students, although SET for Success recommendation for the training of students was in context of employability and that for postdoctoral researchers was based on a need for career plans. Differences in practices may be due to other factors, but a consideration may be that postdoctoral researchers do not necessarily wish to be grouped with research students.

The report from Queen Mary was unusual in mentioning that *development activities are closely linked to HR strategy*. There are, however, many reports which mention that staff courses are open to postdoctoral researchers. It is perhaps interesting that some organisations have explicitly mentioned this in a summary level report, given that these researchers are staff too.

## 5.10 Other themes

The 2005 reports include many mentions of the development of web-based systems for training needs analysis, recording training and raising awareness of training opportunities. The database of practices shows 19 per cent of practices relate to web-based provisions.

Employability is mostly mentioned in connection with non-university employers. UCL seem to be unique in explicit mention of *...life skills and employability be this in a continuing career in academia or outside*.

The Research Councils decided to deliver funds on a co-ordinated way and to a single point within the university. This was to enable research organisation to co-ordinate their career planning and training provisions. In 2004, 27 per cent of organisations reported that

funds would be managed centrally. In some instances, this seems to have progressed to a process whereby some funding is channelled through a central unit and some through local (faculty or departmental) practices. This is to achieve a balance between the “buy-in” and local responsiveness achieved by having academics and managers within faculties or departments bid for funds and centrally managed programmes ensuring practices are in place across the whole organisation. Reports indicate that where the balance is achieved, it enhances local flexibility and support for the overall programme as well as ensuring good levels of provision across the university. However, anecdotes indicate the right balance for a university is hard to establish, particularly if programmes have been very distributed from the start.

There are also some comments about the future for this funding stream, mostly with a theme of how it becomes “normal business”.

*The University is concerned that the provision of a separate funding stream for skills training may not continue beyond the initial developmental phase. The potential combination of skills funding with other Research Council grants has implications for the sustainability of skills training initiatives, especially if the funds are rolled into small individual grants and the sums involved are hard to identify. The University urges the Research Councils to maintain skills training funds as a separate funding stream. The funding mechanism might change, for example funding could be provided through DTAs rather than as a separate payment, so long as the amount could be identified.*

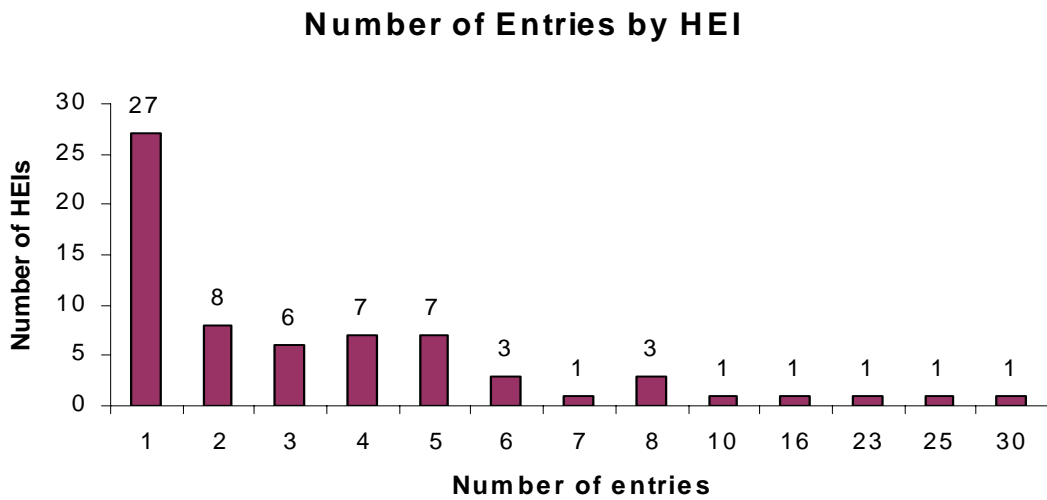
Anecdotes and some references in reports highlight that research council funded researchers account for perhaps a third of the full-time population and raise concerns about the provisions for non-research council funded studentships and posts.

*the university’s overall strategy for use of the “Roberts” funding is to make the additional development opportunities available to all research students and postdoctoral researchers, regardless of their source of funding.*

277 entries as at 1 December 2005

Summary			Total
Total entries			277
Viewable	181 public	91 private	272 + 5??
Roberts related	202 PGRs (73 per cent)	112 PDs (40 per cent)	234 (84 per cent)

Graph 1: number of entries by HEI



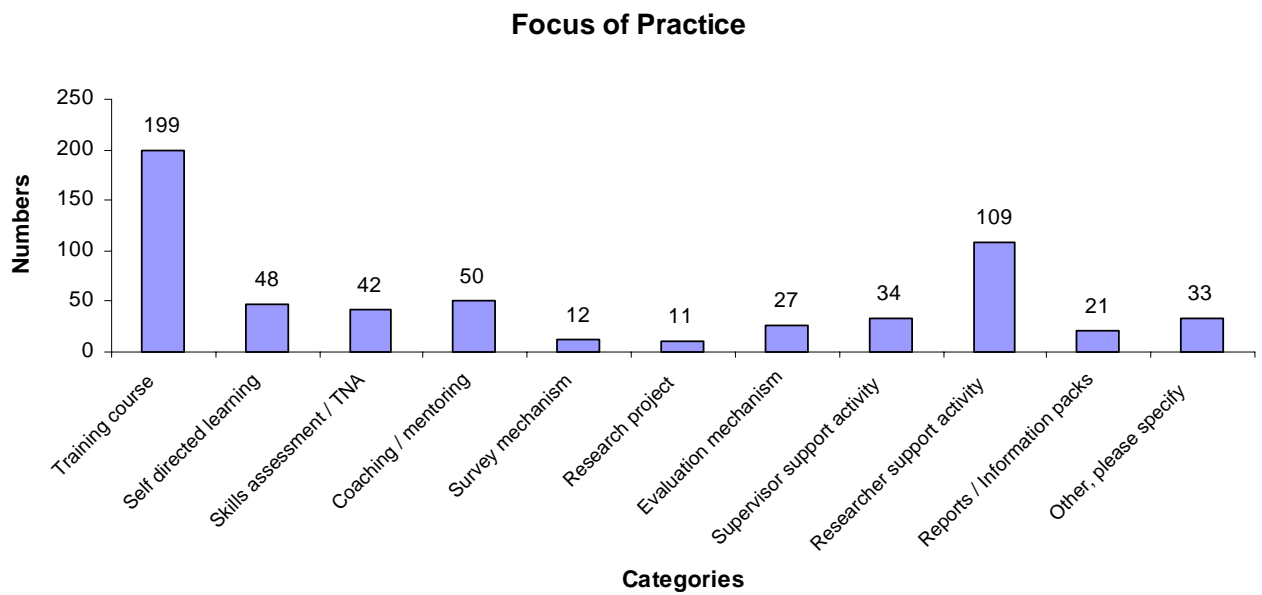
**Summary**

66 HEIs entered practice (approximately 50 per cent of total HEIs)

Average of 4 postings per HEI

Largest from Leeds (30), East London (25), Sheffield (23), Birkbeck College (16), Newcastle (10)

**Graph 2: focus of practice**

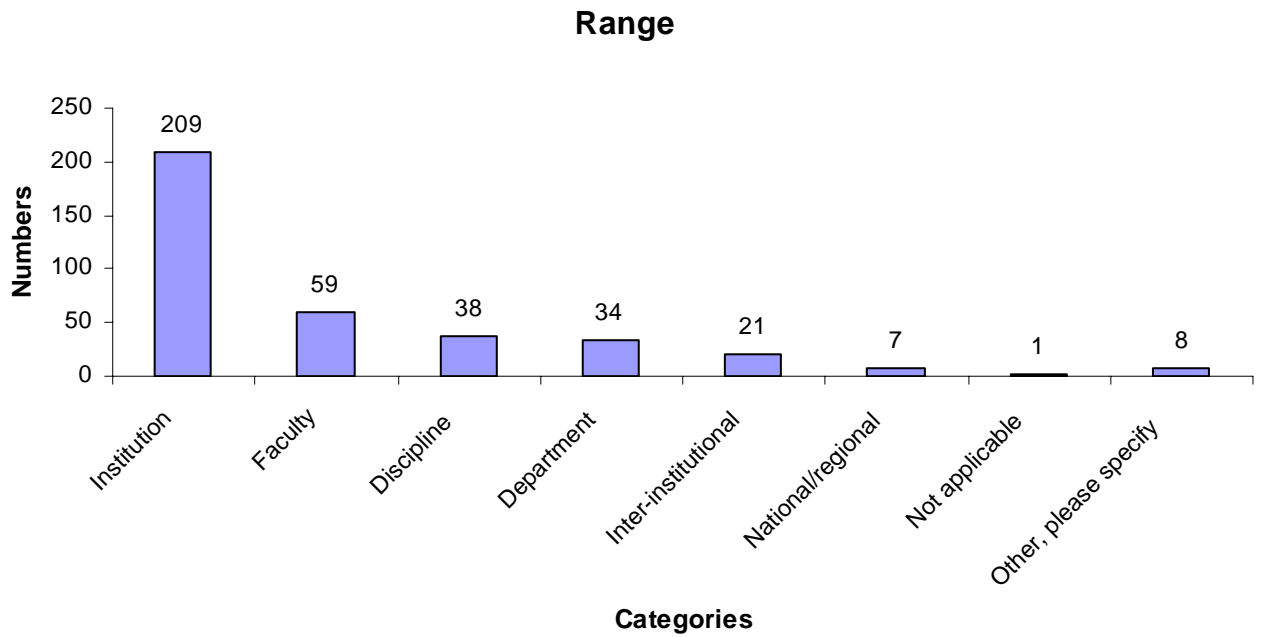


i) Summary

Most common is training course, followed by researcher support activities. But most combine several foci of practice (average 2 per entry)

Other category contains examples such as a conference, programme of training courses, networking, developing strategy.

**Graph 3: Range of practice**

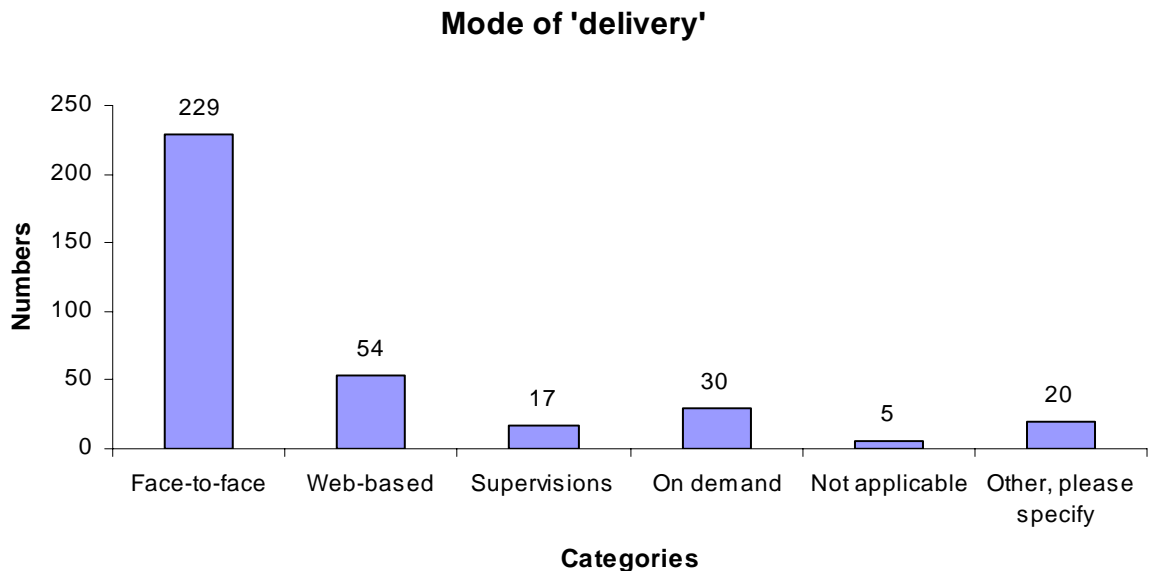


**Summary**

75 per cent of the entries relate to cross HEI provision

11 per cent of entries relate to inter-HEI, national/regional HEI provision

**Graph 4: mode of delivery**



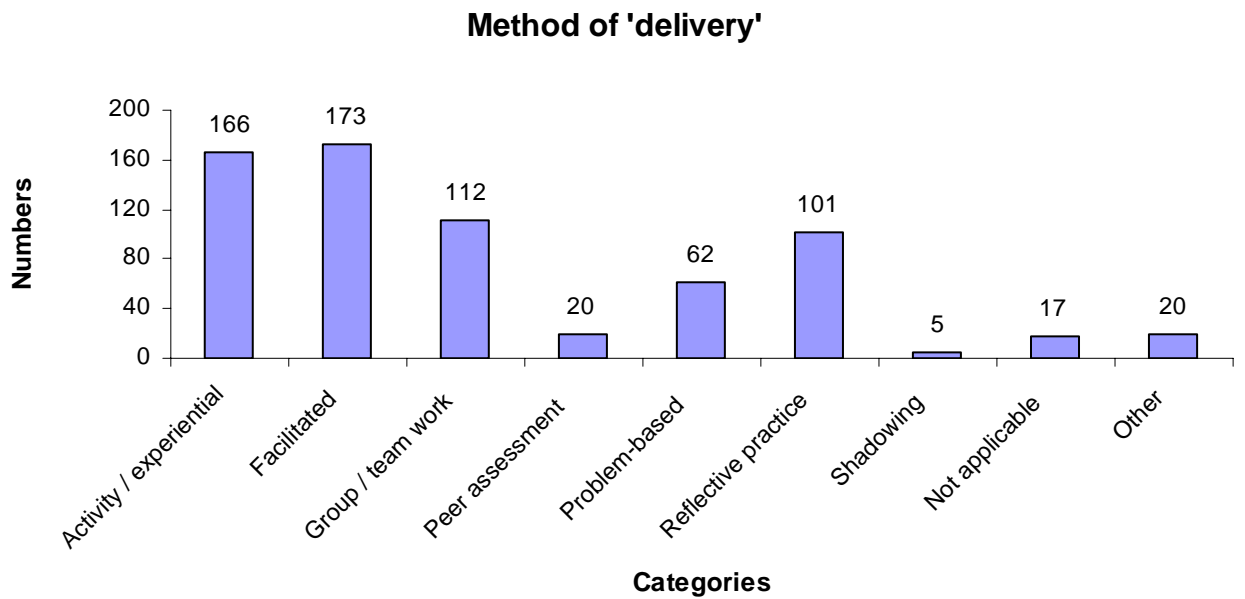
**Summary**

83 per cent of entries relate to 'face to face' provision

19 per cent of entries relate to web-based provision

Only 6 per cent relate to practice during supervisions

**Graph 5: Method of delivery**



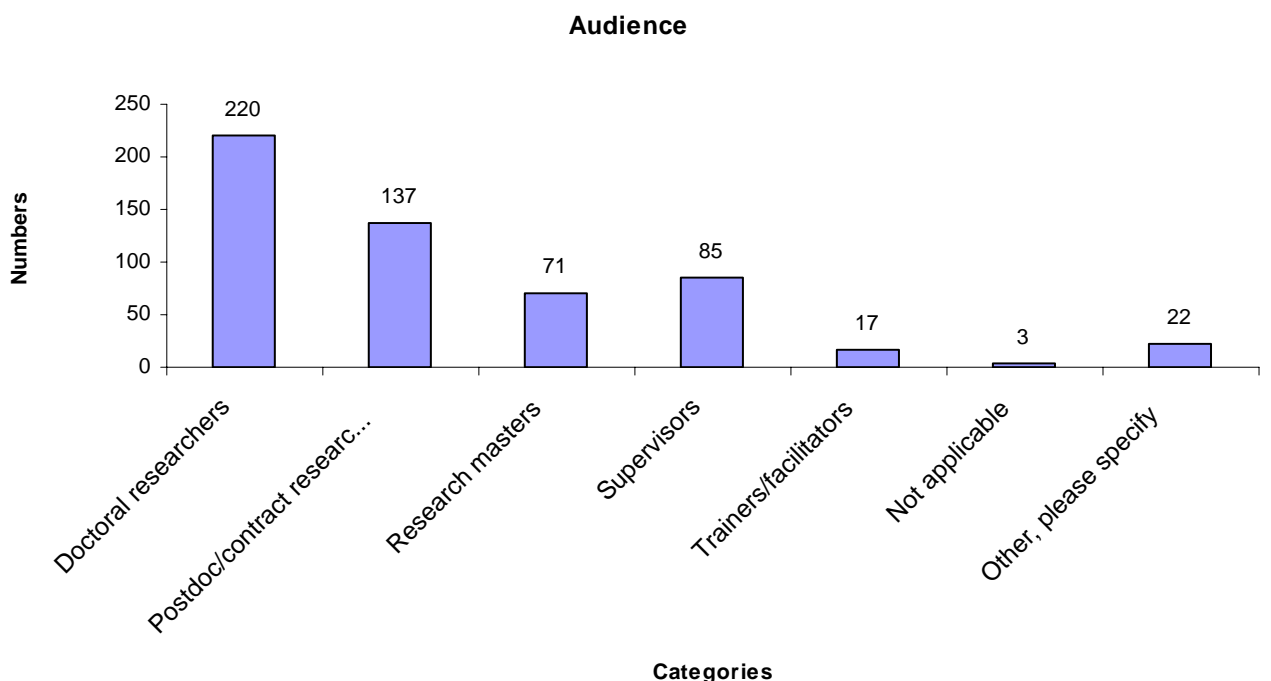
**Summary**

83 per cent of practices are activity based/experiential (60 per cent) or facilitated (62 per cent); 40 per cent both

23 per cent of practices use a single method of delivery; most use a combination of methods: average 2.4 per entry

32 entries (12 per cent) encompass at least four of these methods of delivery

**Graph 6: Audience for practice**



### Summary

80 per cent of practice is open to postgraduate researchers

50 per cent of practice is open to postdoctoral researchers

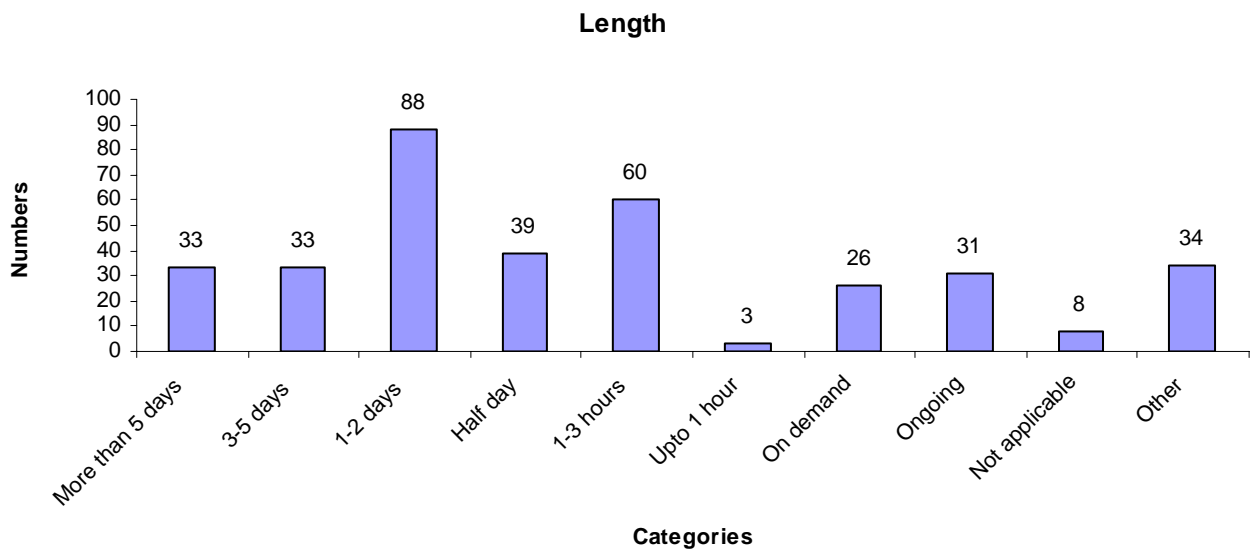
31 per cent to supervisors

6 per cent to trainers

35 per cent of entries are open to both PGR & PDs

15 per cent of entries are open to at least 3 cohorts (little of this is Roberts related provision)

### Graph 7: Length of practice

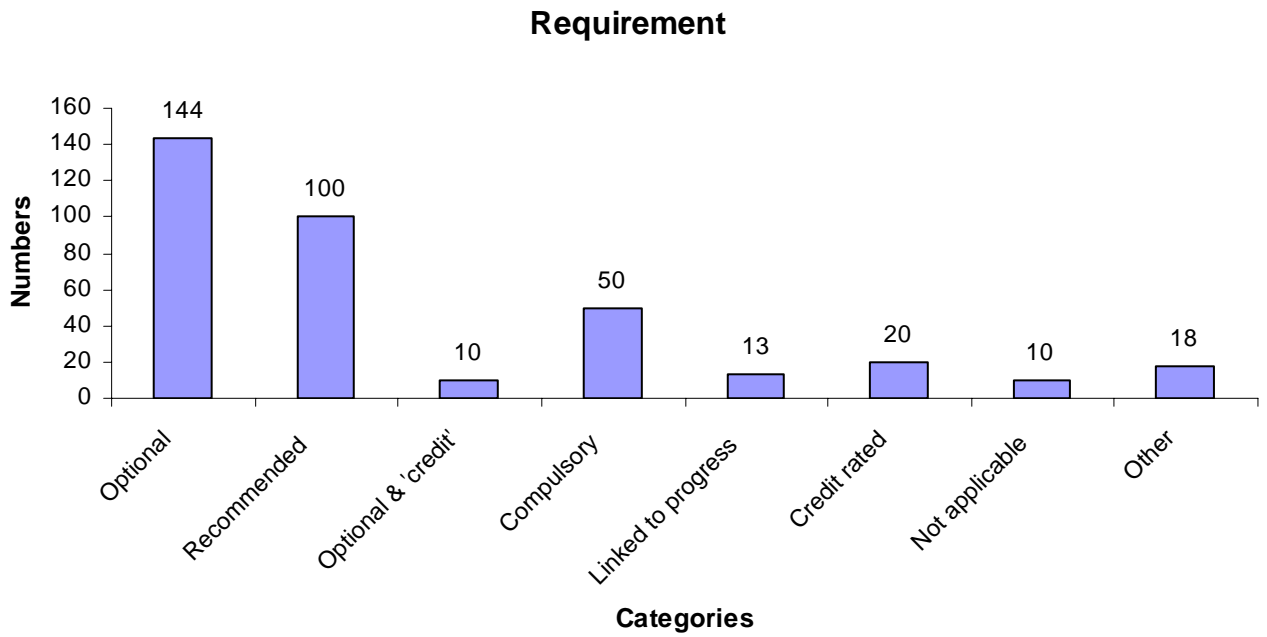


### Summary

32 per cent of entries relate to practice of 1-2 days

22 per cent of entries relate to practice of 1-3 hours

### Graph 8: Requirement of practice



#### Summary

56 per cent of practice is optional (including 4 per cent with credit rating)

35 per cent of practice is recommended

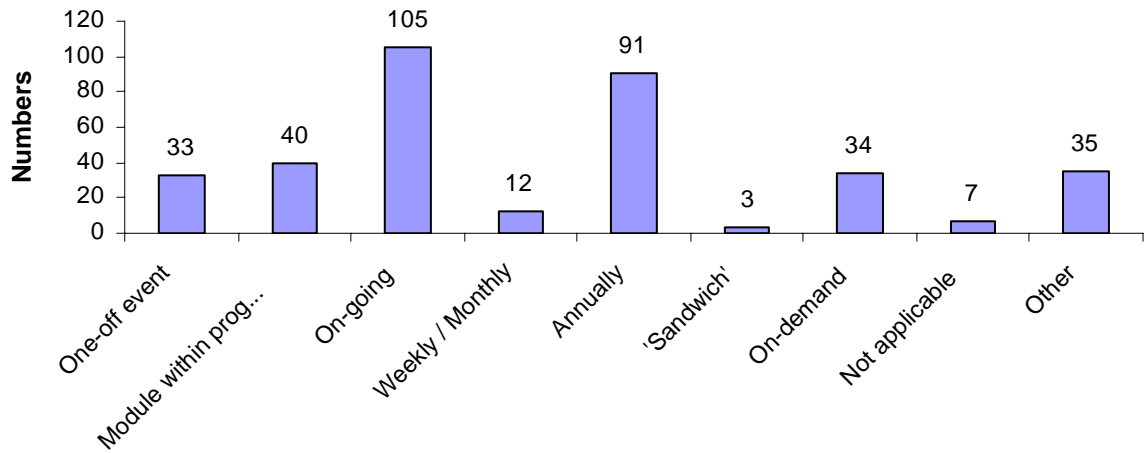
18 per cent of practice is compulsory

11 per cent of practice is credit rated

5 per cent of practice is linked to progress

#### Graph 9: Engagement of practice

### Engagement



### Categories

#### Summary

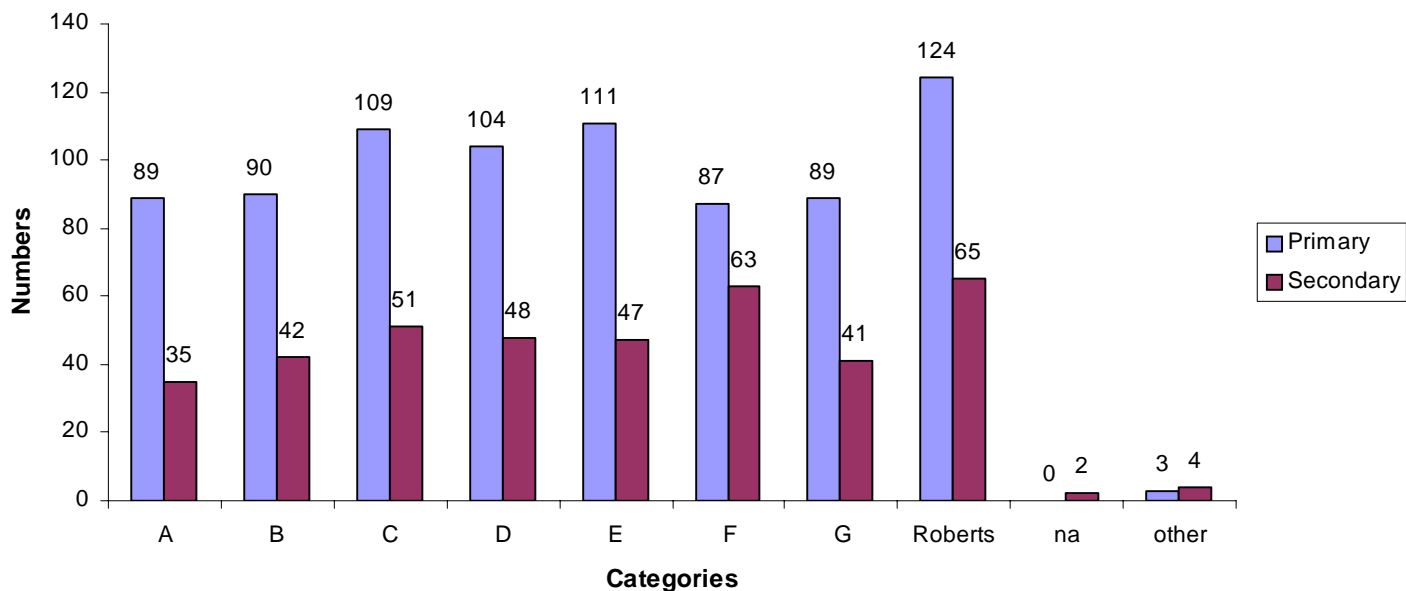
38 per cent of entries are ongoing practice

33 per cent of entries are annual practice

12 per cent relate to one-off events

**Graph 10: relationship to JSS & Roberts**

### Relationship to JSS



#### Summary

Fairly even spread across all sections of the JSS.

Each practice relates (2.5 JSS sections primarily, 1 secondary)

34 entries relate to the whole JSS

172 entries (62 per cent) relate to only one section of the JSS (primary or secondary), fairly even spread across (15min – 36 max)

124 entries (45 per cent) relate primarily to Roberts, 65 secondary relationship (23 per cent) [These stats do not correlate directly with whether the entry has been posted as an example of 'Roberts Provision']