

Mind the skills gap: Information-handling training for researchers

Executive summary



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Introduction

The Research Information Network's report *Minding the skills gap: Information-handling training for researchers* (July 2008) focuses on the nature, extent and organisation of the information-related training provided by universities and other higher education institutions for researchers, and how that training is funded. We focus in particular on the role that librarians and other information specialists play, and how the training that they provide aligns with the wider provision of training for researchers in generic skills.

In recent years there has been a considerable growth in UK interest in the development of the personal, professional and career management skills of researchers. Much of the impetus for this stems from the Roberts Report of 2002, and the recent establishment of the RCUK Research Careers and Development Unit, operating in part through the UKGrad programme (now known as Vitae).

At the same time, there have been fundamental changes in the research information landscape. Researchers now expect to discover, locate and gain access to the information resources relevant to their research on their desktops; and they are creating and gathering unprecedented quantities and varieties of digital information resources in the course of their research. Researchers have gained great benefits from these changes. But they have presented challenges as well as opportunities, and there is a widespread perception that the skills and competencies of many researchers have not kept pace with the rapid pace of change.

In this context, training for researchers in new information-related tools, skills and techniques has grown in importance. Higher education libraries have been seeking to enhance their training for researchers, and some have been invited to contribute to generic cross-institution skills training programmes. There is an overlap between the information-related training and the more generic skills training stimulated by the UKGrad programme, and there are opportunities for collaboration and partnership within and across institutions.

Some institutions have begun to exploit these opportunities, but in general there is a lack of coordination and strategic management of information training provision, both at UK and at institutional levels. This results from:

- uncertainties as to the part that training in matters such as locating, obtaining, organising, transforming, disseminating, and preserving information could or should play in wider generic skills training
- the absence of a language shared between academics, librarians and information specialists, and those responsible for generic skills training
- difficulties in communication between different training providers, and between them and the academic community.

Key findings

The development of policy and practice in researchers' skills

The Research Councils UK (RCUK) Research Careers and Diversity Unit and Vitae are playing a leading role in stimulating the development of policy and practice in developing the generic skills and competencies of researchers, particularly at postgraduate and postdoctoral levels. At the same time, higher education libraries and their representative bodies have been seeking to extend to researchers the training in information skills and competencies they have in place for undergraduates; and some libraries are contributing to generic cross-institution training programmes.

The need for key bodies to work together on training initiatives

At a UK level, the key bodies representing library and information specialists, including SCONUL and Research Libraries UK (RLUK), have so far not succeeded in engaging effectively with RCUK or with Vitae in relation to their training initiatives; and lack of a shared vocabulary creates difficulties in identifying how information skills and competencies can fit effectively into broader generic skills training programmes.

Strategic management of training at the institutional level

While some higher education institutions are seeking to rationalise and coordinate training provision for researchers, there is relatively little evidence of strategic management of research information training at institutional level. A small group of institutions is making concerted efforts towards more integrated approaches to information training; but in most higher education institutions provision is uncoordinated. Poor communications between different units and training providers often means that no one has an accurate overall picture of what is being provided across the institution.

Joint approaches need to be implemented

There is considerable enthusiasm in several institutions for moving towards joint approaches to the planning, organisation and delivery of information training; but implementation of such approaches is rare. In developing joint approaches and coordinated provision, much depends on personal relationships between information specialists and other training providers, and between them and key members of academic staff.

Clarity on the roles libraries have in information training

The precise roles higher education institutions expect libraries and their staff to play in information training are often not clear, as are institutional strategies and expectation about libraries' roles in support of research more generally. Libraries are often seen as useful partners in training for researchers, but central training units in higher education institutions tend to see libraries' roles as restricted to training in information seeking.

Clarity on eligibility for funding

There is a complex pattern of funding provided at UK level to support training, but the funds for generic skills training allocated to universities following the Roberts Report of 2002 (often called 'Roberts money') plays a critical role in supporting and encouraging training in generic skills. While most higher education libraries are expanding their provision of training for researchers, relatively few of them are receiving any 'Roberts money'; and there are doubts as to whether much of their provision is eligible for such funding, since it may not fall under the heading of 'generic skills'.

The need for additional resources for libraries

The current and planned expansion of library training provision for researchers may not be sustainable unless libraries are given additional resources.

Specific training and generic training needs to be coordinated and balanced

Central training units tend to adopt experiential and constructivist approaches to training, while libraries and information specialists tend to demonstrate specific sources and tools. Both approaches have their strengths, but unless they are planned effectively, they may not make for a coherent training programme.

Libraries continue to provide individual and small-group subject-specific training which is often highly-valued, but which may not be sustainable on a large scale.

An over-emphasis on generic training may not be effective, and there is evidence that information skills and competencies are best developed in contexts that take full account of the researchers' different subject domains and levels of experience, and that build on their expertise as information specialists in their own fields.

Broadening the scope of libraries to provide information management training

Libraries' provision of training for researchers varies considerably in scale and how it is organised. While the content tends to focus on information seeking and related issues, there is interest from librarians in broadening that scope to issues relating to information management and systematic reviews.

The trend towards use of e-learning and blending learning

There is a trend towards the greater use of e-learning and blended learning approaches to training for researchers. These may be particularly valuable in meeting the needs of specific groups; but there are many potential pitfalls to be overcome in constructing effective e-learning programmes.

Focusing on researchers' real needs is vital

There is a tendency for librarians and researchers to take different views of researchers' information skills and competencies. But there is little evidence of libraries or other trainers making systematic attempts to assess researchers' training needs. Hence there is a danger that training programmes are not focused on researchers' needs.

Surveys are of limited value in identifying training needs, but other approaches such as the mediated focus groups used in this project, and the use of e-portfolios combined with self-assessment against objective criteria, offer some promise.

The role of the librarian is changing

The role of subject and liaison librarians has changed significantly in recent years, and some lack the confidence to provide intensive support to researchers. Libraries need to ensure that they have the capability and capacity to offer high-quality training for researchers, including knowledge and understanding of the research process.

The need for better ways to monitor and evaluate training provision

Both libraries and central training units are aware that they have only weak mechanisms for monitoring and evaluating the take-up and effectiveness of the training they provide.

Recommendations

1. RLUK and SCONUL and the RIN should seek active dialogue with RCUK and the Vitae team about ways to secure appropriate coverage of information skills and competencies in training and skills development programmes for researchers.
2. Institutional and faculty research committees, as well as central training units and libraries, should make concerted efforts to improve communications between all those concerned in the planning, organisation and delivery of training; and develop more integrated approaches and strategies that are aligned with their research strategies, avoid both gaps and duplication, and secure the delivery of coherent programmes that meet the needs of researchers.
3. SCONUL and RLUK should seek to clarify with RCUK the kinds of information-related training that are eligible for support from 'Roberts money'.
4. Higher education libraries should seek to engage with their Vitae regional hub, and make use of the Vitae Database of Practice to share information about good practice.
5. Librarians and other information specialists, academic staff, and central training units should join in developing and delivering training programmes which recognise the strengths of different training approaches and techniques, and seek both to enhance understanding of the information landscape and to develop skills in the use of specific tools.
6. All training programmes should be developed and where appropriate delivered in partnership with relevant members of academic staff, and should so far as possible take account of and exploit the experience and expertise already acquired by trainees; disciplinary differences and cultures; and differences in researchers' current roles and levels of experience.
7. Libraries and other training providers should seek to exploit the potential of e-learning and blended learning approaches to training; but they should be cautious in seeking to avoid the many potential pitfalls in the way of constructing effective e-learning programmes.

8. Libraries and other training providers should adopt more systematic and innovative approaches to identifying and assessing the needs of researchers to enhance their information-related skills and competencies.
9. Libraries should review the capacity and the capabilities of their staff in providing, in partnership with academics and others, high-quality training that will be valued by researchers; and they should avoid any temptation to oversell what they can offer.
10. Libraries and information specialists should engage with the UKGrad team that is exploring innovative approaches to monitoring and evaluating the effectiveness of the training they provide.
11. The RIN will seek, as a first key step, to organise in consultation with RCUK, Vitae, RLUK, SCONUL, and other relevant bodies a strategic workshop conference to consider the findings and recommendations of this report, and to identify how they might most effectively be taken forward. The workshop will in particular consider the organisation of a series of round tables for representatives of central training units, academic staff, library and information specialists, and others. The aim will be to explore the scope for more joint planning, delivery and evaluation of training; and the balance and relationships between generic and subject-specific provision.

A full copy of the report is available to download for free at
www.rin.ac.uk/training-research-info

About the Research Information Network

Who we are

The Research Information Network focuses on understanding and promoting the information needs of researchers. We produce evidence-based research into information and data issues that affect researchers and information management professionals.

What we work on

We provide policy, guidance and support, focusing on the current environment in information research and looking at future trends. Our work focuses on five key themes: [search and discovery](#), [access and use of information services](#), [scholarly communications](#), [digital content and e-research](#), [collaborative collection management and storage](#).

Who we work with

Our partners include the higher education funding bodies, the Research Councils, national libraries, researchers, information management professionals, universities and publishers. Our network extends across the United Kingdom and we also have links overseas, to give a global perspective to our work.

How we work

Our [advisory board](#) and [consultative groups](#) provide strategic direction and user perspectives to ensure we engage our stakeholders fully in our work. Our collaborative approach means our key stakeholders are represented in all the work we do and that our agenda is driven by them.

How we communicate

As an independent voice, we can create debates that lead to real change. We use our reports and other publications, events and workshops, blogs, networks and the media to communicate our ideas. All our [publications](#) can be downloaded free from our website at www.rin.ac.uk

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