

Meeting Report

eInformation for eScience

University of Birmingham, 24th April 2007

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This one-day training event was designed to provide information professionals with an up-to-date overview of resources and services for science. The event aimed to highlight new resources, critique existing ones and highlight developments (including eScience) within this dynamic field. The event was organised by Tracy Kent, who works as an Academic Support Consultant for Information Services at the University of Birmingham and who has over 15 years of experience in the information profession.

The day began with a short introduction to eScience (now also known as 'eResearch') and its goals. The term 'eScience' was first used in 2001 by Dr. John Taylor, Director-General of Research Councils in the UK Office of Science and Technology (1999-2003), who stated that 'eScience is about global collaboration in key areas of science and the next generation of infrastructure that will enable it' [1,2].

Tracy Kent then presented the first session, entitled 'What's on your eShelves?', which looked at key electronic references resources for science. Tracy gave an insight into wikis before discussing reference services including ScienceDirect Reference Works and Oxford Reference Online. The importance of assessing your institution's research profile and scientific needs was emphasised as crucial before deciding what should go on your eShelves.

Elizabeth Tilley, Earth Sciences Librarian at the University of Cambridge, then took to the floor to discuss 'Evaluating eResources for Science'. Elizabeth identified a number of criteria (users, content, use features and context) by which eResources could be evaluated and compared. These criteria were then demonstrated by the examples of Web of Science, ScienceDirect, CSA Illumina / Illustrata, SciFinder Scholar and Intute.

Following a short coffee break, Terry Bucknell, Electronic Resources Manager at the University of Liverpool, spoke about 'What's in your Bundles'. Terry considered the issue of 'big deals' and the impact that these are having on the publication titles that libraries are buying. The importance of statistics (which are now increasingly available for electronic publications) was emphasised: for example, the 'number of downloads' can be useful in determining which publications to buy (or cancel). The experience at the University of Liverpool was given, for which the big deal approach appears to work well. Terry concluded by stressing that 'ultimately the characteristics of your own institution will determine which bundles, and which types of bundles, are most appropriate'.

An action-packed lunch then followed with delegates having the opportunity, during the break, to participate in a trip to the University's HP Visual and Spatial Technology Centre (created as a result of a partnership between the University of Birmingham and Hewlett-Packard) [3], a tour around the University's Main Library or to try out some of the resources highlighted in the morning's presentations.

The afternoon began with a presentation on the topic of 'Open Access (OA)' entitled 'Different Shades of Grey'. The first half of this talk was delivered by Tracy Kent, who gave a broad overview of OA: what exactly it is (and what it's not), its anticipated benefits (to both scientists and information professionals) as well as some criticisms of it. Tracy talked about the common means of OA, namely via OA repositories and OA journals. An overview of some tools and services that can be used to search for, and identify, these types of repositories and journals was given. The second half of this presentation was given by Monica Dukes, Software Developer at UKOLN.

Monica gave an overview of the eBank UK Project [4] that seeks to 'maximise the use of electronic data in the research process by making it directly available'. The eBank philosophy is 'about the separation of intellect and interpretations in a journal article from the underlying data ... which enables that data to be made openly available for reuse'. The project has focussed on crystallography data, and some technical issues and solutions surrounding this type of data were given, along with an overview of other relevant projects and appropriate resources.

Following the afternoon coffee break, Tracy once more took to the floor with her third (and final) talk of the day entitled 'Searching for eScience on the Internet'. This presentation began with some useful tips on how to be more effective in searching for science resources on the Internet. Tracy gave an insight (and critique) into a number of evaluated search engines, such as Intute, Higher Education Academy Subject Network and SCIRUS before discussing five specific science search engines. Details of a number of general search engines, alternatives to Google, were given, and a few 'niche' search engines discussed.

The final presentation of the day was given by Matthew Dovey, Programme Director (eResearch) at the JISC, who talked about 'Grids, eScience, eResearch, eInfrastructure and eLibraries. Matthew defined the Grid as '... a software infrastructure that enables flexible, secure, coordinated resource sharing among dynamic collections of individuals, institutions and resources' [5] and identified three types of grid: computational, data and collaborative. A good example of a branch of science using the Grid is particle physics. The world-wide particle physics community are currently building a grid infrastructure to store and analyse the vast amount of data they will shortly be collecting from their detectors on the Large Hadron Collider (LHC) experimental facility at CERN in Geneva [2].

Matthew then talked about eScience (which isn't the same as the Grid, although in the past it was seen as being more similar) and characteristics of it. A number of examples of current eScience projects were given in the fields of breast screening, remote microscopy and aircraft maintenance. Matthew finished by talking about challenges and opportunities in the field, and mentioned the current JISC call for projects on 'Semantic Tools for Assisting Research Lifecycles'.

During the day a wide range of material was presented, which provided delegates with a host of current information in the field. It is hard to find fault with the day, which was well organised with a good range of enthusiastic speakers. If I were to offer a small criticism it would be that, due to time constraints, delegates were unable to go on both lunchtime tours, and time for discussion and trying out resources was limited. In my opinion, the course certainly represented good value for money and I would be very surprised if any delegate went home having learned nothing new.

- [1] Research Councils UK: <http://www.rcuk.ac.uk/escience/news/firstphase.htm>
- [2] Hey, T. and Trefethen, A.E., *The UK e-Science Core Programme and the Grid*, Future Generation Computer Systems 18 (2002), 1017-1031.
- [3] Visual and Spatial Technology Centre: <http://www.vista.bham.ac.uk>
- [4] eBank UK: <http://www.ukoln.ac.uk/projects/ebank-uk>
- [5] Foster, I. and Kesselman, C. (Eds.), *The Grid: Blueprint for a New Computing Infrastructure*, Morgan Kaufmann, Los Altos, CA, (1999).

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Editor's note: If any reader is interested in hosting a similar event, please contact Tracey Kent (t.k.kent@bham.ac.uk).