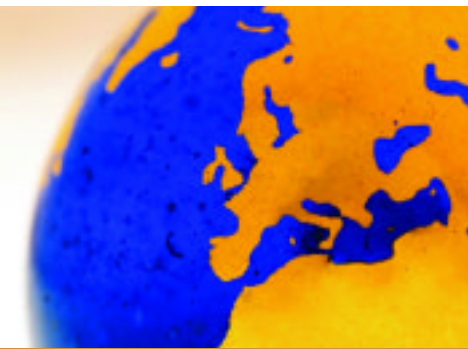


inform



Acting globally - a special international feature

11



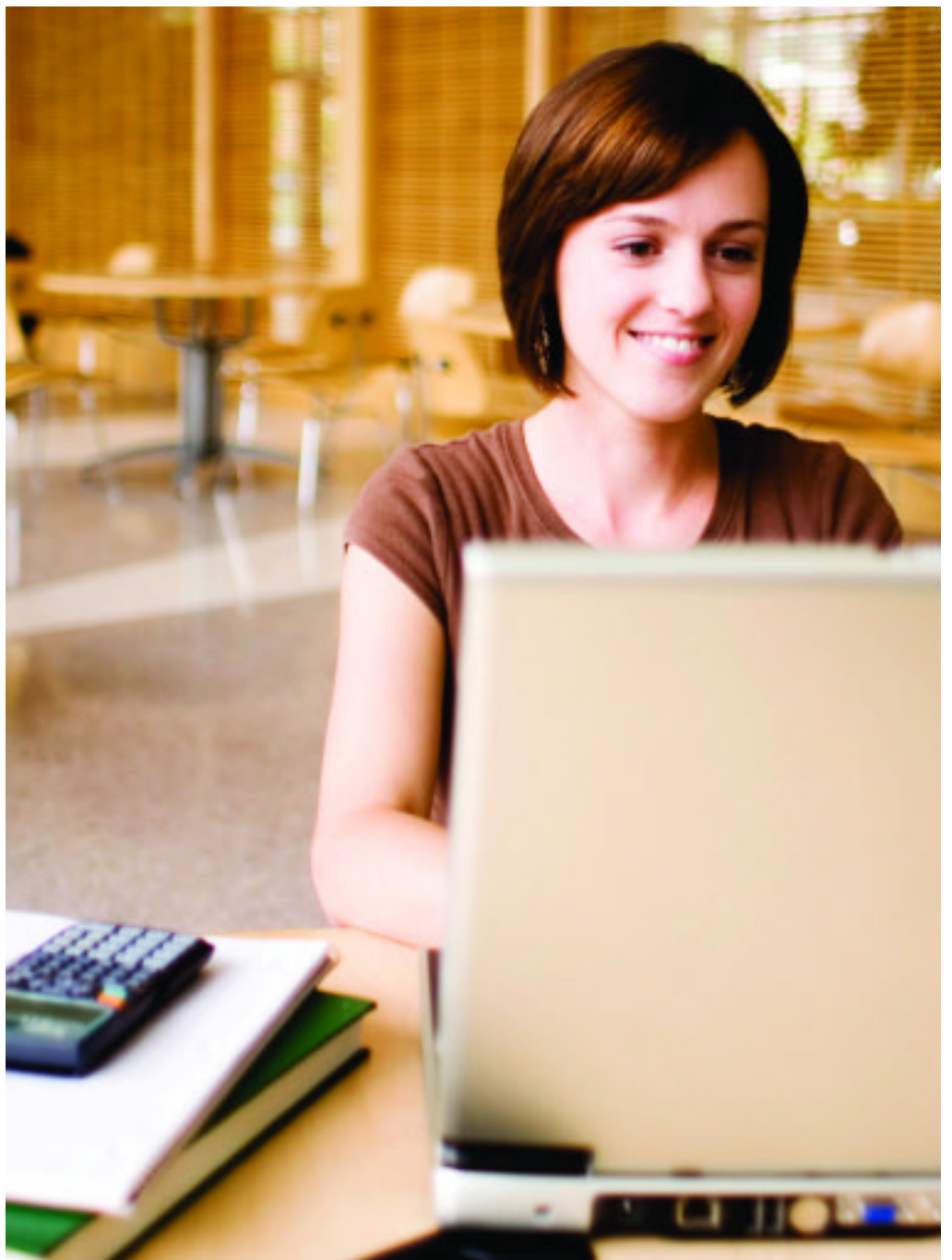
Supporting arts and humanities research

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Hold the front page - a new resource goes online

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'The scientific community is particularly at risk because much modern scientific research generates vast quantities of data'.

Turning the tide



8 ▲

'Classically, the idea of teachers is that they know best... But we took a different tack on this'.

And the winner is...



18 ▲

'Virtual Vellum demonstrated how widely dispersed scholars can engage in collaborative study of rare manuscripts'.

Where the real meets the virtual

'We have a mission to make a layer of scholarly and scientific content openly available on the internet'

How international collaboration is supporting national goals.
Partners across borders, p12

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Read all about it

'This resource demonstrates the power of the web to inform, educate and delight'

A new resource offering 1 million pages from nearly 50 19th-century newspapers has unlocked a rich seam of hidden treasures, writes the British Library's Lawrence Christensen

The British Library's partnership with JISC has delivered many notable successes, but the new 19th-century newspapers collection, launched in November, must be one of the richest and most spectacular fruits of a long and highly productive partnership.

Thanks to the new resource – part of JISC's £22m digitisation programme – the UK's FE and HE communities can now gain free online access to a cross-section of 19th-century national and regional titles that provides a rich and fascinating picture of the society, culture and history of the UK. Lecturers will be able to download material from the website and use it for teaching purposes.

For the first time, iconic historical events that shaped our present will be fully searchable online. Vital newspaper reports on the Congress of Vienna, the Slavery Abolition Act and the opening of the Suez Canal will become accessible from researchers' desktops.

Users will be able to read and repurpose the factual reporting of the Battle of Trafalgar in *The Examiner* and the gory details of the Whitechapel murders in the

melodramatic *Illustrated Police News*. Some of the most famous authors of the 19th-century are represented, including Dickens and Thackeray.

The 19th Century British Library Newspapers Website – developed by Gale/Cengage Learning – employs new imaging techniques and offers highly illustrated materials on topics as diverse as business and sport, politics and entertainment. The collection will focus on London national newspapers, English regional papers, home country newspapers from Scotland, Northern Ireland and Wales, and titles in specialist areas such as Victorian radicalism and Chartism.

Sir Colin Lucas, Chairman of the British Library, speaking at the launch of the resource, called the resource a 'vital online research tool providing the very best resources for the UK's further and higher education communities,' while Sir Ron Cooke, Chair of JISC, said the 'fascinating and groundbreaking resource' demonstrated the power of the web 'to inform, educate and delight.'

The 19th Century British Library Newspapers is one element of a £22



million JISC programme to digitise a critical mass of resources, including sound, film, journals, pamphlets, images, government and parliamentary papers, maps and cartoons and make them available to further and higher education. The initial 1 million pages of content will in time grow thanks to further funding from the programme.

Lawrence Christensen
British Library

Further information

www.jisc-collections.ac.uk



Identity matters in education – two reports published

All of us are affected by how organisations manage our identity, and all of us need to become aware of the importance of sound identity management. This is as true in education and research as it is in everyday life.

Following two 12-month projects to investigate identity management in higher education and the levels of assurance needed to prove an individual's identity, JISC has just published two reports that provide important findings on higher education's current practice and approaches to identity management.

The Identity Project report:

www.jisc.ac.uk/publications/publications/identityprojectfinalreport

The JISC report on levels of assurance:

www.jisc.ac.uk/publications/publications/einfrastructurefinalreport

OpenDOAR now includes 1000 repositories

SHERPA has announced that its OpenDOAR directory, which contains an authoritative list of institutional and subject-based repositories, now boasts 1,000 repository entries from across the globe.

With each of the repositories listed by the OpenDOAR service having been visited by project staff, the gathered information is both accurate and precise, and contains a quality-controlled list of repository features.

For further information, please go to: www.opendoar.org



JISC infoNet launches information management resource

JISC infoNet has launched a resource to support the management of all types of internal information. The Information Management infoKit is based upon the well established principle of the information lifecycle, which provides

a consistent framework for good information management practice.

It also includes two further strands of more detailed guidance relating to records and email management and will be augmented over time with the

addition of further subject-specific strands all based on the same lifecycle model.

For further information, please go to: www.jiscinfonet.ac.uk/news/information-management-resource

Launch of JISC's Information Governance Gateway

November saw the launch of JISC's Information Governance Gateway (JIGG), a comprehensive resource on all matters relating to information governance legislation and the HE sector. Hosted by MIMAS and led by the University of Manchester, the Gateway will cover records management, data protection, copyright, freedom of information and related legislation.

Commissioned as part of JISC's ongoing programme of activities aimed at supporting and developing institutional records management and compliance with information-related legislation, the Gateway will contain resources of relevance to both HE practitioners and the public regarding information governance legislation, including a central point of access to all HE Publication Schemes and other relevant web pages.

For further information, and to access the Gateway, please go to: www.jigg.ac.uk

More than £5m funding awarded

More than £5m of funding has been awarded over two years by JISC in the latest round of its capital programme. e-learning, e-infrastructure and repositories and preservation are the areas to have benefited from the investment.

Further information on JISC's capital programme can be found at: www.jisc.ac.uk/capital

A year of progress and achievement – JISC's annual review published



JISC's annual review has been published for the first time as an entirely online publication. The review documents a year of achievement in the key areas of JISC's activities and includes

podcast interviews with senior JISC figures and the chairs of its committees, an image gallery and a Year in View giving the highlights of JISC's activities during the academic year 2006–2007, which include:

- The launch of SuperJANET5, the upgrade to the JANET network
- International activities, including the worldwide open access petition, the launch of the JISC/SURF 'Licence to Publish' and international repositories activities
- The start of the Users and Innovation programme
- The publication of the national e-infrastructure report
- The launch of the UK Access Management Federation
- New research and reports on Web 2.0, plagiarism, open source software and IPR

To read the full online annual review, please go to: www.jisc.ac.uk/aboutus/annualreview/2007

Turning the TIDE

Research teams across the country are creating vast amounts of digital data that are vital not only to their research but to the UK's science base, its economy and to its very future. But, warns Judy Redfearn, data are in grave danger of being lost unless we take action now



It's January 2018, and after a week of travelling, Professor Johnson sits down one Sunday afternoon to catch up with the past week's post. 'Climate change experiment aborted – data inaccessible,' is the alarming message from Jill Cross, head of the climate change group at his multidisciplinary institution. 'Am unable to access some databases or make sense of others. No way of knowing how, when or where data recorded or by whom. Given up!' she laments.

Messages from other researchers at his institution, which houses a number of large scientific instruments, report

similar problems. Public investment in scientific research is at risk because of the lack of a suitable infrastructure to ensure that the vast amounts of data that these instruments are producing would be available for re-use.

Dismayed, and looking for a welcome distraction, Professor Johnson turns to a message from a particularly promising post-graduate student. He is eager to find out how Lydia has got on with her final report. The data from her quantum tunnelling experiment look remarkable. Keen to find out more, he turns to the web address she has given only to find that it no longer seems to

exist. Now how can he get at the data? Lydia's message said she was moving to Italy and would contact him with her address when she had settled there...

These, and many other similar scenarios, face all of us if action is not taken now to manage data effectively for the future. The scientific community is particularly at risk because much modern scientific research generates vast quantities of data, which must be stored, managed and curated properly

Research data – what JISC is doing

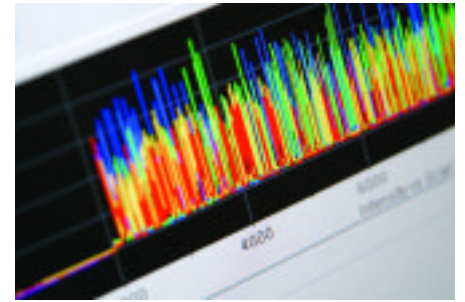
Commissioning a 'data audit framework' and pilot implementations to enable institutions reliably to assess the data held on their systems

Commissioning a study of the careers and skills issues related to data curation, and summer schools to be run by the Digital Curation Centre to begin to address some of these

A forthcoming study, which will quantify the likely costs for institutions in curating data produced by their researchers

A forthcoming HEFCE feasibility study, which will assess the value and scope of a potential national 'shared service' for the curation of research data

'Some research communities are taking the issue seriously, while others are lagging behind'



if we and future generations are to reap the rewards of substantial research investments.

Some research communities are taking the issue seriously, while others lag behind. JISC is well positioned to raise awareness, having already had considerable experience of funding initiatives in this area. For example, the Digital Curation Centre researches issues around how data should be managed and preserved for future use and promotes good practice; the eBank project is investigating how research data can be linked to publications and has shown how data management can be embedded into daily working life; and Repository for the Laboratory (R4L) is developing methods to make raw experimental data available as they are generated by laboratory equipment.

Now, however, data management is rising up the political agenda. According to a recent report produced by the (former) Office of Science and Innovation, 'a national e-infrastructure needs the means of producing, managing and preserving vast amounts of digital data.' Differing needs must be reconciled before this vision can be realised. For example, users, usually researchers, can be

wary of sharing data (how can I ensure my intellectual property rights? How can I establish the provenance and context of someone else's data?).

Custodians, typically subject-based or institutional repositories, want to encourage data sharing, but have concerns over storage capacity, developing curation skills in the workforce and data management planning. Even among subject-based repositories concerns will differ according to disciplinary differences in volumes of data and how they are generated and re-used.

Another issue is the extent to which some of the tools that have already been developed for data repositories meet the requirements identified during studies into good data management policies.

JISC is now embarking on a six-month programme of work to clarify some of these issues. Studies are underway to enable institutions to assess the data they already hold, to assess the likely cost of curating their research data and into ways of ensuring a workforce skilled in data curation. These are preliminary, but nonetheless significant, steps on the path towards the 'national e-infrastructure'

anticipated by the OSI report.

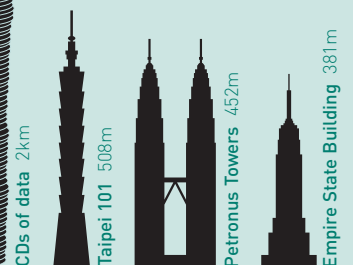
Judy Redfearn
JISC/EPSRC

How much data?



A tower of CDs 2km high, containing data equal to that produced by the Rutherford Appleton Laboratory last year (2PB), measured against some of the world's tallest buildings.

(1PB is a unit of computer storage equal to one quadrillion bytes, or 10^{15})



And the WINNER IS...

The Times Higher Awards have quickly become established as a showcase for some of the best work being done in higher education and a chance to celebrate excellence in the sector. Philip Pothen meets the winners of the new JISC-sponsored ICT award

An initiative which has forged a partnership between students and staff while overcoming challenges of physical remoteness won the JISC-sponsored 'Outstanding ICT Initiative of the Year' Award 2007 late last year. The e-course team at the University of Birmingham's School of Dentistry won the award for its development of an e-course that allows learners to create and contribute their own materials and to interact with a full range of social technologies.

Giles Perryer accepted the award from JISC Executive Secretary Malcolm Read at a prestigious ceremony in December.



The THES editor Gerard Kelly welcomes more than 1,200 guests to the awards ceremony

Giles, e-course developer at the School of Dentistry, says that the thinking behind the e-course was that students themselves know better than their teachers how they want to learn.

'Classically, the idea of teachers is that they know best, they know what's good for students, how students want to learn,' he says. 'But we took a different tack on this... So the way that we deliver our e-course is based far more on what they want to do, what Web 2.0 "toys and games" they want to use, to create an environment in which they're comfortable rather than one they're forced to enjoy.'

The e-course developed by the team is wiki-based, with a full range of social networking – or 'Web 2.0' – features, including podcasts, videos, wish lists, and anonymous feedback options, amongst others. The initiative has also created interactive captioned videos of procedures to help students prepare for unexpected clinical situations at short notice, as well as an 'intelligent' virtual microscope developed to run on any platform.



'The best things about the web – YouTube, Google, podcasting, etc – are quite different from presenting information didactically,' says Giles Perryer, 'and we've taken as many things as possible from Facebook, Google Maps, and so on. We take these features on the advice of the students rather than on what we feel is going to be good for them.'

Naomi Docherty has used the e-course since her first year as a dental student, first as a resource, then increasingly as something she can directly contribute to. 'I use the e-course a lot. From your first year you have full use of it and it has grown massively. In your first year you don't know the right questions to ask the staff but you use it more and more'.



The JISC-sponsored Outstanding ICT Initiative of the Year award

Interactive resources also engage her in different ways and at different times, depending on circumstances. 'You can watch the clinicians on video on days when you don't feel like reading. You can absorb information that way. It's a fun way of learning because you take in more. You can contribute your own materials if you've got a tutorial you're working towards. You can put your own work on the wiki. It's very interactive, so everyone can use it and add to it.'

The virtual microscope provides benefits not otherwise available from books, Naomi suggests. 'If you wonder what something is when you look in histology books, you can't always see what you're looking at. But when you're looking in the e-course

The other shortlisted entries were:

- Community@Brighton at the University of Brighton
- The Media Zoo at Leicester University
- OpenLearn from the Open University
- The Technocafe at Durham University
- Virtual Pedagogy Initiative at Aston University

virtual microscope, you can enlarge it, look deeper and you can also ask questions of a lecturer via the message centre. They can come back to me and tell me what it is. It's more useful than looking at a book. You can actually get some answers.'

It was this commitment to innovation that caught the attention of the judges, says Professor David Baker, Principal of University College Plymouth St Mark and St John and one of the four judges: 'The e-course team won because of their imagination and innovation. It seemed clear to me that the people involved really had moved us forward in terms of the application of ICT to learning and teaching.'

For Deborah White, Director of Learning and Teaching at the School of Dentistry, the award is an important validation of the student-centred approach favoured by the university as a whole. 'The university has a philosophy of supporting students in independent learning. So this fits in with that. We recognise that students want to learn when they're not in the

building, when they're at home and that's very much in line with what the university is trying to do.'

Future plans include ensuring the e-course's long-term sustainability and, importantly for the judges, working towards making the e-course a public resource so that, for example, the team can help with the many enquiries it receives from hard-pressed dental schools in developing countries around the world.

But for now, Giles Perryer and his team are delighted and still surprised at their win at the THES awards last month. 'It was absolutely superb,' he says, 'completely unexpected, and the sound of my chin hitting the table could be heard across the whole room. It was absolutely fantastic!'

To listen to the podcast of these interviews, please go to:

www.jisc.ac.uk/inform20

Further information

www.dentistry.bham.ac.uk/ecourse

Rights and responsibilities in a digital age

The web has made us not only users of online content but, in many cases, creators of content too. Sara Hassen explores some of the issues involved in this 'revolution'

Uploading information about yourself onto a social networking site such as Facebook or MySpace or sharing your thoughts on a discussion list may be straightforward enough. But in doing so, not only are you becoming a 'creator' of online resources, but also, in effect, a 'publisher'. This development constitutes a revolution, say experts, one which has major implications for our rights – and responsibilities – in a Web 2.0 world.

But the ability to create and make available content so easily can make us relaxed – too relaxed, say many – about using other people's content.

'There is an approach', says Charles Oppenheim, Professor at Loughborough University, 'that suggests that "if it's available on the Web, then I can use it". But that's not always the case. There are resources on YouTube [the video sharing site], for example, that can be copyright infringing.'

For IPR (intellectual property rights) consultant Naomi Korn, the cultural shifts have happened almost imperceptibly but are now presenting direct challenges for education and research. 'It's interesting to think how far we've come in the last 10 to 15 years,' she says. 'Users are being able to create their own content. This has changed the way in which we need to be mindful of IPR issues. It has upped the ante. And it's not only Facebook,'

she continues, 'but also sites that enhance the learner experience, that allow sharing of resources and linking with peers. Risks have been heightened. People are more mindful of their rights and the integrity of what they've created.'

Risks are heightened still more by the evident value of what people are creating – and, indeed, of what they may be misusing. 'The materials that are produced by Web 2.0 technologies have considerable value,' says Charles Oppenheim.

'There need to be processes in place to ensure that the IPR in those materials isn't being ripped off by other people... With these technologies which are collaborative, it's quite difficult to decide who's the creator and who owns the rights.'

It was challenges such as these that led to the creation of the JISC IPR Consultancy, managed by Charles Oppenheim and Naomi Korn, which since 1995 has advised JISC on IPR issues, providing expert advice and guidance in a complex and ever-changing field.

And, for those at a loss to know where to begin in such a complex world, what advice would JISC's experts give?

'Once you have put resources up on a Web 2.0 site, you are a publisher, suggests Charles Oppenheim. 'So put yourself in the position of an owner of



third party materials: "If I were the owner, would I be annoyed that somebody has taken this?" If "yes, I might be," then you should be cautious.'

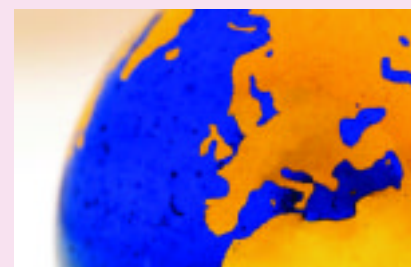
For Naomi Korn, we need to rethink our attitudes towards the web itself. 'One way of perceiving the web is not as a free for all but as a shop window, so when we come across an image by Picasso, say, and someone says you can use it, it is highly unlikely that the person who used it owns the copyright. So you need to have awareness of the authority of the people who post things up. There are JISC-funded resources and services available to help and tools are being developed all the time.'

For the full interview with Naomi Korn and Charles Oppenheim, please go to: www.jisc.ac.uk/inform20

Further information

www.jisc.ac.uk/whatwedo/projects/ipr

Acting GLOBALLY



Higher education in the UK has a global reputation and JISC is playing its part to enhance the sector's standing worldwide. The articles on this and following pages explore various aspects of JISC's international work and look at how its international engagement is bringing direct benefits to the UK

By most indicators, the UK is a world leader in education and research. With just 1% of the world's population, the UK is responsible for more than 12% of its research citations, while UK universities are some of the most sought-after teaching institutions around the world, recognised for the quality of their education and the value of their qualifications.

With a global marketplace for education and research comes the growing recognition that international partnerships are vital if the UK is to maintain and indeed enhance its position. In the field of ICT, this is perhaps even more important as technology helps break down the worldwide barriers to communication.

Acting alone in an interconnected world no longer makes sense, if it ever did so, and JISC's international work supports and, in many cases, leads worldwide developments.

One example is in the field of open access repositories where JISC is working with partners to explore international approaches (see page 13), to learn from others and, where the UK is in a position of leadership, to help ensure that other countries can learn from its experience. Further innovation in the

international arena is set to bring direct benefits to the licensing of online resources through an initiative of Knowledge Exchange, a partnership of four national ICT bodies (see next page). Here international cooperation is delivering new business and publishing models and potentially significant economies of scale.

Technical standards are, almost by definition, global ones and JISC's leadership in the international e-Framework initiative – first with Australia's Department for Education, Science and Technology (DEST), and latterly with other organisations – sets out to define and explain how discrete IT systems can be deployed and made to 'interoperate'.

With countries bringing different areas of expertise to the initiative, progress in a complex and challenging area is much quicker than it would otherwise be, he suggests.

The UK's leadership is acknowledged in other areas too, such as digitisation, as Mike Keller, librarian at Stanford University, attests: 'I'm very impressed. JISC is a fine advocate for the interests of those who would use resources. JISC has leveraged the money it's got very

handsomely. The number and range of projects is really impressive. I think it's a model that we in the States should look at very carefully. It [the digitisation programme] is a terrific piece of work'.

A recent international benchmarking study found that, through JISC's work, the UK is in a position of influence internationally as far as the use of ICT in education and research is concerned. It also suggests that JISC is one of a small cadre of global leaders, perceived internationally as 'a catalyst for innovation' and that its major strength lies in its 'joining [of] new ideas and technology with issues that need solutions'.

With such solutions invariably having an international dimension, JISC's international work also covers networks, e-Science, access management, e-learning and much more. The UK is in the forefront of developments in these areas and JISC is playing its part to ensure it remains so.

Louisa Dale

JISC Partnership manager

Further information

www.jisc.ac.uk/aboutus/partnerships

Partners across borders

International approaches to the delivery of online resources are beginning to bring tangible benefits to four European countries including the UK, writes Philip Pothen



Every £1 spent on providing national licences for online content generates £26 of value for the UK further and higher education sector. So said a value for money report published by JISC early last year. But, with the globalisation of the publishing industry and increasing international cooperation in education and research, could such figures be matched or even enhanced by an *multinational* approach to licensing?

Who's who in the Knowledge Exchange?

- Denmark's Electronic Research Library (DEFF) in Denmark
- German Research Foundation (DFG) in Germany
- JISC in the UK
- SURFfoundation in the Netherlands

An exploration by international partnership organisation Knowledge Exchange is attempting to find out in what is potentially a groundbreaking development for member countries. Made up of four key national ICT bodies in the UK, Netherlands, Germany and Denmark (see inset box), the umbrella organisation is pioneering a multinational approach to licensing, which is also engaging publishers in the delivery of innovative business models.

'The tender process began in February last year through the EU competitive dialogue procedure,' says Max Voegler of German research body DFG, a Knowledge Exchange partner. 'Twenty-two publishers submitted bids. In successive stages we've since narrowed down to five the number of publishers whose bids have been accepted by the Knowledge Exchange partners.'

A group of libraries and licensing experts, working on behalf of the partner organisations, are seeking to establish a contractual framework for the Knowledge Exchange countries. To accommodate differences in approach, a flexible solution is essential. At this stage, content will be procured through two approaches: via so called national licences (one national fee for access to all institutions) and opt-in contracts for individual institutions.

For Bas Cordewener of the SURF Foundation in the Netherlands, the licensing initiative is an important element of the Knowledge Exchange's mission: 'We have a mission to make a layer of scholarly and scientific content openly available on the internet. One important aspect of that mission is to engage with the publishing community about new directions in publishing: what sort of business models and access strategies will emerge in academic publishing in the coming years? How can we, as four partner organisations, help to shape these developments?'

While some publishers were initially sceptical about the implications of such wide-ranging innovations, Max Voegler says that they became increasingly positive as the process went on.

The bigger challenge was, however, to ensure that an international initiative

'helping us pilot various approaches... to provide a better and more cost efficient service to our research community'

could complement different national approaches in this area. As Bas Cordewener says: 'Each country operates within its own legal framework and has its own strategy for procuring content on a national level, so the challenge was immense.'

But it was a test that was passed for the Knowledge Exchange partnership as the initiative was able to ensure that differing national structures and processes could in fact be supported through collaboration and the delivery of further economies of scale. But what next for the initiative? 'The tender has worked very well for certain types of content and not so well for others,' says Bas Cordewener. Large publishers for the most part did not participate. We need to gain a deeper understanding of these issues as we evaluate the tender process and begin to plan further activities.'

Although the tendering process is at an end, Max Voegler believes that the really interesting part comes now – 'promoting and communicating these offers to our respective higher education and research communities'.

Further information

www.knowledge-exchange.info

Continental shift

The benefits of European collaboration were powerfully demonstrated last year when lobbying and advocacy organisation SPARC Europe joined the four Knowledge Exchange partners (see left) to organise and deliver a petition to the European Commission, which called for further action at the European level in the field of open access.

David Prosser, Executive Director of SPARC Europe, was in the thick of these developments. He says that the petition proved to be a case of international partnership bringing about real change to deliver genuine benefits at the national level.

'The Commission had come up with research and a wide range of recommendations,' he says, 'the main one being that publicly funded research should be made publicly available. We wanted to show the Commission the strength of support for this principle.'

Within two or three weeks the petition attracted over 20,000 signatures, says David Prosser, including Nobel laureates, founder of Wikipedia Jimmy Wales and nearly 800 scientific academies, libraries, research organisations and funders from across the world.

'We handed this into the Commission just before they held a major meeting of stakeholders last February. This was a very powerful message and it had a tremendous effect.'

And that effect was more than merely symbolic, he continues. 'The Commission issued a communiqué that went to the European Parliament which was a direct result of the petition. Also if you receive a grant under Framework Programme 7, you now have to make a commitment to open access. The European Research Council has also put in place a similar commitment. So while there haven't been great declarations, we have seen within specific programmes some very concrete moves. The next stage is for us to go to the parliament and to take the issue up with MEPs.'

Such an impact could not have happened without close partnership at the international level, says David Prosser. 'Partnerships are very important, especially in the European context. Talking to the European Commission and the parliament, to be able to say here is a group of European organisations which have come together and which share the same problems and the same solutions shows that we think about the issues, that we've come to a common understanding.'

That sort of engagement is very important. All of these five organisations have done important things, particularly in open access, but have come together to get greater leverage on the international stage.'

For the full interview, please go to: www.jisc.ac.uk/inform20

Further information

www.ec-petition.eu

Concerns? What concerns?



Following the success of the 'IT top concerns' surveys in the UK, USA and Australia, Chris Cobb, Pro Vice-Chancellor of Roehampton University, went on a fact-finding tour of China, and found that their concerns are, in fact, very similar to ours

In the West, China is perceived as being prescriptive and controlling, so I thought that perhaps their approach to IT would be very standardised: a place where protocols for user identity and authorisation were universally applied; a place where student data flowed effortlessly between institutions and agencies, and where the concept of unique, lifelong learning numbers was already well embedded.

I also wanted to see whether the massive economic growth in China had filtered down to university investment in IT and, if it had, what technologies were being applied.

But China isn't as 'controlled' as the West perceives it to be. Of course, the single party system is strong and the 'Great Firewall of China' does exist. However, I found that people generally did, and said, what they pleased and that much of the decision-making is devolved and based on the same value for money criteria that the West uses.

I also found that the issues facing Chinese IT Directors are very similar to those in the West: interoperability, funding, resilience and 24/7 access and support. Furthermore, the Chinese purse is far from bottomless.

Disappointing as it was to discover, the top IT concerns in Chinese universities are very similar to those in the West.

The Chinese equivalent of JANET is CERNET, which provides 'free at the point of access' connectivity to 1.8m university students and staff at over 1500 institutions, at speeds of up to 10Gbps. Another government funded project is called CALIS, which has created a network of digitised learning and research resources across 500 university libraries.

At one of the universities I visited, they'd built a new 50 million Yuan teaching building, which had over 1,000 open access computers across 37 multimedia classrooms. A central communications room controlled all video and presentational materials to every classroom. The room comprised a wall of TV screens showing activity in each classroom with other screens showing the presentational materials, live TV and video streaming. Ten technicians were on call to support lecturers in the classroom and to cue the necessary presentations.

In the same building, video links were used in teacher training. Students practised their teaching in mini-classrooms in front of two or three peers and a camera. A team of lecturers would sit separately in an adjacent room monitoring a bank of TV screens, speaking to their students via microphone. Distance learning, but not as we know it!

My attempts to discover their top IT concerns through structured surveys were not quite so successful, however, my lack of Mandarin being a huge hurdle. Then there were the problems of culture and protocol. There's a term in China known as 'Guanxi', which is used to describe issues of trust, mutual respect and giving/losing face. Sometimes, in my conversations with Chinese IT Directors, I would pick up on a potential new candidate 'concern', only on further probing for the issue to be down played with a 'well, it isn't that bad' or 'it used to be, but not so much now'.

The openness and friendliness of the Chinese people and the fantastic hospitality shown to me were lasting memories, however. I'll also remember the pace of change and the appetite for self improvement which appeared insatiable.

I also found the mixture of traditional and modern beguiling - with camphorwood archival cabinets sitting alongside 21st century server farms. All in all, the whole experience was fascinating and one that I'll never forget.

Chris Cobb
Roehampton University

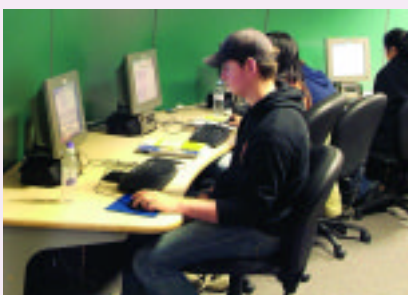
All that jazz

It's not only institutional repositories that are changing the ways in which digital resources are made available, writes Philip Pothen

When Catherine Parsonage saw a JISC call for proposals to set up repositories last year, she immediately thought of the small but important collection of jazz resources held at her institution, Leeds College. Based at the college's Centre for Jazz Studies since 1995, the archive was, in Catherine's words, 'stored safely, but not accessible'.

The call, she thought, gave her and the Centre the chance to set up a repository that could help 'build links with the community in a more proactive way' but also to be part of a JISC programme that would support the development of dozens of such repositories across the UK.

The response to the JISC call was, says Catherine, 'a logical step' for the Jazz Research Network, a cross-institution community of researchers, which used a JISCmail list and ran an international conference but had no digital archive to ensure the safe deposit, preservation and long-term access to valuable resources on jazz.



'There is a need for us as a community,' she says, 'to deposit academic papers, conference proceedings and other resources which are being created all the time, but also to look after very important archival materials which exist in private and family collections and to make these accessible. A key part of this undertaking is then to engage the community so that they know there is somewhere for them to deposit their materials.'

With much of the materials, such as musical scores, in print and manuscript format, and vinyl recordings in LP and 78 formats, a digitisation and preservation strategy is a key element of the JazzHub's work, ensuring the repository performs a vital historical and archival function.

The project is one of more than 40 JISC-funded projects that have been given matching funding either to set up new or to enhance already existing repositories. 'We're a "start-up" project,' says Catherine, 'but we've benefited from the enhancement projects in terms of their understanding of open source software, for example, or intellectual property, or technical standards.'

Manager of the JISC programme, Andy McGregor, says that while most

'There is no perfect repository model. It's a case of whichever suits the content and community better'

projects he is responsible for are setting up institutional repositories, subject-based repositories will be a vital element of the emerging scholarly environment: 'There is no perfect repository model. It's a case of whichever suits the content and community better. Both will work. We can't expect researchers to change their working culture. We need to engage them in ways that make sense to them. The JazzHub is a very good example of this principle in practice.'

For Catherine Parsonage, the repository is even more than this – a symbol of a resurgence of interest in British jazz and the growing confidence of its community of researchers. 'It's a really massive thing. The jazz community is becoming more technologically advanced and is looking to disseminate and be creative. Our repository is the first in this country and it underlines the fact that jazz is an important part of British heritage. It's different to American jazz and this heritage is now being recognised.'

Further information

www.jisc.ac.uk/whatwedo/programmes/programme_rep_pres/repositories_sue/jazzhub

The bright AGE

A special report recently published in the *Times Educational Supplement* celebrated the success of the JISC Regional Support Centres, which it said had 'started revolutions' in the post-16 education sector. Two articles from the report are reproduced here, giving a brief history of the RSCs and a flavour of some of these 'revolutions'



College IT managers still recall the Dark Ages – before there was a proper structure for developing technology for students in FE. Institutions had to rely on costly connections through internet service providers and there was no coordination. 'It was very ad hoc,' recalls Gareth Davies, former head of IT at Newcastle College. 'I think in many colleges IT was just seen as a bolt-on.'

The turning point was the year 2000, when JISC set up a network of Regional Support Centres (RSCs) across England, Wales, Northern Ireland and Scotland. From the early days of getting colleges connected and giving curriculum support, RSCs' role has broadened to cover the entire post-16 sector.

Today, Gareth Davies manages the support centre for the North East, RSC Northern, which serves 22 FE colleges, four specialist colleges, 12 local authorities, a long list of work-based learning providers and, to a lesser extent, the area's five universities.

Colleges have come a long way since those first faltering steps as they became connected to JANET, the Joint Academic Network serving the higher education and research community, seven years ago. 'We are still there to answer questions and to give support, but the colleges have become more self-sufficient,' says Gareth.

The RSCs have entered a new phase with their third round of funding from 2007 to 2010, and a mission statement: 'RSCs – stimulating and supporting innovation in learning.'

This further funding amid a difficult climate for FE is an endorsement of the RSCs' value, says Peter Cleall, JISC senior services liaison manager. 'Surveys of the value of the RSCs to the community came back with a resounding "you must keep this service going",' he says.

RSCs have an annual budget of £5m and consist of teams of between six and a dozen people in 13 regions throughout the UK. Staff act as knowledge brokers, providing a wide range of services including helping providers to develop e-learning, supporting staff development, technical support with networks and connecting to them, and providing online resources.

And they have to make a little go a long way. In the North West, for example, there are more than 200 learning providers and a dozen RSC staff supporting them. They have to work efficiently, using local forums and regional events where they train people to train others.

'The quality of our people is key', says Peter Cleall. 'We have managed to identify people with specific technical skills who are good communicators, good at collaboration and have a flexible approach.'

Martin Whittaker
Times Educational Supplement



If you would like to order a print copy of the TES special report on the RSCs, please contact:
jslteam@jisc.ac.uk

'The quality of our people is key. We have managed to identify people who are good communicators, good at collaboration and have a flexible approach.'

'e-Mature' and in demand

Two years ago Hadlow College lacked a proper vision for e-learning. Although staff who sat on its ILT committee had their individual ideas, they were failing to construct a whole-college strategy that recognised the importance of e-learning.

In November 2005, principal Paul Hannan asked JISC's RSC to carry out a one-day health check and interview key staff. 'It was a day when a lot of work was done,' he recalls. Within three weeks the JISC team had reported on the situation facing Hadlow, a college in Kent, and drawn up some action points to help it improve. The ILT committee was scrapped in favour of an e-learning committee and an e-learning champion was appointed.

The college also set up a virtual learning environment (VLE). 'We swept the floor and said "this is what e-learning is about",' explains Paul. 'People were getting bogged down by technology. Now they realise that e-learning is about the support that we give to learners and teachers.'

As well as allowing managers to think more clearly, JISC's intervention helps colleges to benchmark their performance. When a team carried out a follow-up health check at Hadlow last month, the college was praised for achieving, and in some cases going beyond, the

action points set out two years earlier. 'Some of our work was described as "e-mature" and we're even being flagged up as an example for other colleges,' adds Mr Hannan.

Health checks are free and available from RSCs throughout the country, although the precise way they are carried out varies between regions. Colleges normally view the team of experts selected by each RSC as a 'critical friend' who will reveal their findings in confidence and not be afraid to pull punches when it comes to identifying failings.

Earlier this year, JISC visited Limavady College and North West Institute in Northern Ireland prior to the colleges merging in August to become North West Regional College. Charlie McKeown, now principal lecturer in staff and student services at the college, says the checks allowed the colleges to draw up an ILT strategy as required by the Department for Employment and Learning (DEL) ahead of the merger.

JISC health checks in Northern Ireland include an online survey of staff and students, a trawl through key documents on e-learning and a one-day visit where the RSC team speaks to lecturers and learners. According to Charlie, JISC gains a more accurate picture than senior managers can as all feedback is anonymous. 'People are more honest when they speak to third parties,' he says.



North West Regional College is now clearer about the areas where it needs to improve and can measure its progress against parameters set out by DEL. Meanwhile, JISC is being invited back in March so that it can draw up a report in time for the college to produce a revised ILT strategy 2008-09.

Neil Merrick

Times Educational Supplement

This is an edited version of the full article; for the full article please go to: www.jisc.ac.uk/inform20

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Further information

www.jisc.ac.uk/rsc

Where the real meets THE VIRTUAL

A Leeds exhibition is bringing the Hundred Years War to life, thanks to continued investment in arts and humanities e-research, writes Judy Redfearn



Visitors to the Royal Armouries, Leeds can get a rare glimpse into life during the Hundred Years War between France and England thanks, in part, to technology developed during a project with JISC funding. The technology enables them to 'thumb' through digitisations of rare medieval manuscripts describing events during the war.

Jehan Froissart wrote his *Chronicles* between 1356 and 1400, basing them on eyewitness accounts gleaned from interviews conducted all over north-west Europe. Copies made during the early 15th-century in Paris reveal subtle differences, mainly in the illustrations, to suit the allegiances of different patrons.

Many of these manuscripts still survive in libraries all over Europe. However, their rarity and value means that they are never seen together and never available for public perusal. The Leeds exhibition is the first time that several of them have been brought together, albeit in digital form.

A real manuscript lent by Stonyhurst College forms the heart of the Leeds exhibition. Visitors access digital representations of six other manuscripts via KIOSQUE, an

'This interactive software allows people to engage with very high resolution, high quality images and to appreciate these manuscripts in a way that has only been available to scholars previously'



interactive e-learning experience created by Mike Meredith at Sheffield University and the Sheffield-based team of e-learning specialists, Tribal.

KIOSQUE is based on technology originally developed under Virtual Vellum, a project funded by JISC and the Arts and Humanities and Engineering and Physical Sciences Research Councils under their joint e-Science initiative. Virtual Vellum demonstrated how widely-dispersed scholars can engage in collaborative study of rare manuscripts using very high resolution digitisations shared over the Access Grid videoconferencing facility.

'This interactive software allows people to engage with very high resolution, high quality images and to appreciate these manuscripts in a way that has only been available to scholars previously,' says Professor Peter Ainsworth from Sheffield University, who led the Virtual Vellum and KIOSQUE projects and is co-curating the Leeds exhibition.

Future plans include the use of grid computing and high speed data networks to show the exhibition at other sites simultaneously including the Royal Armouries USA in Louisville, Kentucky.

Judy Redfearn
JISC/EPSRC

Supporting arts and humanities research

For scholars engaged in digital data creation, JISC has played a key support and development role in the funding of specialist data services, including the UK Data Archive and the Arts and Humanities Data Service (AHDS), and by setting up the Digital Curation Centre (DCC).

JISC is also enabling arts and humanities researchers to apply advanced ICT technologies to the development of their research, particularly through collaboration and resource-sharing over the internet. The application of advanced ICT in this way is known as e-science.

JISC has joined with the Arts and Humanities Research Council's (AHRC) ICT in Arts and Humanities Research programme and the Engineering and Physical Sciences Research Council (EPSRC) to fund a joint Arts and Humanities e-Science Initiative. Seven major research projects in a wide range of arts and humanities subjects have recently been funded under the initiative.

Further information

www.jisc.ac.uk/artshumanitiesresearch
www.ahrcict.rdg.ac.uk/activities/e-science/index.htm
www.ahessc.ac.uk
www.rcuk.ac.uk/escience/news/artshum.htm



Community VOICES

Last year saw the birth of a new venture in community coordination for JISC – the Users & Innovation programme's Community of Practice, led by the Emerge project. With further funding recently announced, the Community is exploring emergent technologies, social software and their use in learning and teaching. Alice Gugan talks to three members of the community at the end of its first phase

Enriching and enabling

As Pro-Vice Chancellor for Assessment, Learning and Teaching at Leeds Metropolitan University, Professor Sally Brown has found the Community's strength has been in

breaking down silos and enabling different levels of seniority to become involved.

While this already happens at Leeds Met, this is relatively new across institutions in a wider Community,

she says. 'The Community has made us aware of what we are doing and what we aren't doing. Through its channels there has been networking at a national level and also at an institutional level to put bids together, and for this to happen through the same process is rare.

'What we've been used to seeing is little diamonds of brilliance but no cohesive approach: the Community has enabled communication and capacity building, but its real joy is the recognition of so many ideas and potential projects out there.'

For Sally, the Community has helped consolidate other e-learning-related projects at Leeds Met funded by JISC. 'JISC is a big influencer. This community has enabled feed-in from and feed-on to other projects. By enabling and funding institutions to be a part of the community it has helped us talk, very simply: it has been a really enriching process.'



A good party!

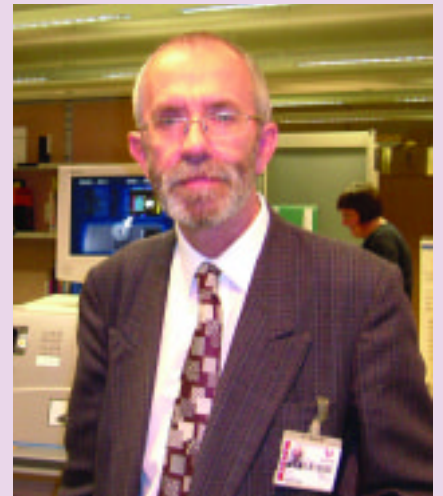
Paul Mayes is used to communities, both local and at a distance. Deputy Director for Library and Information Services at the University of Teesside, he says that communities are 'like a good party – they either go well or they don't! They need a good breadth of people – there are always going to be the active participants and those who are less so.

'A good community can take all sorts, and this one stood out because the enthusiasts had room to innovate and speak out. It has also had quite a nurturing, help-your-neighbour ethos.

There has been the added element of a slight competitive edge towards the end, with projects from the same community bidding against one another, which can skew a focus, but even that has not been a major issue.'

Paul has made over 40 new contacts through the Community, picked up a wide range of skills and tools, met his bidding partner within it and has used the programme's development model (the UIDM) with great success at Teesside.

'JISC is a tremendous brand and the UIDM holds a lot of weight: it's got all the elements of product



development within it, specifically the focus on users and its ability to be tailored to individual needs.'

Flow of ideas

Dave White joined the Community because he wanted a chance to think about and discuss radical ideas that fell outside of funding streams and didn't sit within a day-to-day job. A member of the Technology Assisted Lifelong Learning (TALL) programme in the Department for Continuing Education at Oxford University, he says the Community



'created a safe space to talk about ideas that didn't "fit" anywhere else.'

After spending more than a year talking about computer games, virtual worlds and Web 2.0, Dave joined Emerge. 'Sometimes people would think these subjects were a bit off topic or "wacky", but in Emerge a good idea is a good idea; it doesn't have the same "bounding" as other groups that have been in existence for years. There was a real two-way flow of ideas, and I met other people interested in the same ideas as me that I would have never discovered any other way – a bit like an ideas dating agency really!'

Dave found that the ethos within Emerge encouraged innovation and helped form mini-networks that would otherwise have been difficult or impossible. 'I felt less isolated and also inspired by other people's angles on ideas I had been working

on. I've also learnt a lot about communicating new ideas and new methods of working up ideas in teams.'

Dave plans to stay in touch with members of the Community, which was originally intended to run for just 6 – 9 months, and will now continue as part of the programme benefits realisation process. 'I was worried the Community would be a "nice chat" shop, but the "nice chat" turned into a useful debate which has actually informed the nature of the project we submitted. With the Community I have been challenged by others and the structure of our project and the team are better and more relevant.'

Further information

<http://elgg.jiscemerge.org.uk/about.php>

'The Google Generation' – myth or reality?

A new report, commissioned by JISC and the British Library, counters the common assumption that the 'Google Generation' – young people born or brought up in the Internet age – is the most adept at using the web, reports Dicky Maidment-Otlet



Although young people demonstrate an ease and familiarity with computers, they rely on the most basic search tools and lack the critical and analytical skills to assess the information that they find on the web.

These are the findings of a new report by the CIBER research team at University College London, called 'Information Behaviour of the Researcher of the Future'. But the report goes further and suggests that those traits most commonly associated with younger users – impatience in search and navigation, and zero tolerance for any delay in satisfying their information needs – are now the norm for *all* age-groups, from younger pupils and undergraduates through to professors.

The study calls for libraries to respond urgently to the changing

needs of researchers and other users and to understand the new means of searching and navigating information. Learning what researchers want and need is crucial if libraries are not to become obsolete, the report warns.

'Libraries have to accept that the future is now,' says Dame Lynne Brindley, chief executive of the British Library, who welcomed the report. 'We must do more, particularly to equip users of all age-groups with wider information and digital literacy skills.'

The findings also send a stark message to government – that young people are dangerously lacking information skills, say the authors. Well funded information literacy programmes are needed, they continue, if the UK is to remain as a leading knowledge economy with a strongly skilled next generation of researchers.

Dave Nicholas, one of the report's authors, says that librarians have a 'real opportunity' to deliver on the report's calls for libraries to take a central role in supporting 'wider agendas around lifelong learning, inclusion and citizenship'. 'Librarians

know about information literacy,' he continues, 'they know about delivering programmes to support research and study skills. Researchers of the future need their skills.'

For Dr Malcolm Read, Executive Secretary of JISC, the report supports the need for a layer of peer reviewed and scholarly content made available through repositories, licensing activities and digitisation, which needs to be distinguished from the mass of content made available, for example, from a typical Google search.

Echoing the point made by the report's authors, he says that there is a strong role for librarians to support the wider skills training which the report and a number of other national initiatives were calling for: 'Students and researchers will continue to need the appropriate skills and training to help navigate this increasingly complex information landscape.'

Further information

www.jisc.ac.uk/whatwedo/programmes/resourcediscovery/googlegen

This issue of inform *plus* includes:

- A podcast interview with David Prosser, Executive Director of SPARC Europe, on the worldwide open access petition
- A podcast interview with Naomi Korn and Professor Charles Oppenheim on IPR
- A podcast interview with the winners of the THES award for Outstanding ICT initiative
- A gallery of images on Virtual Vellum
- A full-length article on the Regional Support Centres by Neil Merrick, TES

Print and Electronic Publications



JISC Briefing Paper:
Review of Network Provision
for Research Needs



The JISC Capital Programme
Progress to November 2007



The JISC Year 2006-2007
An introduction to the online
Annual Review

To download various formats or for further details go to: www.jisc.ac.uk/publications

JISC Conference 2008

Lord Puttnam of Queensgate (Chancellor of the Open University) and Angela Beesley (Vice President Community Relations & Co-Founder, Wikia/Chair of Wikimedia Foundation Advisory Board) will be the keynote speakers at JISC's annual conference 2008.

As well as keynote speeches, we have an exciting list of parallel session for you to choose from, and spaces are filling up fast so make sure you get signed up as soon as possible to avoid disappointment!

This event will be of interest to all those in post-16 and higher education and research involved in planning for and supporting the use of ICT.

The conference tag: **jiscconference08**

For further information, please go to: www.jisc.ac.uk/events/2008/04/jiscconference08



www.jisc.ac.uk

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