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On the road to Enlighten-ment: establishing an institutional repository service for the University of Glasgow

Morag Greig and William J Nixon, University of Glasgow

Morag Greig, Advocacy Manager, Glasgow University Library, University of Glasgow, Glasgow, UK (m.greig@lib.gla.ac.uk)

William J Nixon, Service Development Manager, Glasgow University Library, University of Glasgow, Glasgow, UK (w.j.Nixon@lib.gla.ac.uk)

Morag Greig is Advocacy Manager of Glasgow University's institutional repository, Enlighten. She has been involved with repositories since 2003 as one of the managers of the JISC funded DAEDALUS project (2002-2005). Morag is also a subject librarian responsible for physical sciences and music.

William J. Nixon has been involved with institutional repositories since the launch of an ePrints pilot service at Glasgow in 2001. He was the Service Development Manager of the JISC funded DAEDALUS Project (2002-05) and is the Digital Library Development manager at Glasgow University Library. William has been involved in a wide range of repository projects and conferences including Open Scholarship (2006) and OAI5.

Abstract

Purpose

This article will chart the development and growth of open access and institutional repositories at the University of Glasgow, Scotland from initial work in 2001 to the University's recently launched service, Enlighten. The University of Glasgow is a signatory to the Scottish Open Access Declaration and recently released a statement on Open Access.

Design

The study will focus on the key lessons learned through a twin track approach of advocacy and service development during the DAEDALUS Project (2002-2005) and the transition of that work to a University service called Enlighten. This service includes a repository for published and peer-reviewed papers which has now had over 2 million hits and over 270,000 PDF downloads since it was established in February 2004.

Findings

The article will detail the lessons learned by the Library and the project team. It will also identify the range of issues which must be addressed in the successful implementation of a repository and its transition to a production service. These include the development of content policies, copyright clearance and the cultural change necessary to populate a repository service. These challenges have and continue to be addressed by the repository team at the University of Glasgow.

Value

This article provides details of the lessons learned in the practical experience of setting-up an institutional repository and ensuring its transition to a full and supported University service. It will be of particular interest to institutions implementing a repository or running a pilot service.

Keywords: open access; repositories; advocacy; ePrints; DSpace

Classification: Case study

Enlighten and Open Access at the University of Glasgow

This article will chart the development and growth of open access and institutional repositories at the University of Glasgow, Scotland. Initial repository work began with the development of a pilot ePrints service in 2001, the DAEDALUS project, funded by JISC from 2002-5, and more recently the establishment of the University's repository service, Enlighten, launched in April 2006. This launch was accompanied by the release of a University Statement which "strongly encouraged" deposit in the repository and is a key milestone in the evolution of open access at the University of Glasgow.

Create Change and DAEDALUS

The University of Glasgow has been involved in both the open access movement and institutional repository development since 2001, when a trial ePrints service was setup. The realisation that a successful institutional repository service was not merely "nuts, bolts and software" was apparent from the beginning. Advocacy and cultural change were identified as key factors for success. The first "Create Change" meeting held in Glasgow in April 2002 began to address these needs for the wider University community. This event, "The Future of Scholarly Communication", was led by Julia Blixrud (SPARC) and supported by a new, locally developed "Create Change" website.

During these early days, initial advocacy and service development work helped to refine repository goals and facilitated the scoping out of collection needs. A model of separate repositories for different content types, overlaid by a single search service was proposed. This proposal was to become the basis for the successful bid to the UK's Joint Information Systems Committee (JISC), for the DAEDALUS Project.¹

DAEDALUS Project: key facts, aims and objectives, achievements

The DAEDALUS Project was funded by JISC as part of the FAIR Programme (Focus on Access to Institutional Resources)² and ran from August 2002 until July 2005. Its key aims included the:

- Establishment and population of a range of OAI-compliant Digital Collections at the University of Glasgow using a range of different OAI-compliant pieces of software
- Role of catalyst for cultural change and ongoing discussions about the "crisis in Scholarly Communication" within the University of Glasgow and the wider community
- Dissemination of experiences and findings to the wider community

Each of these aims is as relevant and important now with Enlighten as it was in the early days of DAEDALUS. The cultural change and advocacy is critical and was an integral factor in the success of DAEDALUS, and now of Enlighten.

During the DAEDALUS project these aims were achieved through a twin track approach of advocacy and service development activities. This model of working was very successful and generated synergies between the two project managers responsible for these areas. This provided a rich development environment which fed into each subsequent refinement of the repositories implemented. As noted earlier it was clear that advocacy and cultural change would be critical to the success of the project and high level advocacy activities were maintained both at Glasgow and in the wider community. These activities created a good understanding of the need for, and the benefits arising from, an institutional repository service, and also led to Glasgow's significant involvement in the development and signing of the Scottish Open Access Declaration.³

The service development activities ensured that a robust technical infrastructure using GNU EPrints for published and peer-reviewed papers (Glasgow ePrints Service) and DSpace for grey literature, theses and administrative documents (Glasgow DSpace Service) was established. A pilot search service using the PKP Harvester was also implemented provide "proof of concept" to enable cross-searching of these services.

The work of the DAEDALUS Project has been described in detail in a wide range of papers and presentations delivered by project staff and these are available in a collection in DSpace.⁴ This article will not reiterate this information, but instead will cover the key lessons learnt during the project and give details of repository developments at Glasgow since the end of the project and the launch of Enlighten.

The Glasgow ePrints Service: background information

The initial focus for Enlighten is the Glasgow ePrints Service and published and peerreviewed articles, conference papers and books. In line with this, the focus of this article is mainly on developments relating to the Glasgow ePrints Service.

The Glasgow ePrints Service is the University's repository for published material, mainly journal articles, published conference proceedings, books and book chapters. Authors have two deposit options: self-deposit and mediated deposit. Self-deposit requires authors to provide bibliographic details for their publication along with any relevant information relating to copyright. They are then required to upload the full text of their publication. Repository staff check the metadata and complete a number of additional field before the record is made publicly available. If there are any problems relating to copyright or the version of the publication that has been added the author is contacted. The second option currently offered is mediated deposit. Authors are asked to send an e-mail to deposit@lib.gla.ac.uk providing the basic bibliographic details for their publication along with a suitable version of the full text. Repository staff then create a record on behalf of the author.

During the DAEDALUS project a third option was offered. This enabled departments within the University to send details of their publications in the form of a Reference Manager or EndNote database. Project staff developed a script⁵ to import data from such databases directly into the ePrints Service. However, this facility did not encompass the automatic addition of full text to the records, so this had to be carried out as a separate process.

The DAEDALUS Project: Key Lessons Learned

The DAEDALUS project provided a broad and transferable range of lessons for the implementation of a successful institutional repository service. It has already been noted that the overarching twin track approach of advocacy and service development was successful, however each of these tracks also yielded their own lessons.

Repository Software

The service development side of DAEDALUS was initially going to use only two pieces of repository software, ePrints and ETD-db for theses. DSpace was added as a third choice after the project started and during the course of the project ETD-db was dropped so that only ePrints and DSpace were left. It was felt that it was feasible to support two pieces of software but not three. ePrints and DSpace provided complementary features which were suited to the different content policies being adopted for published papers and for preprints and working papers.

The project team had less experience with Java than with the technologies supporting ePrints, and developments with DSpace proceeded more slowly than those with ePrints which uses Perl. The focus of the project in the final year, and in preparation for the move to a new service was on the Glasgow ePrints Service. This meant that it was possible to launch a mature service as the basis for Enlighten and continue to work with DSpace, post-project. This decision mirrored the extensive support and advocacy activities which were ongoing for published and peer-reviewed papers.

Both DSpace and ePrints were installed on a single Sun server running Solaris. This made upgrades more complex, and while they were both able co-exist, installation on separate servers would have been preferable. Ideally they should also be supported by test servers. Since the launch of Enlighten the repositories have been moved to a new server, now running Linux.

The Glasgow ePrints Service is now "production" and early on in the project a test ePrints service was set up, initially for testing record imports. Any changes to the interface, the addition of new content types or changes to the code are made to the test service. The test service also provides a training environment which can be used for training, with no fear of mistakes or of staff "breaking it."

Support from the EPrints and DSpace communities through their mailing lists and wiki's was and remains very important, particularly when working with open source software, and the answers to many queries or configuration challenges have been found there. As the software has matured so have their communities.

Such a model using different software will not be appropriate for all institutions, and it brings its own challenges for support and implementation. However, it is well suited to the development of Glasgow's repository service since each piece of software is best suited for the particular needs of the content types being served.

Authors

Although authors can see the wider benefits of the open access movement, in most instances they are primarily interested in how deposit will benefit them directly. Few authors are sufficiently galvanised by the principles of open access to be moved to deposit. The key message that spurs authors into action is increased visibility and impact. Usage statistics for material already held in the repository are an important tool in encouraging deposit. Whilst it can be very useful to get the backing of a head of department or senior academic this is not always enough to guarantee deposit. It is also necessary to get individuals on board. Otherwise it is likely that individual authors will feel distanced from the process and will not take any ownership of deposit.

Getting authors to deposit on an ongoing basis is not easy. Ideally authors should deposit at the point at which a paper is published. However, in many instances during the project work was being carried out with authors' 'back catalogues' rather than at the point of them publishing an article. This meant that while they were initially keen, once all possible existing papers had been deposited they then forgot about the repository unless prompted. During the project the stage of a critical mass of returning depositors was not reached. This may be another drawback of the mediated deposit process, despite the fact that sending an article to be deposited is very straightforward and takes very little time. Further work needs to be done on getting deposit in the repository to become part of author's workflow.

Content acquisition

During the project a wide range of strategies were adopted for filling the repository. These are detailed in papers published by the project, in particular, "Filling Institutional Repositories: Practical strategies from the DAEDALUS Project." While many of the strategies were successful in gathering content to populate the repository, most were not sustainable, and many did not lead to ongoing deposit. This poses the question of whether it is advisable to adopt quick-win strategies in order to get some content into a repository, or whether it is better to take a long term approach from the start. The latter poses the problem that it is difficult to sell the advantages of a repository when there is only limited content available for demonstration purposes – the classic 'chicken and egg' problem. It is also problematic where there is pressure for content to be gathered relatively quickly. This is likely to be the case where special funding has been made available to develop a repository. For this reason it may be best to adopt a pragmatic approach, and acknowledge that, while not ideal, different methods of gathering content may need to be adopted at different stages in the evolution of a repository.

A relevant example is that of authors who expressed an interest in the repository and asked for all of their existing publications to be added. Two factors often made this problematic. During the early years of institutional repository development, many publishers did not permit authors to deposit their papers in a repository, or had not yet developed a policy on this issue. In addition, where publishers did permit deposit but insisted that only an author final version could be used, the majority of authors did not have a suitable copy. This meant that it was quite common from a list of e.g. 20 papers to have to advise an author that none of the papers could be made available. This was very dispiriting for authors, and resulted in many of them deciding not to bother with deposit in the future. With hindsight it might have been better to concentrate solely on recent and future material where authors would be able to provide a suitable copy. This could also have provided an impetus for authors to deposit at the time of publication. While authors were encouraged to do this, many of them lost the initial spark of enthusiasm, simply because there was no tangible result at the point of them expressing interest. As well as being discouraging for authors this was also depressing for repository staff.

A major policy decision made fairly early on during the project concerned the issue of full text only records versus full text plus metadata only records. At the outset the aim was to develop a repository of freely available full text publications. It quickly became apparent that in many cases it would not be possible to make full text available (either because publishers would not allow it, or because authors did not have a suitable copy of their papers). In addition, authors had indicated that they felt that users of the repository would be given a false impression of the number of papers they had written if only those where full text could be added were included. There was therefore a demand for metadata only records to be added where it was not possible to add the full text. For these reasons it was decided to proceed on this basis. This was a decision which was to have significant consequences for the profile of the repository. By the end of the project the number of metadata only records far outnumbered the number of full text records. From an ideological point of view it was felt that the repository was no longer offering what an open access repository should be offering. The decision was therefore taken to stop accepting metadata only records

and to stop the practice of bulk importing metadata only records into the repository. The only exception would be papers where a freely available full text copy was available in another repository and could be linked to.

In disciplines where major subject based repositories exist, it became clear during the project that authors in these disciplines were not interested in depositing in an institutional repository in addition to a subject repository, particularly if extra work was going to be involved. Rather than giving up on these areas, it was agreed that this might be a case where importing of bibliographic details, in conjunction with adding a link to freely available full text in another repository, might work. An example of a discipline where such an approach has been adopted is Physics and Astronomy. Many physics researchers make their publications available via the arXiv repository (http://www.arxiv.org). Following the importing of the bibliographic details of all publications from the Physics Department from 2000-2004 into the Glasgow ePrints Service, links to the full text in the arXiv repository have gradually been added (see http://eprints.gla.ac.uk/1099/ for an example of how this was done).

A new content type called "PDF redirected" was added to ePrints which would provide a link to an external repository and indicate why a paper was not held locally. This content type initially arose because authors of some papers could make their paper freely available from their website but not in a repository. A link to the authors home page and a note indicating that were not allowed to hold it locally was provided.



The project's use of scripts to import records from publications into the repository from Reference Manager databases had proved very successful from a technical point of view, but there were also associated drawbacks. While departments had been keen for their publications to be added to the repository using this mechanism, follow through by providing the accompanying full text was less successful. In many cases this was not because individual authors were not interested in providing full text, but was due to the fact that frequently they did not have suitable versions of their papers. However, it is also true to say that adoption of this method of populating the repository meant that authors were somewhat removed from the process and meant that in general they did not feel any ownership of the deposit process. At the end of the project the decision was therefore taken to stop importing records in this manner.

Copyright issues

From the outset it was clear that copyright was going to be a major issue to tackle. In the early days of repositories, most publisher copyright transfer policies did not refer to any rights retained by authors in relation to deposit in repositories. This meant that project staff spent a good deal of time contacting publishers seeking permission for papers to be added to the repository. In some cases this led to staff entering into useful dialogue with publishers. The key difficulty was that there were no existing guidelines or legal precedent, and no one project staff could turn to for advice. However, it was an issue that had to be tackled, as authors had clearly indicated that copyright was a major issue of concern, and that they were dependant on project staff checking and clearing copyright for them. Consequently a great deal of experience was developed by project staff in interpreting copyright agreements and dealing with publishers.

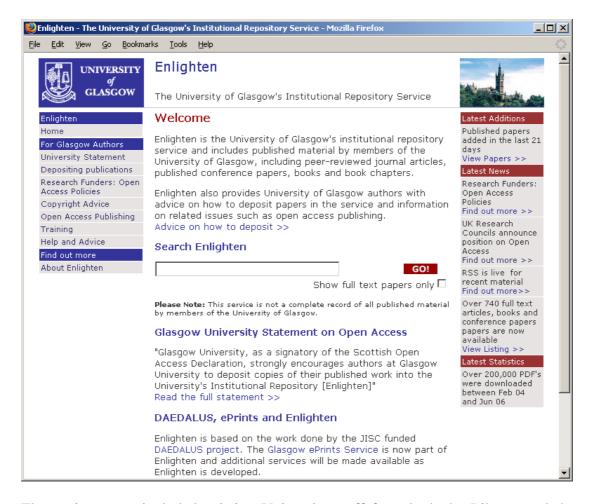
In the last couple of years the issue of copyright has become less problematic, as many publishers have now developed policies on deposit in repositories, and it is much easier to find out about the policy of an individual publisher. However, there are different issues to deal with, e.g. short term publisher embargoes, publishers who permit deposit in a specific subject repository but not an institutional repository , and the resource intensive process of seeking permission to make non-journal material available in a repository.

Concerns about copyright are still a key problem in getting authors to deposit in repositories. Despite the fact that the majority of publishers now permit deposit in repositories (with certain conditions attached) this message does not seem to have got across to all authors. Authors who are new to the idea of repositories are still expressing concern about copyright, and are under the impression that if they have assigned copyright to a publisher this means that they will be breaking copyright law if they deposit their publications in a repository. It is clear that a good deal of advocacy is still required to alleviate this concern, as lack of knowledge about the issue is holding some authors back from depositing in a repository.

A key lesson learned by the project is that authors are very likely to want repository staff to deal with copyright checking and permission clearing. It is therefore critical that repository staff have a good understanding of the copyright issues relating to repositories.

From Project to Service (DAEDALUS to Enlighten)

From the inception of the DAEDALUS project it was always anticipated that its project deliverables and the experience gained would form the basis of a University service. It was not a short term research project whose outputs would be filed away for later consultation but was intended as the catalyst for the realisation of a mature and robust service. The lessons learned would be widely disseminated and the content itself, as it was deposited, was done so on the understanding that it would continue to be available.



The project team included existing University staff from both the Library and the Computing Service who were seconded on a part-time basis. This decision was made to encourage and to ensure the continuity of the service, and to make the transition from project to service as smooth as possible. As part of this transition, additional staff have been made available to support Enlighten as well as ensuring that some of the roles and responsibilities of the core project team became part of their post-project work.

A key development in the launch of the service was the decision on a new name and a new "brand." DAEDALUS was a very successful project but to clearly mark the break from project to service, the team decided on "Enlighten." It was felt that this was memorable, recognised the University's role in the Age of Enlightenment and evoked the spirit of the open access movement. This service was the natural progression, as a "one stop shop" which DAEDALUS had anticipated for both the access and deposit of our open access content. Enlighten also provides information about copyright, the University's open access statement and further help and advice.

Enlighten was launched in April 2006 and marked a key stage in the evolution of open access and institutional repository development at the University of Glasgow. Its launch was accompanied by a University statement which "strongly encourages" deposit into the repository service and an endorsement by the University's Research Office. Shortly after the release of the statement a link to Enlighten was added to the University's home page⁷ as "Enlighten: University research online." This was another

important step in establishing Enlighten as a fully supported service, and meant that both internal and external users would be able to access it very easily.

Policy Decisions: Sustainability, Support and Purpose

As the JISC funding drew to a close, the project staff also spent some time evaluating policy decisions that had been taken during the course of the project. A re-assessment of policies relating to deposit mechanisms and to the question of permitting metadata only records in the repository was carried out. The decisions taken were based on considerations of both the sustainability of the service and the likely level of library staff support, but also on a broader ideological examination of the repository and its purpose.

A key step in the transition from project to service was securing the necessary funds to appoint staff within the library to carry out repository work as an established part of their jobs. This could be achieved either by bidding for funding to establish new posts, or by taking the difficult decision to make cut-backs in other areas of work in other to carry out repository work instead. From the point of view of the project team it was felt that it was not essential that full time repository staff be appointed, but it was vital that nominated members of staff were given repository work as a significant part of their job, and that this work was given at least equal weighing with any other work they were carrying out (e.g. regular library cataloguing).

A bid was made to the University making the case for the creation of two new posts with primary responsibility for repository work. This bid was successful, and two full time library assistants, one with supervisory duties, were appointed. These posts are based within the library's bibliographic services department.

At the same time as this bid was being out forward, significant steps were being taken in persuading the University to adopt a policy on open access and deposit in the repository. Library senior management staff were invited to present a paper to the University's Research Planning and Strategy Committee. The aim of this paper was to persuade the University to either require, or, at the very least strongly encourage, all staff to deposit their publications in the repository. Following wide-ranging discussions by this Committee the University agreed a policy of strongly encouraging staff to deposit their papers. This policy was encapsulated in the form of a statement issued by the University's Vice-Principal for Research, which was circulated by email to all staff. Additional publicity was secured in the form of an article in the University's internal newsletter. The full text of the statement can be seen at http://www.lib.gla.ac.uk/enlighten/statement.html.

The adoption of this policy was a significant achievement, and much of this can be attributed to the ongoing efforts of senior library staff over the past few years to inform and educate University management about open access and to persuade them of the merits of an institutional repository. The importance of patient repetition of the OA message over a prolonged period of time should not be under-estimated (although institutions now at the stage of making the case for a repository may find it significantly easier now than it was two or three years ago, as there is now a much greater awareness of open access and repositories than there was then).

Impact of the University statement

The likely impact of the release of the University statement was unknown. It was not anticipated that there would be a sudden major influx of new content, but at the same time it was very much hoped that there would be renewed interest in deposit, and that new departments might come on board. In the event, the publication of the statement resulted in an initial flurry of enquiries, some of which led to actual content, followed by a fairly steady ongoing stream of content. Staff in a range of new departments did start depositing content – these included Electronics & Electrical Engineering, Archaeology and Music. Also encouraging was the fact that a number of research groups got in touch to ask if publications could be added for the group as a whole. The level of content offered following the statement was sufficient to allow the new repository staff to get to grips with the deposit and copyright checking process, but was not so overwhelming as to leave them with a large back-log and the potential to disappoint enthusiastic authors.

Further publicity about the repository from the Vice Principal's office resulted in additional interest from new depositors. The most recent disciplines to start depositing material have been Law and Veterinary Medicine. In addition, staff at the University's Crichton Campus⁸ began to deposit material. It has been encouraging to see interest from such diverse disciplines.

Since the release of the University statement repository staff have also been invited to give presentations on Enlighten to a number of departments. These presentations have evolved since those given during the period of the DAEADLUS Project, as very impressive usage statistics for the repository can now be provided, and used as a means of encouraging deposit. Further information about usage statistics for Enlighten will be provided later in the article.

Funders open access policies

Since the publication by the UK Research Councils in June 2005 of a proposed position statement on Access to Research Outputs, those involved with repositories on the UK were hopeful that this would be the breakthrough that repositories needed. With many universities willing to encourage but not mandate deposit in an institutional repository, it was hoped that an open access mandate by the major UK funders would be the catalyst for change that was needed. However, it was to be another year before RCUK finally published an updated statement. The June 2005 statement had proposed that all eight Research Councils would make it mandatory for research papers arising from Council-funded work to be deposited in openly available repositories at the earliest opportunity. Instead, the June 2006 statement indicated that each Council had been permitted to agree its own guidelines on access to research outputs. The outcome of this has been that each Council has a different set of requirements. Some have followed the UK's Wellcome Trust in requiring grant holders to make their resulting research articles available in a specific repository within six months of publication. Others have strongly encouraged grant holders to deposit in suitable open access repositories. Some Councils have indicated that they are still discussing the issue and will provide guidelines in due course.

While it would have been a better outcome if all Councils had mandated open access, and helpful if the Councils that did mandate open access had adopted a standard policy, this move has nevertheless been a major step in forwarding the cause of open access. Authors who have hitherto been uninterested, neutral, or supportive but claiming they did not have time to deposit, are now in a position of needing to incorporate this into their workflow. Here at Glasgow it has meant that faculties that were previously lukewarm about the benefits of open access and repositories are now asking for advice on how to go about complying with the new requirements. Discussions have been ongoing with our biological and life sciences faculty on how best to provide authors with simple guidelines on what will now be required of them. It has been agreed that repository staff will offer to deposit publications in the PubMed Central repository for those authors who are funded by the Wellcome Trust or by the Medical Research Council. Where deposit in PubMed Central is carried out for authors, a record will also be added to Enlighten with a link to the freely available full text in PubMed Central using the PDF redirected content type previously mentioned.

Research Assessment Exercise

Along with funders developing open access policies, a further anticipated driver for the take up of repositories was the UK's Research Assessment Exercise (RAE). It had been hoped that it would prove possible to provide access to the full text of the publications being assessed via institutional repositories. However, during the first half of 2006 it became clear that this was going to prove difficult. The vast majority of publishers do not permit the publisher pdf version of articles to be made available in repositories, and it was anticipated that the RAE assessors would want access to this version of publications rather than to so-called 'author final versions.'

Under the auspices of the Institutional Repositories and Research Assessment (IRRA) Project, 10 the two major repository software packages in use in UK institutions (ePrints and DSpace) were adapted to enable them to accommodate the requirement of the RAE information gathering process. However, while the technical aspects of the process were taken care of, the copyright and publisher related issues were unclear. This division is typical of the open access movement as a whole. At Glasgow it was decided not to make use of the Enlighten repository to provide the RAE return. There were a number of reasons for this. The main reason was that it looked unlikely that publishers would allow repositories to provide freely available publisher versions of the papers being assessed for the RAE. It was felt that it was not appropriate to either fill the repository with material that had restrictions on it's use, or indeed to create a 'dark archive' of material using the ePrints software. In addition, there was a strong feeling that it would be best not to create confusion for authors over the primary purpose of the institutional repository. On a more practical basis, an important consideration was the need for authors to get into the habit of providing author final versions for the repository, and this could have been compromised by the creation of a dark archive that held the published version. Finally, such a move would also have been a reversal of the policy decision made at the end of the DAEDALUS Project to stop adding records where no full text was available.

The decision was taken to use the Reference Manager software package to manage the University's RAE return. A significant number of departments hold their

publications data in Reference Manager, or in packages that can be easily imported into Reference Manager. A major advantage is that if it is decided later to make available the full text relating to the 2008 RAE return in the repository it will be a straightforward process to import the bibliographic details before adding the full text (using the import scripts written during the project).

Usage statistics

The statistics for the Glasgow ePrints Service were always considered impressive during the DAEDALUS project and by the end of August 2005 there had been over 55,000 PDF downloads (from a pool of 300 full text papers). That number has been dwarfed by the growth since then so that by the end of Sep 2006 more than 275,000 downloads had been registered! The most frequently downloaded publication is a book, "The Language of Pictland", which has been download over 11,000 times. The number of full text papers in the service has also more than doubled and in the last year alone has now reached over 750. The Latest Additions section of the ePrints Service shows papers deposited over the last 21 days.

Evidence that material in the repository is being found and used is a key driver in persuading authors to deposit their material. Many authors have been very surprised at the levels of interest in their publications. While details of specific titles and their downloads are not yet made publicly available details of the overall download figures are provided.

A Google Analytics¹¹ account has been set up and in the coming months this will be implemented and the results analysed. This will provide more specific details on the routes through to content, including entry and exit points. Many search services including Google Scholar and the new Thomson Web Citation Index provide links directly to the full text PDF rather than to the record itself. Papers in the repository include a cover sheet which includes the name of the paper, the url and the University crest. Links to content in Enlighten has been identified in online resources such as Wikipedia. Where content consists of a book which the Library holds a physical copy of, a link to the electronic copy is provided from the entry in the Library Catalogue.

Future developments

The focus to date with Enlighten has been on the published and peer-reviewed outputs, and the Glasgow ePrints Service. The range of additional services for content such as a pre-prints, working papers and theses continue to be refined and populated. There have been a number of initial submissions to Enlighten for content which is more appropriate for DSpace and having the additional services in place has facilitated management of the broad spectrum of content which University staff want to make more widely available.

Theses

The University is actively moving towards mandating electronic deposit of PhD theses and this policy decision will play a key role in the direction of service provision for Enlighten. It is anticipated that a separate theses service will be established, whereas previously theses had been made available as one of many

content types held within the DSpace repository. This service would enable students to deposit their finished theses, and ideally, provide appropriate embargo options where necessary which they wish to apply.

Harvester

The pilot search service developed during the project using the PKP Harvester software is continuing to harvest all of the content held in both services. When we are ready to expand Enlighten's coverage of content type the search interface, currently limited to ePrints, will reflect this.

Open Scholarship 2006 Conference

Enlighten staff continue to play an active role in international Open Access activities and the University of Glasgow is hosting the inaugural Open Scholarship 2006¹² conference in October 2006. This is a companion European Conference to the OAI meetings at CERN in Geneva, and to the Nordic Scholarly Communication Conferences in Lund, Sweden, and is aimed at librarians, university administrators, funders, academics and technical specialists. Its focus is the range of new challenges and opportunities faced by open access repositories such as Enlighten. It will address key themes presented by many leading European practitioners in the field of open access including legal issues, sustainability and value added services.

Maintaining Momentum

Good progress has been made in implementing Glasgow's repository service and also in fostering awareness and adoption of open access since the end of the DAEDALUS project. The launch of Enlighten is a key milestone in this journey and its momentum can be measured by the increased interest from staff to deposit, a healthy and upward trend of users to download and access material in the repository, and high level University support.

The wide range of lessons learned in advocacy, copyright and service development have contributed to a successful move from a project to service. These lessons are already being applied to new services, for example, electronic theses, as work continues in parallel to refine university policy and implement the repository.

Repository staff will continue to pursue an active advocacy campaign. While content in the repository is increasing at an encouraging rate, there are still many staff and departments within the University that do not yet know about Enlighten, or who need to be convinced to start depositing material. The work of the UK funding councils and Glasgow University's open access statement ensure that Enlighten is ideally placed to build on the current momentum and to take the open access journey further, adding new services, new users and new content.

"Enlightenment must come little by little - otherwise it would overwhelm."

Idries Shah

Notes

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