

The E-Resources Management Handbook - UKSG

Show Your True Colours: devising advocacy for an institutional repository

MARY BETTS-GRAY

Business Information Specialist, MIRC Cranfield School of Management

JOHN HARRINGTON

Head of Information Services Kings Norton Library, Cranfield University

A practical approach to institutional repository (IR) advocacy is described and a model for sustained, effective advocacy is outlined. The key steps are discussed with reference to examples implemented in connection with research IRs. The importance of understanding institutional cultures and drivers and aligning the strategy to these is discussed. The need to develop an advocacy message promoting the benefits of the IR which addresses identified barriers to engagement is highlighted. The implementation of an advocacy strategy through an operational plan which includes a marketing campaign is described. The methodology concludes with suggestions for quantitative and qualitative evaluation and review of the effectiveness of the strategy.

Introduction

This is an unashamedly practical approach to the topic of institutional repository (IR) advocacy. It is based largely on the work conducted under the JISC-funded Embed project¹ carried out between 2007 and 2009 and the subsequent application of the lessons learnt. The focus is on a research IR although the principles can be applied to institutional repositories of all types.

The chapter will cover the following aspects of advocacy:

- strategy
- developing an advocacy message
- planning and execution
- evaluation and review.

The overall goal of the approach described is to design a top-down and bottom-up advocacy strategy. One objective of the strategy is to change attitudes, perceptions and behaviours of individual members of the target community so that they become the advocates, creating a viral marketing effect.

A second objective is to shift the institutional perception of the repository from a service that belongs to the team who create and support it, to something which becomes an integral part of the mainstream activity of the community it supports, be it learning, teaching or research.

Relevance of advocacy

There is a view that after almost a decade of institutional repository development, advocacy is not a solution to the challenge of populating IRs. Indeed some have argued that the need for advocacy is a given, there are few, if any lessons to be learnt and the solutions lie elsewhere. Sale², for example, whilst acknowledging that advocacy is worth doing in support of a mandate, states that 'persuasion is a weak reed'. He suggests that the repository has to become 'routinized' in the academic workload and along with others, like Harnad³, believes that mandates offer the best guarantee. Advocates of persuasion suggest that IRs are failing to properly address the needs of their target communities and are adopting systems-based solutions that will facilitate this routinization. These are aimed at either increasing the functionality of their repositories or else integrating IRs with other institutional information systems, in order to increase their relevance to current working practices and procedures4. There is merit in all of these but the argument that these obviate the need for advocacy is a spurious one. There is plenty of evidence to suggest that compliance with mandates is still a concern and there is a danger that merely changing the system will simply produce another solution with which the target community will fail to engage. Indeed the experience of the Embed project suggested that none of these will work in isolation. The recommendation is to adopt an approach which involves elements of all: systems to address concerns over workload, together with advocacy aligned with institutional strategy and policy (which may include direct or indirect mandates to encourage engagement).

Advocacy toolkits

One indication of the continuing importance of advocacy is the amount of effort that has gone into producing tools to assist hard-pressed repository managers and teams. The following offer good starting points:

- IRIScotland Repository Toolkit advocacy tools⁵
- Repositories Support Project (RSP) planning checklist⁶
- Embed wiki⁷.

Model

The model below (Figure 1) builds on the work done by the toolkit developers and brings together some of the materials by enabling them to be utilized and placed within an advocacy model. The rest of the chapter describes each element of the model.



Figure 1. Advocacy model

Advocacy strategy

In terms of strategy it is perhaps somewhat obvious to state that the service goals of any IR should be aligned with the mission, culture and key institutional drivers of the parent organization, and that the advocacy strategy should be aligned with the mission of the repository. However, the Rand Technical Report, *Embracing the Future* (2008)⁸, found that misalignment between the objectives of the repository and the needs of different groups of stakeholders is a real issue. It is perhaps a little surprising to note that few IRs in the UK appear to publish a mission statement on their home page. It could be argued that having a clear and concise mission statement is the natural starting point for an advocacy strategy. The two following examples demonstrate differences of emphasis. Loughborough University's⁹ clearly highlights the alignment between the University's research strategy and the objectives of the repository, specifically: visibility, accountability and preservation. The mission statement of the IR of the University of Pennsylvania¹⁰ without making specific reference to open access nevertheless links the IR directly to the University's commitment to quality and social impact.

The advocacy examples below are based on an IR which is very much aligned to support the mission of a research-intensive university in the UK. In this context an aligned strategy would make clear reference to the priorities which are currently shaping the research agenda, namely, quality assessment, visibility, access, impact and accountability. The agenda is very much being influenced not only by the Research Excellence Framework (REF)¹¹, and prior to this by the Research Assessment Exercise (RAE)¹², but also by work being carried out within the UK Research Councils under the banner of their Research Outcomes Project¹³.

An advocacy strategy developed for an IR which incorporates preservation as a key part of its mission statement might have as a central theme trust and a long-term commitment to preserving the knowledge base of the organization.

An advocacy strategy developed for an IR in support of teaching and learning might have a central message based around sharing and re-use of materials.

Regardless of the type of repository, the advocacy strategy should also reflect the policies of the IR in terms of content acquisition. For example, a strategy which places emphasis on the importance of the IR as a shop window for high quality research outputs might choose to focus on peer-reviewed journal articles. If the content of a research repository is largely made up of grey literature such as non-peer-reviewed working papers and electronic theses, for example, there is a risk that the advocacy strategy is misaligned with the content.

In the UK many higher education institutions have opted to populate their repositories with a combination of metadata-only records and full-text publications when these can be obtained. Advocates for this approach argue that academics and researchers are more likely to engage with repositories that are well populated rather than empty. The growth of these 'blended' repositories is being accelerated by the use of tools that facilitate the automatic import of metadata records from external databases. However, the risk of this strategy is that it effectively bypasses the need for individual academics and researchers to submit their work to the repository, and might therefore reduce opportunities for engagement with these communities. In the case of a research IR, a policy decision is required over whether to retain a focus on the acquisition of full-text articles and other documents or to supplement this content with metadata-only records. Which of these approaches provides the best fit with advocacy strategies will very much depend on individual institutional priorities and cultures.

In any case, advocacy strategies will need to be regularly reviewed and amended to reflect changing priorities. This is documented in the Embed research, particularly in the evolution from RAE to REF. The impact of the RAE on repositories seems to have varied. Some undoubtedly benefited with a clear strategy and advocacy message that the repository would effectively be the institutional publications database for the RAE. At other institutions, concerns over copyright and potential damage to the relationship between academics and publishers proved an obstacle to engagement and the advocacy strategy had to focus on allaying fears.

In contrast, the initial focus of the REF on metrics, and in particular bibliometrics, provided an opportunity for an advocacy strategy based on the importance of the repository in increasing citations.

The apparent change in focus, at the time of writing, from bibliometrics to demonstrating research impact suggests a need to revisit the strategy emphasizing the importance of visibility and providing access to a wider audience outside academia. An amended strategy will focus on supporting impact by facilitating access to a non-scholarly audience and a key advocacy message based around business and community engagement rather than citation counts. Depending on the future direction of REF this may need to change again.

Developing an advocacy message

Before an effective message can be developed it is important, as argued by Fried Foster and Gibbons¹⁴, to have a real understanding of both the motivational drivers that will encourage engagement and the potential or actual barriers to engagement between the repository and its target audience. This understanding has to be based on evidence and the only sure way of obtaining that evidence is to carry out a study of the requirements, attitudes and behaviours of members of the target audience. Many repositories will have undertaken such a study as part of their start-up and/or further development. One example of such a study which contains useful pointers to the sorts of issues that need to be explored can be found in the Embed Project: Research Community Requirements Study¹⁵. Common barriers to engagement include the following:

- low awareness existence of the repository, how it works, benefits
- confusion how to deposit material, relationship with other information systems, such as publication databases, current research information systems (CRIS) and virtual learning environments (VLEs)
- apprehension (often misunderstood) concerning relationship with publishers' copyright, plagiarism
- reluctance fears of increased workload, possible damage to reputation (being associated with anything other than the published version of papers).

In order to be effective, therefore, the message must address the above issues. At the heart of any advocacy strategy is the need for a clear and consistent message or messages based on the benefits of the repository in support of the mission of the institution. There is perhaps merit in demonstrating that the repository is ideally suited to assist the institution in providing one service which is of clear strategic importance and constructing an advocacy approach designed to get that simple message across. Once this has been demonstrated and accepted it then becomes easier to show how the repository can assist the business of the institution in other ways. There has been perhaps a temptation amongst repository advocates, particularly in the early days of IR development, to try to place the IR at the heart of all strategic objectives of the institution, in effect to make the repository all things to all people. The dangers of this are the risk of diluting the message, along with confusion and a loss of clarity of purpose.

In the example of an open access research repository, the key objective is to showcase the quality of the institution's research and to facilitate the dissemination of that output to help create impact. The purpose of the associated message is essentially fourfold, to:

- raise awareness of the existence of the IR. This is particularly pertinent in the case of a start-up but experience shows that even in the case of a mature IR it can be difficult to ensure that all parts of the institution are aware
- explain how the IR works. There are two aspects to this:
 - □ firstly, how work submitted to the IR is discovered by others via internet search engines such as Google
 - secondly, the process by which individuals can submit or deposit their work in the IR.
- sell the IR by emphasizing the benefits to all parts of the institution:
 - benefits to the individual researcher in terms of increased visibility
 - □ the importance to the research communities in terms of increased profile. This message might need to be tailored to reflect the cultures of different communities
 - □ the importance to the institution in terms of enhanced reputation and accountability.

make clear the value of open access and link this to the importance of global research for business, culture and society.

Whatever message is chosen, advocacy has to be an ongoing process. It has to be sustainable and repeatable. One very clear lesson derived from the initial Embed User Study is that advocacy by e-mail is not enough. The message to repository managers and support teams from academic colleagues is that advocacy cannot be conducted by sitting in the library. Advocates need, above all else, to go out and talk to research communities and individual researchers if these messages are to be heard.

Creation of an advocacy operational plan

Having defined a strategy and identified and agreed the messages that need to be communicated, the next step is to create an advocacy plan to put the strategy into operation. A good starting point for developing a plan is to look at some of the material contained in the toolkits referred to above. Useful examples include the Repository Support Project (RSP)¹⁶ planning checklists which cover all stages of repository development from start-up to expanding content in mature repositories. While offering useful advice, the toolkits stop short of providing a blueprint for developing an advocacy plan, possibly because this has to be adapted to suit individual institutional circumstances. However, in order to assist repository teams to prepare plans, the following case study is an example.

Described below is an example of the advocacy operation plan developed for the CERES (Cranfield Collection of E-Research) repository of Cranfield University¹⁷.

It consists of four parts:

- strategic (top-down)
- community building (bottom-up)
- developing promotional materials and identifying internal communication channels
- external dissemination and knowledge sharing.

The key elements of the plan are: the description of the objective and associated tasks, the identification of realistic deadlines, allocation of responsibilities to job roles and identification of success factors used to determine when a task has been achieved or completed.

Points to note about this particular plan are:

- the plan spans the transition period from the Embed project to the subsequent implementation of the lessons learnt
- it was developed in direct response to evidence following a survey of current attitudes and awareness among the target research community
- although applied to a mature repository the plan recognized the need to reposition and rebrand the repository to address the low-awareness challenge. This involved a high profile relaunch and renaming
- it provided an opportunity to go back and address issues which had been overlooked in the start-up phase
- it was designed to be achievable, repeatable and sustainable. Note that the operational plan is a living document and is continually being reviewed and updated.

Strategic (top-down)

Table 1 shows the top-down approach. Points to note:

- the importance of securing the support of senior management and the realization of this support in terms of policy statements
- the targeting of relevant committees and forums which determine policy within academic units. This includes Heads of Department and senior academics with influence
- establishing the repository as part of the normal business of academic structures such as Faculty Boards and Research Committees

Task	Brief description	Timescale	Critical success factors	Who will do	Comments
Presentations to Research Committees Identify Research Committee contacts Prepare and deliver presentation	Overview of CERES and demonstration of benefits and how IR works	6 months	Make sure all presentations completed by deadline	Project team	Completed Outcomes include representation at REF Strategy and on School Research Committees
Presentation to University Senior Management Team	Update on IR progress - include need for buy-in and support	6 months	Obtain statement of management support	University Librarian	Article in in-house University-wide magazine including statement of support from VC
Presentations to Faculty Boards	Include CERES update at each meeting	Ongoing	Regular written reports presented	Faculty Board Reps	Outcome – Request from FBs for stats
Presentation to Heads of Department	Target those missed by other presentations	6 months	Get buy-in and support. Members of Dept encouraged to submit work to CERES	Project team	Completed
Presentation to individual Research Communities	How to add your material to CERES	12 months	Content added to CERES	Information Specialists	2 presentations completed
High profile relaunch Identify time, date and confirm venue Plan programme Organize refreshments Capture launch Invite speakers Identify target audience Agree budget Promotional items Pre- and post-publicity	Gathering of great and good external and internal. Endorsed by Deputy VC, Director of Research and Funding Body	April 12–19 2008	New brand and identity established – CERES (Cranfield E Research)	Repository team with support from Marketing Group and Embed PMT	Completed Well supported event – good internal press coverage

Table 1. Strategic (top-down) approach to advocacy

While securing the support of managers and policy-makers is essential, unfortunately this is not in itself a guarantee that this support will translate into the necessary actions amongst individuals that will bring about the changes to attitudes and working practices needed to ensure engagement and the submission of content. This requires a bottom-up approach to build a real community of active supporters, and is likely to prove the most challenging part of the plan to implement.

Community building/face-to-face (bottom-up)

Table 2 shows the bottom-up approach. Points to note:

- this whole approach is about building partnerships to develop sustainable solutions
- the involvement of university IT and school-based IT staff to address workload and workflow issues. The plan does not itself address systems solutions but develops co-operation to enable solutions to be developed
- the plan targets important library staff colleagues to keep them informed about internal and external developments to enable them to become effective advocates
- departmental administrators are identified as part of a support model that lies between self-archiving and a mediated service, building upon the experience of these individuals in processes such as RAE and REF
- liaison with research communities and individual academics aims to establish the benefits of the repository and to align the repository with the issues that matter to them, e.g. research profile and visibility.

The overall objective of community building is to embed the repository progressively in the overall framework of researcher support services in order to ensure that this becomes part of everyday business.

Task	Brief description	Timescale	Critical success factors	Who will do	Comments
Liaise with existing publication database stakeholders	Agree ways of co-operating to minimize academics' workload	12 months	Collaborative approach to obtaining and disseminating publications and related information	Repository team	Metadata, workflows, full text
Liaison with University IT Department	Raise via joint library and IT committee	12 months	Support obtained for necessary development of appropriate systems solutions	Repository team	Ongoing
Liaison with School IT Departments	Talk to web development teams about uploading and exposing content. Understand current plans and identify opportunities for synergy between web developments and the repository	I2 months	Development of linkages between researcher profiles, publications and other content to optimise exposure of research outputs to different audiences		Multimedia content and links added
Information Specialists	Development of internal training programme	May 2010	Information Specialists have better understanding of issues round CERES and REF. CERES team better understanding of IS knowledge of CERES and REF	Repository team	
Liaison with Departmental Administrators	Building network of repository support workers – awareness raising and engagement with the mediated service (Phase 1)	2010	New workflows and processes put in place	Repository team	
	Identify champions and encourage to take on work, provide training, devise training materials (Phase 2)	2011	Administrators give support Increasing number of people involved in submission of content		
Liaison with Researchers and academics	Sell service associated with the repository to individuals – relate to individual needs and priorities. More systematic and effective.	Ongoing	More people contributing papers voluntarily Greater awareness of the repository	Repository team Information Specialists	Meet new authors Part of academic liaison. Agenda item for next Info Services Meeting

Table 2. Face-to-face (community building) approach to advocacy

A good recent example of a project which combines work intended to enhance the relevance of the repository to its target community, while actively training and supporting academics and administrators, is Glasgow University's Enrich project¹⁸.

Developing promotional materials and identifying internal communication channels

The third strand of the operational plan is to develop a promotional campaign. One outcome from both the strategic and community building phases is the identification of champions at all levels of the institution. The risk of doing this in isolation is the creation of silos or islands of awareness. These champions are likely to be highly motivated and engaged. However, without the support of a broad-based promotional campaign there is a danger that other sections of the institution will be left virtually untouched by the advocacy.

The purpose of the promotional campaign is to generate a sustained 'drip, drip' effect to the research communities. This involves the identification of suitable marketing communication channels and the development of a range of promotional materials. While the selection of channels and the appropriate

media will depend on the nature of the repository, a central component is the development of a powerful brand image for the repository. Given that marketing and design skills may not be readily available within repository teams, if resources allow it is recommended that collaboration is sought with a professional designer to bring additional skills and a fresh perspective.

A specific example of a promotional campaign developed for the CERES research repository is 'Show Your True Colours'. It was decided to work with a professional designer to produce a concept for the campaign. This concept encompassed the development of a new brand identity, a new name (CERES) and a new logo. The campaign concept is based on enhancing visibility and impact and is presented in a series of formats: posters, postcards, presentations, and publications with striking images from the natural world brought together under the slogan 'Be Seen. Be Read. Be Cited'. The slogan was deliberately intended to target the link between the benefits of the repository in terms of raising the visibility and increasing the impact of research with the predominant driver that is reshaping the research agenda – REF. A selection of materials is available on the Embed wiki¹⁹. Figure 2 shows a montage of the materials produced.

A similar example is Figure 3, which links strong messages to concise and clear images. NECTAR (Northampton Electronic Collection of Theses and Research)²⁰ uses the slogan 'Visibility, Accessibility, Impact' to produce an effective rallying call to action.

Within the campaign, general advocacy materials can be backed up with other important sources of evidence. Among the potentially most valuable of these are statistical indicators such as usage statistics, anecdotal evidence and request-a-copy.

Usage statistics are regarded as an important part of the advocacy message²¹ and can be used to demonstrate how the repository can increase the visibility of content, for example in a research repository. While statistics are undoubtedly powerful in increasing interest in deposit, it is important not to fall into the trap of over-hyping the effectiveness of the repository. The usefulness of the statistics is dependent on the development of increasingly enhanced functionality both in the way information is collected and counted. For example, although huge viewing and download statistics will be welcomed by authors and researchers, it is important to point out that much of this activity can be attributed to search engine spiders and robots. This message can be somewhat tempered by pointing out that the discovery of content through these internet search engines is key to the way that repositories work. The Publisher and



Figure 2. 'Show Your True Colours' promotional campaign materials



Figure 3. NECTAR branding

Institutional Repository Usage Statistics projects PIRUS²² and PIRUS 2²³ are developing more trustworthy usage statistics that can be used to compare across repositories and publishers using the COUNTER standard²⁴. This will be an important aid to advocacy in the future as the ability to aggregate usage figures from publishers and repositories may bring about a shift away from an evaluation of journal quality to the

The collection and recording of requests made through the repository team from external enquirers, especially from non-scholarly audiences, although anecdotal in nature can provide interesting examples of how the repository can open up research. It is strongly recommended that such examples are documented and used as part of the overall advocacy toolkit.

In circumstances in which access to the full text is constrained by embargoes, the application of requesta-copy functionality within the repository can be a way not only of promoting an author's research but also of tracking interest and connecting enquirers with the author. This too can be a visible demonstration of the effectiveness of the repository.

External dissemination and knowledge sharing

While the advocacy approach outlined above is based on an understanding of institutional cultures and the alignment of the repository and the advocacy strategy with the mission of the institution, it is important that this is not carried out without frequent reference to external ideas and influences. An important fourth part of the operational plan is therefore to build in a commitment to both disseminating information relating to advocacy activities and to sharing ideas and experience. The primary objective of this is to learn from the success of others so that advocacy planning can continually evolve. It is, therefore, important to build in a commitment to sharing.

There are a number of useful organizations which actively encourage knowledge sharing amongst the repository community, notably JISC which continues to act as an influential supporter of repositories and has developed the Digital Repositories infoKit25, which encapsulates best practice; the JISC-funded Repository Support Project²⁶, and United Kingdom Council of Research Repositories (UKCoRR)²⁷ which is aimed specifically at repository managers and has an active discussion list.

Evaluation and review

Having devised and implemented an operational plan in order to complete the advocacy cycle, it is important to review and evaluate the outcomes. The purpose of this phase is to inform the next evolution of the strategy and subsequent advocacy planning. An effective way of measuring outcomes is to repeat the study of the requirements, attitudes and behaviours of members of the target audience which was used to develop the advocacy message. An example of this type of follow-up study is the Embed Final User Study Report²⁸. An important part of planning the study is to identify the indicators which you will use to measure progress. These are likely to include both quantitative and qualitative indicators of success and relate back to the critical success factors identified in the operational plan.

In quantitative terms it could be argued that the ultimate indicator is a step-change increase in the amount of content being added to the repository. While this is a highly desirable outcome it should be noted that advocacy alone, even when coupled with a mandate, might not produce immediate results unless the fears of increased workload are addressed by simplifying the ingest process and reducing the barriers to submission.

Qualitatively, as a precursor to an increase in repository content, a cultural shift in attitudes, perceptions and behaviours could be seen as a vital first step. Arguably an important indicator that change is indeed taking place is an increase in awareness amongst the target communities, evidenced in particular by viral marketing in which members of that community become advocates for the repository. The effectiveness of this and other marketing communication channels can be measured within the study by asking how respondents became aware of the repository. Another expression of viral marketing is the creation of links by researchers and academics from their own or departmental pages to the repository.

Figure 4 shows the addition of repository links from Faculty web pages as a matter of policy.

Figure 5 shows linking to individual papers within the repository from an academic's personal website (in this case, that of Professor Richard Wilding) as a matter of choice. Other potential indicators of cultural change and awareness as a result of advocacy activity may include:

- requests for deposit and usage statistics
- increased demand for progress updates on the repository as part of the core business of the university, academic groups, departments and individuals
- recognition of the role of the repository in supplying the evidence in support of internal HR processes such as annual performance review and promotion. Where this occurs, this amounts to an effective informal mandate on members of the academic and research communities to engage with the repository.

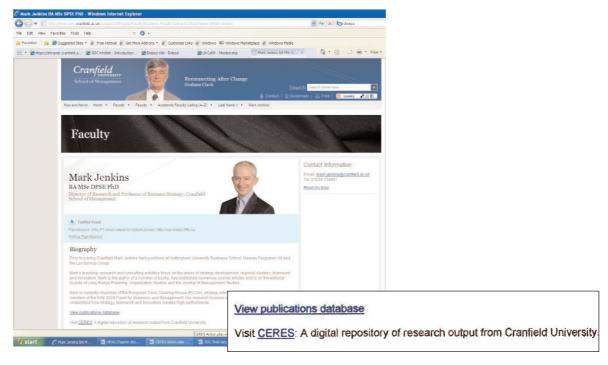


Figure 4. Faculty web page with links to IR (detail inset); http://www.som.cranfield.ac.uk/som/p1319/People/Faculty/Academic-Faculty-Listing-A-Z/Last-Name-J/Mark-Jenkins

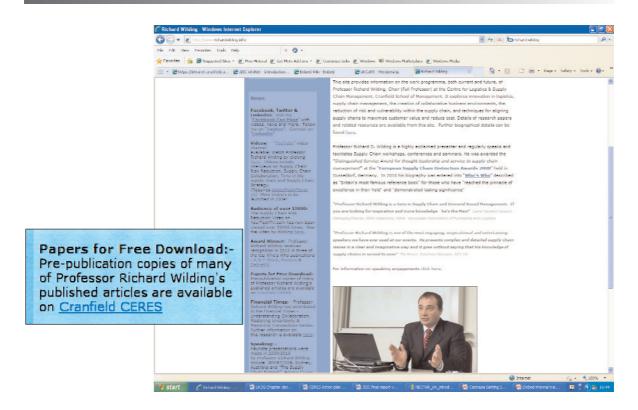


Figure 5. Personal web page with links to IR (detail inset); http://www.richardwilding.info/

Conclusion

The experience of the repository community suggests that merely setting up an IR does not automatically guarantee that the target community will willingly engage and provide content. There is evidence to suggest that there are two basic prerequisites for success:

- a simple ingest process with associated workflows to address concerns over workload
- sustained advocacy possibly coupled with some form of mandate, either direct or indirect, to raise and maintain awareness of the importance and benefits of the repository, to individuals and to the organization. Additionally for research repositories, the benefits to global research and to culture and society will resonate with some communities.

The advocacy model described above is intended to provide for a flexible, sustainable and repeatable methodology incorporating the following key requirements:

- understand the culture and environment in which the repository is operating
- align the mission of the IR with that of the institution. This perhaps should be expressed in a clear and concise mission statement
- develop a clear and consistent message which specifically addresses the barriers to engagement. The emphasis must be on clearly establishing the benefits of the IR
- design and implement an advocacy operational plan which targets all levels within the organization. The overarching purpose of the plan is to create a viral marketing effect. This supports top-down statements of policy and support. The aim is to ensure that these important expressions of support translate into changes in culture, perceptions and attitude
- create a sustained promotional campaign utilizing different media and a range of communication channels to reinforce and foster the viral marketing
- evaluate the effectiveness of the advocacy against the previously identified barriers looking for quantitative and qualitative indicators of success. Use this evidence to inform future strategy and planning to begin the next cycle of advocacy.

The unavoidable conclusion is that improved IR functionality and mandates alone will not solve the engagement enigma and that an ongoing and creative, sustained commitment to advocacy will be an essential factor in the success of the IR for the foreseeable future.

References

1. Embed Project Final Report:

http://cclibweb-2.dmz.cranfield.ac.uk/embed/images/a/ad/EmbedProjectFinalReport.pdf (accessed 30 November 2010).

- 2. Sale, A, Advice on filling your repository, *Serials*, 2010, 13(3), 207 –211; to access via doi: http://dx.doi.org/10.1629/23207 (accessed 30 November 2010).
- 3. Harnad, S, Waking OA's "Slumbering Giant": The University's Mandate To Mandate Open Access, *New Review of Information Networking*, 2008, 14(1), 51–68.
 - http://eprints.ecs.soton.ac.uk/id/eprint/17298 (accessed 30 November 2010).
- 4. Sheppard, N, Learning How To Play Nicely: Repositories and CRIS, *Ariadne*, 2010, Issue 64. http://www.ariadne.ac.uk/issue64/wrn-repos-2010-05-rpt/ (accessed 30 November 2010).
- IRIScotland Repository Toolkit advocacy tools: http://cdlr.strath.ac.uk/iriscotland/iristk/tkinsadvocacy.htm (accessed 17 December 2010).
- 6. Repositories Support Project (RSP) planning checklist: http://www.rsp.ac.uk/grow/advocacy/ (accessed 17 December 2010).
- 7. Embed wiki:
 - http://cclibweb-2.dmz.cranfield.ac.uk/embed/index.php/Embed_Wiki (accessed 30 November 2010).
- 8. Hoorens, S, Villalba-Van Dijk, L, and Van Stolk, C, *Embracing the Future: Embedding Digital Repositories in the University of London* prepared for the SHERPA-LEAP Consortium and conducted by RAND Europe (2008) http://www.rand.org/pubs/technical_reports/TR625/ (accessed 30 November 2010).
- 9. Loughborough University's IR mission statement: https://dspace.lboro.ac.uk/dspace-jspui/ (accessed 30 November 2010).
- University of Pennsylvania's IR mission statement: http://repository.upenn.edu/mission.html (accessed 30 November 2010).
- 11. Research Excellence Framework:
 - http://www.hefce.ac.uk/research/ref/ (accessed 30 November 2010).
- 12. Research Assessment Exercise:
 - http://www.rae.ac.uk/ (accessed 30 November 2010).
- 13. Research Outcomes Project:
 - http://www.rcuk.ac.uk/aboutrcuk/efficiency/Researchoutcomes/default.htm (accessed 30 November 2010).
- 14. Fried Foster, N and, Gibbons, S, Understanding Faculty to Improve Content Recruitment for Institutional Repositories, *D-Lib Magazine*, 11(1), January 2005; to access via doi: doi:10.1045/january2005-foster (accessed 30 November 2010).
- 15. Embed Project Research Community Requirements Study:
 - http://cclibweb-2.dmz.cranfield.ac.uk/embed/images/a/a3/ResearchCommunityRequirementsStudyFinal.doc (accessed 30 November 2010).
- 16. Repository Support Project:
 - http://www.rsp.ac.uk/ (accessed 30 November 2010).
- 17. CERES (Cranfield Collection of E-RESearch) https://dspace.lib.cranfield.ac.uk (accessed 30 November 2010).
- 18. Enrich Project:
 - $http://www.jisc.ac.uk/whatwedo/programmes/inf11/sue2/enrich (accessed\ 16\ December\ 2010).$
- 19. Embed wiki, see ref. 6.

- 20. NECTAR (the Northampton Electronic Collection of Theses and Research): http://nectar.northampton.ac.uk/ (accessed 30 November 2010).
- 21. Sale, A, ref. 2.
- 22. PIRUS:

http://www.jisc.ac.uk/media/documents/programmes/pals3/pirus_finalreport.pdf (accessed 30 November 2010).

23. PIRUS 2:

http://www.cranfieldlibrary.cranfield.ac.uk/pirus2/tiki-index.php (accessed 30 November 2010).

24. Project COUNTER:

http://www.projectcounter.org/ (accessed 30 November 2010).

25. JISC Digital Repositories infoKit

http://www.jiscinfonet.ac.uk/infokits/repositories/index_html (accessed 30 November 2010)

- 26. Repository Support Project, ref. 16.
- 27. UKCoRR (United Kingdom Council of Research Repositories): http://www.ukcorr.org/ (accessed 30 November 2010).
- 28. Embed Final User Study Report http://cclibweb-2.dmz.cranfield.ac.uk/embed/images/8/87/Final_user_study_report.pdf (accessed 30 November 2010).

Article © Mary Betts-Gray and John Harrington

■ Mary Betts-Gray

Business Information Specialist

Management Information and Resource Centre (MIRC)

Cranfield School of Management

Cranfield

Bedfordshire MK43 0AL, UK

E-mail: m.betts-gray@cranfield.ac.uk

■ John Harrington

Head of Information Services

Kings Norton Library

Cranfield University

Cranfield

Bedfordshire MK43 0AL, UK

E-mail: j.harrington@cranfield.ac.uk

Biographical notes

Mary Betts-Gray is a Business Information Specialist at Cranfield University. Her responsibilities include developing support for research, advocacy for CERES (Cranfield Collection of E-Research) and membership of the CRIS project team.

John Harrington is Head of Information Services at Cranfield University. His responsibilities include development of strategy for library support for research. He is a member of the University REF Strategy Group and the CRIS project team.

To view more chapters from The E-Resources Management Handbook, published by UKSG, click here: