

The Open Access mandate: a key element of open scholarship

Abstract ***Purpose***

The purpose of this paper is to describe the role and function of a mandate which is much more than getting a repository populated. An account of the University of Pretoria's efforts to get a mandate for journal articles and the way the mandate will be implemented is used as demonstration.

Design/methodology/approach

An overview of the current international situation regarding open access mandates is used as a backdrop to compare the University of Pretoria's philosophy, plans and implementation with other universities.

Findings

A mandate is necessary for OA&IR success – even in Africa. In fact, the major research universities of South Africa should set an example if access for the developing world is one of our goals. A mandate is an excellent mechanism to go beyond enthusiasm to commitment and to normalize and mainstream this additional step in the scholarship chain. It simplifies the relationship between authors, publishers, research managers and other role players. It opens discussion on authors' rights and the future of scholarly communication. A mandate will only work if it is backed by a solid implementation plan and the necessary resources to make it happen.

Originality and value

OA&IR is no longer uncharted territory but every reported case study makes it easier for others to follow. In a short space of time we have passed many milestones and these successes can be repeated at other institutions.

Introduction

The combination Open Access plus Institutional Repository (OA&IR) is one of the important realities of current scholarship and librarianship. Entire movements and communities have sprung up around these concepts harnessing the energies of researchers, librarians, research funders, publishers and research managers around the globe towards a well articulated common good. The need for open access is more or less undisputed and its value proclaimed. Alma Swan recently summarized it with regard to the research literature as 1) enhancing visibility and impact [for authors and institutions]; 2) accelerating science progress; 3) better management and assessment of research; 4) providing the raw materials on which the semantic web tools for data-mining and text-mining can work in order to generate new knowledge from existing findings (Swan 2008).

Similarly institutional repositories are becoming part of the research/learning infrastructure on university and research campuses with their ability to capture, store, index, preserve and redistribute information and knowledge objects that were poorly managed in the past. They provide solutions to many needs. Novel applications and the ability for the user community to contribute actively to the development of the resource are responsible for growing appreciation and use. The fad stage is clearly not over yet (and hopefully will not pass altogether) but there are indications that strategic intent and solid objectives are leading to mature programmes with the ability to realise the potential of both open access and institutional repositories. This is necessary to ensure impact and accountability for the steady stream of resources needed to make it sustainable.

There is ample proof that the commitment articulated by an open access mandate is necessary for success (Harnad, Carr & Gringas 2008) and that the implementation of the mandate is key to eventual success.

What is an institutional OA mandate

An institutional OA mandate is a local policy that articulates an organization's commitment to open access and describes the terms under which the members are required to contribute copies of their scholarship outputs to the institutional repository. Normally it requires immediate deposition within a certain time frame to ensure that all objects and related metadata are captured and stored. Open access is the default policy but may be limited by the policies of the journal publishers to whom authors may have transferred their copyright, in which case suitable action is indicated. A true mandate is binding on all members of the community and only allows for waivers in well defined cases. The best mandates also advise authors to retain their copyright and provide tools such as an addendum to attach to a publication contract as well as support from the organization to negotiate with publishers. Some mandates recommend publishing in open access journals and some institutions even provide financial support for it.

Institutions that have accepted mandates find themselves on good company. They are aligned with the well known declarations (Budapest Open Access Initiative of 2001, Bethesda Statement on Open Access Publishing of 2003, The Berlin Declaration of 2003 and the Berlin 3 OA Recommendations of 2005), numerous recommendations and statements by prominent research groups such as the European Research Advisory Board and the European Research Council, petitions signed by the world's best researchers, and the mandates of major research funders such as JISC, Wellcome Trust, National Institutes of Health, Research Councils UK, Howard Hughes Medical Institute, CIHR and many more.

The current international OA mandate scene

As of 31 December 2008 61 mandates were reported in [ROARMAP](#): 27 institutional mandates, 4 departmental mandates and 30 funder mandates. Additionally 10 proposed mandates are listed. Details of these policies are available at <http://www.eprints.org/openaccess/policysignup/>. The mandates of CERN, University of Southampton, Queensland University of Technology, University Minho and University of Zurich are regarded as model policies.

In February 2008 the Faculty of Arts and Science of Harvard University adopted a mandate which has stirred the imagination of the OA community. Here is a mandate, originating from the academic community, which not only includes the normal terms, but gives Harvard a non-exclusive licence before any negotiations with publishers. It also grants Harvard the right to make additional copies, to re-use the information and to permit others to use the material for non-commercial uses (Darnton 2008, Nguyen 2008, Papallardo 2008). Authors are not required to self-submit but merely have to supply the necessary copy to the Office for Scholarly Communication to deal with the repository. This mandate recognizes the university as the employer (and funder) of the researcher with a certain claim to the fruits of the research and pledges the full weight of the university should that be necessary in negotiations with publishers. The terms, the way it was adopted and announced signalled a new OAM era. The fashion in which the mandate will be implemented, and the response from the publishing community will be watched closely by the rest of us from lesser institutions – it may well be a watershed.

The importance of a mandate

Once there is general awareness of open access and its advantages, once a group of champions have demonstrated that it is workable, seeking a mandate becomes the logical next step towards sustainability and simplification. A mandate endorses the institution's attitude towards OA, accepts responsibility for the dissemination of its research outcomes and supports a new stance on authors' rights which is to restore the author's rights and to expand it to the institution and the community which funded the research by only giving the publisher a licence to publish in stead of transferring copyright to the publisher. "At the heart of the policy is the idea that faculty and institutions should have more control over how work is used and disseminated, and that they have responsibility to distribute their scholarship as widely as possible" (Hahn 2008). It echoes Waaijers's call for an "active and directive approach on the part of universities and research institutions" to demonstrate our resolve to work towards a new dispensation (Waaijers 2008). Mandates can lead to unified action which may be necessary to negotiate with publishers.

Without a mandate the initiative remains tentative, deposition is slow and patchy and resources are consumed by having to sell a perfectly good idea over and over, by allaying fears and bringing the reluctant on board. Arthur Sale describes this situation very aptly: "Once such a policy is in place the IR manager's approaches to researchers and heads of centers and all the plethora of feel-good activities actually work. People who are required to deposit their publications are grateful for advice. The occasional chase-up call is not resented. Just about everything that the university can put in place (for example, publicity for deposits, awards for the best author or paper, assistance with self-archiving, download statistics, etc.) will begin to work as it resonates with every academic in fulfilling his or her duty. In the absence of mandates, every encouragement activity known to Man fails to convince more than a small fraction of researchers to invest the five minutes of time needed to deposit their publications, and the percentage does not grow with time." (Sales 2007). In numerous studies (Harnad, Carr & Gingras 2008, Sale 2007, Swan & Brown 2005) researchers have indicated that they will participate if mandated and in all cases mandates have brought about significant change in capture rate from as low as 15% to close to 100% in a few years. For this very same reason the NIH changed its mandate in 2008 from a request to a requirement with very good results (Hahn 2008).

Additionally a mandate that is properly related to other relevant policy and practice can pave the way for more effective co-operation in areas such as research reporting, will save time and effort and will significantly increase the value of the repository (Joint 2008).

Working towards a mandate

An OA mandate has serious repercussions for many individuals at a research institution: such a policy change should not be taken lightly and should be explored with caution particularly when an entity such as the library is leading or coordinating the initiative. It should preferably follow an adequate run-up period during which issues surrounding the OA paradigm are explored including extensive awareness raising, identification of user needs, demonstration of success, finding and working with champions, building enthusiasm, experimenting with the functionality of an IR, discussion and debate on copyright and finding solutions for copyright problems, allaying fears, building support systems and lobbying the support of decision makers.

The coordinator's plan of action will start with an investigation into the organization's policy structures and practice: is new policy needed or can existing policy be changed to accommodate the mandate? The mandate should be at the centre of a wider, enabling policy framework including policies and rules relating to the institutional repository. Preferably it should relate to and fit in with other local policies, regulations and rules that can strengthen it (e.g. the employment contract of researchers or the study contract of students may already contain a policy on ownership of scholarly communication). The policies of publishers, funders, national and international research organizations also need to be taken care of. Find out how the process works, in what form documentation should be presented and which individuals and bodies need to approve it in which order.

Once the mandate has been written another round of serious consultation and debate should follow to make sure the wording is clear and legally correct and to address all concerns before decisions are made. Remove contentious issues that may hinder adoption of the mandate but do not water it down to a state of a toothless request that may be easily ignored and from which it will be near impossible to recover lost ground. The goal at this stage should be to build consensus, advocacy and education. Commitment from decision makers is essential. If the academic community need to vote, find out how should this should be approached? Who else needs to be aligned? Will a poll to measure support help the cause?

Equally important at this stage is to have an implementation plan at the ready that will instil confidence that these new processes will run smoothly and that a good support system is in place. If the mandate is adopted it will also be necessary to communicate it to the local research community and all other interested parties. It may also be worth spreading the news to the international OA community or the national research community.

Implementing the OA mandates at the University of Pretoria

Just as an institutional repository needs an OA mandate for success, the mandate by itself will not ensure success. It needs to be implemented in a concerted way.

The University of Pretoria currently has two repositories: the older one for theses and dissertations (<http://upetd.up.ac.za>) started in 2000 and uses the ETD-db software developed at Virginia Tech. Since 2004 a submission mandate is in place: students do not graduate without submitting their theses. Copyright of theses (doctoral degrees) and dissertations (Masters degrees) belongs to the University of Pretoria. While this is essentially an open access resource a system of embargoes allow for safekeeping of sensitive information or for publishing negotiations to take place while the thesis/dissertation is barred from view. It is managed by the library as part of the Open Scholarship Programme. Staff work closely with students, supervisors and administrators to create this very useful database of 2581 full text items and 1129 metadata records for theses/dissertations which are digitized upon request. Usage is very heavy. Compliance is 100% and little effort is needed to chase missing documents. In a 2007 survey of doctoral students the majority reported on positive experiences ranging from the convenience of having their theses online to offers for research, publishing and other co-operation (Hammes & Mahlangu unpublished).

Our experience with this system taught us that a mandate backed up by a good support system and adequate information creates a positive comfort zone for students to participate. Students are incentivised to self-submit but actually few of them do that and those who do quite often provide very poor metadata! The majority hand in electronic copies on CDs or DVDs which are then submitted by library staff. The university pays the library to do this and it proves to be very cost-effective. This system needs to be migrated to a new platform and plans are underway to integrate it with a new campus management system in order to use captured information, to benefit from the functionality of the campus system, to simplify the administration in general to establish it as the final "information event" (Joint 2008) of this specific research chain.

When the new IR, UPspace (<https://www.up.ac.za/dspace/>) was implemented in 2006 the decision was made to expand the Open Scholarship Programme to include the management of research papers and to rename it **openUP** (<http://openup.ais.up.ac.za/>). The common thread would be the mandates and the intention to create complete OA collections of these materials. From this vantage point the IR is our most important tool and the mandate an important governance mechanism. However, UPspace also fulfills other roles and contains an interesting and varied collection of resources apart from journal articles, conference papers and dissertations, the majority of which are submitted voluntarily. A mandate on the other hand not only forces the researcher/student to act within certain boundaries but also places a huge responsibility on the library to offer a service compatible with a specific service level agreement.

During 2006 and 2007 the issues surrounding archiving of research papers were investigated. Experiments lead to procedures, rules, guides, extensive awareness campaigns and lobbying. Research leaders were singled out for preferential treatment and in turn helped to create enthusiasm (eg. The Jonathan Jansen Collection available at <https://www.up.ac.za/dspace/handle/2263/108>). Very few articles were submitted by researchers themselves. Some appointed students or admin staff to do it on behalf of the department, some provided the money with which the library appointed part time staff while subject librarians also added records as a way of seeing for themselves how it works before convincing researchers to participate.

A second OA mandate

Right from the start it was envisaged that we would seek a mandate when the time is ripe: the OA concept was generally accepted (although sometimes confused with online availability) but the response was too poor – even champions thought that someone else was going to do it for them. In 2008 the necessary policy was developed. Although it is not as brave as the Harvard mandate it complies with the three main aspects of a good mandate: compulsory submission of postprints by all at the earliest possible date, publishers' policies managed effectively and copyright transfer minimized with the use of an addendum. Authors are encouraged to self-submit but it is not compulsory as long as they send the postprints to the *openUP* Office for mediated submission.

Neither is it a university licence but authors grant the university the right to deal with repository material as we see fit. Complying with publishers' policies is the responsibility of the *openUP* Office. The recommendation to publish in OA journals was removed from the policy because the university does not see its way open to fund it at this stage.

With the help of the library director and the information specialists in the faculty libraries the *openUP* team embarked on another intensive round of advocacy and lobbying. The support of the deans, other research leaders and important decision makers was secured. Research leaders made public statements for Open Access Day and this was communicated widely (<http://web.up.ac.za/default.asp?ipkCategoryID=2843&articleID=997>). The very successful co-operative exercise with the Department of Research Support during which available fulltext was linked to the records in the University's research report created a lot of goodwill. There was much apprehension against the idea of using the addendum and fears were raised that this may jeopardize publishing opportunities. The policy was scheduled to be voted on during the senate meeting in September. Unfortunately it had to stand over till May 2009. In spite of this temporary setback we actually already have a patchwork mandate (Sale 2008): at least two faculties and a number of schools submitted all their 2007 articles to the repository.

To prepare for a full scale implementation a strategy map was created to link our game plan to university and library strategies and to translate it for easy understanding of all participants (Kaplan & Norton 2004). The map is attached as an addendum.

Hurdles on the way to success

Some researchers balk at the additional task of submitting their articles to the IR viewing this as a clerical task that wastes their valuable research time – similar to the findings of Foster and Gibbons. During extensive talks with senior researchers we realised that self-submission does not (yet) fit logically in their research/scholarship workflow.

A second problem, that of the *postprint*, has not been mentioned in the literature so far although a couple of colleagues at other universities agreed when asked up front. Obviously this term is not (widely) used in the research and publishing communities and needs to be explained every time it is mentioned. Authors confuse it with the well known *preprints* and *reprints*. Generally authors do not store their postprints and cannot locate them either. It may be an altogether local phenomenon but we got the impression that the postprint does not carry enough weight to be remembered and pampered. In discussions with local and even major publishers we found some of them equally perplexed. Many authors were also disappointed to find that such an interim version of the article will be archived. Here is obviously an area where a lot of education and convincing still has to be done.

The UP Open Scholarship Programme

The UP repositories have a dual focus: they should benefit individual researchers as well as the university. Consequently the university takes responsibility for their success. The Open Scholarship Programme working through the *openUP* Office was set up to lead and manage the implementation of the mandates, to influence copyright practice at the University, to provide advice on (particularly OA) publishing, to open discussion on new ways of publishing and to co-operate towards better research management. Two full time and three part time staff members are employed. The repositories are technically serviced by other staff in the library and the university's IT department. Sorting out copyright issues is a major task: the majority of South African publishers do not have policies on archiving and negotiations have to start from scratch by sharing the OA good news. The excellent progress that has been made in this regard can hopefully be rolled out to the rest of the South African libraries. Since 2006 2346 journal articles have been archived (<https://www.up.ac.za/dspace/handle/2263/121/browse-date>) and archiving permission for 275 journals has been secured.

We were eminently delighted to read that Harvard is also planning a substantial operation to deal with their mandate seeing this as justification for our own strategy. From experience we know that skilled staff who can do a task quickly, who can effectively help and support authors and can put

the final touches to their self-submissions can provide a cost-effective service. We consider this to be an effective response to Karla Hahn's "Norms are always more difficult to change than technologies" (Hahn 2008)

What will success look like?

For the next three years we are aiming for a 90% submission rate, a sustainable service and a more effective research reporting system incorporating the institutional repository. Naturally we also hope that open access will lead to more citations in the long run (Harnad & Brody 2004, Hajjem, Harnad & Gingras 2005, Norris et al 2008)

But even if this does not realise we may find that the real gains are in the area of copyright awareness, the discussion on scholarship and publishing and the fact that authors and institutions, individually and combined, have taken decisive steps towards responsibility for the dissemination of scholarship. A successful open scholarship programme is not an end in itself but a valuable step in an evolving scholarly communication process. By and large the most compelling reason for involving ourselves with [these issues] is the opening up discussion and debate about the best ways to share information and to use it in new ways (Sanger 2006; Lynch 2007).

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ATEGY MAP FOR THE UP OPEN SCHOLARSHIP PROGRAMME

Client/Stakeholder value proposition

Client/ Stakeholder perspective	<u>UP Researchers (staff and students)</u> Visibility One-stop access to own publications Easier research reporting Perpetual, guaranteed archiving: stable, readable and permanently accessible Version control?	<u>International researchers and public</u> Free and easy access to quality research results Remote access Manageable down-loading	<u>UP and Other Stakeholders</u> Comprehensive view of research Increased impact and reputation Efficient research reporting → more income Pages on the open web: rankings metric Repositories as part of research infrastructure Mutually advantageous relationship with publishers
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Internal perspective	Operations management	Customer management	Innovation
	Execute mandates Harvest etds and articles Build repositories Run efficient administration Negotiate with publishers re copyright Contribute to research report	Provide information, guidance, support Provide training and training material Lobbying, advocacy, marketing Implementation of mandate	Enhance research reporting Software customization (Oracle/Dspace) Develop infrastructure Develop new admin dispensation (Oracle) Migrate UPeTD (subject to overcoming shortcomings)

Learning and Growth Perspective	Human capital (skills, knowledge, training) New staff (2) Strategic competencies (admin and quality editing) Skills development as identified Develop quality measures	Information capital (systems, databases, networks) Infrastructure DSpace Oracle RIMS Storage Processing software	Organizational capital (culture, leadership, alignment, teamwork) Develop mandates, policies & standards Coordinate Library and UP operations Strengthen strategic alliances with Research Dept, faculties, publishers and ASSAf Clarify goals and focus Governance mechanisms: UP and Library Leadership development
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