# Advice on filling your repository

**This article offers advice to new repository managers, serials managers or people transitioning to an open access (OA) repository and wanting to fill the repository with all the published research output of their institution. The advice is not new. It has been said by many others in part, and by the author in Australia and New Zealand for at least five years. It is, however, firmly based on experience and knowledge of what works and what doesn't in many universities, right around the world. The article contains only the most important advice abstracted to bare essentials.**

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## Long-term target

The long-term target of every repository manager must be that depositing research publications in the repository should become an automatic part of an academic's work pattern, just like submitting their research for publication, or setting their examinations. This is called 'routinization'. This is so obvious that the paper will not argue it.

The only known route to achieving this is through what is called a 'mandate'. In a mandate, researchers are *required* to deposit copies of their publications in the repository, as soon as possible and so they can be made open access (OA). Either institutions or research funders have to require their employees or grantees to deposit these publications. This is an unexceptionable request and within the authority of the institution or the funder, and few complain about it. Alma Swan's studies[1,2] support this, as does actual on-the-ground evidence. Again, I will not argue this, except to note that it is the only strategy known to fill repositories with more than 50% of the available research publications. This was well documented many years ago[3].

Once depositing and making publications open access becomes universal (or even as low as 50% of the world), the momentum of the technological revolution will be unstoppable, and academics publishing quality papers will rush to deposit. It has already happened in the disciplines of physics and computer science, in case you think this is fanciful. Mandates will no longer be required except to deal with problem cases, or will exist as an historical leftover from the beginning of a technological change. Those academics who don't accept this will be the cast-offs of that generation of scholars, just as in previous scholarly revolutions such as those for a heliocentric planetary system, the K-T extinction of the dinosaurs by a large meteorite, or plate tectonics. It is extremely difficult to predict the rate of change, though the direction is inexorable and the evidence irrefutable.

## Short-term targets

Assuming that you do not have an enlightened senior executive, each repository manager has to adopt a different strategy. If it isn't oriented towards gaining a mandate in the long term, you are wasting your time, unless you believe in prayer and miracles. Voluntary persuasion has consistently been shown to achieve around 15% (sometimes a little higher) of available deposits.[4] Five years of experience has not changed that evidence. The only thing that will change this in a voluntary environment is the *universal adoption* of OA mentioned above, which will drag in almost everybody.

## Strategies

Suppose you are in this situation. You have not got a mandate. What to do? Firstly, you should accept that the idea of one person (other than the Vice-

Chancellor or one of the Senior Executive Group issuing a mandate) changing the work practices of a university is such a foolish notion *a priori* that it can be put aside as a delusion. The theory of change says that successful change comes either quickly through fiat (a mandate), or very slowly through evolutionary principles. So here are some suggestions to start slow but aim at fast.

*Patchwork mandate*

Do not try a scattergun approach. It won't work because your effort is too thinly spread. Soon backsliders come to balance the converts. This is common knowledge centuries-old missionary experience.

Sit down and identify target departments in your university and target them. To offer more missionary experience – go for the chiefs (and they aren't always the people apparently in charge). Each university is different so you need to choose *your* own targets. Set in place measures that will ensure that even when you move on to another target, you have a champion in that target area who will be your surrogate to deal with back-sliding. Support the champion. Massage their ego and provide them with data, information and help. There is a more comprehensive paper to help[5]. Apply known techniques of change management to the problem. The author was previously a Pro Vice-Chancellor so these are techniques he applied.

*Why do we do this?*

Your first and main answer to an academic should be that open access increases citations. Counts of publications are now passé, and they were only ever the crudest form of metric for research impact. Citations are now the fashion, and they are a less crude surrogate – if an article is cited at least someone read it! As time goes on we shall see more complex measures like the SCImago Journal Rank (SJR)[6] and the set of Hirsch indexes coming to the fore in a basket of metrics that attempt to measure the multi-dimensional aspects of impact, different for every discipline. Work has to be accessible online to be assessed in this way. Academics have to adapt to this new environment.

I suggest that you download Anne-Wil Harzing's *Publish or Perish* tool[7]. Try it out. Demonstrate it to authors or in department seminars. It is very good at producing metrics for people with unique or unusual names like the author, but not so satisfactory for John Smiths or Rob Whites. Disambiguation is difficult. However, it shows how online access (in this case through Google Scholar) can be used to develop sophisticated metrics of research impact. Given the same number of citations, has X published one absolutely excellent paper in their life 20 years ago, or has X a record of good papers every year over that time? It matters.

*Performance*

Using performance management to promote your repository is a double-edged sword, so be careful. Some academics might hate you for damaging their prospects, and then where are you? Better if a Head of Department asks for help. However, get your repository able to deliver a research record summary so that a high-performing academic can attach it to his or her report for performance management. The Head of Department will get the message.

Forget about using your repository for promotion cases, etc. unless you have senior management support. It comes with the mandate territory, not as a precursor.

*Things that do not cut any ice*

Don't bother to explain that the university administration would like to know what research is being carried out. Probably 99% of academics would say 'Stuff that!' Don't try to explain how, when everyone goes OA, then your researchers will have free access to the world's literature. They don't much care – they have never paid for access to research journals anyway. What they don't know does not bother them.

Some words of warning. Do not publish lists of individual academics who are most downloaded this month, or anything similar. Do not try to award and publicize prizes to individual academics. Most academics absolutely hate being compared with other academics, and then you've lost them for years. The exceptions are (surprise) those few at the top. The author's experience is that the same people are at the top rather consistently, so what are you doing? Pandering to their ego, that's what. And maybe you get pats on the back from them for your perspicacity. As a matter of interest, the same object has been consistently top of the University of Tasmania downloads for at least three years. Psychiatry is popular it seems. It probably has popular impact well above its citation count.

*Other things that are useful*

Most of the following tips are very useful with individual academics, but responses to each tip vary widely. They are worth doing centrally in your repository and using appropriately. Especially, they are the answer to the people who already put their papers on their websites (so they are OA) and think that a repository isn't any better than their website. Disabuse them because they aren't converts; they are dyed-in-the-wool OA believers. They won't backslide once you've convinced them that a repository is a better solution.

Put effort into making sure that Google indexes your repository really well. Many academics crow about being top of the list in Google on their particular search term. You can't easily guess that search term – it is the topic of their research that other researchers in that field are likely to use.

Make sure that your authors can read good statistics on how often their paper is downloaded. Some academics follow these avidly and deduce from a spike in the patterns that someone just cited their work and then try to find out who. See Figure 1, or indeed any OA paper in the University of Tasmania repository that takes your fancy. The link is at the bottom of the relevant metadata page.

Provide an easy service so that authors can put a link to an up-to-date list of publications on their personal website, for example see Figure 2.

Make sure that each author can download his or her own paper (even if restricted) wherever they are in the world. Very active researchers value this a lot, because it is like carrying a no-weight library of all your publications with you when you travel internationally. Makes collaborative research a lot easier.

Offer departmental seminars on how to use OA information to best advantage. Use Google Scholar shamelessly (it doesn't really work without OA) and show how to track citations and follow them.

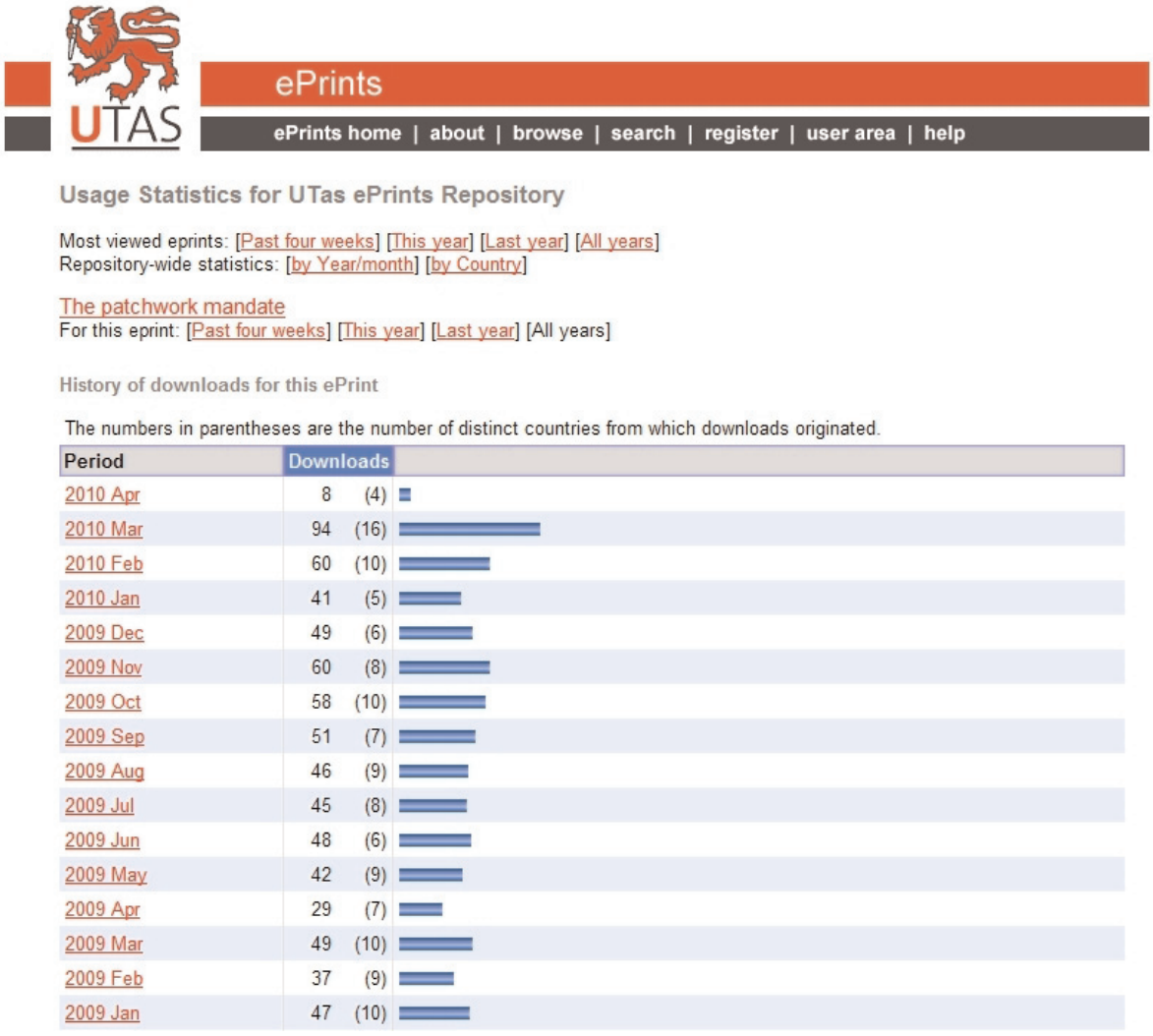


*Figure 1. Sample download statistics*

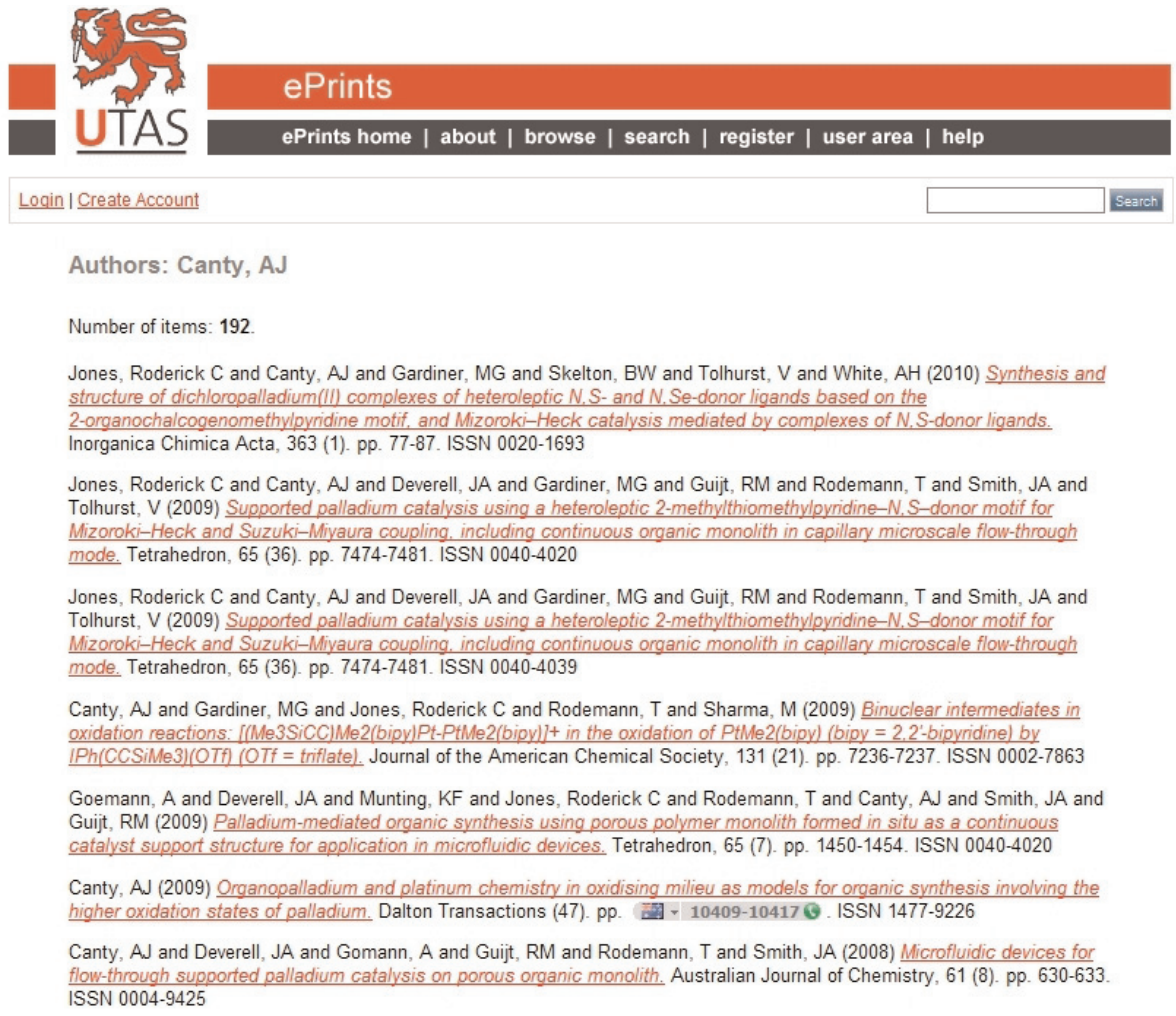


*Figure 2. Sample list of publications*

Talk about Harzing's *Publish or Perish* and demonstrate it. Talk about metrics, citations and SCImago. Throw in citations as a way of searching forward in time from a significant paper whereas references go backwards in time. Especially target postgraduate (PhD) candidates, as they influence more indolent supervisors.

## Debunking some myths

This paper is meant to provide positive advice to repository managers and librarians who are new to the open access enterprise. However, there are a few myths that need to be squashed (not for academic eyes):

The metadata entered by authors is in general as good as or better than that entered by librarians. Do not try to do better. You are wasting money.

Since almost all searches are done by Google, full text analysis rules. Keywords and phrases are of such little consequence that it is a pity to waste a librarian's time on them when they could be doing something useful.

Copyright issues can be vastly overdone. If your mandate or your advice calls for the Accepted Manuscript (aka postprint) as it should, just ignore checking copyright and let it go up. If a publisher complains (they almost never do nor have any grounds to), make it restricted. Do not accept the Version of Record (aka publisher's pdf) unless it is guaranteed open access. In case it isn't, tell the author that the submission has been rejected because they violated copyright. They'll learn. They're good at learning. They won't learn unless you teach them.

## Summary

So, to summarize: mandates are the only thing that works now. Persuasion is a weak reed, but worth doing to prepare the ground for a mandate, but be very selective in whom you seek to persuade. Use change management techniques to assist you. The persuasive techniques continue to work once you've got a mandate. Keep them going until the activity is totally routinized in the academic workload.

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