Authors' attitudes to, and awareness and use of, a university institutional repository

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Abstract

This article reports the findings of an author study at Cranfield University. The study investigated authors' publishing behaviours, attitudes, concerns, and their awareness and use of their institutional repository (IR), Cranfield QUEprints. The findings suggest that despite a reasonable amount of advocacy many authors had not heard of QUEprints and were not aware of its purpose. Once explained, all authors saw at least one benefit to depositing a copy of their work to QUEprints, but many were unsure how to deposit, preferring to depend on the Library to do the work. The authors voiced few concerns or conditions regarding the inclusion of their work in QUEprints, but felt that it would be an extra, inconvenient step in their workload. This research led to the development of the Embed Project which is investigating how to embed the IR into the research process, and thereby encourage more authors to deposit their work.

Introduction

Cranfield QUEprints is amongst the most successful UK HE institutional repositories (IRs) in terms of the amount of content. However, in common with others, its rate of growth is still relatively slow. A list of UK HE institutional repositories and statistical data can be found at the Registry of Open Repositories[1]. Currently, QUEprints' contains just over 1,600 items, and just over 26 per cent of these items are preprints or postprints, the majority of which were requested from the author and then deposited by Library staff via a mediated deposit service.

Experience at Cranfield (and elsewhere[2]) confirms that making the IR available does not necessarily mean that authors will automatically start depositing their work for inclusion. The aim of the research described here was to provide the Library with a

greater understanding of the attitudes, behaviours and concerns of the authors from whom they wish to obtain content, and to identify the issues that might either encourage or discourage authors from putting their work in QUEprints.

Methodology

The views of 21 authors were obtained using a standardized, structured open-ended interview, which allowed the authors to express themselves in their own words. Inspiration for the topics and issues included in the interview script were formulated from a combination of discussions with the Library managers and from a review of the literature and other author studies on OA publishing and IRs[3,4,5].

Adopting the maximum variation sampling strategy[6], seven authors were purposefully selected from each of the three academic Schools based on the Cranfield campus of Cranfield University. Among those selected were 'early adopters', identified as individuals who had already sent a relatively high number of papers to be deposited in QUEprints. Also selected for interview were authors currently holding influential positions within their School; for instance one deputy director of school and two heads of department were interviewed. The remaining 18 authors were selected to represent other academic positions at Cranfield: these included two readers, eight senior lecturers, one lecturer, six senior research fellows and one research fellow. To maximize the variation between participants, each of these were selected from a variety of different academic departments and from a variety of different research fields.

The qualitative data was then analysed adopting the 'grounded theory' approach to data analysis, as described by Paul ten Have[7], whereby the authors' responses were compared and similar answers were then categorized based on the data rather than on any preconceived ideas of the interviewer.

Results analysis

Motivation for publishing/sharing work with others

It seemed important to gain an understanding of what motivates the authors to publish/share their work with others and it was hoped that by understanding this it might help with the design of future advocacy of the institutional repository, QUEprints, to coincide with these motivations. The authors were asked:

What is the primary motivation for you publishing/sharing your work with others? Almost half of the authors (43 per cent) cited personal career progression,19 per cent said it was to share their findings with others and 14 per cent said that it was to be research active for the Research Assessment Exercise (RAE).

When asked directly:
Has the Research Assessment Exercise influenced where you choose to publish?, 76 per cent said that it had and, when probed further: *What has its effect been on your choice?,* the majority said that it made them try, wherever possible, to publish their work in the journals that have a high impact factor rating in their subject area and, interestingly, a couple of the authors said that it had made them focus on publishing in journals with a relatively fast turnaround time between when they submit their work and when it actually gets published, so as not to miss out on including the paper in their Department's RAE submission. These findings suggest that the influence of the RAE and an author's personal career progression are powerful motivators both in terms of their reasons for sharing their work and deciding where and how to disseminate research. For the IR to be successful, it seems logical to assume that it needs to sit comfortably with these motivations.

Current publishing behaviour, and awareness and use of open access dissemination methods

Having ascertained their primary motivation for sharing their work, the next questions focused on discovering the methods the authors were currently using to disseminate their work. Eighty-one per cent said they shared their last piece of work with others via a traditional refereed journal. When asked:
How do you normally share your research with others?', all the authors mentioned the refereed journal, with the second most frequently cited method being conferences, mentioned by 71 per cent of the authors. Able to provide as few or as many methods as they liked, between them the authors identified 20 different ways that they currently share their work with others, including television and radio, however only one author spontaneously mentioned using the web to do so. This low mention of the web as a method of disseminating their work was interesting given that when, later in the interview, the authors were asked:
Have you ever made your work freely available via the web?, almost half (48 per cent) of the authors said that they had done so, and approaching half (43 per cent) of the authors claimed to have had work deposited in QUEprints.

Despite this limited use of the web to disseminate their own work, all the authors said that they use the web to search for the work of others in their field. When asked:
What are your preferred methods?, by far the top two preferred methods were the library's electronic resources, including alerts services (86%) and Google/Google Scholar (86%). This suggests that the authors are currently more familiar with using the web to find information than using it to disseminate their own work. It also suggests that although many of the authors had made their work available via the web, it is not their usual method and remains relatively low down their list of choices – and low in their consciousness.

Having asked about their use of the web generally, the authors were then asked: *Have you ever published your work in an open access journal?* The literature suggests that authors are still fairly conservative in their publishing behaviours[8], and this question was included to see how receptive the authors at Cranfield were to adopting this alternative publishing model. Although 14 per cent of the authors said they had published work in an open access journal, none of them had paid to do so (claiming that having to pay would have deterred them from doing so), and all of them said that they would not do so again because as far as they were aware, OA journals were not highly rated for the RAE. A typical reply was: 'Yes, but I won't do it again, because it's [open access journal] not graded for anything, so there would be no point.'

Awareness and current use of the institutional repository and 'early adopters'

To gauge the success of current advocacy efforts and to shed light on any trends regarding motivation for choosing to use QUEprints as a dissemination method, authors were asked about their present awareness and use of QUEprints. Advocacy methods so far have included presentations to School Research Committees, reports to Faculty Boards, articles in University and Library Service Newsletters and support has been gained from some School and Department Heads to mandate submission among their colleagues[9].

Over half (57 per cent) of the authors said they had heard of QUEprints; however, only 43 per cent said they knew what QUEprints was. This suggests that hearing about QUEprints does not equate to understanding its purpose. Thus there appears to be a need for further advocacy to raise awareness of and knowledge about QUEprint's purpose, although there has been partial success in advocacy, as the authors at least recognized the brand, even if they did not necessarily know what the brand stood for.

Having found out about awareness and understanding of QUEprints, the next question related to their use of QUEprints:
Have you ever had any of your own work deposited to QUEprints? Just less than half (43 per cent) of the authors said they had sent work for deposit in QUEprints, therefore 25 per cent of the authors who had heard of QUEprints had not yet sent any work for deposit, which suggests that knowing that QUEprints exists does not necessarily mean that all authors will automatically start depositing their work for inclusion. This is reflected in the literature[10].

The research showed that while the authors demonstrated a willingness to deposit work, it was very easy for them to remain detached from their IR. Further research is required to discover ways of engaging the authors in a more proactive way, and embedding the IR within the authors' work practices.

Conditions and concerns

Clearly, if authors had any concerns that might deter them from sending work for deposit, or they had any conditions which they would like to have met before agreeing to send their work for deposit, it was important to find these out and to address them in the design of future advocacy.

The authors were asked:
Are there any conditions you would wish to impose before agreeing to deposit/continuing to deposit your work to QUEprints? Sixty-seven per cent of the authors answered 'no' to this question. Of the 33 per cent of authors who mentioned a condition, ensuring that the work had first been peer-reviewed (43%) and ensuring that depositing work to QUEprints would not upset the publishers with whom they had signed a copyright agreement (29%) were the top two concerns mentioned. It became clear, as the questions turned to asking authors' views on copyright and on which version of their work they would prefer to see included in QUEprints, that more and more authors expressed similar preferences.

Views on copyright and version preference

Authors expressed more concern about protecting the copyright of the publishers than about their personal copyright. When asked:
Have you ever discussed retaining your copyright with a publisher?, one author said they had discussed the issue of retaining copyright with colleagues but none of the authors had ever discussed retaining their copyright with the journal publishers; they had

always willingly transferred their copyright. This finding is reflected in the literature[11].

The findings suggest that authors placed great value on peer review and believed that it should be protected. This became very apparent when the authors were asked:
Which version of your work would you prefer to see included in QUEprints? Three options were given from which the authors had to choose: preprint (not refereed), refereed preprint (refereed, but not with publisher's logo or formatting) or postprint (refereed, publisher's PDF version). Eighty-six per cent of the authors said they would prefer the postprint. At the very least, authors wanted to see a refereed version included. No one said they would prefer the non-refereed preprint version to be included. When asked:
Why do you prefer this version?', 38 per cent felt that the peer review was like the 'gold standard', 'like the rubber stamp of quality', lending credibility to their work. Many considered ceding their copyright to be a fair exchange for the referencing and copy-editing provided by publishers. Thirty-three per cent felt that the refereeing process improved the grammar and accuracy of the content of their work, and 10 percent of authors said that their work would be better protected by formally assigning copyright to the publisher, because they would have more legal influence than they would have as an individual.

One author specified the condition that he would want help in depositing his work – 'I'd like help getting it on there [laughs]. I've got so much stuff it seems like a mountain to climb to get it all on there. What help can the library offer?' – which strongly suggests that the current mediated deposit service is of value to this individual.

The authors were asked:
What would be your biggest concern about depositing your work to QUEprints? Seventy-six per cent of the authors said they had no concerns. Concerns that were mentioned were associated with risks that exist with sharing work in any format, not just in an IR, for instance, the risk of plagiarism, of being misquoted, or that others might use the work for unauthorized commercial gain. The issue of the time involved in depositing work to QUEprints was raised as a concern. Many of the authors were already involved in submitting work for inclusion in their department's RAE submission, so were concerned that sending work for deposit in QUEprints might cause duplication of effort.

Benefits and motivations

In order to understand the types of benefits that the IR might have from the author's perspective, the authors were asked:
What benefits do you see to putting a copy of your work in QUEprints? All the authors saw at least one benefit to putting a copy of their work in QUEprints, and some mentioned more than one. Of the benefits mentioned, access to a wider audience was mentioned by 67 per cent of the authors, and 43 per cent of the authors mentioned higher citations. When asked if they would be more inclined to send work for deposit in QUEprints if it meant that their work would be more widely available, 81 per cent of the authors said that they would. For the majority of authors the wider dissemination of their work appealed to them and would be an incentive.

The authors who had sent work for deposit were then asked:
What were your motivations for doing so? Authors were able to mention more than one motivation. Almost half (44 per cent) said they had sent their work in response to a request to do so (from the library), 44 per cent cited the potential for increased visibility of their work – 'the feeling that if things are not available electronically nowadays they may as well not be done.' – and 22 per cent mentioned increased citations, but overall the response was reactive rather than proactive, such as: 'The library sent an email asking […] I thought well there's nothing to lose by giving it to them, I mean, publicity is good and if somebody gets hold of my stuff and cites it that's great.'

Self-archiving versus mediated deposit

As mentioned above, some authors expressed concerns about the time they thought might be involved in sending work for deposit in QUEprints and some suggested that the library could provide help. When asked directly:
Whom would you prefer to manage the self-archiving – that's the depositing – of your work to QUEprints?, 76 per cent said that they would prefer the library staff to do it and 24 per cent stated as part of their answer that they would not want to do it themselves. Some authors elaborated on their answer and their comments suggested compelling reasons both for retaining the mediated service and for the library to continue to provide that service, for example:

'Anyone other than me. I mean what are my options on that, because I would have thought that having it done centrally by a qualified librarian is a really cool idea?'

'I think library staff because of the whole copyright issue and I think they would have the expertise to deal with those issues.'

'…someone in the library that knows proper cataloguing policy. […] if we're going to do it, let's do it properly, with proper indexing, proper cataloguing, you know, professional. You don't want to let academics loose on it because they'll […] use all their own little systems. No, I want a proper information specialist to do it.'

These comments also reinforce the need to explore issues such as copyright and classification, both of which are being explored as part of the JISC-funded Embed Project[12], for example, adding subject terms to records as a means of enhancing retrieval.

One author who had not deposited work to QUEprints elaborated (see below) by saying that he had been deterred from doing so because of the time and hassle he thought it would involve and the duplicating of the process he had already gone through, putting his work on his own department's website, especially the process of checking copyright with publishers:

'There's quite a lot of hassle involved in sending stuff to QUEprints. I've already gone through the hassle involved to put stuff in an open access arena, and some of the hassle involves finding out who the publishers are and contacting the publishers […] I'd quite like the fairies to come along and do it all for me. So that is why I haven't done it. I think if everyone around me was publishing to QUEprints I would do so as well, but we would probably still want to maintain our own Web site.'

This illustrated a misconception of the effort currently involved in sending work for deposit in QUEprints, staff currently check copyright on the author's behalf as part of the mediated deposit service. Further research is being conducted within the Embed Project into ways of assisting authors with their copyright needs.

Conclusions and further research

Despite various awareness-raising and advocacy efforts, this research suggests that many academics remain unaware of QUEprints, or are aware of its existence but remain detached from it. Throughout the research there were a number of suggestions from authors that would help them interact with the IR. To develop a means of engaging authors more with their institutional repository, in a similar way that they engage with the RAE process, it was concluded that further research was required. The Embed Project seeks to address some of these issues by developing and testing a prototype fully-managed service model where the IR is fully integrated into the research process. Rather than on the

repository, the focus is on the researcher and the research process, providing a range of services to support the researcher, from pre-publication assistance, for example proofreading, through to regular post-publication usage statistics. It is intended that individual components of the model will be transferable beyond the original test sites, and will help to raise the profile of IRs generally.

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