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The Sound of the Crowd: Using Social Media to Develop Best Practices for Open Access Workflows for Academic Librarians (OAWAL)

Abstract

For the past nine months, Graham Stone and Jill Emery have been promoting OAWAL: Open Access Workflows for Academic Librarians on a blog site, through Facebook TM, through Twitter TM, and at in-person events in both the USA and UK to raise awareness of open access management issues in academic libraries and in an attempt to crowdsource best practices internationally. The in-person meetings used a technique known as the H Form, which can be applied to other areas of academic librarianship. This overview outlines the current project, focusing on feedback received, highlights some of the changes that have been made in response to that feedback, and addresses future plans of the project.

Introduction

As an extension of the successful TERMS: Techniques for Electronic Resource Management^{1,2} project, which used crowdsourcing techniques to openly peer review its content before publication of an article and handing the blog over to individual editors, the authors decided to initiate a project looking at open access (OA) workflows. The OA project stemmed from feedback received during the TERMS project by librarians both in the UK and USA indicating that they felt overwhelmed and lost trying to conceive of managing open access content within their institutional environment. The authors chose to entitle this new endeavour: OAWAL: Open Access Workflows for Academic Librarians, and launched it as a blog in early 2014.³ The focus on academic librarians is intentional; while public and corporate librarians may have to manage some aspects of open access within their given organizations, academic librarians are engaged in OA management in an entire life-cycle approach due to the nature of content creation at many of their campuses.

After launch, OAWAL began soliciting feedback through Facebook [™] and Twitter [™], and at in-person events in both the USA and UK. The in-person events were run as workshops or informational sessions, many of them using the H Form,⁴ which is described in depth below. This article will discuss the methodology behind this approach and will look at the early results from the first workshops before considering the impact on the development of OAWAL going forward. The voices of the crowd have been crucial in the early success of this project and we are indebted to everyone who has been willing to engage with the project both online and in-person.

Literature review

In recent years the open access movement has come of age. In both the USA and Europe a succession of new funder mandates have been announced, which will have a seismic effect on OA. In the UK, the Finch Report⁵ brought about a sea change in funder policies and was quickly followed by a change in RCUK (Research Council UK) funding policy⁶ to favor gold OA. This was quickly followed by announcements from other European funders in Austria,⁷ the European Union Horizon 2020,⁸ and the Higher Education Funding Council for England (HEFCE),⁹ which constitute a multitude of different funding mandates, some favoring green and some gold OA. In the USA, funder mandates are no less complicated, with the National Institutes of Health (NIH) public access policy¹⁰ supporting a broadly green mandate and the Gates Foundation¹¹ announcing a gold mandate. This has had

an effect on how universities and particularly university libraries manage OA, as the new mandates necessitate new advocacy plans and workflows, generate additional costs, require reorganization of staffing, and bring some staff into contact with open access for the first time, as demonstrated by the recent London Higher/SPARC Europe report on the cost of open access.¹²

Recognizing a gap in practice as evidenced in the literature, the authors launched the OAWAL project in early 2014.^{13, 14} Since then a number of other programs have been launched to assist libraries in supporting open access. In the UK, Jisc issued a call for expressions of interest in the OA Good Practice Pathfinder project,¹⁵ which "aims to reduce the burden on HEIs [Higher Education Institutions] in implementing funders' OA requirements through enabling universities, working with others both within and beyond the sector, to develop improvements in IT tools, standards and services, and the related workflows and organisational arrangements for OA implementation." A total of nine projects were funded in this call, many of which are now starting to report initial deliverables. A number of projects have themes that overlap with OAWAL.

In September 2014, the End-to-End project released its first report,¹⁶ which looked at issues with workflows for green and gold open access, academic culture, and publisher policies. Following this, in October 2014, the O2OA project, a partnership of 3 UK universities, issued a needs assessment survey using focus groups and interviews of 21 academics and research leads which suggested some common OA drivers, barriers, facilitators, and supports.¹⁷ Like OAWAL, the O2OA project will be reviewing these themes throughout the length of the project and will suggest collaborative development. Finally, at the end of October, three Jisc OA Pathfinder projects combined to run a full-day workshop entitled "How to be innovative in Open Access with limited resources,"¹⁸ which also looked

at issues in implementing OA. In addition, one of the partners at this event, the University of Hull, leads the HHuLOA project,¹⁹ which has a stated aim to work with OAWAL.

In the USA, toward the end of 2014, NASIG issued a press release announcing the establishment of a task force to create a set of core competencies around scholarly communication. It is hoped that further details of this project will be released in 2015.²⁰ Katherine Rowe and Kathleen Fitzpatrick²¹ identify a number of keywords for open peer review, which OAWAL has taken on board as part of its own crowdsourcing. Particularly "our-crowd" sourcing and critical mass, or "harnessing collective intelligence,"²² that is, the need to know that the reviewers are knowledgeable about the subject and that there is a critical mass in order to provide a thorough review. Fitzpatrick²³ develops this point further by suggesting that if there is no incentive for commentators to contribute then the crowdsourcing attempt may fail. The approach that OAWAL took to crowdsourcing will be further discussed below.

Methodology

As with the launch of TERMS: Techniques for Electronic Resource Management,^{24, 25} the initial approach with OAWAL was to create a web site, and advertise it on various electronic discussion lists in the library and information science field, promote it on TwitterTM, create a FacebookTM page for postings, and to hold a series of workshops to engage the views of key strategic stakeholders in the UK and USA. From the beginning, the plan was to develop OAWAL as a community resource with a fixed term of twelve months in which to solicit feedback.²⁶ This engagement has seen successful with multi-channel feedback occurring with direct postings to the web site, TwitterTM exchanges around salient issues, and a growing number of FacebookTM group members. In this promotional campaign,

unlike that for TERMS, the majority of the sections were written and developed at the time of launch and the crowdsourcing began from a more mature place in the project.

OAWAL is divided into six sections, which are each then further divided into six subsections. The sections are all distinct areas that may occur with OA management within an academic institution. In some cases, not all of the areas described or depicted fall in the realm of librarians' work, with some typically associated with a research or sponsored program office. All are concepts and areas about which librarians need to be informed when beginning to manage OA resources and activities within their academic institution. Each section can stand on its own or can be seen as part of the scholarly content creation life-cycle. During the crowdsourcing period some sections were renamed. Table 1 outlines the current section and subsection headings.

OAWAL							
1. Advocacy	2. Models & Mandates	3. Standards	4. Library Scholarly Publishing	5. Creative Commons	6. Discovery		
1.1 Internal Library Message on OA	2.1 Traditiona 1 Green Model	3.1 OA Metadata & Indicators	4.1 New University Presses	5.1 Link between CC & OA	6.1 OA in catalogues & discovery tools		
1.2 Communication of OA to Academic Community	2.2 Gold OA	3.2 ORCID	4.2 Hosting	5.2 Copyright & CC	6.2 OAISter participatio n		
1.3 Mandates/Policie s	2.3 Funder Mandates for Green or Gold	3.3 FundRef	4.3 Librarian expertise	5.3 Funder mandates/ policies	6.3 Necessary Metadata		
1.4 Promotion of Repository	2.4 Effect of Gold on Staff	3.4 CrossMark	4.4 Publishing	5.4 3 rd party rights/autho r rights	6.4 Exposure on Google™		
1.5 Budgeting for OA	2.5 Gold vs. Hybrid OA	3.5 Preservatio n & Storage Formats	4.5 Challenges	5.5 Commercial Use of CC content	6.5 Indexing of Gold/hybrid OA		

1.6 Staffing for	2.6 APC	3.6	4.6	5.6 Benefits	6.6 Usage
OA	Processing	Alternative	Sustainabilit	of CC	data
		Metric	У		
		Schemes			

Table 1. Overview of the sections in OAWAL

The first in-person forum for OAWAL, held when the site had been live for about a week and a half, was presented at the Electronic Resources & Libraries Conference in March 2014.²⁷ Due to this timing, the session provided an overview of the site itself and of its components. Since much of this work is new to academic librarians in the United States, feedback was based on major components within the sections and on refining definitions of terms.

Subsequent presentations of OAWAL²⁸ have used a facilitated approach adapted from the Peanut Plus Consultancy Group in the UK.²⁹ This approach is known as the H Form and allows the presenters to provide the overview of OAWAL and its sections, and then lets the audience choose major themes from the overall work to focus on more intently. Once the themes are selected, the facilitators supply the groups with whiteboards or large sheets of paper divided into a large "H." On the left-hand side of the "H," under an image of a sad face, the group uses multiple post-it notes to indicate barriers to achieving the theme. Next, on the right hand side of the "H," a smiley face is drawn and the group uses multiple post-it notes to identify optimal outcomes for the theme. Then in the lower quadrant of the middle of the "H," the group notes the actions needed to get from a sad face place to a smiley face place. Finally, the group uses the upper quadrant of the middle of the "H" to write three-to-five achievable goals based on these noted actions.

From the in-person events held in London and Bradford, UK, the authors outlined numerous goals to be further developed from OAWAL; these are described in detail below. The Charleston Conference in November 2014 supplied a forum for attempting the H Form approach on a larger scale, without break-out groups. While this approach was minimally successful in garnering extensive feedback, the discussions at these sessions did allow for further refinement and development of the OAWAL project overall.

The next step for the project's methodology is to determine how to graph OAWAL onto a scholarly content life-cycle that will include the roles/services librarians can offer, the services provided by consortia and national initiatives in both the UK and the USA, and the way these fit into the mandates and public policies currently in place in both countries. This attempt at mapping the intersections of roles and services will help better delineate the roles and influences of various areas within a higher education enterprise.

Early results

Since the launch of OAWAL in early 2014, there have been a number of very positive comments received from individuals working with OA and from groups such as Jisc and SCONUL (Society of College, National and University Libraries) in the UK and the California Digital Library (CDL) and SPARC (Scholarly Publishing and Academic Resources Coalition) in the USA. As a result, the authors have held a number of workshops and presentations, two in the UK and four in the USA. These workshops have used an adaptation of the H Form described above, and have resulted in a wealth of information from participants, which will be collated and used to further improve OAWAL.

Participants in the workshops came from a wide variety of organisations in the information chain, including publishers, subscription agents, vendors, and librarians. The librarians themselves had a variety of backgrounds, such as repository managers, collection managers, subject librarians etc. Since the groups were so mixed, this has resulted in a wide variety of feedback. One of the guiding principles of OAWAL is to be agnostic regarding the routes to open access; in keeping with that principle, coding of responses does not take into

account the sector from which that feedback comes. A number of the sessions were specifically themed to fit in with the anticipated audience, however, the feedback that was received was not always confined to these themes and often covered more general areas.

In total audiences identified 94 barriers to open access and 67 goals or positive statements about what 'success' might look like. It is perhaps unsurprising that there were more barriers than successes, however, there were 54 suggestions to resolve these barriers, which was very encouraging. Of these resolutions, 27 were listed as 'top 3' statements. These responses have been grouped into broad themes, which are shown in table 2

Barriers by theme (and # of comments)	Successes by theme (and # of comments)	Resolutions by theme (and # of comments)	
Advocacy (27)	Advocacy (17)	Standards (14)	
Funder mandates (12)	Discovery (16)	Discovery (8)	
Staffing (11)	Funder Mandates (7)	Advocacy (6)	
Discovery (11)	Costs (5)	Indexing of journals (6)	
Standards (7)	Standards (5)	Funder mandates (4)	
Costs (6)	Staffing (4)	Collaboration (4)	
Gold workflow (6)	Publishers (3)	Staffing (3)	
Indexing of journals (5)	Workflows (2)	Miscellaneous (2)	
Publishers (5)	Indexing of journals (2)	Publishers (2)	
Buy in (3)	Miscellaneous (2)	Cost (2)	
Miscellaneous (2)	Green open access (1)	Green open access (1)	
Creative Commons (1)	Library as publisher (1)	Buy in (1)	
Best practice (1)	Peer review (1)		
	Technology (1)		

Table 2. Grouping of discussion by theme

Some of the themes are interrelated: for example, costs and staffing. Mandates will also link to gold and green workflows, and potentially discovery. It is hoped to use these results as an indication of where concerns lie, where successes can be achieved, and in particular where OAWAL can facilitate this by serving as a resource for its users.

Feedback indicates that advocacy, funder mandates, staffing, discovery, and standards are the key barriers, with costs and workflows closely linked. While many of the same themes also featured in the list of successes, it appears that a key resolution falls under the theme of standards, which is an area that the workshops saw as a way to get from barriers to success. It should be noted that when only looking at top 3 priorities, there was a more even grouping of different themes, probably because participants tried to balance their top 3, e.g. one each for standards, discovery, and advocacy. It should also be noted that few groups actually stuck to a top 3!

Based on the crowdsourcing above, we have now mapped the themes onto OAWAL to identify gaps, or where a theme could be identified that did not come out in the feedback. The theme of 'publishers' is not considered relevant as OAWAL is not focussing on any one model as the only way forward for OA, in addition, this theme did include a number of rather negative comments about individual publishers.

The data can be analysed in a variety of ways. Of the barriers, only twelve (ignoring the 'publishers' comments) are not specifically referred to in a section of OAWAL. It appears that the sections on advocacy, methods and mandates, standards, and discovery are all very relevant to the needs of the community. However, the sections on library scholarly publishing and Creative Commons are not quite as readily relevant to everyone.

Regarding success, the same looks to be true, although library scholarly publishing was mentioned at this point, which is to be expected since it is a way to resolve an issue rather than a barrier. There were only eight areas of success (ignoring the 'publishers' comments) that are not covered in OAWAL, however, a number of these were in the area of discovery, which suggests a review could be required.

The same pattern emerges for potential resolutions, where advocacy, methods and mandates, standards, and discovery all feature. There is one area that is not covered at all by OAWAL and that is collaboration. Rather than create a new section on collaboration, the authors will review the current content of OAWAL with a view to adding paragraphs and examples of collaboration where appropriate. The concept of collaboration and when it is appropriate should also be made evident in the introduction.

Regarding the two sections that have received little comment, Creative Commons could be seen as part of advocacy (section 1.2). It is certainly a concern in the UK as evidenced by the recent HEFCE consultation on open access publishing³⁰ and public evidence given to inquiries in the both Houses of Parliament,^{31,32} in addition to funder mandate requirements. The section on library scholarly publishing represents an expanding area in both the USA and UK, where, for example, it was mentioned recently as an area of possible growth in the recent UK National Monograph Strategy.³³ It is anticipated that although it only had one mention in the workshops, the area will grow and is linked to an alternative gold workflow.

Further work needs to be done in order to make sure that OAWAL helps to address all of the individual comments in the themes. However, the data above need to be checked in detail to see whether a specific concern is addressed appropriately. The data also give a very good indication of the areas that require expansion; for example, sections 1.2, 1.5, 1.6, 2.3, 2.4, 2.6, 3 (in its entirety), 6.1, 6.2, 6.3, and 6.5 (see Table 1) were all mentioned heavily and may need further work to ensure best fit. It may be that the other sub-sections need to be reduced and/or merge in order for these section to be expanded.

A recent event held as part of the Jisc OA Pathfinders projects also attempted some further crowdsourcing.³⁴ This event concentrated on the issues in implementing open access in the UK. Again, OAWAL maps onto the main issues discussed, particularly around advocacy, costs, funder mandates, and workflows. However, there were a number of areas that are not, as yet, covered by OAWAL.

- The issue of institutional buy-in, principally by senior management in the university, is not treated in depth by OAWAL, and was also mentioned in the OAWAL workshops.
- The lack of open access options in some disciplines, e.g. nursing, law, and business, which could be addressed in section 2 and possibly expanded in section 4 on library scholarly publishing.
- Connecting the dots between funding and open access, about which OAWAL could give guidance and examples in either section 1 or 2.

Discussion and further work

At the launch of OAWAL, the authors had no preconceived notion of how the project and work would be accepted. Indeed, the usual doubts and concerns were expressed about immediate relevancy and any impact the project would have. The initial response to OAWAL was overwhelmingly positive, and the initial feedback was extremely thoughtful. The inperson sessions were met with a tremendous reception to the project, and generated a careful reading and culling of each section that will help lead onto the next steps with the project. Lastly, web site hits continue to increase in addition to a growing number of people joining the FacebookTM group.

Obviously, from the feedback received up to this point, there is further work to be accomplished. In some cases, sections need to be expanded to address and hit upon other details that were originally missing. Some sections may need to be re-organized or redefined in overall scope and/or combined together in a different manner. To this point, this structure has served the project well and there is hesitation to move too far afield from it, so this type of re-structuring will take some care, consideration, and planning. There are many initiatives regarding open access content creation and publication that have not stood the test of time or

that will be refined over the next five to ten years. Given this environment OAWAL will remain a work-in-progress for the near future.

The results of the H Form process clearly indicate that the "drivers" of open access scholarly content need to more readily identified and defined. Also the impacts of these driving forces need to be added throughout the project structure. In the UK, there are numerous barriers that have also been identified that could be included within each section of the project as well. Many of these fall in with the areas of discussion regarding Gold OA and Gold OA management with academic institutions. This will also vary widely from the UK to the USA in that within the UK, librarians and libraries have largely been tasked to handle these processes, whereas in the USA, many of these tasks are handled within Research or Sponsored Program offices and sit completely outside the direct realm of librarians. However, there is recognition in the UK that open access is not just about local issues and OAWAL could help to show all parts of the open access lifecycle, while offering a window into gold workflows for a non-UK audience. Most importantly the H Form exercises have shown that OAWAL needs to better show the support librarians and libraries can play in the scholarly research life-cycle. This depiction will help all of us gain a better understanding of where work process intersections lie and where tools and processes may need further development for this work.

One aspect that is still very much in development is the inclusion of workflow processes examples and depictions of workflow management within a given institution. There has been much work done in this particular arena in the UK and the publication and capturing of this work process is just now beginning to be released and disseminated. Upkeep and the continued addition of these resources within OAWAL will continue to grow throughout 2015 and there is a need to set a schedule for inclusion going forward. Hopefully examples from other countries can also be incorporated as work processes develop, are codified, and disseminated out.

In the end, the response to OAWAL has been heartening and has shown that there is a strong desire to have information on open access workflows and workflow processes readily available to our community. Much of this work is still in the formation stages but it is hoped that OAWAL can serve as a resource and as a gathering place for best practices as they emerge. With the development of more visualized data mechanisms and through the further refinement of the project, OAWAL is poised to meet the goal of serving as a rich base from which librarians can build their local practices and processes.

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