ABSTRACT
The nature of academic librarianship is changing as librarians move away from the curation of material and into research support roles. Although this creates new opportunities it can be difficult for staff to learn the skills needed. The Office of Scholarly Communication at Cambridge University seeks to address this issue with the Research Support Ambassadors Programme, an initiative which skills staff in areas such as Research Data Management and Open Access. This case study outlines the evolution of the program from its pilot through to its recently completed second run in 2016. The challenges associated with running a cross-library training program are discussed and solutions highlighted. Also discussed is the impact that the program has had on participants. This case study will be of interest to those aiming to pursue a career in this area of librarianship and those looking at preparing staff for the future of the academic library.

KEYWORDS
Library staff development; university libraries; scholarly communication; research support

Introduction
The nature of the academic library is undergoing a fundamental shift away from merely providing access to scholarly literature and toward assisting in its creation. Researchers are arriving at institutions with the skills to gather information and create new knowledge but face an overwhelming choice of methods to manage and promote their outputs. This changing dynamic offers academic librarians a chance to branch out into research support roles but to do this successfully they must develop skills in the area of scholarly communication.

The Research Support Ambassador Programme at Cambridge University Library seeks to address this need for development. Run by the Office of Scholarly Communication (OSC) the Ambassador program was established in 2015 and has recently seen its second cohort complete their training. Functioning as part of a wider research support education program, participation in the Ambassadors
provides a chance for staff to receive targeted training and become the local research support expert in their library.

This article provides an in-depth case study of the Research Support Ambassador Programme including the background and structure of the initiative, perceived benefits and the outcomes thus far. It also addresses changes made to the program between its first and second runs, issues that have arisen and how these were overcome. Finally, the case study outlines the lessons learnt and provides recommendations for institutions looking to deliver similar programs to upskill library staff in the research support.

**Literature review**

**Need for scholarly communication literacy**

The changing skill set of the academic librarian has long been discussed, with practitioners working to keep pace with the next trend. Auckland’s (2012) report into the research skills support provided by librarians was one of the first to highlight scholarly communication as a growing area of interest, arguing that “to be able to fully deliver this new role … [librarians] need to have the skills and knowledge required to perform it expertly and with confidence” (p. 5). Similarly, in their report for LIBER, the same year Christensen-Dalsgaard et al. (2012) talked of the need for libraries to ensure their continued relevance through diversifying into dedicated research support. An understanding of scholarly communication had become firmly established as a skill for academic librarians when Bonn’s (2014) job advertisement analysis revealed that “scholarly communication literacy has become a core competency for academic librarians” (p. 132). The trend continues to the present with library educators looking at the new skills they can help their students develop as discussed in the blog post by Marcum (2015) and interviews with library educators in SCONUL Focus (Robinson et al., 2016).

The literature divides the skills needed for research support into two areas: those which are discipline specific and generic, transferrable skills. Christensen Dalsgaard et al. (2012) talked of the need for general data literacy and this call has grown to become specific with authors such as Schmidt, Calarco, Kuchma, and Shearer (2016) highlighting the need for skills in Open Access and Research Data Management. As pointed out by Koltay (2015), these are skills that many academic librarians already possess but the key may be in making the connection between these existing skills and their role in research support services. Generic skills are also very much in demand with Bonn’s job advertisement analysis highlighting the need for flexibility and innovation as well as being comfortable working in a changing environment (Bonn, 2014). Finally, in her recent paper Kennan (2016) referred to the need for effective communication and advocacy skills and called for the need to develop the “librarian with more” (p. 7).
Scholarly communication training

Given the rapid pace of change in skills for academic librarians, it can be difficult for both students and practitioners to know where to turn for the best education in new areas. Formal education has long been a traditional route for librarians looking to enter the profession or upskill but concerns have been raised about its appropriateness. Corrall (2010) questioned “the value of academic preparation for professional practice” (p. 568), citing its lack of real world experience. There are also barriers to carrying out formal education. Shirkey and Hoover (2015) argue that the cost of training and time away from regular duties often rule out formal training opportunities while Rodriguez (2015) claims that “practicing librarians have little opportunity for in-depth training related to scholarly communication” (p. 404). Even those responsible for library education acknowledge that it is increasingly difficult for every facet of librarianship to be included in one course of study (Robinson et al., 2016).

However, there is a clear need for training for librarians in research support. When asking practitioners about the factors inhibiting the development of research support services at their institution, Kennan, Corral and Waseem (2014) identified a lack of knowledge regarding the topics as one of the main issues. Similarly, Brewerton’s report for RLUK (2012) found that subject librarians were often reluctant to develop research support skills as they did not fully understand the services they would be contributing to.

The literature offers up potential solutions these problems. Auckland’s report (Auckland, 2012) discusses the use of professional development to supplement formal training, pointing out that many librarians are looking outside the information sector for relevant training. Bresnahan and Johnson (2013) cite “on-the-job” training as a popular method of learning about research support, with many librarians not realizing they need to develop these skills until they are in post.

Scholarly communication initiatives

Many of the attempts to educate library staff about scholarly communication focus on one area rather than the discipline as a whole. The Rights Well Workshops at Oregon State University (Wirth & Chadwell, 2010) looked at author rights in the publication process while Harvard University’s Copyright First Responders attempted to form a group able to respond to copyright queries (Peet, 2014). Some schemes take a specific time period as their focus such as Oakland University’s Open Access educational program run to tie in with International Open Access Week (Rodriguez, 2015). In addition to in-person programs, there have been examples of online training such as the Research Data Management training for librarians offered by the Data Curation Centre and the University of Northampton (Guy, 2013). Although these programs are well-intentioned their narrow focus does not give a broad picture of the scholarly communication landscape and how it fits together. Running on an as-needed basis may also mean that content is not updated regularly.
Some libraries have attempted to create in-house programs that tackle a broader range of issues such as the program at the University of British Columbia aimed at liaison librarians (Kirchner, 2009) and the similar Scholarly Communication Coach Program at Eastern Illinois University (Bruns, Brantley, & Duffin, 2015). These training programs are often run as an extension of existing training and rely on adapting existing materials rather than creating targeted programs from scratch, again risking their currency.

While all of the aforementioned initiatives report successful outcomes in terms of staff knowledge and confidence, many are limited to an audience of frontline staff rather than being aimed more widely to educate any staff who may come into contact with researchers. In addition the majority of the successful examples focus on North America and Canada, indicating a potential gap in the U.K. academic library sector.

**What is the Research Support Ambassador Programme?**

When it was launched, the OSC quickly saw a need to inform library staff on areas that would potentially be new to them and two concurrent educational programs were launched. The overarching *Supporting Researchers in the 21st Century Programme* is open to all library staff and provides a continuous schedule of training on all aspects of scholarly communication while the *Research Support Ambassadors* is a shorter, intensive program that runs once a year. The Ambassador initiative is aimed at a self-selecting group of library staff from all levels who wish to gain in-depth knowledge of research support and offers a chance to learn theory while putting that to practical use by creating a training resource. Once this training has been completed, participants are able to confidently provide point of need help to the research community at their own library. As not all libraries are able to employ dedicated research support staff having an Ambassador helps to provide point of need help to the research community. The most immediate benefit for individual participants is an increased knowledge of the core areas of scholarly communication. As discussed previously, a solid level of scholarly communication literacy is becoming increasingly important (Bonn, 2014) for those who work in academic libraries but it can be difficult to find time to learn about these new areas (Shirkey & Hoover, 2015; Rodriguez, 2015). Participation in the initiative builds learning into Ambassadors schedules and allows them to relate this learning to their local context. The Programme also provides a chance for participants to challenge themselves by going outside of their professional comfort zone, encouraging further professional development. Working together on a group project produces a tangible output that participants can point to, to showcase their skills, for example during a job interview. As Ambassadors are drawn from across employment grades, this may have been their first chance to contribute to the wider library community in this way.
Bringing together staff who usually work at different libraries has resulted in the formation of new relationships and increased communication between libraries. Cambridge librarians are also provided with accessible training materials as a result of the program since group project outputs are made available via a Creative Commons license. Overall this guidance on emerging areas contributes to an informed library workforce who is better able to engage with the research community and help to increase the visibility of the library amongst the research community.

Outline of the 2015 Programme

The Ambassador Programme was officially launched in April 2015 following two introductory sessions and an e-mail announcement directed at all library staff. The initial cohort attracted twenty-three staff of varying levels with representation from college and faculty libraries as well as the University Library. The initial aim of the Programme was to educate staff by encouraging them to become involved in the teaching output of the OSC, for example by delivering sessions. Participants were also asked to work in groups to produce training material in one of four pre-selected areas: Open Access policies and compliance, managing online presence, research support services and the research lifecycle. The choice of output was left up to participants to decide within their groups. Ambassadors were also given access to Moodle, the Cambridge virtual learning environment, as a way to communicate and collect material related to their project. A variety of outputs were produced including an online directory of support services at the University and a short video highlighting researchers’ use of ORCID.

As the OSC itself was newly formed and still developing the Ambassador Programme was run as a pilot project, something the initial group of participants were made aware of. Although staff in the department were happy to help there was no dedicated individual to oversee the project which resulted in some delay and confusion. Concerns were also expressed at the outset of the program by both participants and their line managers as to the amount of work staff at different levels would be expected to do. This concern was addressed by offering different levels of participation so that an Ambassador on a lower grade would not be expected to deliver a presentation but could assist with advance preparation. Managers and participants were also asked to sign a formal agreement, countersigned by a representative of the OSC, to agree to the time needed to work on the program. The initial cohort of Ambassadors reported on their progress in November 2015 and completed the program in February 2016.

Although formal feedback was not collected for the initial cohort, Ambassadors were asked to submit anonymous comments to Padlet (https://padlet.com/) upon completion of the Program. Padlet is an online tool that functions as a restricted access bulletin board where those with access can post, read, and respond to comments on a topic. This anonymous format allowed Ambassadors to be honest with their feedback, something which was needed after the pilot. Comments made
highlighted several points for improvement such as the need for more structure, a sense of direction, and a clearer scope for the group project. In addition, Ambassadors felt that the lack of deadlines made their own management of the workload more difficult than necessary. Overall they felt that they could not recommend the program in its current form.

Outline of the 2016 Programme

This feedback was used extensively in the planning for the 2016 Ambassadors in order to provide a better experience for participants and more effective outcomes. In addition, a Research Skills Coordinator was appointed within the OSC prior to the start of the second cohort with the responsibility for management of the program.

An open call for participants was issued and introductory sessions were run to outline the program, changes that had taken place and anticipated outcomes. In total sixteen Ambassadors were recruited for the second cohort and again represented a good mix of participants from College, Faculty, and University Library departments.

The second run of the Programme was adapted to take into account some of the issues raised by the first cohort. The main change was the implementation of a stronger structure including a defined start date and an end date designed to coincide with international Open Access Week. This allowed both participants and their line managers to better plan time over the course of the program. Structure was also added through the inclusion of three main strands: core taught training sessions, a group project and the development of transferrable skills. Six mandatory training sessions were delivered, comprising around ten hours of formal training in total. These sessions covered topics identified by the OSC team as being the core areas staff would need to know about in order to provide research support such as Open Access, Research Data Management, and Altmetrics. Attendance at these sessions was monitored and the content was prepared especially for Ambassadors by subject experts from both the OSC and the University Research Office. Participants and their line managers were again asked to sign formal agreements allowing attendance and time to complete group project work to ensure that Ambassadors could complete the required training.

Structure was also added to the group project element of the program. The initial cohort was given the freedom to define the scope of their own project and the form of their training output. This led to some confusion among participants who felt that they spent too long deciding what to work on rather than focusing on the task at hand. In response to this, defined project briefs were introduced for the second cohort clearly outlining the expected output and suggested timescales.

The second cohort also featured an increased focus on transferrable skills to enhance Ambassador’s general employability. Ambassadors were given compulsory presentation skills training as part of their core sessions to enable them to
communicate with the research community with confidence but this is a skill which could be adapted for many other situations. Although the Research Skills Coordinator remained on-hand to provide guidance Ambassadors were allowed to manage their group project with minimal interference helping them develop time and project management skills as well as confidence in their ability to see a project through to completion.

A more consistent approach to feedback was developed for the second cohort including both pre- and post-program assessment. Shortly before starting the program Ambassadors were asked to complete a self-assessment of their knowledge level on the core topics covered during the taught element. Ambassadors were asked to repeat this exercise upon completion of the program. These scores were not used for formal assessment but as a way to measure the learning taking place during the program. On a ratings scale of one (I know nothing about this topic) to five (I could teach the class), Ambassadors increased their knowledge by an average of two points, which is an encouraging trend.

More formal feedback was received via an end of program survey, which gained a response rate of 90% (n = 14). Responses to the core taught element of the program were positive with 67% (n = 10) rating the sessions as very useful. The most useful sessions for Ambassadors were those on Open Access, Research Data Management, and copyright, perhaps reflecting the areas which participants are called upon to deal with in their everyday roles. When discussing the core taught element one participant said that “the programme provided a great way to develop and update my knowledge in a short space of time and to feel better able to support the local research community.”

The group project element, where Ambassadors were asked to work together to produce a tangible training output, drew a less favorable response. Even though time commitments were clearly stated and agreed to at the outset of the program, Ambassadors struggled with the time needed to attend sessions and complete work with the main issue being “finding time to get all of our group together.” Ambassadors also struggled to work with others at libraries some distance from their own: “it was hard to keep track of progress, our group became very fragmentary with everyone in different places working on different aspects.” However, 83% (n = 13) rated the scope of the group project as about right for the program, which was an improvement over the first cohort. Benefits to the group project were also outlined, especially when it came to working with new people: “it was invaluable to get new perspectives from colleagues … and to have the chance to make new connections and build my network.” Given the geographically dispersed nature of Cambridge libraries, anything that works to forge closer relationships is a positive outcome.

Ambassadors were asked to rate the use of Moodle as the primary method of information storage and communication for the program. As the virtual learning environment of Cambridge University, it is important that library staff know how to use the tool but not everyone will have an opportunity to do so in their current
roles. As such, using Moodle to store information regarding the program was useful not only for access purposes but as a way to provide training to Ambassadors. There were mixed reactions regarding the success of Moodle for the program, especially its use as a communication tool. Although all of the messages were kept in one location allowing for easy retrieval a technical problem meant that some participants did not receive all of the communications they should have. Ambassadors were more positive about using Moodle to store and share session materials such as PowerPoint presentations with several commenting that having everything in one place for reference made the experience easier. There were mixed reactions to using Moodle as a communication and storage tool for group project work with 70% (\(n = 12\)) rating it as not at all useful. While some groups found the system intuitive and easy to use, others preferred to use tools such as Google Docs to communicate. Although this worked for them in the short term it means that they did not gain experience of using Moodle and that a record of discussions will not be archived along with the rest of the site.

Overall the outcomes from the second cohort of Ambassadors were positive with 88% (\(n = 14\)) willing to recommend the program in its current form to colleagues. In addition, several personal and professional developments were highlighted such as: “my increased level of confidence when it comes to dealing with scholarly communication issues” and “I now feel better able to talk to researchers when they have questions.” This increase in professional confidence and the improved service provision for researchers is an important and positive outcome of the program.

**Looking forward to the 2017 Programme**

Although the second cohort of Ambassadors proved more of a success than the initial run there are still improvements to be made. Future rounds of the Programme will include additional structure in response to feedback. Although the intention with the group work was to let participants develop project management skills by having the coordinator take a step back this resulted in unnecessary confusion. In future runs of the program tighter control needs to be maintained, at least initially, so that this is avoided. In response to comments regarding lack of time to work on the group project dedicated time will be built into the program schedule, for example directly after taught sessions, so that groups are able to work together.

More general lessons can also be taken away from the program. The importance of taking the time to fully plan initiatives such as this cannot be underestimated and although it can be tempting to start putting ideas into action immediately this can backfire if the project does not work out as intended. In a close library community such as Cambridge, word of mouth is a very important factor in influencing opinion and a negative reaction would mean working twice as hard to promote future runs. In this way extra time spent planning prior to the program launch is not time lost but time well invested.
If things do go wrong, it is important to acknowledge this rather than trying to hide it. Being able to show that you have taken participant feedback into account and acted on it will earn a lot of goodwill among potential participants, far more than pretending something negative never happened. Finally, it is important to allow a variety of different perspectives to contribute to the design of an educational program such as the Ambassadors in order to foresee potential problems before they arise. Hopefully these improvements can help to build on the work of the Ambassador Programme and help it continue to be a success into the future.

**Conclusion**

The Research Support Ambassador Programme seeks to address many of the gaps in scholarly communication education for librarians delivered in other areas. Although formal education is the traditional method of learning for library staff there are concerns whether this is the best method to deal with rapidly evolving subjects such as scholarly communication or the most effective use of staff time (Corrall, 2010; Shirkey & Hoover, 2015). In addition to this, most who have experience with scholarly communication acknowledge that they learn on-the-job (Bresnahan & Johnson, 2013). The Ambassador Programme attempts to address these concerns by combining formal education with a practical element. Working through the theory of scholarly communication offers participants increased subject knowledge whilst producing a tangible training output allows them to put their knowledge to practical use.

The Ambassador Programme also looks at research support as a whole rather than focusing on a single area as previous programs have done (Wirth & Chadwell, 2010; Peet, 2014; Rodriguez, 2015), allowing participants to see the bigger picture. At the same time, the Programme offers a chance to specialize in a topic of interest through work on the group project element, offering the best of both teaching methods.

While the Ambassador Programme does have many advantages, it is acknowledged that there is still work to be done to improve it. Future runs of the program will take into account participant feedback to provide a better experience and develop online training offerings to help counteract the issue of time spent away from daily roles. Although the planning and delivering of a program such as this is intensive for all involved the benefits vastly outweigh the work.

With the rapid pace of change in academic libraries it is more vital than ever that staff take advantage of every opportunity to educate themselves in newly emerging areas. If, as Bonn (2014) claims, “scholarly communication literacy has become a core competency for academic librarians” (p. 132), then the Research Support Ambassador Programme helps to ensure that staff at Cambridge University Library remain a relevant and vital source for the researcher in the 21st century.
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