

# **Publication driven data sharing: Changing University of Queensland, data sharing culture one paper at a time**

## **ABSTRACT**

The Royal Society Science Policy Centre concluded that “[...] data that underpin a journal article should be made concurrently available in an accessible database.” (2012). This principle is shared by many funding bodies nationally and internationally, and is supported by a growing number of major publishers (Nature, 2016; PLOS, 2016; PNAS, 2016; The Royal Society, 2016). Many disciplines have subject specific data repositories that align with open data initiatives such as Dryad, GenBank, and PANGAEA.

However, there is a gap in this space which can be partly filled by established institutional repository (IR) services, which offer reliable and robust researcher-focused solutions for publication-related datasets.

The Australian National Data Service (ANDS) and the University of Queensland (UQ) Library are collaborating on a project to explore using the IR (UQ eSpace) to store, describe, and share data underpinning UQ publications.

Although pockets of research groups within UQ have well established data sharing practices, a data sharing culture has not yet been institutionalised at UQ. This project will allow us to not only capture and describe data underpinning UQ research publications for integrity and reproducibility purposes, but it will also provide us with a context for discussing and promoting data sharing practices with researchers.

## **Methods**

The primary aim of the project is to investigate and potentially source 500 datasets that underpin UQ authored publications and describe them in UQ eSpace. The project has two phases: a short pilot that will allow us to create efficient processes and gather feedback in order to make improvements via an iterative process, and a larger rollout.

Our initial contact list of researchers focuses on those who recently published in a journal on the Nature Index list or in a PLOS publication, all of which have a data sharing policy. We have offered to create dataset records in UQ eSpace for existing data, even if they are stored elsewhere (e.g. in Figshare) and we have used the opportunity to advertise the IR as an attractive alternative for future data sharing activities.

## **Results**

Early results indicate we have established UQ eSpace as useful tool for meeting publisher data sharing requirements. Taking a personalised approach by contacting researchers and groups directly, we were able to gather iterative feedback on our processes and systems.

In the conversations with researchers, we have learned about their data sharing practices and pain points, which will inform future directions in the Library's data management messages and services.

So far, we have discovered that by approaching data sharing in this targeted way we have seen positive outcomes—a greater number of discoverable datasets in the IR underpinning published research papers, and an improved data sharing culture.

## **Conclusions**

The data sharing landscape is still evolving and there are considerable issues for researchers and institutions to overcome. It is too soon for the full impact on the University's data sharing culture to be measured, but through this process we will continue to better it one publication at a time.

## **Works Cited**

- Nature. (2016). Availability of data. Retrieved from <http://www.nature.com/authors/policies/availability.html#data>
- PLOS. (2016). Data Availability. Retrieved from <http://journals.plos.org/plosone/s/data-availability>
- PNAS. (2016). Editorial Policies. Retrieved from <http://www.pnas.org/site/authors/journal.xhtml>
- The Royal Society. (2016). Data sharing and mining. Retrieved from <https://royalsociety.org/journals/ethics-policies/data-sharing-mining/>
- The Royal Society Science Policy Centre. (2012). *Final report - Science as an open enterprise*. Retrieved from <https://royalsociety.org/~media/policy/projects/sape/2012-06-20-saoe.pdf>

## **PAPER**

### **1 Background**

In the Royal Society Science Policy Centre report “Science as an open enterprise”, the following statement was made in relation to the openness of scientific data:

data that underpin a journal article should be made concurrently available in an accessible database. We are now on the brink of an achievable aim: for all science literature to be online, for all of the data to be online and for the two to be interoperable (Royal Society, 2012).

This principle is shared by many funding bodies worldwide, and is proactively supported by some publishers such as Nature Springer and PLOS (see Section 3.2). Further, many discipline groups engage with subject specific data repositories that completely align with open data initiatives (e.g. PANGEA, Dryad, etc.).

Although discipline-specific research data repositories exist, there is a gap in this space which can be partly filled by institutional repository services. Developing these services could potentially offer reliable, robust, long-term stable solutions for publication-related datasets. Also, being associated with the institutional affiliation of at least one of the publication authors, provides unique opportunities to enrich the metadata records for the datasets and capture provenance of the research data.

The potential cumulative value of research data should also be considered and, where possible, research data should be made available for reuse. Providing access to research data has the potential to raise the research profile of individuals and institutions, increase returns on public investment, promote open inquiry and debate, and enable innovative uses of data that may not have been foreseen by researchers at the time of its creation.

With both the importance and value of research data in mind, and the awareness of the current trend in open science, in December 2015 the University of Queensland (UQ) Library and Australian National Data Service agreed to collaborate on a High Value Collection project called the “Publication Driven Data Sharing Initiative”.

## **2 The Project**

The project will run from February 2016-June 2017. It will aim to work directly with researchers to provide underlying data for high impact UQ research outputs and make them available via the institutional repository, UQ eSpace. This project will allow us to investigate researchers’ attitudes towards publication driven data-sharing and to identify barriers to data sharing including infrastructure and service ‘pain points’.

UQ’s eSpace offers the My Research Data facility which allows researchers and research groups to describe their research data according to good practice, link it to the resulting publications, and further supports them by offering either mediated access or open access to their research data. In doing so, researchers can aid discovery, dissemination, and most importantly preservation of their research data. UQ eSpace is also able to mint DOIs for datasets, providing a persistent URL for the purposes of data citation.

For an identified subset of UQ publications published in 2015-2016, this project will create records in UQ eSpace for the research data directly underpinning each publication. Where possible, this data will be assigned a DOI and the metadata will be made discoverable via Research Data Australia, and records indexed in the Web of Science Data Citation Index.

UQ researchers who become involved in this project will be encouraged and supported to deposit their publication-related datasets into UQ eSpace at the point of manuscript submission for all of their future publications, and to cite their own research datasets according to best-practice. This will meet an existing need for authors submitting manuscripts to journals that require data for review prior to publication.

### **3 The plan**

The specific goals of the project are:

1. Capture 500 datasets underpinning high impact outputs and articles published in journals with data availability policies;
2. Make improvements to the UQ eSpace My Research Data service;
3. Document and improve internal processes to better establish a data publishing service within the library;
4. Improve research data sharing culture across the institution.

So far, publications to target have been identified using the following criteria:

**Group 1:** Outputs published in 2015 - 2016 in journals listed in the Nature Index which include a UQ researcher as the corresponding author.

Exclusively UQ authored papers will be prioritised

**Group 2:** Outputs accepted or published in in other journals with research data availability requirements (e.g. PLOS publications).

Publications in Group 1 will be retrospective (2015-2016) and publications in Group 2 will primarily be articles that are newly submitted (2016+).

The project will be run in two phases: a pilot, and a larger roll out.

## **4 Phase One: The Pilot**

The first phase of the project was completed in May 2016 and focused mainly on information gathering activities around current UQ data sharing and publishing practices, making technical improvements to the institutional repository, and initial contact with select researchers to gauge attitudes about depositing their publication related datasets.

### **4.1 Current UQ landscape**

Although pockets of research groups within UQ have well established data sharing practices, a data sharing culture has not yet been institutionalised at UQ. This project will allow us to not only capture and describe data underpinning UQ research publications for integrity and reproducibility purposes, but it will also provide us with a context for discussing and promoting data sharing practices with researchers.

Since the project has a focus on datasets underpinning publications, we wanted to better understand if and how the majority of researchers at UQ are affected by journal and funder data sharing policies. While we generally understood that there is a worldwide trend towards more stringent data availability policies, but to what extent were our researchers engaging with these journals and funders?

### **4.2 Research data policies environmental scan**

Using InCites, we profiled UQ's research outputs by journal and funder. We gathered the top 25 journals and top 25 funders by productivity (number of documents) and by impact (total number of citations).

The policies of the journals and funders were reviewed on the following aspects:

- Is there an existing data sharing policy?
- Is there a recommendation or requirement for a data management plan (DMP)?

- Is there a research data sharing mandate in place?
- Is the research data peer reviewed?
- Are there any data sharing standards?
- Are there any preferred or required data repositories?
- What are the data licensing requirements?
- When must the data be published?
- Is a DOI for the dataset required?
- Do the funding rules have a research data management requirement?

Table 1 and Table 2 provide a summary of findings from the environmental scan. Full details of results can be downloaded from UQ eSpace (Willson, 2016).

Although the table does not show the nuance of each journal and funder's requirements, it provides the high level overview appropriate for this paper. It also helps to illustrate the point that UQ researchers are being asked to share their research data by journals and funders, and more often than we had initially imagined.

**Table 1: Research data policy summary from top journals and funders by productivity**

	Data sharing policy?	Data sharing mandate?	DMP requirement?
Journals	7 of 25	5 of 25	--
Funders	10 of 25	7 of 25	6 of 25

**Table 2: Research data policy summary from top journals and funders by impact**

	Data sharing policy?	Data sharing mandate?	DMP requirement?
Journals	18 of 25	14 of 25	--
Funders	10 of 25	8 of 25	6 of 25

The data gathered in this process was revealing and helped guide our approach to the project. We were now armed with information about these policies and the knowledge that researchers were already publishing research data underpinning their publications.

#### **4.2.1 So where's the data?**

Looking closely at our identified outputs published in 2015 - 2016 in Nature Index journals most (not all) had met the journal's data availability requirement by uploading a pdf supplementary document containing the "data" underpinning the publication.

Where this was the case, the "data" pdf was hosted by the journal. It was not well described or licensed for reuse. In some instances, the "data" provided in the supplementary pdf was not sufficient information to allow substantiation or reproduction of the article's claims.

What became apparent in this exercise was that journals have not/are not generally interested in the quality or usefulness of the data. They have very little commitment to publishing research data according to best practice. Although Wilkinson et al argue that "Contemporary e-Science requires data to be Findable, Accessible, Interoperable, and Reusable in the long-term, and these objectives are rapidly becoming expectations of agencies and publishers" (Wilkinson, et al., 2016), we have yet to find strong evidence that journals are supplying anything more than token statements towards openness.

It should also be noted that there is a significant discipline split, with some disciplines (e.g. genomics) heavily engaged with data sharing. There is some evidence to support these anecdotal findings in the recently published "Has open data arrived at the British Medical Journal (BMJ)? An observational study". In this study the authors

found that of the BMJ articles they evaluated, there was a “data sharing rate of only 4.5% among all studies and 24% among clinical trials”, and that “there is clear room for improvement despite the journal's internationally leading stance on encouraging data sharing” (Rowhani-Farid & Barnett, 2016).

These considerations became the basis of our key messages to researchers and would help see us into Phase Two of the project:

1. Journals and funders do have data sharing requirements. The library understands what these are and can help you meet them.
2. Choosing an open data repository, especially UQ eSpace, for your publication data will allow you to share your data according to best practice, allow you to retain more control over your research data, and facilitate citation of both the article and the dataset.

### **4.3 Technical outcomes & some early wins**

The main outcomes of phase one were improvements to the UQ eSpace My Research Data facility. The repository platform is built on home-grown software and requires developer time to make small changes. This project allowed us dedicated developer time to make improvements and changes to the data deposit form in UQ eSpace.

#### **4.3.1 Improved UQ eSpace Data Form**

UQ eSpace is undergoing significant changes to the underlying technology in the next 12-18 months, so the changes that we intended to make on the research data submission form would be limited to updating field names, improving descriptions and adding help information--rather than making significant technical improvements (e.g. not linking to other UQ systems).

The primary improvement of the form was reordering and evaluating the fields that were required to improve the user experience. The aim was to strike a balance between what the Library wanted in order to adequately describe a dataset (i.e. minimum viable metadata), the requirements/recommendations for Research Data Australia and ensuring the amount of required information was not overwhelming to depositors. Was this balanced achieved? We're not sure yet--user testing is underway and will conclude later in 2016. However, initial feedback has shown that field names are clearer and completing the form is quicker.

The secondary improvement was adding additional 'point of need' help information on preparing to submit your dataset for publication. We worked closely with the UQ Copyright Lawyer to develop a dataset due-diligence checklist that guides the researcher through a number of questions to consider before submitting the dataset (University of Queensland Library, 2016). The checklist links to our comprehensive research data management online guide.

#### **4.3.2 Enhanced feed to Data Citation Index**

A significant feature of UQ eSpace is that records are harvested by Research Data Australia and are then fed to the Clarivate (previously Thomson Reuters) Data Citation Index (DCI). DCI tracks citations to datasets, which becomes an additional measure of a researcher's scholarly impact.

In UQ eSpace we are able to link datasets to other UQ eSpace publications. This link is then captured by DCI as a citation.

One of the outcomes of this project was to enhance the feed from UQ eSpace to DCI so that dataset citations would be more accurately captured in DCI. Although we sent the full publication to DCI, DCI's automated process for counting citations had trouble parsing the way we were sending the information (in various RIF-CS fields).

This meant that not all datasets were obtaining a citation, even if they should have been.

Working closely with ANDS, we developed a way to use the RIF-CS notes field to send a full citation of the publication (including DOI) in one statement, rather than divided up into separate fields. Although this was a bit of a 'hack', DCI was better able to handle the citation in a single field and we noticed an improvement in capturing our dataset citations.

### **4.3.3 Addition of UQ click-through agreements**

In a recent paper authored by UQ's Copyright Team they note that "when researchers and universities are committing significant resources to obtaining data it comes as no surprise that the ownership of this resource would be both sought after and unclear" (Joyce & Dodemont, 2015). In Joyce and Dodemont's paper they also make an argument that some research data, that is often a collection of facts, does not attract copyright.

Because this project was investigating, in most cases sharing a small subset of analysed data linked to a publication, the issues of ownership and copyright did not go unmentioned. Addressing these issues was built into the project's major outcomes.

Anecdotal evidence and conversations held with researchers as part of this project revealed that the majority believed/assumed that as collectors or creators of the research data they were the owner of the data. While UQ's current Research Data Management Policy doesn't claim ownership of the research data, it does assert custodianship of research data. This "custodianship" seems to allow for the university to assert management and preservation over the data, regardless of whether it can claim copyright. From Section 5.5.1:

Subject to applicable legislation and regulations and/or any separate agreements or obligations of confidence entered into by the University with third parties, including funding bodies and non-UQ research collaborators, the University asserts custodianship over Research Data for all research covered by the scope of this policy (University of Queensland, 2013).

In addition, most researchers believed that their research data attracts copyright, despite consistent advice from UQ's Copyright Lawyer that a large percentage of data collected does not attract copyright.

Due to the fact we were asking researchers to publish their research data, we had to ensure we were allowing/encouraging them to do this in a way that had both their interests and the interests of the university at the forefront. And what this meant was foregoing international community standards on data licensing.

Nationally, AUSGoal and ANDS encourage the use of Creative Commons to license published research data (AusGOAL, 2011; Australian National Data Service, 2016). Creative Commons works well as an international standard for licensing copyright works (including research data that attracts copyright). However, has no relevance when the material does not attract copyright. What this means for the researcher and the university is, if a dataset is shared under a Creative Commons licence and then misused (not attributed, used commercially, etc.) there is little to no recourse the individual or the institution can take.

With these considerations and with the help of UQ's Copyright Lawyer, we implemented the UQ Terms & Conditions in UQ eSpace. These Terms and Conditions form a click-through agreement that researchers can apply to any published dataset in UQ eSpace. Instead of a licence that sits on the page (like a

Creative Commons licence would) the click-through agreement is presented when a user attempts to download a dataset from the repository. In order to gain access to the file, the user must click “I agree” to the presented terms and conditions. Similar to other click-through agreements in software and websites, the active agreement of the terms and conditions make it enforceable. Once the “I agree” button is selected, the file will automatically be downloaded.

The intention is to have a suite of click-through agreements for researchers to select from. As part of Phase One, we have integrated the click-through mechanism in the repository and implemented the first of the agreements--the attribution agreement:

I AGREE TO ACKNOWLEDGE any re-use of this dataset in any research outputs where reliance is made upon it, including conference papers and published research papers.

The agreed form of acknowledgement is as a full citation as presented on the UQ eSpace record for this dataset.

Feedback from researchers on this has been overwhelmingly positive and is already in use in UQ eSpace. Researchers appreciate the control and peace of mind this click-through gives them when publishing their datasets. We have had additional requests for click-through agreements including a non-commercial click-through and requests for these terms and conditions to be implemented alongside a ‘request a copy’ like function to assist with mediated access. These requests will all be considered, with the inclusion of additional agreements planned in the near future.

## **5 Phase Two**

In April 2016, after Phase One of the project was completed, a new project manager was seconded to see the project through to completion in 2017.

Armed with our environmental scan and our improved repository workflows, we were ready to capture those 500 datasets (gotta catch'em all!). Remember--there are two primary groups of publications we are investigating. Group 1 are those retrospective (known) articles in Nature Index journals. Group 2 are new (unknown) articles published in journals with data sharing policies or are research outcomes with funder level data sharing requirements.

We soon learned that capturing datasets for these two groups required very different approaches.

## **5.1 Retrospective publications**

The retrospective articles and their underpinning datasets is proving to be the more challenging of the two groups, because there has been limited engagement by researchers.

### **5.1.1 Ineffectual approach**

Our first attempts to create datasets for the known publications were not as successful as we had hoped. We used our standard approach to building our research data collection which relies on self-deposit--that is researchers creating their own records. So, we would approach an author on the paper (usually via email, but sometimes in person), explain the project and then ask them to create a record for their dataset in UQ eSpace.

Responses to these requests included:

- “Why would I want to do that? The paper and data are already published.”
- “Sure, you can describe that dataset according to best practice, but I’m too busy to go back and look at it again.”
- And the ever pervasive silence...

It was apparent that these publications were old news and researchers saw limited value in revisiting them to describe the underpinning datasets. We faced the challenge of engaging researchers on this aspect of the project, but wanted to attempt to meet the project goals, so we tried an alternative approach.

### **5.1.2 Another approach**

The Library's research data team created metadata records for the data described within each retrospective Nature Index publication exclusively authored by UQ researchers. There were 46 in total. The idea behind this exercise was to create a high quality metadata record, use it as a way to illustrate best practice in research data description, and demonstrate to researchers what could be done for their future publications and datasets. It important to note that we cannot recommend this as a best practice or sustainable way forward. However, the exercise proved to be useful, which will be discussed.

In this approach, the Library's data librarian created a draft record describing the dataset. The data librarian then employed the assistance of the relevant Client Service (CS) librarian (i.e. liaison/subject librarian). With their discipline knowledge, the CS librarians were able to provide corrections to the dataset metadata record and provide enhancements.

Then, the relevant Client Service (liaison) librarian and a member of the library's data team met with one of the researchers to show them how the data underpinning their publication can be described and the benefits of doing so for future publications. If the researcher was happy with the record the library had created, we would ask for the raw data files to be uploaded along with the metadata (if the data was not already made available at the journal) and then publish the record in the repository.

The meeting with the researcher and librarians also allowed for discussion of research data management in general and provided the librarians with an opportunity to discuss the research group's needs in this area.

In normal practice we would rely on self-deposit of datasets and leave much of the description and metadata creation up to the researcher. Although it is a 'light touch' approach as far as the library is concerned, ensuring that the researcher is engaged with the description of the data is essential to ensure the metadata is accurate and of high quality.

That said, this process has allowed librarians to experiment with data description and curation and see where our skills need to be developed. Specifically, subject knowledge is invaluable in order to understand the data being described and comprehend the overall project in order to give the dataset context. This information is not easily gathered by a lay person or from the article itself.

It has also emphasised the idea that researchers do need to be engaged with the description of their datasets and that the library's services should continue to focus on building researcher knowledge in this area and encouraging them to make data publishing part of their normal scholarly communication process.

At the time of this paper, we are in the process of working through the retrospective articles in this way. It is too soon to see the impact of this approach. Will the researchers we met with take a different approach to data publishing on the next paper? We will have to wait and see.

## **5.2 Future publications**

### **5.2.1 Targeting research groups**

Early on in designing the project plan we determined that one of the most effective ways to change data sharing behaviours was to target research groups (rather than a school or institute). Groups have their own culture and processes, are smaller and have a clear leader. Our goal with research groups is to educate and infiltrate.

We set a target to meet with at least one research group per week for the life of the project. Working closely with the CS librarians, we have been meeting with groups from multiple disciplines. In the meetings we share information about data publishing, UQ eSpace functionality and the support the library provides with research data management. In turn, we take the opportunity to ask questions and attempt to understand data management practices and data sharing attitudes.

This approach has been most successful in terms of number of new datasets added to the repository for both retrospective and new publications.

### **5.2.2 Communication**

The Library has also started to make use of existing communication channels across the university to provide updates about funder and journal research data policies. In addition to the Library's website, guides and sessions, we have broadcast via:

- UQ News (university wide) newsletter
- UQ Research Administrators Network newsletter
- UQ Research Computing Centre newsletter
- Various School and Institute updates

Data publishing and sharing has also become integrated into our regular research data management training sessions.

We are also planning ways to increase our reach through face-to-face staff development training sessions. Specifically, we have planned a 'Preparing to Submit

Your Journal Article' workshop. This workshop will be an introduction to strategic publishing, author rights and meeting journal data sharing requirements.

### **5.3 What's next**

At the time of submission, we are halfway through Phase 2 of the project. Since the start of the project, 76 new datasets have been deposited in UQ eSpace. We have had slow, but steady results with our multi-pronged approach and will continue with our approach of targeting research groups, keeping up-to-date with funder and journal policies, as well as delivering new workshops that address sharing publication related datasets.

## **6 500 data sets in 12 months...a dream?**

Probably!

### **6.1 The timing just isn't right...**

The most challenging aspect of meeting the goal of 500 new datasets has been timing. As already discussed, retrospectively describing or sourcing datasets has not been overly successful. And, despite countless head nods and enthusiastic agreements that describing/publishing datasets underpinning publications is the way of the future, unless the researcher is on the cusp of publication there are no immediate gains in terms of datasets added to the repository.

While some researchers have been happy to look retrospectively, most are only looking forward. It is too soon (impossible?) to measure the full impact of our efforts. We understand the importance of a consistent message and a willingness to communicate it, rinse and repeat and will continue to work with research groups and university leaders to reiterate key points.

### **6.2 It's not you, it's me...**

"They just don't want to share their data" is a mantra that is often repeated. "How do we get them to do this...?" The truth is, planning and managing research data

effectively, so that it can easily be described and published, is no easy task. It requires infrastructure that spans the entire research data lifecycle, curating the data as the project progresses. UQ are in the process of addressing this problem, but a full solution is still some time off. And although it is easy to get bogged down in processes and policies it is important to remember that “good data management and stewardship is not a goal in itself, but rather a precondition supporting knowledge discovery and innovation” (Wilkinson, et al., 2016).

### **6.2.1 One paper at a time**

An improvement in data sharing culture and changes to individuals’ behaviour will not happen overnight. Our ultimate goal of this project is not only building the 500 dataset collection, but also to continue to establish best practice processes in research data management and move forward with supporting open science. With this bigger picture in mind, during this project we will continue to focus our efforts on supporting research groups and individuals--working to capture and describe datasets underpinning publications...one paper at a time.

It eluded us then, but that’s no matter—tomorrow we will run faster, stretch out our arms farther...And then one fine morning—So we beat on, boats against the current, borne back ceaselessly into the past (Fitzgerald, 2008).

## **7 Works Cited**

- AusGOAL. (2011). *Research Data FAQs*. Retrieved October 2016, from AusGOaL: <http://www.ausgoal.gov.au/research-data-faqs>
- Australian National Data Service. (2016). *Licensing for data reuse*. Retrieved October 2016, from ANDS: <http://www.ands.org.au/working-with-data/enabling-data-reuse/licensing-for-reuse>
- Fitzgerald, F. (2008). *The Great Gatsby*. Project Gutenberg Australia. Retrieved from <http://gutenberg.net.au/ebooks02/0200041h.html>
- Joyce, T., & Dodemont, A. (2015). Data Basics: Discussing issues of ownership and access in an online environment. *eResearch Australasia*. Retrieved from

[https://eresearchau.files.wordpress.com/2015/08/eresau2015\\_submission\\_79.pdf](https://eresearchau.files.wordpress.com/2015/08/eresau2015_submission_79.pdf)

Rowhani-Farid, A., & Barnett, A. G. (2016). Has open data arrived at the British Medical Journal (BMJ)? An observational study. *BMJ Open*.  
doi:10.1136/bmjopen-2016-011784

Royal Society. (2012). *Science as an open enterprise*. London: Royal Society.  
Retrieved from  
[http://sirius.library.uq.edu.au/libshare/HumanResourcesManagement/BranchAdminPublic/HRFormsBlank/staff\\_dev\\_req.pdf](http://sirius.library.uq.edu.au/libshare/HumanResourcesManagement/BranchAdminPublic/HRFormsBlank/staff_dev_req.pdf)

University of Queensland. (2013, November). *4.20.06 Research Data Management*. Retrieved October 2016, from UQ Policy and Procedures Library:  
<https://ppl.app.uq.edu.au/content/4.20.06-research-data-management>

University of Queensland Library. (2016, September 12). *Dataset Deposit Checklist for UQ eSpace*. Retrieved from UQ Library:  
<http://guides.library.uq.edu.au/c.php?g=500758&p=3429166>

Wilkinson, M. D., Dumontier, M., Aalbersberg, I. J., Appleton, G., Axton, M., Baak, A., . . . Boiten, J.-W. (2016, March 15). The FAIR Guiding Principles for scientific data management and stewardship. *Scientific Data*, 3.  
doi:10.1038/sdata.2016.18

Wilson, S. (2016, October). *Summary of data policies from selected funders and journals*. Retrieved from UQ eSpace:  
<https://espace.library.uq.edu.au/view/UQ:410279>