Why does data need to be managed?

Data can be defined in many ways depending on both the discipline and the individual researcher. Some don’t believe that they deal with ‘data’ and prefer to think of it as information. However it is defined, its management needs to be carefully considered to avoid problems and ensure a smooth research process.

Sometimes librarians need to work to advocate for data management. This video looks the arguments that you can make to convince your research community.

Funder mandates
As part of the growing Open Research movement, research funder are increasingly mandating a data management plan as part of the grant application process. They want to see some evidence that the researcher has thought about where their data will come from, how they will look after it and how they will make it accessible to those who might find it useful. These plans can of course change but funders will expect to see that the researcher is capable of handling these decisions in an informed way.

There is also an expectation that the data which underpins research publications will be shared with both the research community and the public. This is partly to facilitate the creation of new knowledge and partly as a way to avoid potential research misconduct. If data is shared then others can use it in their own work and check the conclusions that have been drawn. After several recent cases of research misconduct this is a welcome development.

Increased efficiency
On a much more local level, having a good data management strategy can really help to increase the efficiency of the researcher. It helps them to be more organised in their approach to their data and their project as a whole. It forces researchers to really think about the implications of their decisions and make sure that they have a good plan in place.

In some cases having a plan can act almost as a checklist which ensures that they have covered all of the areas that they need to think about. Researchers are incredibly busy and often under pressure to carry out their work so it can be easy to miss things which could cause problems further down the line.

Good academic practice
Linked to this is the fact that managing information is a vital part of good academic practice. As librarians, we often help our users to manage the information they use in their work. Extending this to help them manage the information they are creating should be natural. We try to teach our library users information literacy skills in a variety of ways and data management should be included in this.
From a researcher’s point of view, part of undertaking a research degree is to prepare for their future career whether this is in academia or outside. Being able to manage information well is a valuable transferable skill for any job applicant and having demonstrable experience of this can really help to make a CV stand out from the crowd, or at the very least keep it from the instant reject pile!

**Preservation**

As well as helping the researchers of today, good data management can help to preserve information for the researchers of tomorrow. Putting proper thought into capturing and managing the data that is produced in current projects will help to ensure that in five, ten or fifteen years time this information is still available.

Not only will this help researchers but it will also be useful to the wider public who may want to access the results of projects for whatever reasons. This is something which has not always been considered in the past which has resulted in a wealth of data consigned to obsolete storage mechanisms or even lost completely. Putting in just a little thought now can have huge positive consequences in the future.

**Looking to the future**

There are of course many reasons why data needs to be properly managed and depending on your local research community you may have to combine a range of reasons. The important thing is to introduce the topic to researchers in a way which will meet their needs and encourage them to integrate good data management into their workflow.