

Developing Data Information Literacy with the Institutional Review Board

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Background

Are you having trouble communicating the need for data management to applicants submitting their proposals to your Institutional Review Board?



Data literacy is important for beginning researchers to develop, but they may not realize exactly what knowledge they lack and instruction may not address their specific gaps.



While serving as a member of the Institutional Review Board (IRB), the librarian noticed a lack of campus knowledge and consensus about data management standards.



Working with fellow IRB members, the librarian created instructional materials for imparting information about data management to IRB applicants, as well as the wider campus community.



Students who attended the initial workshop expressed a better understanding of the need for data management and gained data information literacy skills.



Creating an Evidence-Based Data Management Workshop

Team: Science liaison librarian who serves on the IRB and fellow IRB members

Goal: Analyze IRB proposals sent back for lack of adequate attention to data management and design a workshop incorporating identified knowledge gaps from these proposals to help increase data literacy on campus

Data: Twenty IRB proposals from 2016-2017 Recorded:

- Whether revisions were required for data
- What revisions were suggested to the applicant
- What revisions the applicant made to their proposal

Totaled the number of people, both before and after revisions were requested, who:

- Coded their data
- Used a master list
- Retained their data for at least 3 years
- Retained their data on 2 or more devices
- Retained their data in more than 1 location
- Had a plan for sharing their data
- Had a plan to publish their research

Used Voyant Tools, a web-based text analysis environment, to explore the proposals for similarities.

Researched best practices for data management and data literacy, with a focus on federal requirements for research data.

Incorporated this information when designing instructional materials. As good data management plans incorporate best practices, these were the focus for the workshop.



Word cloud of terms from initial proposals

Of 20 IRB proposals submitted November 2015-November 2016:	
14	Required revisions for data-related issues
12	Involved vulnerable populations
19	Indicated the research would be published
11	Indicated the data would be shared
12	Required revision for storage issues
12	Revised proposals specified data would be retained for 3+ years
4	Required revision for security issues
4	Required revision for issues involving coding of data, anonymity of data, or privacy of data
5	Revised proposals specifying coding of data
3	Revised proposals incorporating master list of data coding
2	Required revision for issues involving data disposal
1	Required revision for issues involving publication and sharing of data
19	Proposals submitted by undergraduates
1	Proposals submitted by faculty

Learning Outcomes



Word cloud of terms from revised proposals

The Focus on Data Management workshop is designed based on user needs as determined from analyzing IRB proposals and revisions. The workshop focuses on three questions:

1. What is research data management?
2. Why do you need a data management plan (DMP)?
3. What are the best practices for creating a DMP?

Participants have the option to complete a survey at the beginning and end of the workshop. In the workshop, they are introduced to terminology, IRB requirements, and best practices.

Future Plans

Participant surveys will be analyzed once enough people attend the workshop and submit their responses. This information will be used to improve instruction. The librarian develop an e-learning module of the Focus on Data Management workshop for campus use.

References

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