Program Development Exercise: Social Sciences

Background:
You are the library liaison for the Social Sciences at Higher Ed University. Recently, you met with an Assistant Professor in the Sociology department, Dr. Smith to assist him in writing up a data management plan for a Faculty Early Career Development (CAREER) award from the National Science Foundation (NSF). Dr. Smith is studying virtual research environments and the online collaborations between researchers that take place, to determine what characteristics of virtual research environments help or hinder collaboration.

During the conversation about data management, Dr. Smith notes that he never had to learn anything about managing data when he was a graduate student and that the graduate students in his class are not really exposed to these issues either. Being the savvy librarian that you are, you respond that you would be interested in developing a “data information literacy” program that would help his students acquire the knowledge and skills with data that they would need to be successful as researchers. Dr. Smith loves the idea and thinks it could be expanded to cover all graduate students in the department, not just those that he advises or take his courses.

Potential areas of need:
In talking further with Dr. Smith, he explains that the primary issue he sees with his students is their carelessness in providing sufficient context with their data, such as when using surveys to collect data. His students will often conduct surveys as a means of collecting the data they need to do their research. Generally students tend not to see their data as something that will have long term value for themselves or others, but as something they need to generate and analyze for a specific purpose in the short term. For example, because the students understand what their variables mean at the time they are conducting the survey they tend not document them very well. Furthermore, students do not always record the decisions that they have made such as how missing variables or non-responses will be treated, which raises some questions about the quality of the data. Students also seem to struggle with producing visualizations of their data that convey the meaning of their findings accurately and effectively. Finally, he also noted that students often believe that data cannot be shared beyond its original context due to IRB requirements for data that contain sensitive information about human subjects.

The department:
The Sociology department at Higher Ed University-enrolls an average of around 70 graduate students in any given year with an entering class between 15 to 20 students. The department’s areas of specialty include inequality and social justice, social media and online communities, healthcare and medicine, and crime and deviance.

Software and data file types:
There is a campus wide license for Qualtrics for survey research, and SPSS and Stata statistical software that are frequently used by the graduate students in the department. There is a lot of interest in “R” though it is not heavily used in the department yet. Students will typically use the graphicial capabilities of SPSS, Stata, or Excel for generating visualizations of their work.