Using private links for supervision

Key Points

- Figshare for Institutions provides a useful mechanism (through its project space) for higher education instructors to developing good curatorial practices amongst their students.

- The closed sharing spaces and private link functionality are very valuable for safely sharing sensitive data that may not be openly publishable, at least not during the earlier phases of research.

- Core curation skills should be included in the higher education curriculum, particularly for students who want to conduct postgraduate studies.

About Ulrike

Professor Ulrike Rivett is the head of the iCOMMS research team, based in the School of IT, Department of Information Systems in the University of Cape Town. iCOMMS' work focuses on developing and researching the use of ICT systems and solutions to solve practical problems in South Africa – for example, improving the quality of municipal service delivery. This case study explores Professor Rivett's usage of Figshare for institutions in her postgraduate teaching process.

Professor Rivett has found Figshare fairly easy to use, though she did say that as an Information Systems lecturer, she may be generally more familiar with online data management tools than academics in other disciplines. Her focus has been on using the platform to enhance her teaching, particularly as the University of Cape Town's Research Data Management Policy strongly pushes for more sophisticated data management and curation practices, and encourages open data sharing by default.

Professor Rivett has found the projects feature in ZivaHub – UCT's instance of Figshare for institutions – particularly valuable in her postgraduate teaching for a number of different reasons, namely:

- Figshare offers a larger storage allocation than other platforms, such as Dropbox.

- Figshare is more easily securable (via private links and invitation-only project spaces) than more open platforms such as GoogleDrive.

- Figshare provides a far safer storage alternative than mobile physical media, such as flashdrives, and the data remains accessible once students graduate and leave the institution.

• By encouraging her students to upload their data to a secure platform she can access, Prof Rivett can provide feedback on the structure and quality of the data itself as well as on the dissertations and theses generated from the data.

• The private link feature also provides additional utility in allowing the data to be shared with external examiners for theses and dissertations, when required.

Prior to hearing about ZivaHub, Professor Rivett indicated that the lack of a secure storage system with sufficient storage capacity had made it harder for her to access the most up-to-date versions of her students' data. This difficulty made it harder to check her students' findings against their actual datasets, or to catch problems in their data-gathering processes early.

As research undertaken within iCOMMS typically collects a mixture of quantitative and qualitative data, which often contains sensitive or confidential information, Professor Rivett felt the private project space and confidential link sharing features were vital for preserving the confidentiality of her students' research participants.

That said, she is supportive of Open Data sharing as a principle, provided the appropriate legal and ethical measures are undertaken – and as the Chair of the UCT Faculty of Commerce Research Ethics Committee and head of a unit that often includes qualitative methods in its research gathering processes, Professor Rivett understands all too well how difficult it can be to properly de-identify data so it can be ethically shared.

Her current use of Figshare is therefore focused more on its functionality as a secure storage and private data-sharing platform than as an open data publishing platform. She has nevertheless been an active advocate in the Faculty of Commerce encouraging other academics to adopt Figshare, though she notes as with other new online tools and technologies, the adoption of Figshare is likely to be slow until the need for it has been sufficiently demonstrated.

Interestingly, Professor Rivett made the point that the use of tools such as Figshare should be built on a solid base of good, fundamental curatorial practices, and that these practices (such as the development of rigorous data cataloguing processes, file management and naming, the use of controlled vocabularies, etc.) should start to be taught to students quite early in their academic career, perhaps even before they begin postgraduate studies. Given the sheer volume of data that students and career academics will have to deal with in their research, and the plethora of tools available for file management, curation and sharing, developing expertise in the core principles of file organisation and curation should now become part of the standard academic toolkit going forward.