Following the success of the learning technologist, is it time for a research equivalent?

With so many scholarly communications tools and technologies now available, how do academics decide which are most appropriate for their research? Andy Tattersall suggests it might be time for a research equivalent of the learning technologist, a role that has helped drive innovations in teaching underpinned by technologies. The research technologist would be embedded within the university department, make recommendations on appropriate online tools, provide technical assistance and also offer guidance on accompanying issues of ethics or compliance. With the right ongoing support, academics can improve the communication, dissemination and impact of their research.

The research cycle is changing rapidly and a lot of that change is due to the proliferation of technologies and websites that support the research process. Many of the most useful tools have been captured by Jerome Bosman and Bianca Kramer in their excellent 101 Innovations in Scholarly Communications. Whilst this work is a great help to those aware of it, the reality is a majority of academics are either unaware of or unwilling to engage with the myriad tools and technologies at their disposal (beyond social networking sites such as Twitter, Facebook, ResearchGate, etc.). There are several reasons for this: workload and deadline pressures; fear of technology; ethical implications around their use and their application, especially when it comes to third party software; or too much choice.

The usefulness of these tools has been recognised by major publishers, who have made certain strategic investments in order to create their own research cycle workflows. So if the likes of Elsevier are looking to use these tools to change the research ecosystem, this should be of great interest to anyone who publishes with them, right? But with so many tools available, how do academics navigate their way through them? How do they make the connection between technology and useful application? And who helps them charter these scary, unpredictable waters?
Lecturers and teachers have their pedagogy, what do researchers have?

If we look at applications of technology and social media in teaching, we can see more clearly how things have been implemented. Post-2004 and the advent of Web 2.0 there was an increased uptake of technology in the teaching community. The advent of virtual learning environments aided this, with the ability to employ discussion forums, blogs, video and, more recently, social media. Of course research has also taken advantage of these tools but the difference with teaching is that it was often led and facilitated by the learning technologist. This group of centralised, university-educated professionals help drive teaching innovations that are underpinned by technology – the clue is in their job title. The technology itself does not drive the teaching innovation but can help initiate and improve on it. By championing technologies with teaching staff, technologists have helped refresh higher education, making it more fit for the 21st century. They have helped shape learning and teaching through approaches such as blended and flipped classes, video and screen capture, fresh forms of assessment, use of mobiles, and social media. In many cases the innovation is led by the lecturer but, like research, in most cases it requires a good degree of guidance to get them there.

The research technologist

Whether we call it a research technologist or digital academic specialist, this role would not be too different from its learning technologist counterpart. It would support research and its dissemination in the use of video, animation, infographics, social media, online discussion, mobile device use, and social networks, to name just a few technologies. The learning technologist applies pedagogical reasoning for their technology choices, and the research equivalent would need to assess the same considerations. Not only that but good communication skills,
information literacy, and an understanding of data protection, ethics, and what constitutes a good technology – and how it can be applied to a specific research setting in a sustainable and timely manner – are all essential. For example, the use of video to disseminate research around speech therapy would potentially be more useful than an infographic. In the same way, an infographic published in a blog post might be a better way of conveying the results of a public health project.

The reason why in-house support could benefit the practice and dissemination of research is that researchers are very pressured for time, and often don’t know what they need regarding research technologies and especially dissemination. Secondly, when they do know what they want, they often need it “as soon as possible”. These two problems are more solvable within the department, especially as researchers often don’t know where to go for specific help. The research technologist would be a designated, focused role, embedded within the department. They’d be a signpost to new ways of working, problem solving and, most importantly, be able to consider all issues of ethics and/or compliance when passing on advice. They’d become the “go-to” person for anyone wanting to use technology as part of their research.

More than just using technology

The issue of employing more technology in your research comes with various challenges. For example, with research that is sensitive, controversial or otherwise likely to attract negative attention, using social media does come with many issues. Instructing researchers to use Twitter to communicate their research is all well and good until they receive negative comments, especially abusive and threatening ones. Something like Twitter requires a technical explanation (e.g. how to use the block function or employ a dashboard like Tweetdeck) but also advice around negative comments, how, if and when to respond, when to block, and, in some cases, when to report to the platform, your institution or the authorities. Another example might be the copyright issues around ResearchGate or YouTube. Unless time is spent helping researchers understand how to use these tools and what the accompanying major issues are, those researchers will remain reluctant to use them at all. Additionally, the more those who use them have bad experiences, often through no fault of their own, the more likely others will see good reason to navigate around such opportunities. One bad experience on social media could put a researcher off using it for good. With the right ongoing support, these technologies can, in an impact-driven environment, help communicate and disseminate your research to wider audiences.

The role I am fortunate to have, information specialist, is akin to a learning technologist but I work more closely with researchers these days. My role was established a decade ago to look at how technologies can be leveraged to support my department. That extended to research and teaching staff, students and our own academic library. In that time I put my department on the path to their first MOOCs in 2013, edited a book on altmetrics, and championed Google Apps, as well as the use of video and social media on campus. Whilst I have seen the creation of new roles around learning technology, marketing and impact, there remain areas of support that fall between the cracks. This is where I pick up much of my work, supporting research and teaching colleagues around the use of video, infographics, social media and the many less attractive associated issues, like copyright, security, ethics, and the negative impact on productivity. I work closely with the centralised departments, which benefits all parties involved, and carry out some teaching, marking and write the occasional paper. In effect I am a hybrid model that is, hopefully, better able to understand the needs of all involved, including the centralised departments that work so hard to support researchers.

For teaching, which has always required librarians, IT technicians, and marketing experts, the learning technologist does not replace these roles, but complements them. The establishment of learning technologists within departments has helped bring teaching forward to take advantage of new technologies. For the same to happen within research it needs institutions to consider the learning technologist and explore whether there is value in developing an in-house research equivalent, a kind of “Swiss Army knife” professional, who can exploit the burgeoning number of opportunities afforded by the many new technologies out there.

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About the author

Andy Tattersall is an Information Specialist at The School of Health and Related Research (ScHARR) and writes, teaches and gives talks about digital academia, technology, scholarly communications, open research, web and information science, apps, altmetrics, and social media. In particular, their applications for research, teaching, learning, knowledge management and collaboration. Andy received a Senate Award from The University of Sheffield for his pioneering work on MOOCs in 2013 and is a Senior Fellow of the Higher Education Academy. He is also Chair for the Chartered Institute of Library and Information Professionals – Multi Media and Information Technology Committee. He has edited a book on altmetrics for Facet Publishing which is aimed at researchers and librarians. He tweets @Andy_Tattersall and his ORCID ID is 0000-0002-2842-9576.

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