

Why open access should be a key issue for university leaders

Hall, M. (2014). Why open access should be a key issue for university leaders. Guardian, 18 February 2014. <https://www.theguardian.com/higher-education-network/blog/2014/feb/18/open-access-key-issue-university-leaders>

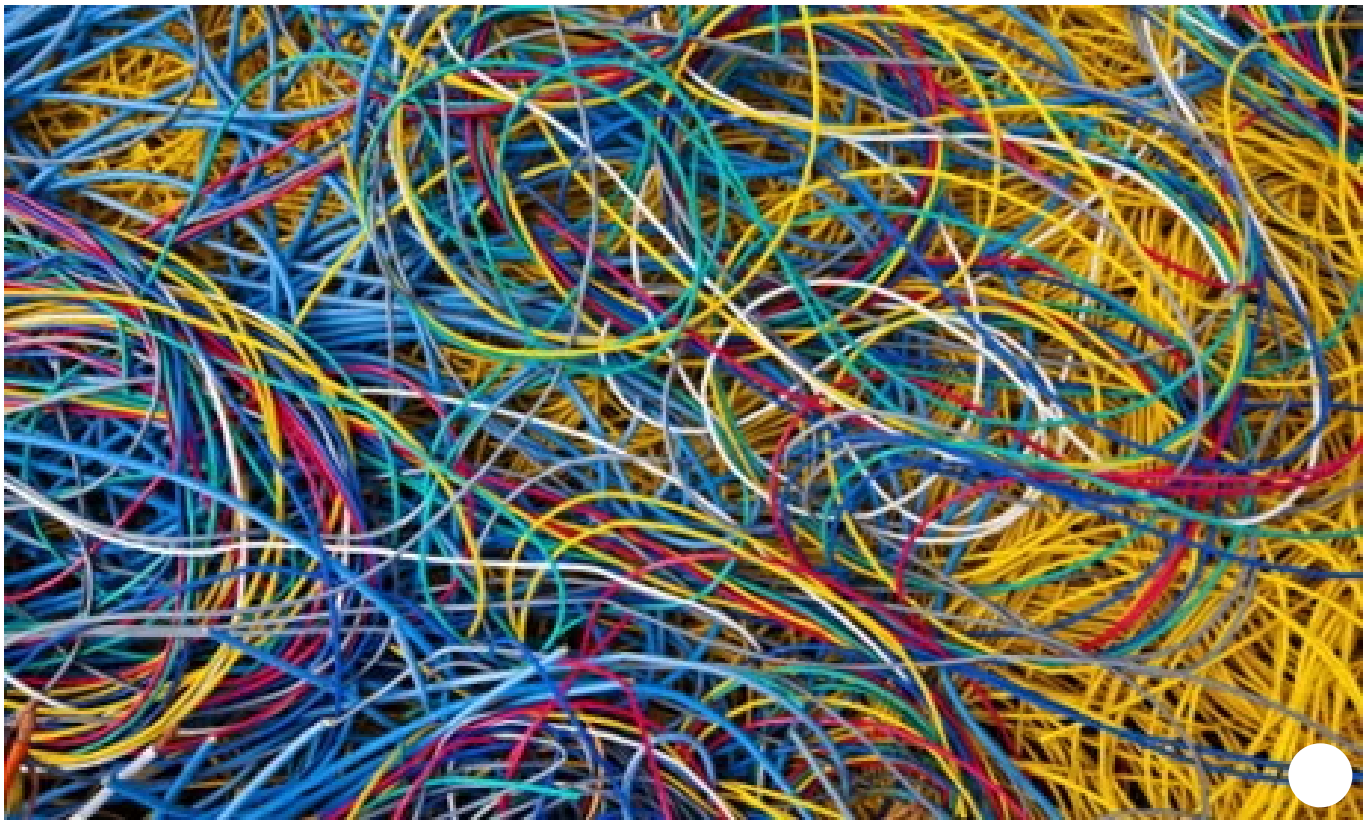
Universities are digital machines these days. But many of the decisions that have to be made as a result are not technical at all. They are about the nature of research and its public benefits, about how learning and teaching takes place, and how we confront difficult ethical issues. Strategic choices that are made now will have significant implications for the ways in which knowledge will be created and shared in the future.

Paywalls and passwords are an irritating but natural consequence of the privatisation of the web; they are also essential for online security. For the future of research, though, the need for openness is far more than a convenience. It arises because the volume and rate of production of online publications and digital data sets has now outgrown the limits of conventional research methods and is changing the ways in which new knowledge is created. Without openness across global digital networks, it is doubtful that large and complex problems in areas such as economics, climate change and health can be solved.

Appropriate and effective policies and protocols that ensure openness are essential in ensuring access to both research publications and massive digital data sets. Automated searches of the publication record are not feasible if subscription requirements and paywalls constantly prevent access to the copy-of-record. This is why the current debate about "green" open access – delivered by repositories – and "gold" open access – delivered by journals – and article-processing charges is so important.

Our universities were built from the principles of scarcity and closure: restricted access to libraries; special knowledge that could only be passed on in the lecture theatre; closed communities of scholarship. Today we are drowning in digital information, available almost everywhere via interfaces and cheap devices that know where we are. Learning and teaching is about making sense of this bewildering open world, with all its opportunities and its increasing dangers.

website:	www.martinhall.org
email:	martinhall@martinhall.org
LinkedIn:	www.linkedin.com/in/martin-hall-connected-learning-studio/



Blog

🕒 This article is more than **12 years old**

Why open access should be a key issue for university leaders

Universities are drowning in digital information. It's time senior leaders made openness - and its consequences - their concern

Martin Hall

Tue 18 Feb 2014 15:18 GMT

 Prefer the Guardian on Google

Universities are digital machines these days. But many of the decisions that have to be made as a result are not technical at all. They are about the nature of research and its public benefits, about how learning and teaching takes place, and how we confront difficult ethical issues. Strategic choices that are made now will have significant implications for the ways in which knowledge will be created and shared in the future.

We couldn't operate universities without the digital systems that run payroll, student registrations, finance and the teaching timetable. Our libraries spend more on electronic publications than paper. We reach large numbers of students online using increasingly significant digital media. But while bandwidth is now as basic a need as electricity and parking, there are critical choices ahead.

Central to these is openness - the extent to which those working and studying within the university and college system can get access to any digitally-based information they need without encountering a virtual gateway: a password, subscription requirement or payment.

Paywalls and passwords are an irritating but natural consequence of the privatisation of the web; they are also essential for online security. For the future of research, though, the need for openness is far more than a convenience. It arises because the volume and rate of production of online publications and digital data sets has now outgrown the limits of conventional research methods and is changing the ways in which new knowledge is created. Without openness across global digital networks, it is doubtful that large and complex problems in areas such as economics, climate change and health can be solved.

There are two primary reasons why these changes to research are taking place:

1) **The sheer volume of new, peer-reviewed publications** is already too great for manual review in many fields of study. In medicine for example, more than two new papers are published every minute. The volume of research outputs is accentuated by China and India, the [emerging giants in university-based research](#).

Thirty years ago, when today's senior researchers were in their early careers, big university and copyright libraries could claim to stock printed copies of everything published in a discipline; today, many researchers never need to enter the library building at all.

2) The sharply **declining unit cost of bandwidth, digital storage and processing capacity**, combined with the breathtaking pace of technical innovation, is allowing massive, almost instantaneous flows of digital data across the world. In many cases, these flows are being constantly fed by devices linked together as the "internet of things". Some of these devices are highly sophisticated - for example, real-time seismic measurements used to predict tsunamis and terrestrial earthquakes. Others are commonplace - citizen journalists using smart phones to upload images or the millions of daily financial transactions that track economic trends.

These massive digital data flows are the new raw materials for research. For highly complex problems such as climate change, epidemiology, financial stability and space exploration, access to global big data is already a basic condition for research to take place at all.

Protocols

Appropriate and effective policies and protocols that ensure openness are essential in ensuring access to both research publications and massive digital data sets. Automated searches of the publication record are not feasible if subscription requirements and paywalls constantly prevent access to the copy-of-record. This is

why the current debate about "green" open access - delivered by repositories - and "gold" open access - delivered by journals - and article-processing charges is so important.

Access to massive digital data sets is invariably complex and contentious. Nation states are touchy about rights and security (all the more so, given [WikiLeaks](#) and [Edward Snowden](#)). Individuals and interest groups worry about rights to privacy and commercial misuse of personal data. Researchers are concerned about the premature release of research data and the ethics of openness when information is collected with assurances of anonymity. Each of these is a complex set of issues in its own right.

Openness is also central to the continuing development of learning and teaching. While [Moocs](#) took the headlines in 2013, innovation in the flipped classroom - where pupils complete course material ahead of lessons to free up time with their teachers - is rapidly moving on, often putting social media at the centre of course design.

Our universities were built from the principles of scarcity and closure: restricted access to libraries; special knowledge that could only be passed on in the lecture theatre; closed communities of scholarship. Today we are drowning in digital information, available almost everywhere via interfaces and cheap devices that know where we are. Learning and teaching is about making sense of this bewildering open world, with all its opportunities and its increasing dangers.

Digital technologist specialists are important in every university; we need them to keep our systems running and to look ahead for coming innovations that will require investment and changes in the ways that we work. But the strategic and ethical questions that arise from the rapid and comprehensive advances in digital technologies - and particularly openness and its consequences - are for anyone in a leadership position, whether an academic programme convenor, a dean or a vice-chancellor. All universities are now digital, and all research and teaching will be shaped by continuing technological change.

Martin Hall is chair of Jisc and vice-chancellor of the University of Salford - follow him on Twitter [@VCSalford](#)

This content is brought to you by [Guardian Professional](#). Looking for your next university role? Browse [Guardian jobs](#) for hundreds of the latest academic, administrative and research posts.

Most viewed
