Miscellaneous Open Research Case Studies

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Open Research Case Studies – Octopus with Alexandra Freeman

Octopus is not just another publishing platform, it is designed to be the primary research record, and to create an incentive structure which maintains the highest standards of research and research culture. It sits alongside journals and other dissemination outlets, allowing those to specialise in delivering key findings to their audiences whilst Octopus acts like a 'patent office' to record who has done what and when, and ensure the quality, integrity and accessibility of all primary research, in full.

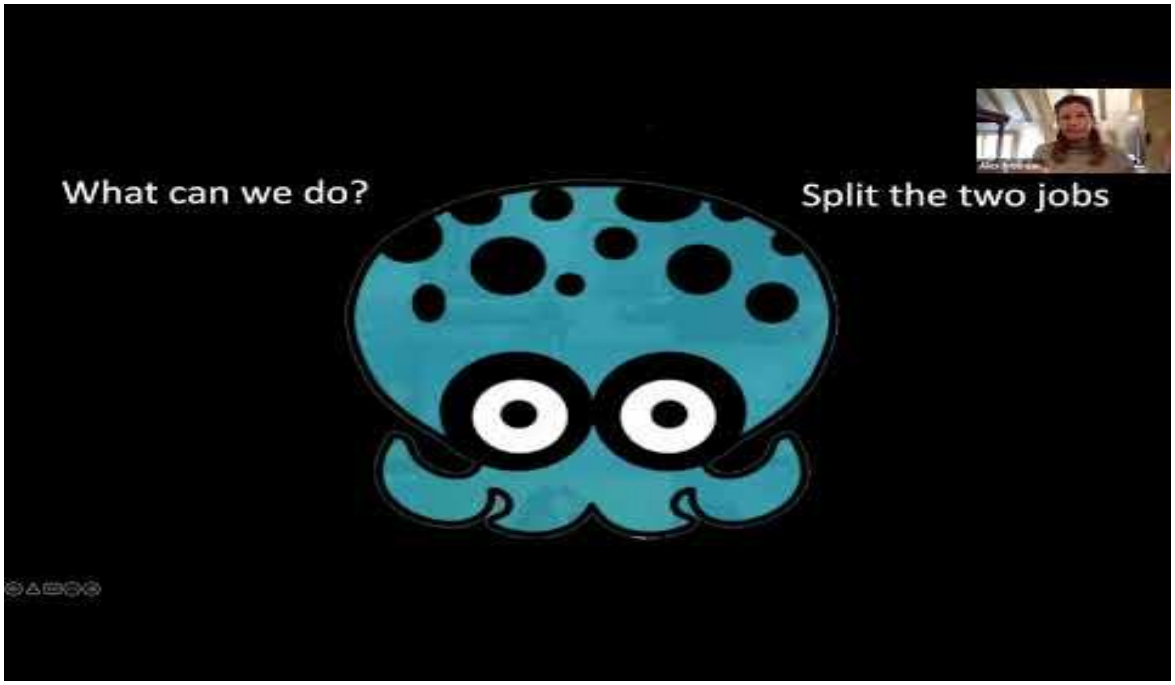
Source: https://www.octopus.ac/about

When, why, and how the idea of Octopus was conceived?

I moved from the media back to academia at the end of 2016 to the Winton Centre in Cambridge, where we work on evidence communication. We've got a team partly of researchers and partly of practitioners. I was really surprised how postdoctoral researchers thought about publishing as so central to their careers and heard them talking about how they 'had' to get publications in particular journals. Hearing them talk, it struck me that they were talking about the same story-telling-based communication I was used to in the media, which was primarily about entertainment.

I started thinking that what we need is something that does a different kind of communication from what these academic journals do. They encourage people to concentrate on the impact of their findings. However, not everything that researchers do *should* have an impact on people in that way: we should be communicating to other researchers what we have thought about, and what we have done (whatever the 'findings'), and describe it in such a way that they can learn from it and build on it. Octopus, then, is about trying to create a platform other than journals for the communication of scientific research – not concentrating on the 'findings', but equally communicating all the research we do, in a different style. So, having come up with that idea in early 2017, I've been working on Octopus alongside my day job since then. Last year we got full funding from UKRI to turn it into a functional service, which we launched just before the summer break in 2022. In the autumn we plan to start shouting about it properly.

Octopus: A new way to open and transparent research



How does Octopus relate to open research?

Octopus has many roles within open research, but open research is bigger than Octopus. It is a platform where people can be open about their hypotheses, data, and analyses – all types of research work. It's free to share, read, and write.

But Octopus is trying to do more than just openness: it is trying to encourage a greater sense of collaboration and to change the way that we all think about our place within the research community and how we think about our work. Instead of the traditional research cycle, during which people want to protect their work until they've got to that high-impact publication, Octopus encourages you to do what you enjoy doing. If you are great at coming up with ideas and hypotheses, then you can publish a hypothesis, and be judged on its quality. If you are an analyst, you can analyse data sets that are already open, and be judged on those stand-alone analyses.

Instead of one person, or one small group of collaborators, doing everything - completing and publishing a project at the end - Octopus lets you think about things in smaller units, and links them together as people write them. In Octopus, publications can be data, analyses, hypotheses, protocols, and even peer-reviews. They are more collaborative. It's not just open access, but designed to open people's minds to different ways of thinking about their research and their role in the research environment.

How did you come up with the metaphor and the name of Octopus?

I came up with the concept quite suddenly: I just wrote it all down in one evening, and a couple of days later I thought: I need to name this. I wanted a name which is friendly and easy for people to say whatever their native language is, so it is quite a simple word, and I wanted one that lent itself to a logo. Octopuses are great; they have distributed intelligence, so they don’t have a centralised brain, but each tentacle has a high degree of autonomy. I liked the idea of

the distribution of intelligence, and as it happens, there are eight publication types within Octopus.

Who are the main collaborators of Octopus?

At the moment, the main collaborators are Jisc – who are the UK's higher education digital infrastructure managers, and they are helping build it – and UK Reproducibility Network, who are our "philosophical" collaborators. They love the idea; they are our partners, which is helping us get closer to our audiences and disseminate Octopus.

Who is funding this project?

UKRI is our main funder at the moment. We've had other funders: for example, we won a prize award from the Royal Society, which was about changing the research culture. We also had an anonymous philanthropist who gave us a very generous donation, which allowed us to take our prototype to a stage where it was completely working.

What challenges did you come across in developing Octopus?

We had so many challenges although from a technical point of view, Octopus is relatively easy to build. It isn't rocket science to build a platform that does publishing.

Firstly, it's always difficult to raise money to do things properly. It's relatively easy to get little amounts of seed money to start building things. But it's more difficult to get somebody to buy into supporting something for the number of years it takes to get traction on the ground, and UKRI has been fantastic in giving us that multi-year funding.

The other challenges are that this is nobody's full-time job. It's not my full-time job at the moment, although it might be since my day job comes to an end at the end of 2022, so I might have more time to spend on Octopus, which would be great. A lot of people who are involved in open science and similar projects are trying to fit it around their day jobs.

The biggest challenge, of course, is getting the word out and getting people to use it because it's just a very big world out there of researchers, but even people hearing about it and buying into the philosophy of it isn't enough, but they have to publish in Octopus and trust the platform.

That is where Jisc and UKRI are so important: they are big names with long-term commitments to the project. I hope they can help get people's trust that this project is going to be around for many years and is being supported by the highest levels. So, you can trust it with your research.

What feedback have you received since your launch event?

We have been busy since the launch, though we have been quite quiet about it. I was expecting we would do a big launch and then lots of publicity and drive users. But what we've done is launch and then used the quiet period over the summer to do a lot of backroom work, of which a lot has been about getting feedback and talking to people with whom we are going to be working together.

We have been collecting a lot of feedback about features that people need. What we launched at the beginning of the summer was the most basic form. We knew we needed to do a lot more building, but feedback from users has been helping us put those features in order. We've had some people use it, which is great, and some people are publishing on it and tweeting about publishing on it, which is fantastic to see.

We've been mainly working with higher education institutions and also other platforms that we want to integrate with and hope to work with more closely, institutions like protocols.io, and other open-access players. Octopus is trying to bring together a lot of other platforms: we don't want to be creating an extra burden on people, but we want to integrate seamlessly with places and repositories people are already using.

How long-term are you thinking with Octopus? Would you see an international uptake of your project?

Octopus is very much international, although our funding comes from UKRI. I have always envisaged it being global, and one of the things I want to do as soon as we possibly can is to bring automatic language translation to the platform so that it's completely language agnostic, and people read and write in their native languages. Octopus is already global, but over the next three years, I hope to see it building its place as running alongside journals.

The way I see it working is that Octopus provides openness: it is open access, so it's free to read. This means that if the primary research is on Octopus, and that is what is known as the 'version of record' (what was done, when and by whom), then, that research is openly accessible. Then what is published in journal articles, which is about disseminating findings to interested readers, can be behind a paywall - as long as the primary research and the 'version of record' of it, is freely available in Octopus. It changes the whole role of journals and their business model, but it makes the system sustainable and fair. I see this transition happening over the coming three to five years, and after that period, what I hope is that Octopus becomes the well-recognised primary research record where people publish all their research 'for the record' and for research assessment, and journals take on the task of serving the findings relevant to their different audiences in the best formats for them to read.

I think Octopus can bring a bit of order to what is currently a very messy environment with lots of repositories and journal articles that are torn between what their aims are, and referencing things in repositories all over the place. Hopefully, Octopus will bring some clarity to this new world we are moving towards of open sharing alongside dissemination.

Who is your core audience?

Our audience is not just academics. It is easy for academics to forget that research goes on in a lot of other institutions, so anybody who is doing primary research, which includes researchers in government laboratories, pharmaceutical companies, engineering companies, and market research companies. There are people, from all those areas, from charities and GS who are interested in Octopus.

We've had quite a lot of interest from researchers working outside traditional academia, who are doing research. For them, the idea of writing a journal article, it's just not feasible because it's not part of their job. Or they published in the literature that academics don't access very often. They are keen to use Octopus because it doesn't take a lot of extra work to package your research in a format that's suitable for sharing on our platform. So, the audience is everybody doing primary research.

Alternative Methods of Publishing - Dr. Alexandra Freeman

How would someone who is working in Arts and Humanities benefit from using your platform?

That is a good point, and we have been trying to do user research with as broad a range of disciplines as possible. I am always surprised by how well it works for some disciplines I hadn't imagined, so we have got some people wanting to use it within Arts and Humanities.

Of course, our team doesn't know how best to use the Octopus structure for researchers in fields we were not familiar with, but we are very keen to take feedback from people to see how we can make Octopus work for them. I am hoping that a lot of the features will work and that what we need to do is just think about a broader terminology that allows people to see how it might work in their field.

I know that one of the things we need to think through is for people working with data, for want of a better word, that is not published or publishable in a format that Octopus would take. For instance, in literature, how might we allow people to write an analysis linked to published literary works? That is one of the things that I am thinking hard about this month, and it would be great if any of your colleagues who work in Arts and Humanities would feed into that.

Do you think there would be a hierarchy or different levels of engagement among the sections?

I don't see an issue with people wanting to concentrate on particular areas or there being more publications of some publication types than others. One research problem, for instance, will spawn lots of ideas on how to tackle it. I think there will also be a natural balancing out: where there is a lack of people collecting data, for example, then there will be pressure, an incentive, for people to go and collect more data there. What would worry me if people *value* one type of publication more than another, for example, if they would value data or analysis more than protocols.

Have you come across similar initiatives or platforms?

Yes, ResearchEquals is a very similar model, but we have slightly different focuses, and lots of people ask about how they relate to each other. I see ResearchEquals more as a platform on which you can publish and revise more easily, and you can get feedback from others very quickly, but it's not the 'version of record'. I see there being quite a nice pipeline towards people using ResearchEquals as their day-to-day platform, sharing what they are doing if they want to get feedback on it in a slightly less formal way, then publish it across to Octopus in a formal sense as a record of the completed work, for formal assessment.

Other open projects have similarities, such as Registered Reports. These are similar to Octopus in the way that they break up the publication of an article. In that case, you get a peer review after you have written the introduction and the methods, as it were, and then you do the data collection. In that sense, it's halfway to Octopus because you can get peer-review on any publication type in Octopus – such as the research Problem or the theory or hypothesis alone. These are the two that strike me as most similar, but there are lots of new platforms and projects out there.

How do you want to incentivise the use of Octopus?

What we need to incentivise it, is to be easy to use and useful to people in their day-to-day life as researchers. For that, we have ingested research Problems from open-access publications, and each of these will have associated references, which are the existing papers deemed algorithmically as approaching that research Problem. That should mean that at this stage, Octopus becomes a useful search tool because if you work on a particular area, you can find the Problem that relates to it and then the papers that have tackled that Problem. I think peer review on smaller publication units will also be useful for people, just as if I'm writing a registered report that is getting peer review at that early stage, it is useful because I want somebody to have a look at the protocol that I'm planning to use.

Secondly, we need to ensure the funders, institutions, and people who might use the platform for research assessment, signal that they are using Octopus. We need to be sure that we are talking to all the institutions and funders, which is what we are doing right now.

How will you ensure that there is no duplication of information?

I'm not worried about duplication: some of the things I published in Octopus have been from articles I published in journals. The advantage of republishing them in Octopus as it were, is that they can then be rated and reviewed within the platform, and when institutions look at my Octopus record, they get to see all the work I've done all in one place. It makes it easier for other people to build on that work. Republishing your work in Octopus not only gets you more credit because it allows people to rate work and review it openly, but it also encourages others to build on that work. It is good for the research community because it means there is more research happening, and it's also good for you because it's very satisfying to find other people coming up with ideas related to yours.

Where and how do you advertise Octopus?

There is a marketing team within Jisc, and they've got all sorts of ideas, for example, there's an app for researchers, of which I've never heard, which we put Octopus on. There are other platforms we can connect to that I'm not familiar with, especially in other disciplines. We are looking at different ways of 'advertising' Octopus: producing leaflets, sending posters to institutions, advertising on social media, building up a community user group, and encouraging people who are already Octopus users to give talks and disseminate to their colleagues. UKRN has a big international network, the Reproducibility Networks, and we are going to be collaborating with them as well.

In November 2022, we are starting our little roadshow of talks and workshops, and some of those are practical workshops where people bring a publication or something they want to publish, and we work through with them, how to get it up on Octopus. There are many ways we can advertise the platform, but if anybody else has any other thoughts, then we're very open to them.

Open Research Case Studies – Open Education with Antonio Martínez-Arboleda

How does open education relate to open research?

I see a connection between research and open education, whether the research is open or not. Research is an activity, a process, that leads the researcher to new insights. Once you have reached that stage in your research activity, in which you have new knowledge to share, even if it is with a small community, in my view, the outputs fall within the realms of education in one way or another, whether it is formal, non-formal or informal education. This includes facilitating the learning of your research peers, and other communities. As an open educator, the important thing for me is that we need to conceptualise research as a process, not as an outcome. The University of Leeds is a values-driven institution: we want to make a difference in the world and people's lives. For this goal, openness is central. It would be inconsistent to have open research processes that do not lead to open education.

Interview with Antonio Martínez-Arboleda - Open Education Champions series

Has open education changed at Leeds since you have been teaching here?

I have been teaching at the University of Leeds for 24 years. There is now far more openness thanks to technology and the effort of open educational practitioners. There are more opportunities, and more people are engaged in open education now.

There is a dichotomy between the open education movement, as a group of academic knowledge activists, coming from colleagues working primarily in HE schools of education and libraries, and the other strand of open education, which is very organic and is happening as

part of the research-related activities, in the field of public engagement and research communication. We need to bring together both strands of open educators.

Is an open education always digital?

No, open education is not always digital. You can have open educational practices without digital technology. The difference is that technology has allowed multiplying those opportunities for openness, but openness is something consubstantial to human beings. You could look at the history of humankind through the lens of openness and see how we humans have always shared knowledge. Technologies have accelerated the range of opportunities for openness.

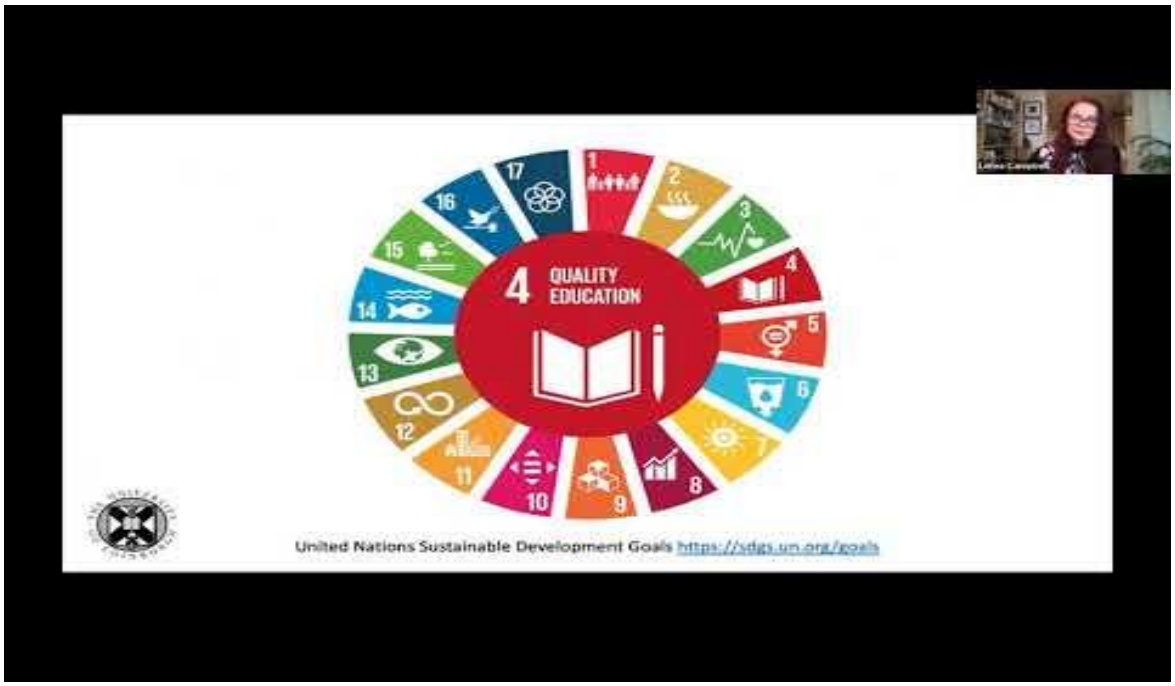
What is the link between decolonisation goals and open education?

Open education can contribute to decolonising because openness creates a dialogue. It is difficult to conceive decolonisation from the top; it has to be a collaborative effort. Being more open allows a variety of inputs in the educational resources for teaching. Openness is a catalyser for diverse voices and perspectives.

Is there a difference in the academic fields in implementing open educational resources?

Some researchers are highly specialised in a very specific aspect, and, understandably, the level of prior knowledge required from potential users who want to use open resources in that narrower subject is a barrier. It is relatively easy to develop a programme of educational activities and dissemination in Italian literature, for example about Dante. However, if someone works on the crystallisation of ice in nuclear plants, for example, there are probably much fewer resources. We need to think of how more granular resources in very specialised subjects fit in within learning journeys. Contextualising the resource for the potential user is important.

A global challenge: digital and open education for inclusive societies



Do you aspire to have a 'real-world' impact?

I dislike the word 'real' to define things outside the university. It implies that academia is not part of the world. Academic skills are just human competencies applied in an academic context; they are not exclusive to the world of academia.

"We need to think of social media as an instrument to facilitate that engagement. If you do not understand the needs and learning aspirations of the people who you want to engage with, then social media will not help. You need engaged conversations with the right audiences."

How important is social media in research dissemination?

The idea of narrowcasting is very important. Social media success is usually identified with a huge number of clicks or followers. Whether we like it or not, the platforms encourage certain types of behaviour that are not always in tune with the educational values and purposes of universities. That is why the use of social media requires a bit of planning and purpose.

Universal Values, Global Change: University of Leeds Strategy 2020 - 2030

How do you see the future of open education?

For openness to succeed, we need a combination of ingredients: training, information, processes, incentives, examples of good practice, and time. The University of Leeds is embracing openness strategically as part of its mission, which is crucial. If an institution believes in those values and practices, it sends a powerful message to colleagues and students.

"The University of Leeds is currently promoting openness at strategic and international level, and we all should be very proud of it. Colleagues who engage with openness can feel reassured that their work will be supported and recognised."

Open Research Case Studies – Open Peer Review (OPR) with Stephen Pinfield from the University of Sheffield

What is your job role at Sheffield?

I'm a researcher and teacher at Sheffield in the Information School. Open research and open access are one of my research interests, rather than a mode of researching other topics. I'm interested in how other researchers and teachers practice open research.

How did you become interested in open research?

I became interested in open access about twenty years ago and started developing services, technologies, and policies around openness. When I worked at the University of Nottingham, we set up an institutional repository and talked to researchers about their attitudes towards open access and their experience with the new tools we were developing. Towards the end of my work at Nottingham, we looked at other aspects of openness, particularly research data management and data sharing.

Since I've moved to Sheffield, I continued to focus on open access, open data, data management, and recently the topic of open peer review. I am also interested in how publishers and other communication service providers design and support services, how libraries and institutional support services can play a role in this, and the way researchers practice open science and their attitudes and behaviours toward open practices.

What does open research mean to you?

Open research is an umbrella term to describe a set of approaches and practices that make research more open. At my previous job, I distinguished between open process, content, and infrastructure. The first is how you conduct the research, which might involve open methods. Open content is about sharing the product of the research. Open infrastructure provides tools and services that allow sharing of data and code and make publications widely and openly available. It often involves things like open standards to exchange information to enable discovery and reuse. It's a set of processes, behaviours, and practices that allow research to be shared as widely as possible.

Have you published open access previously?

Yes, I think everything I published in the last ten years has been either gold or green open access.

Has your attitude towards open access changed in recent years?

I've been involved in open access for over twenty years in different ways and evaluating and investing in what was happening in that space. My earliest experience with institutional repositories was when we set up Sherpa for Nottingham in 2002.

It moved into a lot of other kinds of projects and services at a national level to work with the funders of research and other stakeholders to develop policies concerning open access and

several publishers. Many publishers wanted to understand the categories we were talking to them about, like the legal position around self-archiving and copyright.

We submitted evidence of the research to the Select Committee in 2004, and a lot of it has gone on to work with the different actors in the research system to develop technologies, processes, and policies that support open access sustainably and ensure the aims of open access were pursued.

"Academic researchers have always wanted to consult their peers to get comments and feedback on their research."

Do you use preprints?

I haven't always deposited them, but my most recent work has been consistently pre-printed, especially if I'm submitting to a journal where there will be a significant delay in publishing. Preprints create an interesting conversation: they allow you to point people to your work and give you feedback before it's formally published.

Recently, we've done work on peer review: one empirical article looks at different modes of innovations in the peer review space, and another is a literature review, and they have been pre-printed. It's been quite an exciting experience looking at how we've changed them due to the feedback we received.

In which repository do you deposit your preprints?

It depends on the topic because my work is interdisciplinary: it crosses boundaries in research and method science space. Most of my recent preprints have been submitted to SocArXiv, the repository for social sciences. I don't think the repository matters if the work is discoverable. I've also used FigShare for other types of work, such as reports and the White Rose repository, which is the institutional repository associated with the University of Sheffield.

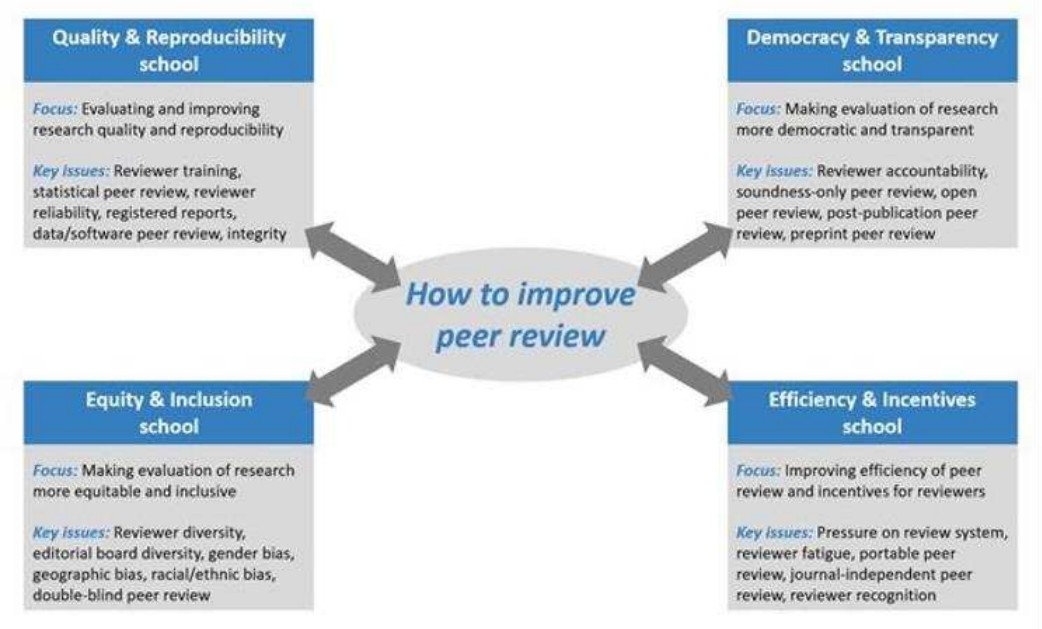
When did the movement of open peer review start?

We should avoid thinking of the peer review process as though it has been accepted forever in the academic community. Conventions of peer review have always changed and developed: the current peer review process only became fixed in the 1950s-60s. There is more innovation in this space now as it's becoming more and more open, but other innovations have been happening over the last ten-fifteen years.

What are the different approaches to open peer review?

Generally, people distinguish between open reports and identities. The former is when the comments, peer reviewers, and replies are made openly available. You can see how the authors have responded to reviewers' comments, what changes they made to the result, or if they've defended their outputs and did not want to make changes. Open identities are when you know the identities of individuals involved in that peer-review process.

The extent to which they are open can vary, depending on timing: what point do you make the process open; for example, would you make the identities and the reports available to peer reviewers as soon as they're available or do you wait for the article to be published, then publish all reports. Open peer review is becoming more prominent, but there's always been innovation in this space.



Source: There are four schools of thought on reforming peer review – can they co-exist?

Who have been the early adopters of OPR?

ArXiv was created with in mind that it would be an informal peer review venue for people. The function of preprints is not just to get your work out early, so you can claim priority, but they are also partly designed to gather feedback about your work before it's formally published, and you can make changes to it.

There are many other models and experiments: for example, an early study from Nature states that it is harder for journals to recruit peer reviewers with open identities. I'm interested in the model of F-1000 which looks at peer review as something already disseminated. Some conventional journals are now experimenting with at least publishing peer-review reports on the publication of the formal article, which seems to be a common innovation to engage with.

What are the main challenges of OPR?

Traditionally, anonymised peer review has meant power was concentrated in the hands of the gatekeepers, but the power relationship changes with open peer review. Reviewers become more accountable. However, some of the challenges are where there is a pre-existing power asymmetry between the reviewer and the author. For example, where an author is a senior person in their subject community, and the peer reviewer is an early career researcher, the ECR might be unwilling to be too critical because they know that their name will be associated with that criticism of a senior researcher. Some people are trying to create more equity in the system through anonymity, maybe even reverting to double-blind peer review, and others through more transparency and openness. I don't think there is an easy way through these challenges, so what we need is more discussion, experimentation and evidence-gathering.

"We should move away from the old-fashioned gatekeeping model to a system that critiques and improves the research."

Is there a necessary conflict between the different approaches to open peer review, or can they co-exist?

In our study, we identified four schools of peer review. We looked at different ways in which people have emphasised different problems, and therefore, they come up with different solutions. They're potentially in conflict with each other: for example, the school of thought wants to be more democratic, transparent, and accountable, and there is tension between the aims of creating anonymity wherever possible to eliminate bias. They both want to create a fairer system, but they have opposed solutions to how they do that.

People want to improve the quality of peer reviews in different ways: some want to include specialist peer reviews, for example, on statistical analysis or two or three reviewers who follow a clear template. At the same time, others think that the peer review system is already overloaded. The different approaches disagree on how they want to improve quality and create a fairer system.

How do readers benefit from OPR?

It depends on why someone reads journal articles. Some people just read the abstract, and if it is relevant, they read the paper depending on what they want to find out. Others might be interested in only the methods used or the conclusion. The more you're interested in the paper at a deeper level, the more you might be interested in looking at the peer review process and the dialogue between the author and peer reviewers. It's the same as if you make a dataset available with a paper and some people will look at that. It won't interest everybody, but it's still a fascinating dimension to the research that provides more detail.

In your opinion, what is the future of peer review?

Open research will become more and more mainstream in most disciplines, and open peer review is a part of that. It will happen differently in different fields at various speeds. I think peer review can be most beneficial in improving and testing an article, and it's less effective when it is just a decision between accepting or rejecting it.

It isn't only about being open but a better way of curating good research, and it makes the system potentially more efficient because it removes the submission-reject-submission-accept spiral that many articles go through, which is incredibly duplicative and wasteful. As each journal requires its peer review process, you can have multiple peer reviews carried out by different people for a single article. It is the system of the old print world, but in a digital environment, we ought to try and re-engineer the system.

"Libraries must be well-informed about open research and open peer review to play a credible role in discussions. I

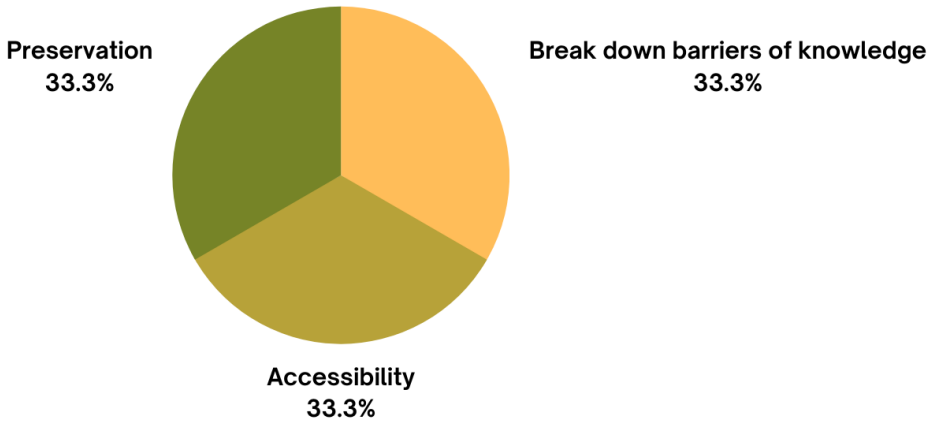
think it's important for libraries to provide a holistic view of the system more than many researchers have, who are knowledgeable on a particular subject community and have limited experience. I'm pleased that the Library at Leeds is doing that."

Open Research Case Studies – Special Collections with Jodie Double

What is your job within the Special Collections & Galleries?

I am the digital content and copyright manager. I manage the team that is involved in digitisation, digital preservation, digital access, licensing, and copyright. I am also the University's Copyright Officer, which means I deal with broader copyright and licensing issues across the university.

What is the purpose of digitisation?



The main purposes of digitisation are access and preservation. Making our collections accessible opens up new possibilities to digitally unite collections globally and break down physical barriers. It also preserves fragile and unique collections for future generations.

What is the Special Collections' strategy for digitalisation?

We are running a Mass Digitisation Scoping Project to understand the potential of collections and gathering data to understand; what material is in the public domain; if not in the public domain what is the copyright risk level; which collections would support research, learning, and teaching; and what could we digitise and present as a whole data set? For example, archival collections with places and names or collections that can be joined up with other collections globally. In addition to the mass digitisation scoping project, the Library is in the planning stages of the Digital Library Infrastructure Project, which is led by Claire Knowles, Associate Director Research and Digital Futures. This programme of work is over 5 years and will transform our digital infrastructure and enable Special Collections and Galleries to ensure content is preserved, findable, accessible, interoperable and reusable.

Over the past decade, digitisation services in the Library have grown from their origins as a Jisc project output evolved due to internal investment and support. The studio focuses on collections within Special Collections and Galleries and creates professional high-quality content that is preserved in our repositories and shared with the public when copyright permits.

"We have undertaken a lot of experimentation through the years with tools to enhancing searching and discovery. At

the heart of all the experimentation and work is supporting research, learning and teaching. Our end goal is to ensure that collections are 'research-ready' for people to be able to find and re-use content in new and exciting ways to create new research."

We have a couple of collections that are completely digitised. They are at the level that somebody could turn them into datasets. Our team is working with disability services: we provide more accessible content for people with disabilities. Our future licensing strategy will ensure people know what we have, what they can do with it, and what are the terms and conditions for their use.

What are the challenges of digitisation?

At the moment, we are running two libraries at the same time: the physical library and the digital one. We are getting more and more 'digitally-born' items. For those, digital preservation is a challenge.

Have you received feedback, especially since the pandemic on digitisation?

As a result of the pandemic, we have found that we can enable global research through different kits. In addition to the high-resolution preservation images we provide from our studio, people who could not travel were using access images. Our Research Support team used their phones to snap images or make videos that some researchers found useful.

What are your thoughts on the increased commercialisation of archives?

It depends on the contract and the negotiations, what each party is going to get out of it, and what terms and conditions you have. We have commercialised some of the collections through Adam Matthew Digital, with whom we are in a good partnership. We have gotten back many images of materials we would not have digitised otherwise. They have also given the metadata back that we can add to the catalogue for enhancement.

What are the legal limits of open archives?

There are certain grey areas and misunderstandings around copyright laws. The new '2039' rule takes all pre-1989 unpublished materials out of copyright if the author died before 1969.

Many researchers come to Leeds from around the world who are often not familiar with UK copyright law and are unaware that, for example, a four-hundred-years old manuscript is still in copyright until December 31 December 2039.

Do open access policies change the way to manage, access, and digitalise archives?

Post-Brexit, we have to follow a new guideline, potentially registering orphans, which are works in which one or more of the rights holders are unknown or cannot be found, which costs a lot of money. It is a lot of work for the library.

We follow due diligence, for example, when we look at the mass digitisation of theses. At some point, we are going to hit the orphan work wall. We probably will take a risk approach; it is likely a bit risky because people never expected some of their theses to be online. I can see that there will be some decades when it is going to be harder and other decades when it is going to be easier to navigate copyright laws.

What support do provide for teaching?

Students look at archival materials; they often realise that some manuscripts are physically very large. The scale and the physicality do not always translate to digital. Even if we use rulers, it is not the same.

We have a support team that does teaching sessions. For example, if a professor wants to do a transcription project with some students, we provide technical support for that. We also have a team, **Skills@Leeds**, who provides academic skills training.

We get a lot of questions from students about publishing their thesis. When you write your thesis, you have to think about clearing copyright material from the beginning. That is always in the guidance, and we tell people: make sure you think about copyright ahead of time.

Where to publish – for postgraduate researchers

"At the Special Collections, we do open research all the time, we just do not call it that way. Same with the FAIR principles: we probably call it something slightly different."

Open Research Case Studies – Careers with Research Consultant (OD&PL) with Ruth Winden

What is your job role at Careers with Research Consultant?

I support the creative development of our researchers on short-term contracts; they are often called early-career researchers. Some of the people I work with might be doing their first postdoctoral fellowship, and some the fifth. I help them develop their academic career path and consider alternatives because there are not as many academic positions as applicants. **At the University of Leeds, we support any career direction a researcher chooses.** We are saying any career path you choose that helps you to apply all the knowledge and expertise you gain here as a researcher, and you could make a difference in the world in many ways, and an academic career path is one of many.

I also work to implement the Concordat that the University of Leeds signed: this is an agreement in the sector you support the career development of researchers, and it gives obligations to the University what we do for our research leaders, the funders, and then also the researchers themselves. On top of that, I offer several sessions on training programmes for doctor training and ECRs.

"I want to normalise career conversations: in academia, there is still reticence around not being honest about my doubts about your career path."

Who is the core audience?

Initially, I worked with postdoctoral researchers and PGRs; now, we are opening up our programmes based on needs rather than career status. Some workshops I run are open to professional services staff and research technicians.

We have some academics come in the sessions and can benefit from this because we can all learn from each other. I love working with peers and cohorts of people and taking them through the process to find what works for them. For example, the Career Architect is an in-depth professional and personal development programme for people who don't want to stay in academia.

What does career development mean to you?

For me, career development means continuous learning, growing, and fulfilling your potential. It's taking time to think about where I see my career going or what I want to learn. It's an ongoing process and a shared responsibility of the researchers because it is their career, so they need to engage with it, but they also need support from the University.

That's why we did sign the Concordat and so for instance, which stipulates that every researcher has ten days of career development time per year. It's not professional but career development, so they can think and what opportunities are there: do I want some shadowing?; do I want to learn?; do I want to come on to the Career Architect workshop?

My job is to support researchers in their career development, but I am also a big believer in being responsible for your career; you need to think about your career yourself. My background is in the industry, so I bring a different perspective, and you will have some very proactive people. I want people to make the most of opportunities to drive their careers and fulfil their ambitions and aspirations, whatever that is. I can't do it for them, nor can they managers, nor can the University.

How did your career shift and develop?

My whole career has been about making the most of opportunities. I always think if you don't try, you don't get it, or if you don't ask, you don't get it, so from my early days, I grabbed opportunities, like the Erasmus grant to study at the University of Cambridge. I'm a big believer that when we reach out and engage with others, opportunities come to us; we create happenstance. It happened in my career: I moved to the UK. I got my first job for those qualities that I thought were my biggest shortcomings.

Then my circumstances changed, and I saw an attractive job as a project manager in careers working in an international context between business and academia. I just fell into a niche I hadn't thought about and loved it. That's been my passion since 1993, almost thirty years of helping people fulfil their potential. I also started my own business and relocated to Amsterdam. Then I moved back to the UK and worked in many different positions, including executive coaching. So, 50% of my career was in the industry and 50% in higher education. I'm always looking for innovation in doing things differently. We have so many fantastic global opportunities, tools, resources, and ways to manage your career that we didn't have that 20-30 years ago.

"I have compassion for our researchers because I think we couldn't live without them. The technicians, the postdocs are PhDs are the unsung heroes of academia; they do a lot of hard work. What I want to change is that the postdocs and PGRs realise their worth because they often have no sense of how good they are. If people are in a place where they feel safe, appreciated, and heard, they bring themselves in and do much better work, so it's a win for everyone."

At what stage people should start thinking about career development?

I think undergraduates are let off the hook a little bit. The first year is usually about settling into university life, but even then, you might want to start thinking about what is out there. When people come to the University, particularly those who choose to do a PhD, they need to think about their aspirations before they do that because it's so intensive: it's four years of your life, if not longer.

I work a lot with PGRs, and I'm always happy to see people in the first year of their PhD studies because that means they are thinking strategically about their research. When you compare that to people who come in at the end of the fourth year, they tend to panic, and that's not a good place to be. From time to time, you should think about what you are doing and what you are focusing on in the future.

How does career development relate to open research?

Open research is about making research accessible, with as few boundaries as possible, so that all research that people undertake and the results and the solutions are accessible. I think it comes in with the impact people want in their careers. I think it's a lot more satisfying for a researcher to do research, knowing it will be accessible to a much bigger audience and can be used in a broader context.

Are there any academic fields that are under-represented in CRC?

It's difficult to say because we have a much stronger continuity of contingency of STEM researchers at the University of Leeds. They engage more with us since there are just more of them. What I do see positively is a lot of interest comes from international researchers as well. I remember from my career and education when I came to the UK from Germany. The UK has quite an advanced system compared to other countries, and many international researchers use our services. The real challenge is how we engage with people – because everyone is incredibly busy –, so they know what's there and what they can do with their careers.

What skills should the next generations of academics focus on in developing their careers?

There is a shift in academia in what constitutes good research and what a good researcher does. Some of the questions I see at the forefront are: how we do research, how we develop ideas, and how we engage with the public. The emphasis is on interpersonal skills; I think expectations are rising. You have to have research skills, but you also have to have a great understanding of technology and digital tools. You also have to be good at data management skills, leadership and management, coaching, and collaboration; many are new expectations.

There is a shift in problem-solving collaboratively rather than competing in a downward spiral. Of course, open research plays a role in it; for example, it can give us some good answers about who the research outputs are.

What are the biggest challenges today in careers in academia and beyond?

One of the biggest challenges is how incredibly fast-changing things are. Often people don't even know what the world will bring to them in two- or three months. A big challenge for human beings as employees and as leaders is how we deal with the constant uncertainty of the world. We need emotionally intelligent leaders who are good at helping others through these transitions because it would be non-stop transitioning. I can't see any other way; the workplace is changing fast.

We also need resilience, self-belief, creativity, and courage. We need people who are in a space where they can come up with solutions and work collaboratively to solve those problems. That's also very exciting because we have people who can account for amazing solutions.

What are the current trends in CV writing? How did they change along with careers?

If you are looking at the academic system, there is a great shift right now from the standard academic CV that focuses on outputs and research grants to a new format we call a narrative

CV. The narrative CV is much more about you, your contributions to your field, and the impact of your work. It is about how you grow the next generation of researchers rather than how many publications you have in a journal and what the H index is. There are many debates about publication inequalities that shift to the narrative CV, and it's hard to say what it would look like in the future since many funders are exploring and testing things.

How widespread narrative CVs are?

We still have the traditional CV to apply for jobs; it is a culture change, and I don't know when exactly it will change. For example, the University of Cambridge is trialling the narrative CV as part of the application process. They will be reporting back soon, and all over the sector, we are waiting to see the results of the trials and pilot schemes to know what is working and what is not working. It forces all of us to think differently about our careers and assess people differently compared to how we did in the last forty to fifty years.

Dr Emma Spary, the Head of the Researcher Development and Culture Team at the University of Leeds, sits on a committee where they are developing the narrative CV. She has always been at the forefront of those developments. I am confident we will soon initiate some changes. There are many more to help in writing a good CV. The key points are about achievements, what difference you make, and brevity and showing people what is unique about you.

"In your CV, you have to be clear about who you are, what difference you can make, and what your approach and values are. You want to find that space where you can make valuable contributions, and I am passionate about helping people achieve that."

Open Research Case Studies - The Lifelong Learning Centre (LLC) with Helen Bowman and Rosa Mas Giralt

What does 'open research' mean to you?

Helen: In the 1990s and the early-2000s, it felt like there were moves to create storage spaces for research data and research outputs, but enhanced accessibility was not so much considered, and that idea of sharing research had always has been fairly narrow in terms of its dissemination. So, the moves to rectify this like making publications open access and making researchers' data more sharable and easier to use have become major drives in what constitutes 'open research'.

However, it's becoming more apparent that open research is about much more than that, covering other areas like opening up the learning process more, public engagement and fair and equitable engagement with research participants all geared towards making the entire research process more open and transparent. I know plenty of opportunities exist out there but I still feel ignorant.

Rosa: I became aware of key open research practices like open access when I was doing my PhD, particularly towards the end in 2010/11 when we were being encouraged and taught more about the benefits it posed. However, funding was a major issue back then where in most areas you, as the author, would have to conjure up the funds to make your work open access, which was obviously a major challenge when you are a PGR with limited funds.

I was well-aware of the debates surrounding the necessity for open access, particularly on institutional boundaries and barriers to accessing others' works. Also, like Helen, I have become increasingly aware of how expansive open research can be with loads of different practices, with a shared end goal being to make our research more inclusive and open for all to see.

For me, the participatory research practice is key here when it comes to my research. It's important to include all stakeholders in the decision-making process and development of the project to ensure openness from the design stage and to have positive outcomes for all.

The Lifelong Learning Centre (LLC)

The Lifelong Learning Centre is both a multi-disciplinary School running undergraduate courses, and a specialist service supporting mature and part-time learners across the University. We deliver courses that encourage and support student diversity, with a focus on students from under-represented groups or who don't have traditional qualifications. We also offer support to current and prospective mature, part-time and Foundation level students, and apprentices. This is done through offering one-to-one advice sessions, open days and subject events to help students decide their pathway into higher education

The LLC grew out of the School of Continuing Education, which was morphed into the Centre in 2005, after being around for approximately 50 years prior. The Centre's primary purpose is to raise opportunities for underrepresented groups who access a Russell Group institution, in this case the University of Leeds. We have a very strong history that goes back over 25 years of working with local communities in Leeds, with lots of partnerships with local education providers, voluntary groups, statutory sector groups, the City Council, the further education colleges - all with a view to engaging Leeds residents in low education participation areas in activities and conversations about educational opportunities.

We strive towards providing access to education here at the university and other education providers around the city through impartial advice and guidance; it's not simply about advertising ourselves and trying to attract people to come and do a typical degree course here. Our course and programme delivery are designed for our target groups. For instance, we run part-time degree courses in Learning and Teaching and Child and Family Studies for mature students who work in local education settings or children's centres and a part time degree in Business Management and Leadership.

Rosa is deputy programme manager for the Professional Studies Degree which is aimed at mature students and young students from widening participation backgrounds who might not otherwise consider entering the university. This course is interdisciplinary which allows students to take pathways in business, child and family studies, learning and teaching or creative writing as well as other opportunities presented by discovery modules across the University. Our mature learners are very much from local communities.

We also have extended degrees with 'foundation years' which are entry routes into degrees across the University for underrepresented groups and those who come from areas of low participation with widening participation criteria. The idea is students are given an opportunity to study with us and then progress into faculties. We also have a part-time foundation year which is aimed at mature students to again enter through a supported process working with the LLC and then progressing into a university faculty. Last, but not least, we also run apprenticeships; one that focuses on healthcare for Nursing Associates, that leads to registration with the Nursing and Midwifery Council and a Chartered Manager degree apprenticeship (CMDA) that is accredited by the CMI.

We do not have a research remit but many of the staff at the Centre do engage in research activity, through Leeds Institute for Teaching Excellence, their individual areas of scholarship, evaluation practices and the work we do to promote community engaged research with our students. For example, staff are working on projects focusing on class, looked after children, pedagogy and the evaluation of widening participation activities. The open research ethos invites us all to think about the research culture in an inclusive way and to recognise the contributions and expertise that 'non-research' focused staff bring to our collective culture. To make research accessible, the University needs to continue to develop recognition of the diverse contributions that all staff make to research.

Courtesy of the LLC

As part of their degrees, our students can work with local organisations that have existing research needs that we connect them with, or they may already work in organisations where they are able to develop research practice with ethical approval. In this way the Lifelong Learning Centre aims to develop an open research culture, with regular opportunities for students and staff to discuss research together in a research community. Working with community partners, sharing research briefings from student projects also promotes the sharing of research findings for practitioner use.

Project: Longitudinal study of mature students' experiences at the Lifelong Learning Centre

The project seeks to deepen understanding of the benefits of widening participation in Higher Education using case studies of LLC students. Specifically, it aims to identify the impacts of university study by considering students' personal and social outcomes before and during their studies and after graduation (such as academic and cognitive skills, attitudes and values, psychosocial benefits, and career, economic and quality of life outcomes).

The project started in 2016 and adopted a longitudinal qualitative approach that aimed to 'follow' participants across the trajectory of their studies, from pre-entry to one year post-graduation. Overall, the project recruited and retained 17 participants (12 female, 5 male, ranging from 20-56 years of age) – with the final interviews completed in 2022

Research methods included one semi-structured interview with each participant per year, and a life map activity completed in the first research encounter which was revisited in the last interview with each participant. Following the completion of collecting our data we did a thematic analysis of the interviews and life-map data. Temporal analysis was developed to draw on the longitudinal focus, following the students over a number of years to identify critical moments of transition and to capture a holistic understanding of individual trajectories. Preliminary findings have highlighted the wide range of benefits (beyond economic outcomes) that students experience, starting early on in their learning journeys. We are currently writing the final report and aim to disseminate our findings in Autumn 2023.

Courtesy of the LLC

What open research practices has the project used?

In 2015 our Impartial Advice and Guidance team identified the need to develop better understandings of the broader benefits of studying in Higher Education for mature students. With backing from the senior management of the Centre, they developed a proposal and galvanised a team of interested colleagues, including Rosa, to work on the project. This was practitioner led from the beginning and the research was developed collaboratively by a broad team with varied expertise, most of whom were not ‘researchers’. This aligns with an open research ethos that moves away from the traditional, hierarchical structures that focus on the funded model of an expert, principal investigator. However, this also means that the research has had to be entirely funded within the budgetary constraints of the Centre. This is double edged, as we have been able to work flexibly over time but we have not had the structured framework of responding to funder demands, which can help with meeting deadlines.

As part of our methodology we used 'life maps', a participant-centred visual diagramming technique where participants charted their journey into higher education. This is a tool that has been used in many disciplines, particularly in research trying to understand different life transitions, but had been less used in the areas we were exploring. We wrote a conference paper on the 'life map' methodology we have use in the project and this is open access (pp. 58-68). In this paper, we consider the usefulness of life maps in research on the experiences of mature students and widening participation in higher education with the aim of showcasing this method; hopefully other researchers can learn about our experience and apply these method/ideas to their own projects.

The whole idea of this project was providing spaces for people who are not often heard in higher education to talk about their experiences and reflect on their opportunities and challenges and try to improve educational accessibility. Aside from us writing-up and publishing the results of the study, we are thinking carefully about how we will constructively feedback what we have learned into the education curriculum and process. How do we connect with practitioners? How do work with applicants? How do we reach relevant communities with our work? These are key questions.

Formal education institutions, like universities, should be inclusive from start-to-finish for students; not just focus on getting them to attend in the first place. People from diverse backgrounds should feel welcomed and a part of the wider student community throughout their student lives. For example, some mature students feel isolated or uncomfortable surrounded by students who are fresh out of school/college and who have very different life experiences.

Other experiences with open research

Rosa: Methodologically, much of my research has been qualitative-orientated, particularly along participatory research lines. Currently, I am also the co-investigator for a large research project in collaboration with the University of Reading and other Universities in Spain, Sweden, and France. It focuses on transnational families and has adopted a participatory research approach involving partner community organisations and peer researchers.

Helen: Virtually all the work we do in the LLC involves some form of interdisciplinary and/or collaborative element. We're a small centre at Leeds and our work relies on us interacting, and collaborating, with key stakeholders inside and outside the university. With the longitudinal project the stakeholders have been the students we've interviewed, where the next steps are about engaging other stakeholders like local community organisations and partner institutions. We're also working with Transforming Access and Student Outcomes (TASO) at the moment, which is an evaluation arm of the Office for Students, to critically assess impacts of some of our work with small groups.

Courtesy of the LLC

Open Research Case Studies - The Public Engagement team at the University of Leeds with Alexa Ruppertsberg

What does ‘open research’ mean to you?

For me, it’s about making the research process transparent; from the start to the end. That includes the research development phase, the actual research and the dissemination phase. My own background is in experimental science and hence I think through that practice. E.g., when writing a paper, the method section should be so clear that somebody else, another peer, is able to repeat your experiment. The purpose is that one’s results are reproducible. Making one’s publications open access, including the data on which the results are based, so that there is the potential for the data to be used again by others and hence the data goes back into the research cycle.

Because UK universities and their research are largely funded by the taxpayer, we are accountable to taxpayers, not just academic peers. If one practices this transparency then one also helps people to trust the whole research process; it adds an ethical dimension to it. Open research also means to me making research relevant in society. Research –not just science - is part of our society and it needs to be accessible; from access to involvement. And by building trust, by being accountable, by making research relevant we serve our social responsibility that we have as a publicly-funded institution.

“These four elements: social responsibility, building trust, being accountable, and making research relevant are our four drivers for public engagement with research at Leeds.”

For me open research, engaged research and public engagement with research share the same values; which is encouraging as that means we can collaborate across these areas to increase the impact of research for society. Last but not least, open research is also be about opening up to other knowledge-holders when we conduct research. This is about valuing the knowledges of different contributors, which is addressed through the Research Culture team at Leeds here.

Collaboration across different disciplines is encouraged because we believe that we can solve a question or an issue better when different approaches are combined. A long-standing example for the inclusion of non-academic knowledge-holders in collaborations can be seen in health and social care research. It’s very succinctly summarised with: “No research about us without us!”, and for once this is the perspective of the beneficiaries of the research, not the academic perspective. If you think that through, we should see a more democratic way in how research is conducted among different collaborators or knowledge holders. For that to happen, I believe the power balance has to shift, which is a consequence of practicing open research.

What is the role of the Public Engagement team at the university?

The Public Engagement team at Leeds helps academics and researchers to start and develop their public engagement practice. We advise, we signpost, and we offer opportunities for development. We also actively seek out opportunities to further embed public engagement with research into processes and procedures, e.g., through the Engaged for Impact strategy. To create a community for engaged research, together with our colleagues from other services, we run one of the largest MS Teams at the University. The Engaged Research Team (ER team), not only provides a huge amount of resources for different stakeholder engagement, but also offers training and networking sessions throughout the year.

To develop academics and researchers' engagement practice, we run the Engagement Excellence Fellowship scheme, which is a tailored coaching and mentoring scheme for 6 fellows a year, and which has seen over 35 graduates. They are now leading public engagement in their schools and institutes, or have secured promotion at other institutions – often their proud engagement practice was the decisive advantage for them. To embed public engagement with research into processes, we were successful in including public engagement with research into academic promotion criteria. Since 2016 it has been used very constantly in 35% of promotion cases across all different grades (8, 9 and 10) and all three pathways (research, student education and academic leadership).

To embed public engagement with research into procedures, we review and provide feedback on research proposals and also offer funding to researchers to develop their research ideas together with non-academic knowledge holders. We are quite proud that 50% of research proposals where we had a hand in get funded!

To recognise excellent practice, we ran public engagement awards. As part of the broader Engaged for impact strategy, we have opened these awards to include other stakeholder engagement, so that we focus more on the purpose of engagement. We just celebrated the first Engaged for Impact Awards in July 2022 with five winners and runner ups, who now can use their prize money to continue their work.

Engaging with external stakeholders and the public

Before thinking about a particular external stakeholder, the first question needs to be about the purpose of that engagement. What do you want to achieve? The answer to that will hint at the stakeholder group or as we describe them the target demographic. For instance, if your research is about improving a wasteful production process, then a company currently using such a wasteful production process is more likely to be interested than the general public. There might be angles of the same work that are useful to inspire and hence are more likely to be of interest to an adult or family audience. Note, how the aim of the engagement has changed now: from improving efficiency to inspiration. Different aims, different demographics and most likely different modes of engagement!

This is where your alpha-skills kick in: how do you establish relationships and understanding, develop trust and mutual respect? All these are important to design and manage the engagement activities to facilitate collaboration. Working with other people is one of the most challenging tasks and it's often not at the forefront of academic skills training. The public engagement team helps researchers think through their ideas, and also to think about how they can further embed this engaged practice into their research.

Activities and Examples

Be Curious

"Be Curious is the University's annual research open event, which aims to showcase how research here at Leeds is making a world of difference to people's lives."

We started long ago with Be Curious which is an open event for the public in Leeds, and it's a platform that makes it easy for our academics to take part. The whole organisation and marketing is our task. This makes it easier for researchers to try something like that and learn from it, and then use that experience when writing a research proposal and grant application, as that builds their practice. We also have 'Be Curious With Us!', which are 2-min short video clips about a research topic or related activity that academics made during the pandemic to contribute to our then online Be Curious event.

Be Curious with Us!

'Be Curious With Us!' are 2-min short video clips about a research topic or related activity that academics made during the pandemic to contribute to our then online Be Curious event.

Be Curious LATES

These are adult-facing evening online events, where three academics or researchers and collaborators talk about their research for 10 minutes each. Because we live stream these events on YouTube, people have a chance to ask questions and engage more with the topic. This has proved extremely successful in terms of reach, as it goes around the world. We had

people from Colombia, from West Africa, from Australia join these events. This helps to open our research across the globe.

Please use the link below to access Be Curious LATES recorded sessions:
Be Curious LATES - YouTube

Be Curious: READ

This is a new venture, where we want to turn research topics into books for children. We are trying to inspire and raise aspirations early on at primary school age. We want to instil curiosity and critical thinking in children and young people, an interest in something, and books are a proven way to do that.

Please find a link to one of the books here.

Do you use social media as a tool for your work with public engagement?

Yes, we do. We have our own Twitter account (@UniLeedsEngage) and we have a YouTube Channel (@UniLeedsEngage). Twitter is a good tool to connect with academics, funders and relevant professionals in the Higher Education sector. It allows us to see what goes on in the sector and at the same time it gives us the opportunity to raise the profile of the research at Leeds to funders. Twitter is not the right tool to reach a general adult of family audiences. For that, we have used Facebook to run dedicated marketing campaigns for events, but lately we have seen a much better uptake by using an 'influencer'. YouTube is useful to host our digital content, from Be Curious LATES recordings, Be Curious With Us! short activity videos and CREATE research animations.

Tweet form UoL Public Engagement Twitter account

What kinds of feedback have you received?

For the campus Be Curious event in May 2022, our external evaluation surfaced a wonderful collection of feedback. Visiting children said things like “it was the best day of my life” and “I want to stay here the whole day”. They were so immersed in the activities and loved it. Our emphasis on giving visitors opportunities to make things and getting therefore deeper involved was extremely valued. Parents were amazed about the spectrum of activities and how great our researchers pitched explanations at the right level for them and kept the children engaged. Given that 50% of our visitors had no connection whatsoever with the university, this kind of feedback is so encouraging.

We continuously evaluate our LATES sessions, which only became part of our offer when people told us they wanted more of these. Having them online, which initially was due to the pandemic, allows people living further away, who struggle to leave their house or have a hearing impairment (the events are subtitled live) to take part in these events. By live-streaming them to YouTube they can also ask questions and take part in discussions. Over 60% of our audience for the LATES come from beyond West Yorkshire and we have reached far flung places, like India, Australia, Nigeria, Turkey, Columbia and the US.

Are there certain disciplines, schools or faculties that engage more with you and your team in public engagements than others?

Yes, there are. One could be tempted to say it depends on the school or the faculty. However, I think it's more a people thing. The right person at the right place at the right time can do wonders! I would say it's a bit easier for us within the STEM subjects (science, technology, engineering, mathematics). However that is not to say that within the BASH subjects (business, arts, social sciences and humanities) there is no public engagement. These disciplines have engaged research practices and call these by a different term, e.g., co-production, partnership working, or policy engagement.

What sort of obstacles and challenges have you encountered in trying to build public engagement, both from the people that you're trying to work with outside the university as well as within with researchers?

For external people, in our case mainly 'the public', the challenge is to make a university relevant to people who are not students or prospective students. It is important to build the understanding that a university is of relevance and benefit and very much part of a local community and society more widely without an expensive price tag.

Internally, we have people who are very driven and passionate about public engagement. Sometimes people feel however, that their efforts are not recognised or equally valued as are other forms of engagement like innovation or enterprise. I'm sure that with our new University Research and Innovation Strategy and the underpinning Engaged for Impact Strategy, we are on the right track to address this misperception. The recent Engaged for Impact Awards have recognised and highlighted the value that the university puts on these activities and wants more colleagues to do likewise.

How effective do you think you and your team have been in raising the awareness and the profile of public engagement at the university?

We have been very effective because institutionally supported public engagement with research started from a grass-roots level. We brought the conversation to the then Pro-Vice Chancellor Professor David Hogg in 2014. I was successful in getting RCUK funding, the University is a signatory of the Manifesto in 2015 and renewed it in 2018. We co-developed our first Public Engagement with research strategy in 2016 (passed by the Council) and set out on the long road to culture change.

We coached and mentored 35 Fellows through the Engagement Excellence who have won prizes for their engagement and continue with their leadership development in their schools and institutes. We made Be Curious, the annual research open day, a highly successful part of the University's calendar; we have developed new modes of engagement platforms

(LATES, books, and maker kits); our offer around proposal support pays dividends as 50% of proposals we are involved with get funded.

Also, public engagement is now explicitly mentioned in the Research and Innovation part of the University's 2020-2030 strategy, putting it centre-stage along with other forms of impact. In terms of external assessment of our work, the public and community engagement work at Leeds was rated in the top 10% of this country in the 2020 Knowledge Exchange Framework. We may be a small team, but unlike many other public engagement teams, we are on continuous contracts, further underlining the University's intent and value placed on us.

What are your present and future plans for Public Engagement?

Presently, we are expanding our portfolio of engagement 'products': the evening lecture sessions (LATES) are very successful with publics and researchers alike. We have published one children's book for the Bragg Centre for Material Sciences and we plan to add more books across the disciplines. Similarly, the maker kits, created by Professor Lorna Dougan for her research, is an idea that we believe has potential across the disciplines as making something with one's own hands forms not only an act of creativity, it also forms an opportunity for deeper learning.

Bringing the whole engaged research community together is one of the ways we want to help build a healthy research impact culture at Leeds; the Engaged Research MS team with its over 1100 members is reaching across disciplines, professional groups and career stages, further raising the profile of engaging people with research.

For the future, we want to expand our collaborations within and outside the university: work more closely with PGRs and support them in their engaged research practice; bring patient engagement and involvement into the 21st century; develop citizen science with colleagues from the Library, contribute to a positive research culture; develop impact evaluation practice and connect further with our local and global communities of publics.

Key links:

Public Engagement team at Leeds: https://ris.leeds.ac.uk/contacts/public-engagement/

Be Curious: https://www.leeds.ac.uk/becurious

Open Research Case Studies - the Consumer Data Research Centre with Emily Ennis

What does 'open research' mean to you?

Open research is about reproducibility. It is also about equality in terms of researchers having access to the same sort of data and methodologies. Last but not least it is about impact: the more open research is, the easier it is to effect real world change as a result.

My research background is in English Literature, which has a very different approach to open research. For example, accessing certain books or archives can be an issue, where in many cases there would be only one copy and in a certain location, and where I might have to travel just to access it. This might be where certain things cannot be made open or digitised because of copyright or intellectual property rights, or because of the age of the material being accessed. However, I felt there were so many hidden secrets to be found in these resources, and so in my professional career since then I've wanted to seize any opportunities to open up resources and make them accessible to as large an audience as possible.

The Consumer Data Research Centre (CDRC)

The ESRC Consumer Data Research Centre was established to lead academic engagement between industry and the social sciences, and utilise consumer data for academic research purposes. As part of that we create, supply and maintain data for a wide range of users – working with private and public data suppliers to ensure efficient, effective and safe use of data in social science. The Centre is led jointly by the University of Leeds and UCL with partners at the Universities of Liverpool and Oxford.

During the initial stages of our funding, CDRC channelled a lot of its resources into developing its data service: a secure repository designed to accrue commercially available data and make it available to researchers at any organisation, in a safe and secure way. CDRC also engaged in its own research projects with those data, but once the data service was established we were able to refocus our resources and now dedicate more to developing collaborative projects with partners and delivering our own impactful research using consumer data. So, we are no longer just about making data available, we are also about delivering research expertise in the field of consumer data.

Facilitating open and FAIR data (findable, attainable, interoperable and reusable)

A crucial remit/responsibility of ours is to ensure that data is used in an ethical way, and that research projects attached to CDRC are delivering 'data science for the public good', which has become an unofficial motto of ours. Part-and-parcel of that is accommodating researchers from across the UK who wish to access our data where, for example, they do not have access to the high level of data security available through CDRC and our parent institute the Leeds Institute for Data Analytics.

For example, we have 'safe rooms' in which researchers can access our most secure data. Many universities across the UK don not have such facilities, and so we have a data service system where such researchers can apply to have access to our data and infrastructure. In accessing the highest level of data, researchers must also pass safe researcher training (usually provided by the UK Data Service), in addition to demonstrating their research is ethical and for the public good. In addition to physical safe rooms.

We also have access to an online and virtual research environment called LASER (Leeds Analytics Secure Environment for Research). These are essentially online, secure safe-rooms for those who wish to access the data stored here but cannot physically come to us. Needless to say the importance and use of this service increased significantly during the pandemic.

Leeds Analytic Secure Environment for Research

What is your role in the CDRC?

I am the Research and Impact Manager, which was a new role created in November 2020, when I joined. The creation of this role reflects the transition CDRC has made into its own research organisation and underscores our commitment to delivering 'real world' impacts through our data research. As the Centre is funded by the ESRC, part of the UK Research and Innovation (UKRI), we are funded by public money and have a duty to achieve public good through public engagement and by broadening research and its impacts beyond the confines of the traditional academic setting.

A major feature of my role is therefore evaluating how well we are achieving our public good motto and how much real-world impact we have been able to deliver with our research. This means assessing levels of engagement, analysing feedback, and providing strategic insights for further impact and research opportunities, among other things.

This can often mean helping partner organisations realise impact too. For example, we have partnered with a number of supermarket retailers, to assess the effectiveness of in-store and online trials promoting healthy and more sustainable diets. This involves making our research expertise available to those partners in order to have an impact on the health and wellbeing of both consumers and the planet. I have been involved in managing those research projects and consolidating the impacts in the real world effected by those projects.

Another example of our work with partners relates to carbon footprint data. I recently coordinated a project in conjunction with Leeds City Council where the CDRC analysed food procurement data to provide the council with a baseline of their carbon footprint, to help them

work on sustainability goals in the coming years. The result of this project is a carbon footprint calculator, which we have now made freely available on our website.

Prior to taking on this role, I was based in the School of Media & Communication here at Leeds. In this role, I remember doing a 'hackathon' with Nick Sheppard from the Open Research team at the Library. This was a taster for me of how data and public engagement can be brought together to give academic research a public life. This further inspired me in open research, and led to me applying for and subsequently getting this role.

Winning the Open Research Culture & Impact Award

There were three main research culture themes/approaches we devised and adopted at the CDRC, which I believe helped us win recognition and the Open Research and Impact award: collaboration and engagement, infrastructure (to facilitate such), and output(s).
Collaboration and engagement:

At the CDRC we have what we call the 'ladder of engagement' model, which essentially highlights that there is no one type of engagement; there are different modes and forms, and you can enter the ladder at any point. For example, you may be working on a small or short-term project that acts as a proof of concept for something more expansive and longer-term, further along this ladder model. A significant amount of projects start off as pilot studies, so reflecting on the impact and public good, as well as the openness, of our research, can be useful to help expand them into larger, more engaged projects.

Infrastructure:

For us, 'infrastructure' means both physical infrastructure, such as our safe rooms and online data repository, as well as our personnel and expertise. Examples of the latter include our high level of data security, legal documents, data sharing agreements, non-disclosure agreements, things that have allowed cross-sectoral engagement and exchange. This infrastructure is vital in facilitating the opening-up of the research process, because areas like data security and sharing, and collaboration agreements are vital legal frameworks for engaging in data research.

We do a lot of work with retailers and supermarkets, for instance, and knowing we have these infrastructures in place has built confidence in those partner organisations. We have recently announced a master collaboration agreement with Asda, which we do not feel would have been possible without the robust legal and security mechanisms we have in place. In the first instance it helps foster trust and understanding between those based at the university and external organisations, allowing collaboration to be fostered.

Output(s):

While we have some 'traditional' academic outputs, such as book chapters and journal articles, the CDRC also has a variety of different output types that maximises its real-world impact. We have a few data products that we think really opened up research to the public. There is the earlier-mentioned carbon footprint calculator project we worked on with Leeds City Council (LCC). We started that project by looking at the food provided in local schools, and then we moved onto other food that they procure, for example, food procured for cafes and restaurants across the city. We provided research insights to LCC through this project, but also made the carbon calculator tool that we built available to the Council and the public for continued open access. As part of this project, we also developed an education game for children, called Planet Plates.

Planet Plates:

This digital game was designed for Key Stage 2 schoolchildren to play. It teaches them about the carbon footprint of their meals. We were able to do this by using the data we collected as part of the carbon calculator project, so the game was really about showing the kids the impact of their own meals, while also empowering them to make more sustainable choices by showing them different meal options in the game. Again, this reflects our commitment to work with communities and feed the data and findings back to them to have impact.

What was the feedback like from the awards committee?

The main thing that stood out to me from the feedback was about us ensuring best practice**.** A lot of what we do can be uncharted waters. We are engaging with data sharing across sectors, which can make some of our partners anxious. So devising means of both keeping that data secure and trying to open it up for researchers to use can be challenging; a lot of it is about working with those data providers individually to develop something that works for both of us, which we usually only know how to do by learning from what has worked in the past. But it has been interesting and exciting to see that a lot of our endeavours, especially secure virtual access through LASER, have been well-received.

Does the CDRC cover research/researchers from all the faculties?

Earth & Environment, Medicine & Healthcare, and the Business School are the main faculties that interact with us, as these are where our core researchers sit. But we also have research projects based in Engineering and the Social Sciences directly. We also know that data are not always numerical, and we handle lots of diverse types of data, which can mean we can work with researchers in lots of different disciplines.

We want people to do research in the public good so we try to engage as many researchers across many different disciplines as much as possible. We also strongly advocate for interdisciplinary research, which is good in itself in trying to develop cross-discipline relations. Overall, the way that researchers engage with us has been very positive. Most of them see the value in open research, like putting their code on GitHub or pursuing open-access publications.

Ethics

As you can imagine ethics is a something we are always mindful of and have built our infrastructure around it. We deal with consumer data, data that is generated when people interact with goods or services. However, the data we analyse typically is not personally-identifiable, and is usually deliberately aggregated or anonymised by the data controller before it arrives in CDRC. Nonetheless, identity protection and data security are pivotal to how we operate. This is a major reason why we have safe-rooms and LASER: to keep that data secure/protected whilst at the same time trying to facilitate openness in terms of other researchers being able to come and access it.

What kinds of training do you offer?

There are essentially two levels to this. One, given the CDRC is a broader, nationwide initiative present at multiple universities, there are training programmes, knowledge exchanges, workshops etc. offered at the national level. Two, we have the institutional level, where here at Leeds we offer many different forms of training. For instance, there is the Data Analytics and Society Centre for Doctoral Training which offers training for PGRs. The CDRC offers funding and infrastructure support for their various programmes and activities.

With LIDA, we also run our Data Scientist Development Programme. It is a competitive, twelve-month intensive programme where data scientists are employed to lead two 6-month projects, working on real-world problems with real data across health, environment and society. These projects typically have an external partner attached, perhaps by providing the data for the project or by funding it. Our external partners come from the public, private, charitable and education sectors.

The data scientists are encouraged to make their research open wherever possible, but some projects are protected by data sharing agreements, and so it is an opportunity for the data scientists to understand how to deliver data science for public good within a defined legal framework. It is not a degree, studentship, or course: it is paid employment aimed at transferring degree experiences into data science experiences suited to industry. Our data scientists might be recent graduates, or they might be career changers, and we have been successful in recruiting diverse cohorts through positive action recruitment. We have found that this is opening up data science to a broader, and more diverse, group of applicants.

We also offer regular short-course training in how to use different software for data collection, storage, and access. For example, we run courses in Python, GIS and R Studio. These beginner and intermediate courses are suitable for academic and non-academic researchers. So, we may have industry colleagues who have limited knowledge of such processes and platforms. Maybe they are career changers or their role may have changed by becoming increasingly digital or data-driven over time. Our courses are CPD accredited, which makes them valuable to employers. Enrolment is usually financed by the attendee's company/organisation, but we have recently launched our Open Data Science bursary – funded by our prize money from the University's Research Culture award for Open Research and Impact – designed to improve the accessibility of these courses for people with protected characteristics and/or from a low-income household.

Digitalisation and open access

Digitalisation of material and data is part-and-parcel of our objective in making research open and FAIR. It is something we try to incorporate into much of our research. For example, we might develop algorithms for use across multiple datasets or upload codes to GitHub. This must be done all while maintaining data security and copyrights/legal imperatives. Overall, one of our core research aims is to make data and findings available to as many as possible and across as many appropriate formats as possible.

A data scientist on one of our recent Data Scientist Development Programme cohorts, worked with a local council to explore their Covid-19 response using specific and important research questions. The Local Data Spaces project delivered impact by changing how local authorities responded to mass testing and by informing UK Government on the demographics most vulnerable to COVID. The data underpinning this project have been made available as Geodata packs for all local authorities, and by publishing the dataset used in the project.

The only real obstacle towards opening up data completely are possible legal restrictions we may encounter. A lot of data we deal with is controlled by external organisations. While we work hard to make the data less sensitive (e.g. by aggregating or anonymising) there are some data that cannot be made available online, and must always be accessed through our safe rooms. There are also some data that we process, for example from retailers, that we have access to only for the duration of a project, and within strictly-defined parameters. These parameters might include only allowing individuals named in the data sharing agreement to access the data, and typically also stops us from naming publicly the types of data we receive.

This is especially important in our work with retailers as we are additionally limited by commercial sensitivity and competition laws.

As a way to make our research as open as possible without risking making sensitive code openly available, we have begun work to deliver a number of derived data products. Some of these tools may have used private data in their construction, but the data can no longer be seen or extracted from the tool as it exists in the public.

What are the present and future plans for the CDRC?

Our current funding runs through to 2024. Our main priorities are to continue to build our reputation for responsible and ethical data science, and to create more outputs and impact. One means to help with these has been a recent expansion of our team. For instance, we have three research data scientists who are free-floating within the team and can therefore be attached to different projects. They can adapt in an agile and responsive way to emerging research priorities because they are not attached to research grants/fellowships. Their purpose is to forward any and all research within CDRC.

We have also recently appointed a teaching fellow who is leading the short courses we run. They will be reviewing and consolidating our practices to create a solid programme for us to work with and to enhance what we know we do well. These are our CPD-accredited courses designed to help train people from external organisations who require data science skills and knowledge. Indeed, we have received CPD (Continuing Professional Development) accreditation for those courses, so part of the fellow's role will be to expand these even further.

Open Research Case Studies - the Research Development Concordat with Emma Spary

What do you of think when you hear 'open research'?

Enabling researchers to demonstrate the breadth of their knowledge, but isn't restricted to a single publication or journal article or output that they may have produced. It is a much more balanced approach. Open research, I think still has a long way to go in terms of the understanding what people think about open research. Most of them assume open access and they're not necessarily thinking about the wider range of publication outputs that they actually produce, create or develop as part of their research.

What is the Research Development Concordat?

The Concordat started out as a European initiative and was adopted by the UK back in 2010. It's primarily there to support the career development of postdoctoral researchers. So those on precarious fixed term contracts. It is called the Career Development Concordat, and as you can imagine a lot sits under career development, so thinking about whatever career they want to go into, the Concordat is there to support that.

It is an agreement between stakeholders to improve the employment and support for researchers and researcher careers in higher education in the UK. It sets out three clear principles of environment and culture, employment, and professional and career development. The principles are underpinned by obligations for the four key stakeholder groups, funders, institutions, researchers, and managers of researchers, to realise the aims of the concordat. The secretariat responsibility for the Concordat is held by Universities UK.

Commitments:

1. Maintain a steering group to oversee the implementation and review of the concordat with appropriate sector representation, including key stakeholder groups and other stakeholders.
2. Report annually to the relevant Minister and devolved administrations on key activities and progress in implementing the concordat.
3. Ensure that the concordat, and strategies for communication and implementation, remains relevant to the wider research system and in line with the other research-

related concordats, relevant legislation, frameworks or other relevant external influences.

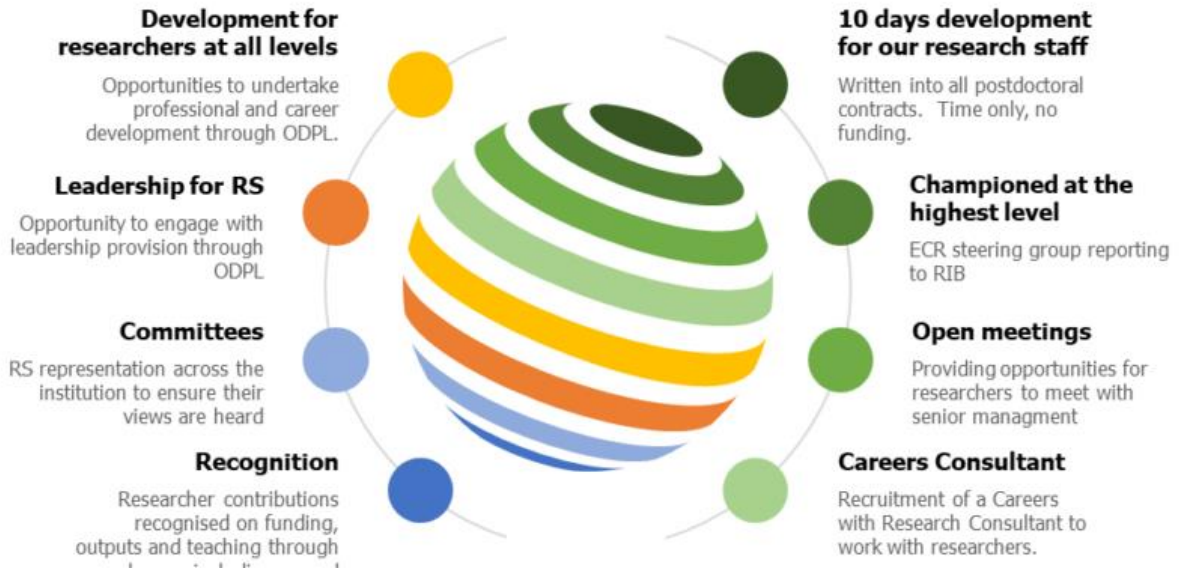
4. Publish and regularly update a UK implementation plan for the concordat, including a communications plan, to ensure a coherent and sustained approach by the sector.
5. Set up specific working groups on topics where there are systemic challenges that require the engagement of multiple stakeholders, for example in seeking ways to provide more security of employment for researchers, improving the research culture, and aligning the Concordat with other concordats and frameworks.
6. Work with relevant stakeholders to develop a consistent and robust way of tracking the careers of researchers to facilitate better understanding of career pathways, within and beyond academia, to inform Concordat related activities.
7. Maintain the Concordat as an online living document, reflecting changes in the research system and understanding of good practice.
8. Provide a platform to share practice and promote this for the benefit of the research community and its beneficiaries.
9. Commission and publish a major review of the implementation of the Concordat after three years.

[from the Concordat website: https://researcherdevelopmentconcordat.ac.uk/about/]

"The University of Leeds has a sustained institutional commitment to provide an excellent working environment, which enables our research staff to fulfil their potential. We have an ambitious action plan, developed in partnership with our researchers, which aims to have a positive impact on both our research staff and the institution."

There is a lot more emphasis on the institutions to do more and to do better, and to continually strive for improvement. So every year we have to publish our action plan. You can't sit back and say we've done it; it's not fixed, it's an ever-evolving plan. We work very closely with other universities and with the funders to make sure that they are aligned.

For example, one of the things we're working on at the moment is the UKRI's R4RI narrative CV and how we might use that. But I think principally for the Concordat, it puts the power in the hands of the researcher, so it gives them something to be able to work with: to say I am allowed to do career development, I'm encouraged to develop research independence, I have rights as an employee at this institution, and I can expect to have a supportive, inclusive environment in which to work.



What is your role in the Concordat?

I am responsible for it on an institutional level, so I have to create the action plan, make sure that my team and associated teams (e.g. the Library, Research and Innovation Service, HR, Secretariat) are all aligned to support it. So, we create an action plan, resource it with the appropriate people. Then we have to monitor its progress, evaluate its success, and do the annual governance. If it's got 'Concordat' on it, it normally comes in my direction.

What has researcher engagement with the Concordat been like?

In terms of researchers engaging with it, it is a bit hit-and-miss. The one thing we have had quite a lot of traction with is the 10 days development. As part of the Concordat, every single researcher gets 10 days development. Now a lot of them think that means sitting in a workshop and we are doing an awful lot of work to show them that actually a lot of their development comes from doing their job and getting new experiences and being able to try new things. I think awareness is high for this because it's something that HR mentions in their contract.

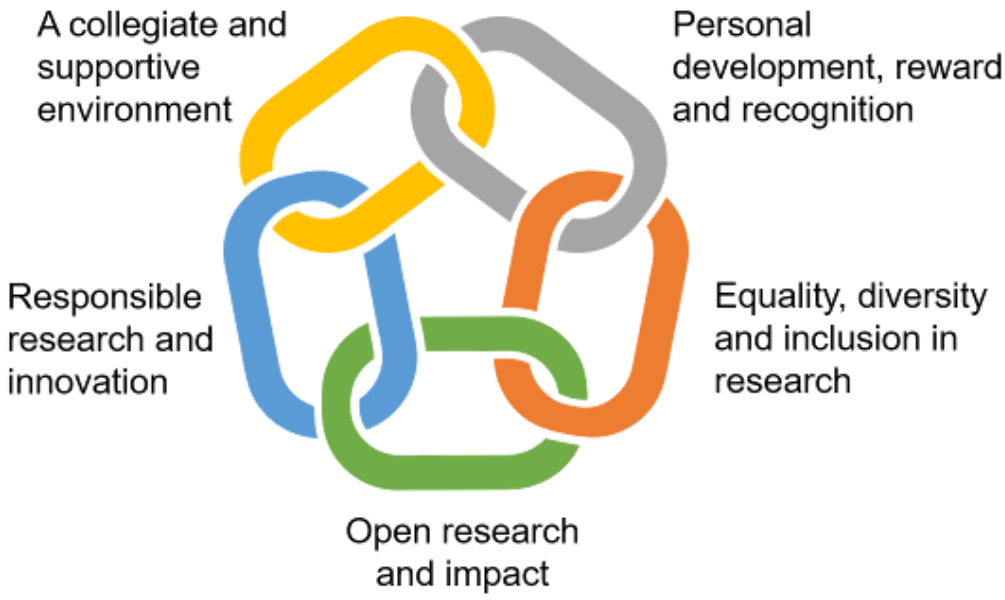
We run a lot of events. We have a researcher development MS Team where we've tried to add all our researchers, and they get regular updates on the work we're doing. We are also going to be creating a new action plan ready for March next year and that will be co-created with our researchers, so again it's another way to get them to think about the Concordat and how it can work for them.

In terms of the disciplinary context when it comes to engagement we have more involvement from those based in STEM subjects, compared to humanities for instance. This is mainly because the big funders that supported this first were Engineering & Physical Sciences Research Council (EPSRC) and the Biotechnology & Biological Sciences Research Council (BBSRC), and they were the ones that really were leading the way with the Concordat.

It also very much depends on who is at the head of those schools, departments and faculties, and how well they've engaged with it. So, for example, if you take Engineering, we've got Oliver Harlen who is a big champion and sits on our steering group, which is really active in this space. We've also got Alan Haywood in Environment who has been championing this and I think that really does count, because if you've got that support that filters it down and builds it into faculty and school plans it's much better received.

I do still get a lot of research leaders coming to me saying "you're telling my postdoc they've got 10 days out of research, who's paying for that?". So, it does help when the funders have said they support it, and as a good research leader, you have an obligation to do more than research; you have an obligation to develop your research team. That is what the Concordat is there to help you do.

I think there has also been a lot of confusion over whose responsibility it is. You will get a lot of new fellowship holders, new principal investigators who are really hot on these development areas and ideas the Concordat is trying to encourage. Then, you've got some people who are maybe a little bit further down the line in their research career who won't have come across this or think it's something new and additional that they have to do. So, what we're trying to show is that actually institutionally there's a lot of support for it. We're not expecting them to do it all; just point their researchers in the right direction and encourage their researchers to engage with it.



What kind of programmes, training, workshops, initiatives, etc. have you developed and offered as part of the Concordat?

Research skills

We have tried to get a nice mix because with an institution of this size career development is pretty wide. You'll have those who want the research skills, as they want to get an academic career. For them, we have support for fellowships, for example, we help people to write their

fellowship applications. We also help them to determine whether they are at the right stage to apply for a fellowship. We run some sessions around looking at where they are now and what would make them competitive for a funding application.

Research leadership

We then cover research leadership, which is what sort of research lead you are you going to be. Do you know what your leadership style is? For example, how are you going to be able to create a diverse team around you? Because what we tend to find, and try to discourage, is when you're hiring people you want to hire someone who's just like you because you think that's going to be the great way to work, and you're going to work perfectly. Actually, we find it can be a recipe for disaster because what you need is to bring new ideas and new ways of thinking into your team.

Supervision

We've then got a whole range of training and support around supervision, supervising our postgraduate researchers, so making use of sector-wide frameworks like the UK Council for Graduate Education.

Research impact

We support research impact, where we think about 'impact' in all its forms. And this is where Ged Hall and I overlap a lot, and he does an awful lot around the responsible metrics and open research groups because impact is not the end product, impact is everything that comes from your research idea. He would love people to think about impact before they do the proposal, not just think about it once they've got the money. We therefore do a lot around awareness of impact and the different types of impact and how you can build that in. And we have longitudinal programs that help people to realise that impact and make it happen.

Career Development Strand

We have the Career Development Strand, which is very much around getting the next position. So, we have a career architect, which is our flagship programme for people who want to move beyond a postdoctoral research role. They might want to stay at the university but move into a research support role, for example, or they might want to transition out into industry or another sector.

Career accelerator

Then we've got the career accelerator, designed for those who need a slightly quicker career development track. We often find people leave it to the last minute and think "oh hell, I've only got 3 months left on my contract, I need to find something else", so we've got career accelerator and that will also support people going for lectureships.

Boost

And then we've got Boost, which is our year-long career development programme open to anybody that is doing or supporting research, and there we offer two or three sessions a month based on various different aspects of career development. So, it could be creating a CV, thinking about a career portfolio, how to use LinkedIn for your career, right the way through to battling Imposter Syndrome.

The Research Culture Awards

The Research Culture Awards recognise that improving our research culture is a complex, challenging process, built on collaboration and experimentation. Engagement with research culture activities can take many forms and involve many different stakeholders. We want to celebrate all those involved in contributing to research success, on any size or scale. By focussing on the shared challenges, solutions, and innovative approaches, we want to inspire sustained commitments resulting in genuine, lasting organisational change.

The Research Culture Awards come under a strand of the Concordat around reward and recognition. We got funding from Research England for them. Disappointingly, we didn't get as many applications from postdoctoral researchers as we were hoping; we got more from postgraduate researchers, actually, and that is something that we want to try and understand. Why did they not feel that they could put themselves forward for these awards? We got a lot from academics and professional services. Therefore, we're thinking about what the barriers might have been to postdocs going for this because we know there are a lot of very active postdocs who could have been up for an award. They are doing some great work in their school or their research group.

I do think the awards were good. They did what we needed them to do: they raised the profile of our colleagues doing fantastic work, they raised the profile of research culture. I'm not sure it necessarily raised the profile of the Concordat directly, but going forward with our new concordat plan, we will have more recognition events like that.

What future plans do you have for the Concordat at Leeds?

One of the things we're doing at the moment is working on the research culture strategy and I think this is going to be key because it's a lovely umbrella to bring all of the support for research together. So, my team and the Library have always worked really collaboratively, but this just makes it more front and centre; it makes it a priority. We're already looking at ways to include more of the Library provision in the Concordat because, as I said talking about career development, there is a huge amount that is going to be around open research and also responsible research.

As you talk about research culture, you realise that whilst there might be five different themes here at Leeds, the overlap between them is huge. So, if you want to be a good research leader you have to be thinking about open research; how to make your research available, how to make it really open and transparent under that responsible part. But you also have to be thinking more creatively about what type of outputs you want to be producing and how you want to make those available. For me personally, going forward with the action plan, I want to be working more with Nick Sheppard in championing the open research lunches that he has and maybe getting more postdocs to engage with those, or actually be part of delivering them.

I also want to be opening up access to things like Octopus, a new platform for preprinting which launched in June, 2022. I know Library colleagues have embraced it, but I don't think the wider research community has yet. Therefore, there is a huge amount of work that we can do to push and promote that.

At the end of the day for me it is about challenging the traditional way of doing research. We may have people clinging to the old, rather closed-off ways because it's what they know and it feels safe, but the way we will publish in papers and have so much emphasis on journal impact factor - that for me as long gone and I want to equip researchers with the skills and confidence to be able to engage in open research, and to remove those barriers. So, if it is not seen as the thing to do in your group, show that you can challenge it and you do have the power to do things differently.