

TIME	SPEAKER	AUDIO
0:00:01.4	Sierra Williams	Right, I believe we are live. Hello and welcome to jobs.ac.uk's Google Plus Hangout. Today's hangout is all on Research Impact and Public Engagement for Career Success. My name is Sierra Williams. I'm the Managing Editor of the London School of Economics Impact Log, which alongside our research into how
0:00:28.7		social science has made an impact in government, in civil society, in business sectors. And it's also to encourage discussion and debate, over how research impact can be understood, and also to highlight best practices and case studies. So we found that the nature of impact throughout the research process is much more than writing a short paragraph at the end of a grant application, saying why
0:00:58.4		your work is important, and maybe a list of how many people attended the conference. The impact of one's research is actually filtering into a wide range of research activities, from the co-creation of research questions to dissemination of findings, via Open Access articles and blogs, to using social media to boost public profile and visibility of research.
0:01:26.5		So obviously there's a lot here for our illustrious panel to discuss. But really all the themes that we'll be covering in today's session will be about how individuals and universities can develop impactful research profiles; whether that's through broad public engagement projects or isolated social media interactions. So we'll also be looking at how these outward-facing activities can be measured and also how they're assessed
0:01:55.6		through a valuation framework, like in the UK the Research Excellent Framework, but also by tenure and promotion committees more generally around the world. So impact and public engagement are, for many academics, intrinsically worthwhile and that has been something we've been doing for years. But it's also clear that in these times of austerity and

		the pushes towards more market-driven higher
0:02:25.3		education, there's also been a push by funders on getting a return on their research investment. So being able to communicate in impact is becoming increasingly important for career success. So our panel today will be able to definitely shed some light on the ins and outs of how researchers are thinking about these things, and what researchers should be considering further. So speaking of our panel, they've been very
0:02:55.0		patient here. I'm going to have them each introduce themselves and then we'll get into it. Ann, do you want to start?
0:03:03.1	Ann Grand	Hi, hello. I'm Ann Grand and I have two jobs. With the University of the West of England in Bristol, I'm a Research Fellow in Science Communication, where my role is all about working with fellow-researchers, specifically in the biological sciences in my case, to embed engagement throughout the research process, and to become responsible for their own engagement and practising engagement. I've just finished a project with the Open University, where I was a member
0:03:32.4		of the Catalyst for Public Engagement with Research, which was seeking to enable the Open University to become genuinely an open-research university, where the research process was open from beginning to end. So I'm really interested in specifically how we use digital tools to support engagement with research. But I'm not just about the
0:03:52.3		keyboards because I also look after the Network of Café Scientifique around the world, so I also have an interest in informal public engagement.
0:04:04.4	Sierra Williams	Great. Steve?
0:04:07.3	Steven Hill	Hi everyone. My name's Steven Hill. I'm Head of Research Policy at the Higher Education and Funding Council for England. So my responsibilities there include policy on

		research funding, and also policy on research assessment. So I'm actively involved at the moment in thinking about what the Research Excellence Framework will look like in the future. And within my responsibilities in HEFCE, I look after research impact in general, and
0:04:37.0		also public engagement with research as part of that broader impact agenda.
0:04:44.1	Sierra Williams	Great. Stacy?
0:04:47.5	Stacy Konkiel	Hello everyone. My name is Stacy Konkiel and I'm a Research Metrics Consultant with Altmetric, which basically means that I get paid to do a lot of research into research. It's systems of incentives in academia, how people measure and understand the impacts that they're having, and multiple impacts. We can talk more about that later. I previously worked for Impact Story, which is a non-profit working in this area that was founded by two of the leading thinkers,
0:05:16.0		in addition to Euan Adie, who is the founder of Altmetric. Impact Story is led by Heather Piwowar and Jason Priem; two brilliant minds that I was very happy to work with. Before working in the Altmetric's business area, I guess, I was a librarian at Indiana University and the University of
0:05:35.8		Massachusetts, here in the US. I've always been interested in all sorts of questions related to scholarly communication.
0:05:44.9	Sierra Williams	Good. And Charlotte?
0:05:47.3	Charlotte Mathieson	Hi, I'm Charlotte Mathieson and I'm a Research Fellow at the Institute of Advanced Study at the University of Warwick. In my research, I work on Victorian literature and I've been involved in a number of public engagement projects myself. I'm especially interested in using digital media to stimulate public engagement. In my job I also work on supporting Early Career Researchers on their career development

		through the IAS. This involves issues of impact, the REF, the job markets, and all of these things and the ways in which they can help accelerate
0:06:16.3		their careers in those ways.
0:06:19.7	Sierra Williams	Great. So we have a bunch of questions that have already come in via registration and the jobs Q # as well, so I'll start with some of those. But if you're watching live, you can send in your questions via the panel on the right-hand side of the screen there. You'll only be able to ask a question if you're signed into Google Plus, but if you see that someone's asked a similar question,
0:06:48.0		and you want that one answered, you can vote it up on the list by clicking on it. If you're not on Google Plus, you can tweet @jobsacuk, but you must use the hashtag jobsQ. So feel free to keep those questions coming in and we can keep the conversation flowing from there. I'd like to start with a question for Ann, who has really done some stellar research into public engagement.
0:07:17.9		So Ann, can we dig into these definitions? What is research impact, and what are the differences between that and public engagement? Where are some of the overlaps as well?
0:07:35.0	Ann Grand	I think it's a particularly interesting question, especially in the UK, and Steven will be able to talk a little bit more about this in terms of that if we're putting the words 'Research Impact' in quotes together. But I think that the basic point that I would make is we all want our research to have an impact. We all want people to know about what we're doing. We want people to share in what we're doing. So I think we all want to have some kind of effect; make some kind of change in our society. I think putting the word 'Research Impact',
0:08:05.0		particularly with in the UK with the REF, simply extends that desire in some ways to have the benefits of the economy, to culture, to society of whatever. I think where that changes slightly with public engagement is that public engagement is about much more than that. It's

		about people becoming engaged with research, and researchers can interact with people in all kinds of ways, and all kinds of stakeholders. For me, I think the important thing
0:08:34.5		is that that can happen over all the stages of research, from the posing of the research question to the production or to the co-creation of the research, to the production of new knowledge, right the way through to dissemination. So I think engagement is about much more than impact, but I think there the relationship has come in is that public engagement can be the engine, as Watermay puts it, that frames and motivates impact.
0:09:03.8		So they have a relationship but they're not quite the same thing.
0:09:10.1	Sierra Williams	Steven, maybe you'd like to way in as well on that question. I know finders have definitely stepped up their game in terms of recognising the impact of research. Can you share how HEFCE understand impact, and maybe also highlight some of those differences between subject areas?
0:09:33.5	Steven Hill	So I'd agree entirely with that Ann said about impact being very broad and being really about the benefits that brings outside of the Academy, the benefits that are brought to wider society. Public engagement is part of that and other sorts of engagement; engagement with businesses, engagement with civil society groups, engagement with government, and other policy-makers
0:10:03.2		are all part of that broad impact agenda. If we're talking about impact and public engagement, I kind of see a Venn diagram, where there is an overlap between impact and public engagement, but not all impact depends on public engagement, and not all public engagement necessarily is directly delivering impact. In terms of subject disciplines, and the differences,
0:10:32.9		I think there are clearly some areas of impact that are more suited to some disciplines than others, so impact on health you might expect to

		be quiet heavily-concentrated in medical research or associated disciplines. Impact on film and theatre, you might expect to be very concentrated in arts disciplines. Broadly speaking that's correct.
0:11:02.1		The research that we've been funding carried out by Digital Science and by Kings North London, to look at the impact case studies that were submitted to our last assessment exercise, shows that it's really much more complicated than that. So even though those broad principles align, there are surprising ways in which disciplines impact in areas of society where you wouldn't expect them to. And one of the most striking findings that comes out of that
0:11:31.6		research, as far as I'm concerned, is that many of the impacts that were submitted for assessment depend on research from really quite diverse disciplinary areas. It's the combination of knowledge and insight from different disciplines that often generate impact, and I think we see that very strongly in the REF impact case studies.
0:11:53.4	Sierra Williams	Just one follow-up question on that. What's the REF's relationship with public engagement? Was it a similar...? I know the REF was specifically looking at obviously specific outputs, but how did it account for public engagement, which tends to be a bit broader like we were discussing, rather than specific impact of specific research? Was there a way to sort of combine the two in that?
0:12:23.2	Steven Hill	Yes. So public engagement was a perfectly acceptable route to impact with the REF, and there are lots of impact case studies that were submitted that involved public engagement as part of the process. One thing that we were very clear about in the REF is that, as far as we and the funding bodies are concerned, impact is about achieving the outcomes in society. Merely disseminating research effectively,
0:12:52.9		important as that is, that isn't an outcome. In order to generate impact you need to have some sense of what difference that dissemination has made. So I think that's why I

		described impact to public engagement as being an overlapping Venn diagram. There is lots of really important, really valuable public engagement, where it's difficult to get evidence of the change or the difference that's been made in society as a result of it.
0:13:21.7		And that public engagement would be difficult to include in a REF impact case study. But equally, there are lots of examples where that benefit to society was extremely effectively demonstrated in the impact case studies.
0:13:37.6	Sierra Williams	Great. I think we should probably jump into some examples... concrete cases. I think that might help bring this discussion to life a bit. So can we just go around and share some successful examples of public engagement? Charlotte, do you want to start first?
0:13:56.4	Charlotte Mathieson	Yeah sure. I wanted to highlight an example that particularly used digital media, so I've looked at the Celebrating Dickens Project which was here at the University of Warwick in the Department of English, to celebrate the Dickens bi-centenary. What I thought it was a particularly good example of was it used a range of digital media across a web-platform in a mobile app, integrating blogs, audio podcasts, films, and interactive app. So it really showcases the way in which you can integrate multiple digital platforms
0:14:25.6		effectively. And also the way in which this project engaged a range of partners in the production of material, so not just the expertise of academics, but also authors, under-graduate students, Arts partners such as the museums and galleries. So really getting a diversity of perspectives and approaches, and I think that's important
0:14:45.6		in public engagement that it's not just all the researcher communicating outwards, but it's also thinking about embracing all those different perspectives as contributing as well.
0:14:58.3	Sierra Williams	Stacy, do you want to share one?

0:15:01.4	Stacy Konkiel	Sure. The example that comes immediately to mind is Doctor Charlotte Rowe who's a researcher with Brown University here in the States and also has an appointment at the University in Cape Town. She does HIV research in a kind of roundabout way. She actually looks at the public health effects and some of the psychological effects of parents who have HIV, what kind of effects that has on children who end up being caretakers, things like that.
0:15:30.3		She is... and this has been a research project that's been going on for a while now. She's fantastic at engaging the communities that she's working with and helping to design the questionnaires that she uses when she goes out and talks to families. Data collection that's beyond questionnaires and surveys, and many other kind of engagement in terms of working with local non-profits
0:16:00.0		that are specifically designed to help teenagers and tweens, I guess you could call them, in the Cape Town area, to help disseminate information about interventions that they could take to help with bettering their own mental health outcomes. Of course you don't put it that way to a group of teenagers, but they're great, the Rowe research team, at doing that sort of public engagement with the communities that they're trying to serve.
0:16:00.0	Sierra Williams	So is this digital? Or is it mostly analogue?
0:16:35.5	Stacy Konkiel	It's actually been a combination of the two, so they've got a really interesting set-up with how they use mobile technologies on mobile phones that they can buy at any mobile phone vendor, anywhere in South Africa. They use that for data collection, but then also for what I understand some means of engagement after the facts. So a lot of it is analogue; a lot of it is offline, but the public engagement activities that she's taken on... some of it is also online.
0:17:03.5	Sierra Williams	Ann, do you have one you'd like to share?

0:17:07.7	Ann Grand	Okay, well the example I have is quite a small example but it's a really interesting example of working with a specific stakeholder group, rather than a broad public. One of the projects that I worked with with the Open University was the Floodplain Meadows Partnership. Now that's quite a long-term long-lasting project, which is all about, as the title suggests, managing the many different varieties of the floodplain meadows around the UK. But the particular example that I'm
0:17:36.3		going to tweet the link to was a small impact part of that project where they looked at the impact that the advice that was coming out from the Floodplain Meadows Partnership was having on the work and practise of the managers of different floodplain meadows. So they worked with quite a small stakeholder community; the managers of the floodplain meadows,
0:17:55.3		and evaluated the impact that the advice that was coming from the main project was having on their practice. So they were able to look at changes in practice and differences that the advice made, which I think was quite an interesting... quite small-scale, but quite specific project. So that's quite a small one. But I think if you're interested in more general broad things then I would suggest going to somewhere like the Wellcome Trust, which has a database of lots and lots of
0:18:25.1		examples of public engagement projects. But as I say, I'm going to tweet the example of the Floodplain Meadows Partnership.
0:18:35.2	Sierra Williams	Steven?
0:18:36.8	Steven Hill	Yes, I'm going to cheat a bit with this question and not give a specific example but send you to a place where there are lots of great examples. So the thing I would recommend you look at is the website of the National Coordinating Centre of Public Engagement. Last year they ran a national competition and if you go on their website, and I'll tweet the link in a moment,

		then you can find videos that tell you about both the finalists
0:19:05.8		in a whole range of categories in that competition, and the overall winners and the ultimate overall winner of that national competition. Those videos give you a fantastic insight into what really great public engagement looks like. I think one of the key things that you take away from that is just how diverse great public engagement is. There's everything there, from a project that simulates
0:19:35.2		atomic interactions through dance; there's a project about archaeology and engaging local communities, deprived communities in archaeology projects. There are examples of getting patients with Alzheimer's involved in the research to investigate it and to do things to help their quality of life, and the list goes on. So there's a whole range of things there, and in fact the NCCP National Co-ordinated Centre website has
0:20:05.0		a whole host of other case studies of really great examples of public engagement. I'll tweet the link to the competition, which is a great starting point.
0:20:13.9	Sierra Williams	Great. Those answers really highlight the range of diversity of projects out there, co-ordinating with mass public specific community or really a very specific sort of group of stakeholders. So it will be interesting to hear... we've got a popular question about when do these projects start? When should researchers be thinking
0:20:43.8		about them? Do you figure out as you go along? Should you be thinking about it before you even start your project? Does someone want to jump in to answer that?
0:20:58.1	Ann Grand	I think it was probably implicit when I introduced myself, but I think you can't emphasise too highly for me that planning for public engagement and for impact should be embedded right throughout the process. You can't start thinking about it soon enough. Start thinking about it right at the beginning. Engagement isn't that frilly bit at the end; it's

		not the dissemination of the knowledge after that process is done.
0:21:27.5		It's about working with stakeholders, working with different communities right the way through your project. As I said earlier, it's about planning, question, knowledge production. To leave it to the end, to something you think about afterwards, inevitably reduces the value of the engagement and reduces the value of the impact that your engagement might have. So I think you can't start soon enough.
0:21:55.9	Charlotte Mathieson	It's important to think about it from the start and to think about impact as being something that's quite a reciprocal process, but also having some questions that you might want to ask of yourself at the start of a public engagement project. So who is this public that we're addressing? What's your public? Why are they going to be interested in what you have to say? So not just what are you going to get out of it; what are they going to get out of it? And I think asking those questions quite early on is
0:22:24.6		really important in having quite concrete aims and objectives that you want to head for, and in shaping the project in that way as well.
0:22:36.2	Sierra Williams	Stacy, does that not show of your understanding of... looking at the shared amount of data that you look at? Is that reflective there?
0:22:47.7	Stacy Konkiel	I absolutely agree with everything that Ann and Charlotte said. I think that when you're thinking about impact specifically, every project has potential for impact. Thinking about an example that I actually just learned about yesterday, this team of scientists won a prize because they spent their time massaging rats. This was the result of an unrelated study that they were doing to understand the research. They were doing research on
0:23:17.4		growth markers in animals, so as a side effect of this, some of the rats had not so great outcomes because they were being taken away from their mothers at a very early age. So the team of researchers would massage these rats in other

		to simulate the touch that the mother would have on the rats. The rats ended up having much better outcomes. What does this have to do with humans, you might ask? Well actually that research forms the basis
0:23:46.8		of interventions that folks are doing now to premature babies; the understanding of the importance of touch and the fact the premature babies especially are in need of it when they're born, in the hospital being cared for. So even the silliest... well it seems like pretty silly basic research like massaging rats or shrimps on treadmills, which was an example from here in the US that the Congress latched onto not too long ago, they really have the potential
0:24:16.1		for long-term impacts in terms of effects on society, public health, many other types of effects. So thinking about not only these questions that you ask at the beginning about who are the audiences that we're trying to engage, and what sort of an impact might my research have, but also how can you measure the effects of the dissemination of your research? If your communications plan is going off according to plan...
0:24:44.8		I think Altmetrics, which are for those who don't know, Altmetrics are metrics that you can gather from both the social web, so looking at things like Twitter and Facebook, but then also from anything else that can be measured online. So are citations to your work appearing in policy documents or patents and so on? Any by having that kind of feedback loop that is instantaneous to appear because of the nature of the web, it makes it a lot easier to understand.
0:25:14.5		If the public engagement plan, if the communications plan that you had set out is working as it's in progress and process, I'd definitely suggest that that also be part of any sort of impact or public engagement plan, because metrics themselves... not evidence when standing alone... they can be really valuable as signals that impacts might lie elsewhere. So if you know that you've been

		tweeted by
0:25:44.3		three hundred people, one of those might be a Nobel Laureate who you have an opportunity to make a connection with if you're following the conversation that's happening around your research online. Similarly, you can look at things like policy documents, patents which I mentioned before, to understand the actual impacts that your work is having in the real world. Not just are people talking about it online?
0:26:07.8	Sierra Williams	Great. I think that launches... Oh, sorry Steven.
0:26:11.2	Steven Hill	Yeah, I was just going to add something. I don't disagree with anything that anyone's said about planning and getting public engagement impact planning early in the process, but I'd also emphasise that people need to be alive to the serendipitous opportunities. Just because you haven't planned... you didn't think your research was going to be of interest to a particular group or a particular audience, and then later on you realise it is. Seize that opportunity and go for it
0:26:40.4		because that's often where really exciting things can happen.
0:26:45.5	Sierra Williams	Yeah, and I think going on that serendipity, that's one thing... the new digital experiments and digital platforms really bolster. So maybe we'll turn our attention to these digital channels. Charlotte, can you answer how digital channels can be leveraged? I know you've been involved heavily in blogging... big advocate for digital tools
0:27:14.9		in social media for Early Career Researchers. Can you elaborate on how to use digital channels?
0:27:23.2	Charlotte Mathieson	Yeah, of course. When we're talking about digital channels, I'm thinking of platforms such as blogs, online writing, audio and visual podcasts, maybe web apps, social media. They're an especially good way to get started on public engagement, for Early Career

		<p>Researchers. They're very accessible tools, particularly free. There's a lot of training available nowadays to get started as well. Blogging can be a really good gateway to thinking about the relevance of your work and how you might engage that audience. I think right from the start of the project,</p>
0:27:52.7		<p>think what you want to get out of it and why your audience are going to be interested. But if you want to leverage these tools for impact in particular, so it's distinct from public engagement, you've really got to have quite concrete aims and objectives. This is very important in the context of the REF because if you want it to count as a REF-able impact then we need that concrete evidence. So if you're thinking about measuring metrics, making use of digital analytics, engaging using in response so you can show how you changed that audience's thinking,</p>
0:28:21.9		<p>so thinking about ways in which you might stimulate conversation and interaction, as well as it just being a broadcast. So there's a difference between just using digital platforms for publicity and using them for public engagement. It's really important to keep that engagement in mind, if you really want to generate that impactful outcome from your digital use.</p>
0:28:43.7	Sierra Williams	<p>I think we should definitely spend some more time going back to Stacy's point about Altmetrics and how to measure these different activities. But before that, I'd like to bring in Steven a bit more on the Research Excellence Framework in the UK, as it's seen as such a big driver of research impact. So Steven, can I draw on your professional involvement? What counts</p>
0:29:13.7		<p>as impact? What should we be really looking at here for the current REF and the next REF as well?</p>
0:29:24.5	Steven Hill	<p>I guess the first thing I've say on that is that part of the answer to that question is not really for me, or for the other people who organise the REF, because ultimately it's the panel members</p>

		<p>who make judgments about things that are submitted to the exercise that decide what counts. They aren't some sort of dissident group that's separate from researchers; they are the same people that are doing the research, so if you want to know what</p>
0:29:53.7		<p>counts as a researcher, then you need to discuss with your peers what they think counts and come up with a view. In a sense, that's what does count in an exercise, like a REF that is led by the research community itself. But having said that, we impose a whole series of definitions around impact and public engagement, and what we're looking for, and those are all written down and consulted on and everyone gets a chance to impact. I've already</p>
0:30:22.8		<p>mentioned the relationship between public engagement and impact we're quite clear about, that you need to go beyond dissemination and measure change outside of academia that the public engagement has led to. So it's moving beyond dissemination and getting into the changing behaviours or the changing knowledge that people have, and things like that. In terms of the future of the REF,</p>
0:30:52.2		<p>then I think there are a few things we can say at this point, and lots of things that are still up for discussion. We carried out lots of evaluation of the input into the REF and some top level conclusion from that is the approach we took, based on submission of case studies and the evidence requirements that we made in those case studies and so on. Most of that has worked pretty well and it's likely that we'll carry that through to next time.</p>
0:31:22.2		<p>There's certainly no suggestion that we're going to completely change the way in which we assess impact. But there's lots of things... points of detail, if you like, that we're currently thinking about at the moment; the relationship between what's called in the jargon the 'underpinning research' in the REF case study, and how we can define that relationship. We're thinking about the extent to which cases that</p>

		have been submitted to the previous exercise can be submitted again, where there is additional
0:31:52.1		impact. That's a really important issue. And questions about how many case studies should be provided for a given size of department or unit. So all of those are live questions. We're talking to people about them at the moment and we'll be formally making proposals in the Autumn and consulting on them. That's the point that everyone will have their chance to say what they think about the way it has worked, and the way it will work in the future.
0:32:21.3		Just a sort of final comment on that... our aim in all of this is to give researchers the chance to showcase the very best impacts that they have. We're not in the game of trying to catch people out or trip people up. We want to make it easy for people to demonstrate the benefits that their research brings.
0:32:48.1	Sierra Williams	Great. I think while we're on this topic of evaluation, Helen Sandford has submitted a question that I think is very relevant. How do I evaluate whether my public engagement has led to research impact? I'll open up this question more widely. Any ideas?
0:33:13.3	Stacy Konkiel	That's like the sixty four thousand dollar question. It's a really difficult question to answer. In many ways, the things that are measurable aren't the things that are necessarily going to always point you towards whether or not your work has had an impact. You can look at things like policy documents, citations, patents, when you're talking about technology commercialisation or impact upon public policy. But a citation doesn't always equal
0:33:42.2		public impacts or any sort of public engagement for that matter. So it's really a matter of, I think, monitoring the conversations that are happening online around your research for sure. I think that's a really important way to go about that, but then another big part of that is working with your university administration to do the harder things; the things that aren't

		scalable for individual researchers, like public surveys... from what I understand
0:34:12.0		are one way that folks in the UK, when thinking about the HEFCE or the REF, they use to understand if the needle has moved at all on certain issues... if research that's been done at a university has had an impact. The folks at your universities, administrators specifically, who are handling a lot of the REFs submissions and who handle it for 2014 and are preparing for 2020, those are folks who are going to be able to really help you understand your options with
0:34:41.7		public engagement activities and how you can actually find evidence of those. So I'd say that the online stuff that's measurable is a part of it, but it's definitely the whole picture.
0:34:53.2	Ann Grand	I think it's really important to be very... as Charlotte mentioned earlier, to first of all have very clear aims and objectives for what you want your research... your engagement to achieve, and to be very clear, as Steven mentioned, about the audiences and the stakeholder groups that you're intending to work
0:35:12.1		with. So if you have clear aims and objectives, and you know which audiences, and you know what kind of impact you're aiming for – is it a social impact? Is it a change in understanding? Once you've set that framework up, it becomes much easier to gauge by evaluation; whether that's by survey or interview or whatever methods you are using to estimate your
0:35:41.4		impact. Setting out a clear frame makes it much easier to evaluate the impacts that you have had on people or on society or whatever.
0:35:53.8	Sierra Williams	Charlotte, I was wondering if you could give an early career researcher background to someone that's looking to evaluate public engagement. Is there an idea that Early Career Researchers are building these sorts of frameworks?
0:36:13.8	Charlotte Mathieson	Yeah, I think what's important, just building on what's been said, I think all of that is completely relevant. Also, if you do want to turn that

		public engagement into impact, just being really sure that you're talking to people and getting advice on that. So talking to Research Support Officers and Impact Officers if you have them, and making sure that right from the start you're measuring your outcomes in the right way, and that you're capturing the right data. Obviously that's important for everyone, but I think particularly for ECRs. There's nothing worse than getting to the end of the project
0:36:42.0		and realising that you haven't been collecting the right kind of data. So I think that's the only thing I would add in particular there, is just to make sure that you're aware of what you need to be capturing right from the start as well.
0:36:55.5	Steven Hill	Can I come in? Agreeing again with everything that's been said, also to think about looking outside of academia for some of the expertise on evaluating public engagements. Broadcasters for example, the BBC... huge expertise in evaluating the impact that their programming, both on radio and TV, has. I think that's very relevant to understanding
0:37:25.1		the impact of many social media channels, as well as broadcasting traditional broadcast channels. And also places like museums and science centres are really the leaders at understanding how to evaluate face-to-face events, activities and exhibitions, and things like that. There's a huge amount of expertise out there, both within and outside universities.
0:37:53.8		It's important to tap into that expertise as much as possible.
0:37:59.3	Sierra Williams	Great. So as we look to broaden higher education's understanding of impact, Stacy you've done some extensive work on impact channels and measurement. How can researchers look to build a solid evidence base, using Altmetrics open access etcetera?
0:38:24.0	Stacy Konkiel	I think that the first step for that is practising open research wherever possible, because that's going to help you increase the reach of work as this has more potential for unrealised impacts. So unrealised impacts, what exactly

		does that mean? Well if you've got an open access article, there's the opportunity for more attention that it might receive, which relates to the very basic issue of dissemination. You might have your research data re-used in areas that are outside of your domain expertise. So some interesting relationships
0:38:53.7		that are disciplinary relationships could pop up. Other experts in your field might re-use your software that you've created for a research project, and so on. I think that metrics, like I've been emphasising, they're not themselves evidence of impact, but they're signals for impacts that might exist elsewhere. The numbers really aren't as important as who's saying what about your research. So I'd say that one part of this equation is to use Altmetric services
0:39:22.0		like Altmetric.com. We have a free bookmarklet that you can download. If you download this bookmarklet and you look at your own research and use other altmetric services of course, like Impact Story and to a certain extent Plum Analytics, you can learn the attention that your research has been receiving online, and that might look like a bunch of tweets, a high altmetric score... we have a single number score that you can use to understand the volume of attention that you're receiving. That could be a paper
0:39:52.0		that's on Impact Story that's got a highly-discussed badge, and uses those as signals to read through the attention to learn who's saying what about your research. So has a Nobel Laureate blogged about your work and said positive things? You want to know the positive things, right? Are you being cited in policy documents, or are you being written about in places like the New York Times, the Financial Times, and so on. So I'd say that that is one way you can go about collecting evidence of impact, is using the
0:40:21.6		Altmetrics and these sorts of services to gather up the conversations online into one place, and using that to dig in deeper to find impact.

0:40:30.9	Sierra Williams	So I know some researchers are resisting the idea of metrics and this idea of a single number, reducing the complexity and the variety of a research output into a number. So what would you say to that kind of resistance?
0:40:54.1	Stacy Konkiel	I would say that it's completely understandable. The general impact factor is one single number indicator that's been abused for pretty much as long as it's been around. But it's been abused mostly because folks are mis-using it. We at Altmetric have created this single number indicator as a way to understand the volume of attention, like I mentioned, but we highly discourage people from using it... let's say you might put on your CV if you
0:41:23.9		wanted to install metrics on it. In the same way that we'd say do not put a journal impact factor on your CV, because if it doesn't tell you a lot in a nuance way about the actual impacts that your work is having, you shouldn't just put 'I've got an Altmetric score of three hundred and ninety two' because that also doesn't tell you a lot. Instead, you can break out the numbers of metrics that you've received in different ways and, more importantly, provide context for those metrics, like
0:41:52.8		I've gotten so many citations and policy documents, or citations as measured by Scopus, and here's how that relates to other papers that have been published in this year or this discipline. That's a much more nuanced and accurate way of representing impact. I'd say definitely steer clear of using that Altmetric score... any other single number of impact for evaluation purposes, but instead
0:42:22.6		use it as a signal to help you dig a little deeper into the attention that your work might be receiving online.
0:42:29.1	Sierra Williams	Ann, I was wondering if you could also elaborate on this idea of open science, and how that mixes with public engagement. For a lot of people, it's two separate concepts. I know you've worked on this as well.

0:42:47.5	Ann Grand	I have worked on it, yes. I think that open science started out as a philosophy, as a protocol, if you like. It's done for all kinds of very good reasons; not least because people feel that there is a duty to share, particularly if you're a publicly-funded researcher, the outputs of your research. The people who are paying for you
0:43:16.3		to do your research have some interest in the outputs of that research. So I think it is a philosophy, but I think the interesting thing about openness, as Stacy alluded to, is that it vastly opens up the potential audiences and the potential for people to become interested, and to interact directly with your research. If you are being open about your data, for example, then it allows people to potentially
0:43:46.0		re-purpose, re-use, review that data for themselves and to engage directly with the research, rather than with the researcher. So I think it's another route for public engagement, as much as anything else; one that's still in it's infancy, and maybe one that's not yet particularly susceptible to measurement, but could
0:44:15.7		nonetheless... if we're thinking in terms of CVs as Stacy came round to in the end of her comments just now... it's something very impactful to put on your CV that you are open, that your work can be accessed as such and such a place, so that people who are reviewing that CV can go and have a look directly at what you are doing. So while it might not have a metric, it opens up a quality of engagement that you wouldn't see in any other way.
0:44:44.9	Stacy Konkiel	Just a quick thought on that, I would absolutely agree. There's nothing quite like expert peer review or any sort of peer review, and being able to read for you and determine for yourself the quality or potentials for impact for a paper, or any other sort of research output.
0:45:04.4	Sierra Williams	Great. So we've talked about CVs now. I think we should really spend the last ten or so minutes talking about the career success part.

		Charlotte, for those looking to develop academic careers, how can researchers balance the more traditional requirements... we did mention impact factors and this idea of publisher peerage, with newer communications and impact responsibilities?
0:45:36.8	Charlotte Mathieson	Yeah, that's a really good question and one I get asked a lot when talking about digital media is where do I find the time to do this when I'm trying to publish? Especially for Early Career Researchers to get that first foot on the ladder. I think that if you're thinking about a good, all-round research profile, that should include time allocated for public engagement responsibilities. If you're on a funded project as an early career researcher, it's probably going to be a requirement of that project that you produce impact, so you need to allocate that into the time from the start of the project.
0:46:05.7		But even if you're not on a project yet, I would consider setting yourself even just half an hour a week, not very much at all, just to write yourself a blog post or start to establish some public engagement connections, and just start to build up that profile. It really doesn't have to take an awful lot of time in the beginning. I think I'd also just add to that that I feel that time spent on public engagement is never time wasted from your core research. It re-pays itself in the benefits that it brings. Just thinking about some of those benefits... public engagement can be
0:46:34.5		very intellectually refreshing. It can give you new ways to think about your project, it can produce new directions or research leads, and it gives you new skills, communication in writing and in public speaking, that will then feed back into your academic profile. So although public engagement does take time, I think if it's well-integrated into the work that you're doing, and you're starting to build up that experience, it's going to help to deliver better results in the long-term. Once you're then looking at your permanent job, that kind of
0:47:03.9		experience... we mentioned a little bit about

		signposting it on your CV, and I think as an early career researcher, even if you don't have very much experience, just putting a section on your CV that says 'Public Engagement' and that highlights a few of the key things that you've done, really starts to show your potential and your ambition, and that you're really going to be able to contribute in those areas once you're in a position. So it's definitely something that you should think about integrating into your research profile and into your CV, and then when you're going to jobs really think about how you're going to
0:47:33.3		continue that in the future.
0:47:35.8	Sierra Williams	Have other panel members come across examples of this on CVs? How should we be writing this in?
0:47:47.9	Ann Grand	I wholly agree with Charlotte said just then and I think, referring back to what I was saying just now, the beauty of open practice and the use of digital media is that they can very much become part of what you're doing. If you're writing a research diary, why not turn it into a blog post. You were going to do it anyway so you can get double value out of it. But I think it requires a little bit of a change from both sides; both people who are writing CVs and people who
0:48:17.9		are reading them. I've been advised a couple of times to not put blog posts on a CV. That doesn't make sense to me because they're about interactions; they're about engagement. So it's about people who are reading the CVs also becoming open and saying, "Oh yes. This is interesting evidence of engagement" so I think it requires changes from both sides.
0:48:42.3	Steven Hill	Yeah, can I come in there? I think there is evidence that that change on both sides is starting to happen, so there are more and more universities that have public engagement or impact in their promotions criteria, for example, or in their recruitment criteria when they're hiring staff. Now it's not universal and I wish there were more places that did that, but it's starting to become a key part of the

		academic career
0:49:12.0		that you have a responsibility for sharing your research widely outside of academia and delivering impact from it. It's not that that's something that you do as an add-on to what people talk about the core activities. It is a core activity. It is part of what it means to be a researcher today.
0:49:35.7	Stacy Konkiel	I would, to give some specific examples, so I think that a really good one in terms of showcasing blogging, Heather Piwowar, the co-founder of Impact Story. I think her CV is a little bit out of date by this point on her website, but she does showcase the fact that she is very engaged online in her CV. So I would encourage folks to check that out. In terms of demonstrating impact in a concrete way, looking at metrics which are a very popular topic nowadays
0:50:05.0		when we talk about impact and what to include on your CV to showcase it, Ethan White is a really good example, as is Steven Roberts at the University of Washington. Ethan is now at the University of Florida. I think he was at Utah State, and they both do a really great job, not only including metrics, but also putting them into context. I think that's an important part of showcasing any sort of metrics on your CV. I mentioned this before, but
0:50:34.6		you should always be using things like percentiles, whether they're comparing the number of citations that you've received to the average number of citations that have been received by other articles in that journal, or that have been published in that year in that subject area. Also looking at things like qualitative data; I think it's much more powerful to say that you were listed in the ninety eighth percentile of biology research. And then also look at things like this paper has been mentioned, bookmarked, or viewed in at least
0:51:04.4		forty-three countries, as according to web service Impact Story or web service Altmetric. That sort of showcasing of the kind of online engagement that you've got around your

		research internationally is a much more powerful thing to say, than to just list the number of citations on your CV, for example. I'd point to those specifically as ways that you can capture these sort of metrics and impact on your CV
0:51:33.6		when you want to use metrics, in a way that's a bit more nuanced. I think people appreciate that as well because you're being very honest about where you stand in relation to others in your field, which is of course something that people are always doing. They're always measuring their mental mind stick... their mind yard stick, excuse me. They're comparing you to other people that they have recognised for research in that field. So giving them better context,
0:52:03.1		concrete context as well, I think is really important.
0:52:06.8	Sierra Williams	I just want to... we haven't really talked on the risks of impact and we don't have much time, but there is a question that's rising up in likes at the moment that might help us delve into this a little bit. Is it a risk to blog about work before it's published? Maybe extending it beyond just blogging, but talking
0:52:35.8		about your work before it's published, and in communicating in these new ways. What are some of the risks we should be aware of that might affect career success as well, negatively? Anyone want to jump in?
0:52:57.8	Charlotte Mathieson	Again, it's something I get asked a lot. I think I would never talk about... never put findings or original results online before they'd been published; I'd be very cautious about that. I personally would only ever talk about the contexts of questions of my research, ideas generating rather than sharing actual data... that's going to vary what that data means between fields. But I think it's really important, especially at an early stage of your career, just to make sure that what you're putting out there is not going to compromise

0:53:27.5		those publications. I think what I always find is, because I'm writing for a different audience, I would never write things in the same way that I would for a published piece anyway. But yes, do bear in mind that you don't want to share results that are going to put your actual research outputs in a difficult position.
0:53:45.6	Sierra Williams	Now is that because specific journals will not publish your work? Is it because of scooping? What exactly is driving that risk?
0:53:56.5	Charlotte Mathieson	Yeah, in terms of publication you don't want to put something on your blog and then send it to a journal and it's already freely available in the public domain; why are they going to re-publish it? So you do want to make sure that that original material, or any book that you're going to be selling, that the original material is going to stay original until that book is published. But I think there is a huge amount that you can do with a publication that is not to do with that, and to deal with public engagement online. I certainly never really found it an issue that has restricted me.
0:54:25.4		It's just about re-shaping your contents and the way in which you approach those contents.
0:54:31.5	Steven Hill	Yeah, and it's about using your judgment. A long time ago, when I was an early career researcher, people presented results at conferences. You were always cautious and you used judgement about what results you would present and what results you wouldn't. Now things have changed a bit since then and we now have ways to reach... a conference presentation two or three decades ago reached a hundred people who were in the room. But now that
0:55:00.5		conference presentation can be tweeted and it can reach anyone in the world. Clearly if you blog or use social media, that has a potentially very large audience. But it all comes down to a question of judgment; what do you think is right to tell people about at any given moment? Obviously as an early career researcher, you have your own judgment, but also I think you

		need to discuss these things with other colleagues who have maybe got more experience at making
0:55:30.0		those judgments. But I don't think there is anything different about the social media channels that we now use, apart from the fact that they have the potential to reach very much larger audiences and to become permanent records.
0:55:46.0	Stacy Konkiel	I absolutely agree and I'd also point out that in terms of thinking about when weighing the potential risks, thinking about disciplinary norms as well. In some areas of biology and physics and maths, it's very common to put up a pre-print for your work, which is in some ways and always... just as with the potential for reaching a larger audience is just as great. If you're putting things onto archive or bio-archive
0:56:13.9		or other pre-print servers... in some fields that's absolutely accepted. You're free to submit to a pre-print server and have things openly available online and then go on to submit to a journal, to have it formally published. I'd say talking with colleagues absolutely, with what the norms are in your field if you're a student or an early career researcher, is a really good way to navigate that.
0:56:39.4	Sierra Williams	Great. Well we are quickly running out of time here, so I'm going to go round and ask each person in the panel a final thought. What's that one takeaway that you'd like the audience to take? Charlotte, you set off?
0:56:56.3	Charlotte Mathieson	Yeah. I think my one tip for any Career Researchers would be don't be put off in getting started on public engagement from a really early stage in your career. Start small; just think about the things you can do from a small basis. Think about digital channels as being particularly effective, and use that to build up and start to develop your public engagement experience right from that early stage.

0:57:20.0	Sierra Williams	Steven?
0:57:24.2	Steven Hill	Yes, I think my takeaway is that if you're wondering what you need to do about all this stuff, and then it's actually quite simple. Just do the very best research you can, and take whatever steps you can to disseminate it widely and understand the way in which you can be useful to people outside of the academic sphere.
0:57:46.8	Sierra Williams	Great. Stacy?
0:57:51.3	Stacy Konkiel	I would say... I would encourage folks to use all the tools at their disposal to understand and get a sense of that feedback loop to the success, or not the success, of your public engagement efforts. Things like that, using web analytics or metrics and things like that. Those sorts of signals will really help you understand where you're winning and where you can stand to improve.
0:58:17.6	Sierra Williams	Great. And finish with Ann?
0:58:21.3	Ann Grand	I think I would like to say remember that engagement is about receiving as much as transmitting, and that the value of engagement is as much in what you as the researcher will learn from the stakeholders and the audiences that you're working with, as in what you can tell people about the work that you're doing. Remember that it will have a value for you, as much as for anyone else.
0:58:46.5	Sierra Williams	Great. Well we'll end there, right on time. You can find careers advice articles, free e-books, and other resources on the jobs.ac.uk website, in their Careers Advice section. You can also find a background piece to the discussion, today written by the panel members here on the LSE Impact Log. There's lot of articles relevant to the topic,
0:59:13.8		so if you're watching on Google Plus or YouTube, then links will be posted below. I think panel members have been sharing links

		on the Twitter as well, so we'll look to re-tweet those also. The LSE Impact Blog has a reading list on using social media for research collaboration and public engagement that we've also shared on the jobsQ#. We'll look forward to linking in as well. If we weren't able to
0:59:43.5		answer your questions, very sorry, but we can engage further online. The recording of this hangout will be available shortly on the jobs.ac.uk website and on their YouTube channel, so if you want to re-cap on something, or share it with your network, please do. On behalf of jobs.ac.uk, I'd like to thank our panellists, Ann, Steven, Stacy, and Charlotte for their time today. Thank you so much. Many
1:00:13.3		thanks to everyone who participated in sending great questions to discuss, and we can reflect on this further. Thanks.

END OF TRANSCRIPT