



Centre for Science and Policy

How can the next REF do more to recognise and reward positive and inclusive research cultures?

Summary report of the discussion held on 21 February 2023

Jesus College, Cambridge

Prepared by Karan Bali (Policy Intern, CSaP)



Research England

Table of Contents

Introduction
Background3
Defining research culture
Specific themes6
General themes6
Measuring research culture
Problems with assigning indicators to research culture7
The distance travelled model7
The benefits of indicators
Improving research culture
Summary and next steps
Summary11
Next steps11

Introduction

In February 2023, <u>the Centre for Science and Policy (CSaP)</u>, University of Cambridge, organised a Policy Workshop in partnership with Research England. The workshop focused on how the next REF (Research Excellence Framework) can do more to recognise and reward positive and inclusive research cultures.

Research England is working with the other UK Higher Education (HE) Funding Bodies to develop plans for the next national research assessment exercise through the Future Research Assessment Programme. One of the changes being considered is to increase the emphasis in the assessment on rewarding and recognising positive and inclusive research cultures. This is likely to be a thread that runs through changes to the exercise and will include an expanded focus on research culture and equality, diversity, and inclusion within the environment element of the assessment.

The workshop brought together Research England representatives, academics, REF practitioners, research policy and culture leads from a range of UK universities and relevant experts.

The workshop addressed the following questions:

- What are the key elements of positive and inclusive research cultures that should be recognised?
- What key evidence is available on research culture that helps identify these elements?
- What are the qualitative and quantitative indicators of positive and inclusive research cultures?
- What are the potential negative unintended consequences of an increased focus on research culture in national assessment? And how can these unintended consequences be avoided or mitigated?

Background

REF is used to assess the excellence of research in UK higher education and has been conducted twice – in 2014 and 2021, respectively. It is undertaken by the four UK Higher

Education (HE) Funding Bodies: Research England, the Scottish Funding Council (SFC), the Higher Education Funding Council for Wales (HEFCW), and the Department for the Economy, Northern Ireland (DfE NI). In terms of the mechanism by which the quality of each Unit of Assessment (UOA) submission is assessed, this is broken down into three main areas:

- Outputs (60% of the total weighting) this refers to the quality of any pieces of research (journal articles, book chapters, exhibitions etc.) produced during the REF period.
- Impact (25% of the total weighting) this refers to the benefits that research delivers beyond academia in wider society. This part of the submission contains a minimum of two impact case studies.
- Environment (15% of the total weighting) this part of the assessment is focused on the 'the strategy, resources and infrastructure that support research and enables impact'.

Research England is currently working with the other three UK Higher Education (HE) Funding Bodies to develop the framework for next REF exercise, with the intention to publish initial decisions in June 2023. Participants noted that, in the past, the environment part of the REF submission has been the least satisfactory since it is very hard to measure rigorously and fairly. From the outset of the workshop, the magnitude and importance of REF were emphasised: REF was described as a powerful tool that does drive research practice and behaviours in HEIs. It was mentioned that once the REF assessment framework is published, it sends a signal to the sector. Therefore, it is crucial that what is included in REF is carefully thought through, both in terms of the intended and unintended consequences of any assessment criteria. It was stressed during the discussion that this is a once-in-a-decade opportunity for the research sector to help to shape REF and hence the direction of research practice in the UK. It is in this context that the discussion on research culture in the REF assessment was conducted.

The report is divided into three parts which follow the logical flow of the workshop discussion:

- How is research culture defined?
- How is research culture measured?
- What are the best ways to improve research culture?

Defining research culture

If the focus is on research culture and how it can be improved, then the first step is to define what research culture means. This is an especially tricky task since research culture can become a bit of a catch-all term – one participant recounted an anecdote of a colleague proposing to include the question of parking space in the agenda on research culture. It was highlighted that there is not much systematic evidence for what research culture is; however, there is a lot of opinion and lived experience which has not been brought together to create a formal definition. One of the participants noted that the trade-offs are also not fully understood: for instance, less pleasant aspects of research culture are present for historical reasons but can be perceived as being necessary to produce excellent research. An important question to address in connection to this is if the trade-offs are a real concern, or if they are simply a barrier to implementation. For the purposes of REF, it would be important to define and articulate key elements of research culture. It was also suggested that it could be helpful to develop a set of principles that underpin research culture: if research culture were defined by too large a range of components, REF will be in danger of driving the whole human resources strategy of an institution. The focus of REF should remain on research excellence; it was stressed that the primary goal of REF is allocating public money appropriately, and not shaping research culture, and so if REF tries to do too much then it may be difficult for it to be held accountable. Although it was agreed that there is no fixed definition of research culture — as it varies between disciplines and institutions — there are certain characteristics of research culture that could be identified and which are summarised below (split into specific themes that were discussed in detail, and more general themes that were not).

It was also stressed that research culture can be defined differently at the three levels of an institution: individuals, research groups and departments. One participant noted the transport system as a useful analogy: the system has to operate at the level of individuals, rail/bus companies and cities. Each of these levels has different needs, and therefore the definition of the system is altered. Perhaps the same applies to defining research culture at these different levels in institutions.

Specific themes

- Inclusivity who gets to do research, and who is accounted for under REF? It was noted that 46% more academics submitted at least one research output for REF 2021 versus REF 2014 (where the requirement was four outputs per person) (76 000 academics in 2021, 52 000 academics in 2014), and it was debated whether this was due to the growth of the sector, or the fact that more people were being included in REF. One participant noted that the move to a more inclusive REF and to a unit-level submission of outputs worked very well since it lowered the barrier for submission (researchers only needed to submit a minimum of one output) and encouraged people to work in a more collegial way. However, it was mentioned that despite this improvement, REF is still missing people who are on research active contracts. It is also important to take into consideration other members of staff who are not conducting research themselves but who contribute to the research culture, such as research administrators and those on teaching only contracts. REF should be striving to account for these 'missing categories' when considering the inclusivity of research culture.
- Precarity this is related to the research funding environment. Discussion arose over whether this aspect is in built to research culture due to the presence of researchers funded to work on fixed-term projects. One participant noted that the action research on research culture (ARRC) project, which involved conversations with industrial partners, emphasised that the fixed-term contract phenomenon is not unique to the world of academia and is very present in the industry sector. It was noted that it is possible to have fixed term contracts (so precarity in a sense) but without the *culture* of precarity in the institution. This indicated that precarity as an in-built part of research culture goes beyond the connection with short-term contracts.

General themes

- Integrity
- Diversity (including neurodiversity)
- Leadership
- Open science
- Career development

- Bullying and harassment
- Sustainability
- Teambuilding
- Training (particularly for mid-career researchers)

Although some definition of what research culture entails is important if REF is to try and assess its quality, participants agreed that a strict definition was not possible and probably not helpful either. Instead, the focus should be on providing a set of principles that underpin research culture with the end goal of encouraging and empowering people to feel that they can do research, and that there are no impediments to this aim.

Measuring research culture

The problems with assigning indicators to research culture

Key indicators of research culture that work in organisations, such as retention or recruitment rate, do not apply in academia because these measures often have no relevance to a positive research culture. Indeed, participants noted that research culture inclusion in REF could cover aspects of the knowledge exchange framework (KEF), and therefore that a positive research culture can foster spin-out companies. Additionally, any indicator used will inevitably become a metric which an institution may seek to maximise in their submission. This could lead to negative unintended consequences, such as increased competition between institutions, which may negatively impact research culture. It should be recognised that there are aspects of research culture that do not have indicators associated with them, and if REF just focuses on assessing what it can count, then it may neglect these. To this end, a distance travelled approach was suggested.

The distance travelled model

By taking inspiration from the teaching excellence framework (TEF), participants agreed that a good course of action would be to turn the question of how to define and measure research culture back onto the institution that is being evaluated. Therefore, rather than there being a canonical set of fixed indicators which do not take into account the type of institution being evaluated, there could be scope for the institution to define its own journey. That is, REF could ask institutions what they think is good research culture (this helps address the problem of defining research culture) and what they need to improve, and then assess whether they are making these improvements over time. This approach would reduce the tendency for competition between institutions, and therefore mitigate the risk of negative unintended consequences. However, as was found with a similar strategy employed by the Athena SWAN (Scientific Women's Academic Network) Charter, it is possible to encounter problems such as insufficient benchmarking associated with this distance travelled approach, as well as issues linked to self-evaluation. Furthermore, some participants raised a concern that an institution may adopt a 'this is my truth' approach, claiming that objective markers cannot be applied because of the uniqueness of the institution and its journey.

The benefits of indicators

On the other hand, some participants stated that there are some core indicators that can be used to measure research culture. These can be summarised below:

- Staff surveys these can be helpful although they lose their accuracy if they are linked to funding, and any self-evaluation assessment is wrought with issues related to grade inflation. Fifty institutions already use CEDARS (culture, employment and development in academic research survey) as a mode of evaluation, and so the REF could possible utilise this. However, it was flagged that not every university may have access to CEDARS.
- Protected time this is the amount of time researchers have available to do research, and thus this indicates whether researchers are overwhelmed by other activities such as teaching and admin.
- Open access what percentage of the research output is open access and thus does not form barriers to open collaboration?
- Bullying and harassment how confident are researchers that any complaint they make regarding bullying and harassment will be acted upon by the research institution?

It is also important to ask the question: How do we run REF? For instance, one participant expressed a view that carrying out visits to universities to conduct the environment part of the assessment may work better than collecting written submissions. Drawing on their international experience of being on a visiting panel in the Netherlands as part of their Strategic Evaluation Protocol (SEP), another participant agreed that visits would indeed be an effective way to figure out the research culture of an institution but are very labour intensive, so the question of practicality arises.

When it comes to measuring research culture, it could be tricky to balance the necessity to identify some quantitative indicators for assessing research culture and a distance travelled approach that allows the institution to define its own journey. By combining these two approaches, REF could potentially generate a method to assess and improve research culture. One participant also stressed the importance of finding indicators that speak to a variety of institutions to help enable progress.

Improving research culture

Since different ways of measuring research culture have their advantages and disadvantages, participants agreed that a combination of different methods could be a good model for progressing. This model is shown below in figure 1.

The first priority for including research culture as part of REF should be to disincetivise bad practices in research culture, and therefore it can act as a health and safety standards model where a baseline of research culture must be met (i.e. quantitative measures, such as 95% open access requirements or gender diversity in the professorship). Since there is no glory attached to meeting these standards, this could reduce the risk of unintended consequences. Furthermore, it was highlighted that it should be possible to find sufficient evidence that more diverse research teams produce better research outputs, and diversity could be another measure to include in assessing research culture.

Once this baseline has been met, there should also be a way to incentivise institutions to continually improve their research culture. This is where the distance travelled model comes in – UOAs or institutions can decide which areas of research culture are most important to them, and then provide a self evaluation of how they have been continually improving these areas. Including case studies could also help to drive forward improvement of research culture. It was noted that case studies have already proved helpful in the 'impact' part of the

REF submission. These case studies could be used both to show what worked well, and what did not, with an emphasis on sharing lessons learned.

It was pointed that sharing good practice is currently a weak point in the environment statements of REF submissions (compared to impact and output). Therefore, a focus on sharing good practice with other institutions and collaboration could also help contribute to improving research culture. An emphasis on this would also reduce the risk of unintended consequences that increase competition between institutions. This sharing of good practice is also important since newer institutions can learn from older institutions that may have more experience in implementing a positive research culture – an example was made of a new department such as nursing learning from a more established department such as philosophy.

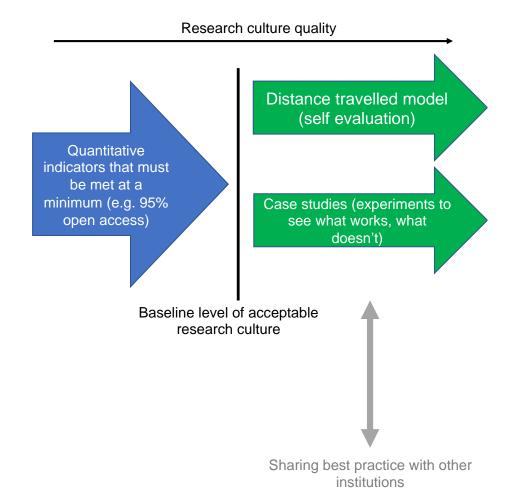


Figure 1. Schematic depicting a potential model for assessing research culture as part of

REF.

Summary and next steps

There is no easy answer to the following questions: what is research culture and how to measure it? However, it was agreed that some form of assessing research culture *must* be part of the next REF. Firstly, this is because there is momentum behind the idea, as indicated by preliminary surveys. Secondly, even though incorporating the research culture element into REF may be an imperfect way of improving research culture, it would still work better than if it was not acknowledged at all.

Summary

- Research culture varies between disciplines and institutions but can be defined by a few key themes such as inclusivity, precarity, and support for careers.
- Any attempt to measure research culture is fraught with the dangers of unintended consequences related to fostering competition between institutions and driving undesirable behaviours. However, there are some indicators that can be agreed on to provide reasonable measures of positive research culture.
- A model for assessing REF can therefore combine four aspects, as shown in figure 1. These are: (1) quantitative indicators that show a baseline level of positive research culture is being met; (2) a distance travelled approach whereby institutions self-evaluate their performance on aspects of research culture that they themselves deem important; (3) case studies used to assess what aspects of research culture work and which do not; (4) best practice sharing with other institutions so that research culture can be improved across UK institutions.
- It is important to realise that the focus needs to be on people, not products. In other words, the end goal of this exercise should be to ensure that researchers pursue a career *because of, not in spite of,* research culture.

Next steps

The following potential next steps were proposed by participants in the course of the discussion:

- Decide upon what the baseline level of acceptable research culture is what quantitative measures should be included in this baseline, and how should it be assessed.
- Decide upon how to best build this collaborative style of working between institutions. There may need to be a database for sharing good practice whereby institutions promote the positive aspects of their research cultures and upload this in some shareable format.
- Engage with stakeholders beyond academia (including Government) to get their view on how research culture should be included in the REF.