

DIALOGUE

Should academic success be redefined amidst the climate and environmental crisis? A dialogue between five UK geographers

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Abstract

The academic geographical community is well acquainted with the reality of the current climate and environmental crisis. As such, geographers, higher education institutions and geographical organisations arguably should take a greater lead in responding to this crisis. This raises concerns about how such responses fit into academics' 'core' job activities, especially given concern about escalating workloads. What mix of activities could or should constitute academic success? This article is based on a dialogue between five UK-based academic geographers spanning different academic career stages. Drawing on our personal and professional experiences, both in the United Kingdom and overseas, we present an edited version of an online dialogue that addresses three questions: (1) How do we define academic success in the context of the climate and environmental crisis? (2) Given the routine and, in some cases, escalating demands of our jobs, do we feel that we have the capacity to address whatever the appropriate measures of success may be? (3) Do we feel that the measures of success are appropriately valued by our colleagues and by modern university management procedures? Our collective reflections on the key points extracted from the dialogue will likely have resonance beyond the United Kingdom (and university) context. These points include: adjusting and adapting how we portray academic success for different audiences; contemplating broader definitions of academic success; considering where public engagement sits within the portfolio of academic responsibilities; deciding how to respond to multiple pressures; choosing how to prioritise different academic demands; and asking whether work to tackle the climate and environmental crisis is adequately valued. We provide some practical suggestions for redefining academic success that require consideration by the academic geographical community. Wider

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discussion and implementation should contribute to enhancing job satisfaction and career progression for individual geographers and strengthen academic geography as a discipline.

KEYWORDS

academic citizenship, administration, public engagement, research, teaching, universities

1 | INTRODUCTION

Over the last few decades, the academic geographical community has become increasingly aware of the fact that we are facing a climate and environmental crisis. Global mean air temperature in 2023 was 1.18°C above the pre-industrial average (National Oceanic and Atmospheric Administration, 2023), sea levels have risen ~20 cm since 1901 (Intergovernmental Panel on Climate Change, 2021; United Nations, 2024), and habitats and species continue to be lost at ever-increasing rates, with some reports suggesting that we are in the middle of a sixth mass extinction event (Barnosky et al., 2011; Cowie et al., 2022; Kolbert, 2014).

Academic geographers—herein defined broadly to mean anyone employed on a research and/or teaching contract, whether permanent or fixed term, in a university or research institute—have contributed to highlighting the multifaceted physical and social dimensions of the crisis. Contributions include generating research articles and books (e.g. Hulme, 2009; Maslin, 2021; Sultana, 2022; Taylor & O’Keefe, 2021), contributing to the establishment and running of dedicated journals (e.g. WIREs Climate Change), coordinating working groups (e.g. the Climate Change Research Group of the Royal Geographical Society) and organising relevant conferences and conference sessions (e.g. the ‘Climate Changed Geographies’ theme of the 2023 Royal Geographical Society and Institute of British Geographers (RGS-IBG) Annual Conference). Many contributions also have been made by geographers and geographical organisations through contributions to diverse teaching and outreach activities (e.g. AntarcticGlaciers.org, 2025; Climate Solutions, n.d.).

The need to address the climate and environmental crisis is just one of many intersecting pressures that influence the ‘core’ research, teaching and administration and academic citizenship activities undertaken by academic geographers (Figure 1). In recent years, for instance, higher education institutions have given greater consideration to addressing equality, diversity and inclusion (EDI) in student and staff recruitment and retention, decolonising the curriculum, improving environmental sustainability and developing approaches for non-academic engagement and impact (e.g. Clayton & Kumar, 2019; Hillier et al., 2019; Hopkins & Souch, 2023; Laing, 2021; Nxolo, 2017; Tooth & Viles, 2021). The COVID-19 pandemic also provided challenges to many long-established ways of thinking and practice, with changes having been made to the format and delivery of activities including lectures, fieldtrips and academic conferences (e.g. Gibson et al., 2021; Scerri et al., 2020). These intersecting pressures continue to be addressed in many other fora, and here we focus on geographical contributions to the climate and environmental crisis. At the 2023 RGS-IBG Annual Conference, for instance, wide-ranging discussions included consideration of how geographical perspectives can help with meeting net zero obligations at local, regional and national levels. But as the climate and environmental crisis has deepened—at the time of writing, 2024 is also shaping up to be one of the warmest years on record (The Guardian, 2024)—we argue that there is a need for individual geographers, higher education institutions and geographical organisations to take an even greater lead in responding to the crisis.

Given this context, and the multiple other challenges facing higher education institutions such as concern over escalating workloads and financial pressures, how do we reasonably prioritise addressing the climate and environmental crisis? What mix of activities could or should constitute academic success? Many challenges faced by early career academics in navigating the ‘academic ladder’ have been identified (Alderson et al., 2023), including the opacity with which we discuss and define success (Schillereff et al., 2023). Should we broaden our discussion beyond early career academics and consider how a need to address the specifics of the climate and environmental crisis impacts across a wider range of career stages? The aforementioned examples demonstrate how academic geographers are well placed to research and educate about the climate and environmental crisis, but to what extent are relevant activities embedded in professional recognition and academic career progression criteria?

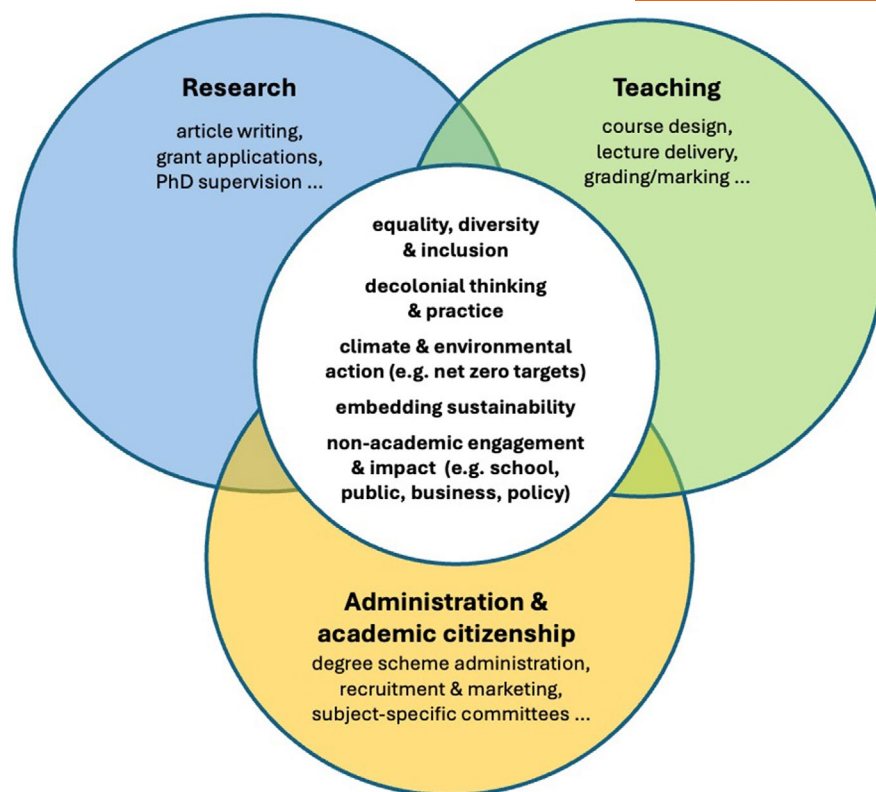


FIGURE 1 Academic geographers typically undertake a mixture of ‘core’ research, teaching, and administration and academic citizenship activities, some of which overlap. These ‘core’ activities are all influenced by various intersecting pressures (central bold text). Arguably, one of the key pressures is the need for individual geographers and institutions to take an even greater lead in responding to the climate and environmental crisis, such as helping to meet net zero targets.

To address these questions and stimulate wider debate, the five authors organised an online dialogue in March 2024 to share and discuss our thoughts and experiences. We regard ourselves as academic geographers by training, with specialist interests in physical geography and geomorphology. We range across career stages and are all employed at UK universities (Table 1). We also have varying degrees of employment experience or familiarity with the overseas academic geographical scene, so much of what follows is likely to have resonance beyond the UK context. Nevertheless, we recognise that we all have our own biases and experiential gaps and that others need to contribute different perspectives.

Our online dialogue explored three key questions: (1) How do we define academic success in the context of the climate and environmental crisis? (2) Given the ‘routine’ and in some cases escalating demands of our jobs (e.g. in teaching or administration), do we feel that we have the capacity to address whatever the more appropriate measures of success may be? (3) Do we feel that the measures of success are appropriately or adequately valued by our colleagues and by modern university management procedures (e.g. in probation, mentoring and promotion schemes)? We do not address in any depth issues associated with carbon footprinting and the wider sustainability of research and teaching activities, as these important issues have been well covered in other fora (e.g. Marc et al., 2024; Seuront et al., 2021; Williams & Love, 2022).

The following section is an edited version of the online dialogue, chaired by the lead author, recorded in Microsoft Teams and subsequently autotranscribed. The dialogue has been edited to correct errors in the autotranscribed text, to eliminate repetition or achieve greater brevity in expression and, in a few instances, to avoid identifying particular institutions, organisations, people or events. Our individual contributions are identified by our names, and footnotes and key references have been added to provide greater context where deemed necessary. We then present our collective reflections on the key points raised in our dialogue and our recommendations for action. We end by inviting the wider academic geographical community to contribute to the discussion.

TABLE 1 Summary career profiles of the authors.

Name	UK academic title	Years since PhD	Career profile
Erin Harvey	Postdoctoral Research Associate (PDRA)	2	Cardiff University, UK—Postgraduate Lecturer & Demonstrator (during PhD) Durham University, UK—PDRA
Daniel Schillereff	Senior Lecturer in Physical & Environmental Geography	9	University of Liverpool, UK—Graduate Teaching Assistant (during PhD) UK Centre for Ecology & Hydrology—PDRA King's College London, UK—Teaching Fellow King's College London, UK—Lecturer (research and teaching) King's College London, UK—Senior Lecturer (research and teaching)
Lucy Clarke	Senior Lecturer in Physical Geography	15	University of Exeter, UK—Occasional Lecturer (teaching) University of Exeter, UK—PDRA University of Dundee, UK—Lecturer (teaching) University of Hull, UK—PDRA University of Hull, UK—Temporary Lecturer British Antarctic Survey, UK—PDRA University of Gloucestershire, UK—Lecturer/ Senior Lecturer (research and teaching) Nottingham Trent University, UK—Senior Lecturer (research and teaching)
Stephen Tooth	Professor of Physical Geography	27	University of Southampton, UK—Research Assistant University of Wollongong, Australia—Demonstrator and Occasional Lecturer (during PhD), Research Associate University of Nottingham, UK—Temporary Lecturer University of the Witwatersrand, South Africa—PDRA and Occasional Lecturer Aberystwyth University, UK—Lecturer/Senior Lecturer/Reader/Professor
Heather Viles	Professor of Biogeomorphology and Heritage Conservation	40	University College London, UK—PDRA University of Oxford, UK – part time college teaching positions, Lecturer, Reader, Professor, part time Research Professor

2 | DIALOGUE

Lucy: How do we define academic success in the context of the climate and environmental crisis?

Heather: This is one of the questions that I found hard to answer. [...] When I started in academia, concerns about the climate and environment were defined very differently. If you think back to the early 80s, acid rain [was] more of a concern than climate change [...] and success was measured by how good you were at your research [...] and whether you were publishing enough. Frankly, success had a strong element of whether you were lucky to thrive in your career.

Things are completely different now [...] but some of us who have been involved in academia for a long time have found the transition to be a bit challenging. My research has changed hugely over the years and addressing climate change issues has become very important to me recently, but I'm not sure that's for any pure reasons. It's probably more because I've been chasing the money and the opportunities. In a way, I think the metrics of success now are

probably a lot broader than they were. From my perspective as somebody who was fairly recently head of a large department, academic success is now related far more to both research and its impact. Equality, Diversity and Inclusion (EDI) considerations hopefully also make career progression assessments fairer. Furthermore, in the university that I work in addressing the climate and environmental crisis is very important at institutional level [...].

Stephen: I agree, it is a difficult question. I think the subtext here is that in academia we may be moving away from a situation where success is primarily judged in terms of numbers and possibly the quality of publications and the amount of grant capture to a situation where those metrics are still important but perhaps have declined in relative importance compared to other measures of success, like public engagement and public outreach [...]. If you think about the new Research Excellence Framework (REF)¹ 2029 proposals [UK Research and Innovation, n.d.], the Royal Society's Résumé for Researchers² [The Royal Society, n.d.] and the new guidelines about Curriculum Vitae (CVs)³ that UK Research and Innovation uses to support grant applications [UK Research and Innovation, 2024a], all the right noises are being made [in terms of broadening the measures of success by including things like public engagement]. There's now consideration given to broader research culture and environment, and how these elements should be part of the definition of success. But, in practice, is that really what we're being judged on as individuals in our institutions?

And, specifically in relation to the climate and environmental crisis, as academics do we have an obligation to do more public engagement and public outreach? Should we more directly address the climate and environmental crisis in our work, including undertaking more activities like public engagement? [...] But [there is a risk] that may lead down a slippery slope where it may be difficult to draw a line between maintaining scientific objectivity and advocating for certain courses of action

Lucy: I found it really challenging [to answer this question] and I found myself thinking about all of my experiences and people that I know [...] It's correct that we're broadening out our metrics, but I still think that the definitions of success don't include this [public engagement] and that the metrics that I'm judged on are still research and teaching driven. The metrics may change through your career, and they may vary slightly in terms of what they address, but none of them link to any kind of climate and environmental crisis. I am now encouraged to look at environmental importance in everything I do ... my teaching intended learning outcomes, the research impact, and its link to [the university themes around] sustainability. So part of my job is ensuring that it [environmental consideration] is integral in everything that I do, but I'm not ever judged on it and I'm not held accountable to it, which is quite interesting to me ... [environmental consideration] is in my day-to-day role but nobody above me is looking at that when I have my performance reviews, when I'm going for promotion, or in any other activities I do. I also think there's a real tension between my role and the university's role. I'm constantly talking about the climate and environmental crisis and what students need to do about it, but at the same time, we have to think about the student experience and culture and think about marketability of the course. And that often involves things that directly contrast with what we're telling them (e.g. flying to enable travel overseas). So there is this tension, and that's where it becomes problematic with the metrics because from top-down quite often the pressure is about student experience and student satisfaction rather than environmental considerations. I think the university is looking at me and wants me to have a much more rounded academic performance, including things like environmental considerations, and outreach and engagement about these topics, but they still aren't part of my role's performance indicators.

Daniel: This is all so interesting. I relate to what Lucy said. I've sat on a couple of academic interview panels, gone through the promotion process once, and been involved in one REF cycle ... which was eye-opening. Based on those experiences, it seems to me like there's a difference between bottom-up and top-down scenarios. What I mean by that is there's one [bottom-up] scenario where my department appoints someone at, say, lecturer level. The interview panel and the decision-making are mostly done by my immediate colleagues, people from my department. As a department, we therefore have more control over the job description, so we can highlight and emphasise that we are looking for a wider range of skills or experiences or aptitudes, and we then have some influence over how we weight those against, say, grant income or publications. But I think my experience of going through the promotion process was different because my application was going to be looked at by a panel of unknown, very senior figures in the university [the top-down scenario]. My institution does include a wide range of criteria in its promotion framework, but I received advice that my application needed to speak to the grants and speak to the publications. There is now a big text box devoted to EDI on the promotion application form. That's great, but the rest of the form is very much about your research profile

and then a bit about teaching. So, it seems to me that where we have some control—and by ‘we’ I mean ourselves [in this online dialogue] and colleagues within our departments—then we can be a bit more direct and positive and forward thinking [about what skills or experiences we’re looking for]. But, at the level of the university, the procedures maybe haven’t changed as much as we would have wished.

Erin: Daniel’s points here are really interesting because promotion criteria are not something that I’ve interacted with, but it does fit with previous discussions that I’ve had; how publications and grants are needed for academic success and to be on the top of the pile when CVs are being checked for permanent positions. [Only after this do the hiring team] look at the public engagement and any outreach activities. I think public engagement and being able to communicate research clearly should also be considered because it’s another way to disseminate research and to improve the links and relationship between scientists and communities. That’s very important when thinking about the future of academia and universities, and our roles in the climate and environmental crisis.

Stephen mentioned the *Résumé for Researchers*. I have been told that this can positively impact early career academics because you have the chance to discuss other aspects [of your professional role], not just publications. Maybe a similar idea [as the *Résumé for Researchers*] will eventually be reflected in CVs when applying for permanent [academic] positions as well. I think the importance of communicating research currently gets somewhat pushed to the side. You are expected to [communicate your research widely] or you want to, but maybe this is not always recognised as a key skill.

Lucy: Given the routine and in some cases escalating demands of our jobs, do we feel that we have the capacity to address whatever the more appropriate measures of success may be?

Erin: The recent push towards more remote [online] opportunities could open up a lot of training opportunities for early career academics and enable us to gain a broader skillset to address these other measures of success. We might now be able to attend things that we previously couldn’t because you can just do it in an afternoon on Zoom. I recently attended [a two-day online workshop] which offered funding if people couldn’t attend to allow them to purchase the technology they needed to participate, or for childcare or any other commitments, which was a great initiative. While this was driven by COVID-19, it is also better for the climate [because it avoided the need to travel]. And it also gives you the chance to meet other international collaborators. I also feel like [with more online meetings] there may be a shift towards [more] collaborative and interdisciplinary research. Particularly between academics at different career levels, because to tackle climate change we can’t just work with other geographers. We need climate scientists, and we need to work with other [disciplines] and local communities. And I think this is becoming more the norm. That’s a great thing for early career academics to be exposed to and have the opportunity to get involved with, hopefully in a supportive research team. [Therefore, improvements in remote opportunities and broad interdisciplinary thinking could help our ability to meet other measures of success.]

In terms of challenges, I think there is a pressure to publish and I think this is particularly notable for fixed-term staff because you’re constantly thinking about applying for the next job. You may feel a need to focus on your CV as opposed to getting involved in other [research or outreach] initiatives that interest you; for example, following your curiosity and spending time on climate change and environmental problems. These are big problems. They’re very complex, and they require a lot of people, large teams and also a lot of thought. And I think if you’re in a one- or two-year position, you don’t really have the chance to think about this in full. If it isn’t part of your current project, it sits alongside [is secondary to] the research project that you’re funded on.

I’ll finish with a related point, I think community links are increasingly important. I’ve been really lucky to have been involved in projects that are interdisciplinary, intertwined with society and other fields, with principal investigators (PIs) who develop these [community] relationships over time. But if a PhD student or a PDRA joined a project and was expected to forge these relationships, then I think that would heavily impact their research in terms of the time they could commit to their research and also the time they could commit to their outputs. Currently, [the time taken to build community links on a fixed-term contract] would not necessarily be considered when comparing metrics of success, as far as I’m aware.

Daniel: I've had to shift my thinking quite a lot about the impact that I personally have in terms of addressing the climate crisis [because of the demands and realities of the job]. I'm moving away from thinking it's something that my research is directly contributing to addressing, and now I consider my impact to be through teaching students who go on to do all sorts of awesome stuff. This shift has come in the last two or three years. [...] In hindsight, it might be rather obvious but actually it really is a transition for me from an idealistic PhD student where I thought my research would change the world to now [...] When I write references for students, I think: 'Gosh, that job [...] sounds like it will absolutely make a positive change, and because you've been a student in some of my classes, I can sort of vicariously claim some positive impact'. This is really where my thinking is now. I love doing research. I hope it has some tiny positive impacts, but I've now come to value this sort of pyramid scheme.

Thinking specifically about engaging critically with the climate crisis and moving from science to advocacy, a couple of things come to mind. I have some colleagues who are very high profile [visible] in the media and they often get asked to comment on things. It seems to me that it's quite self-reinforcing. So, if you become a high-profile media figure, then you're the person that always gets asked for comment or asked to join advisory panels ... that sort of thing. And that's great, but it also seems much harder to get into the media [if you don't have that established profile]. You may be left questioning 'How do I get into it?' It also seems to me that it's only when you become a high-profile media figure that it becomes recognised as a real skill or trait that others in the [scientific] community then value. Similarly, I suspect institutions are delighted that they employ these sorts of high-profile scientists, but it's like there is some sort of threshold that means until you reach that point, institutions don't place an awful lot of value on your engagement or media work, and that threshold seems quite high.

I also wonder to what extent the views of the PI of a project influence what opportunities there are for people [they employ who are] quite early on in their careers to pursue things beyond writing publications or planning for the next grant. I think some PIs will be super supportive, super encouraging [of spending time on other aspects like public engagement]. Sometimes these activities can be built into the grant, but there are situations I've seen where the PI just wants their PDRA to write [project outputs].

Lucy: I think that this is a really significant challenge. Academic workloads are a known problem at whatever career stage you're at ... there's pressures from all over and those pressures just change [but never really decrease]. As Erin said, finding that capacity for the critical thinking of not just how do you take one of these [climate or environmental] problems and start researching it to potentially get a research grant, but how do you actually look at changing an institution? How do you change the way we value academic success? It takes an awful lot of thought and collaboration because it can't be done individually. I think that time pressure is one of the biggest problems and it's one that that there isn't an easy solution to. Looking at the future of higher education, it seems like there's going to be more of a squeeze in terms of time. So, we have to start thinking creatively about how we can do this. And I think Daniel's right there are ways to do this in terms of engagement and outreach. The media especially is a great way because if you are high profile, then you can use that to advocate [for climate or environmental issues], but it is very difficult to get into that arena, and so we just hear a few voices in a few areas. We've got to think about other avenues that we can develop to get more of a voice out there.

I do think there's a really positive shift in the thinking though, and it comes back to what we think about the climate and environmental crisis. It's now fact and it's something that I think is so fundamentally ingrained in why [new] people are interested in our discipline. That can only be a positive, because for me it was something that I was aware of and passionate about, but it's stepped up a gear now because it has to. So hopefully as people start to go through the [academic] system, it's got to put pressure on these things [priorities associated with the climate and environmental crisis] and we've got to start seeing some acknowledgement [in measures of academic success] because we're seeing a different generation coming through and it is absolutely a key priority to them. We have to start thinking about how to acknowledge that as well.

Stephen: Yes, the demands of our jobs—whatever career stage you're at—are escalating. In terms of my particular situation, do I have the capacity to address whatever I think the more appropriate measures of success may be? I suppose I have the freedom to do so. I'm lucky enough to be in a position where I don't actually worry too much about what I'm told I'm supposed to be doing. I'll just do what I think I should be doing. But I have to prioritise. I'll give you a specific example: I've put a lot of effort in the last decade into writing colour booklets like the one that Heather and I did for the

British Society for Geomorphology (BSG) called '10 Reasons Why Geomorphology is Important' (Tooth & Viles, 2014). And then there are derivatives of that booklet: '10 Reasons Why the Geomorphology of Wetlands is Important' (Tooth et al., 2015) and '10 Points that Everyone Should Know about Flash Floods' (Tooth et al., 2021). The effort for each of those [non-peer reviewed] booklets is probably equivalent to one or two research publications. I've also written a book on river potholes with a [non-academic] geomorphological enthusiast [Dewi Roberts] and my good colleague [Hywel Griffiths], which is aimed at a very broad audience (Roberts et al., 2022). That was probably equivalent to two or three research publications. So I guess my standard [peer reviewed] research output is less than it could have been, but I've done all these other things which personally are more satisfying, particularly because I've had great engagement with people at in-person public talks and online talks [that are based around these outputs and resources], and I can see how their eyes can be opened to geomorphology [and related climate and environmental issues].

I've just been to India and for the students at one particular university, the '10 Reasons Why Geomorphology is Important' booklet (Tooth & Viles, 2014) is now included as part of the suggested reading for a module on geomorphology. I don't know their exact student numbers, but they're large [about 100 students on this module every year]. So, this booklet is reaching people but I had no idea about that until someone mentioned it to me. So, that's a key part of my impact and I think it links to what Daniel was saying. I also underwent a shift some time ago. Yes, my research is important. It gets cited. I know it's well received in that sense. I think it's making a small difference to the way we view the world and the way we might view the world, but actually much of my impact is through other things ... not the [academic research] papers, but actually more through the booklets and books. It's through the public talks. It's through Science Café events. It's through local community engagement. And personally I find that a lot more satisfying.

Interestingly, one of the strategic objectives of my university is local community engagement. So, I regularly refer to that objective if I ever detect that someone is questioning why I'm spending so much time writing booklets or doing this or that small scale, local project ... you know, taking people down to the local rivers and talking about water pollution issues. I say: 'Well, it's one of the university's strategic objectives: strong community engagement. I'm doing what the university says it wants me to be doing'. Whether those activities are valued as much as they should be by all my colleagues is another issue, which perhaps we'll come onto shortly.

I'll make just a couple more points. Lucy talked about how you might change an institution. I think the pressure is coming from outside institutions through things like the REF. If you read the new proposals which are out for consultation for the next REF (UK Research and Innovation, n.d.), then there is recognition that research culture [at universities] is strongly shaped by this exercise [...] and there is a new framework for how the REF will run. The proposals are trying to positively shape the research culture in universities and get away from just outputs. Over the last few REF cycles, there has been a move towards this already, but I think it will be even stronger in the next REF cycle, as there's less emphasis on individual researchers and more on the collaborative outputs by a particular department. And this gets back to the point Daniel made about whether or not PIs are supportive of their employees and encourage them to undertake activities other than just publishing papers or writing grants. That's going to depend on the individual, of course, but all I can say is that I'm strongly supportive of these activities for the people that work with me. Some postdoctoral applications, such as those to the Royal Society, require that career-training opportunities be written into grant applications, and I certainly strongly encourage my PRDAs to engage in all the things that I think they should be engaging in, whether it be local community engagement in the UK or overseas.

Heather: First of all, this issue of workload and time pressure is now a critical thing for everybody. Not only researchers but also professional staff within universities who contribute hugely to our research and teaching. And I think it's reached a bit of a crisis point in some universities ... certainly in my institution it has. We have a new, excellent Vice Chancellor with lots of new initiatives. She prioritises climate change, for example. She also prioritises local engagement and the links between local and global. But I think many people in the university are a bit overwhelmed. How can we respond to yet more new agendas? And in fact, that was the first thing that sprang to mind when Lucy invited me to join in with this dialogue. Is there a danger that the climate and environmental crisis becomes yet again something that we must add to our list of other things that we need to worry about (see Figure 1)? And I know from listening to what you were saying at the beginning, Stephen, that that's not the kind of the point you're trying to make. But I would like to see a more holistic vision. So, for example, in my institution, we frame a lot of things around the United Nations Sustainable Development Goals (SDGs)⁴ and internal research funding sometimes prioritises applications addressing those sorts of issues. I think we need to think about all these things [decolonialisation, EDI issues, outreach] as part of the same set of values rather than just more sticks to beat us with. And just carrying

on that theme, I absolutely agree with what Daniel said about promotions and jobs and that these things should be a menu of actions that people can take, and [universities should] not expect people to do all of them all of the time. And if I'm trying to give people career advice, that's the big thing I would suggest: 'Don't worry, you should focus on what's best for you in your context at the time'. And I think Stephen has given us a very good example of how perhaps at different stages in our careers, we can afford the luxury of doing some things which at other times are simply not possible.

The second point I wanted to make was that I agree absolutely with the importance of teaching. I think the support that I've given people through teaching probably trumps any sort of research findings I might have made. I would also say that being a PI and team leader comes with huge responsibility. I don't just worry about what I'm doing with my time. I worry about giving people the chance to do these things as well, given the constraints of a grant and the need to support them as part of their professional development.

The final point I want to make is that all our discussions so far are really interesting because they're showing this tension between what we think of as personal responsibilities and what we should expect from our institutions. When I was reflecting on the questions posed, I realised that I was very lucky to be in a university that is big enough and old enough and well thought of enough to have some support for these things. For example, my department has solar panels on the roof that are part of the university's commitment to addressing climate change. In a way, I think throughout our careers we need to think not only of ourselves as individuals but also as vital parts of these big institutions. While we can't all be expected to address these things directly in our own research and, to a lesser extent, our teaching, we should be advocating for them within our institutions, and we should be making more of the support that those institutions provide rather than seeing them as a problem.

Lucy: Do we feel that the measures of success are appropriately valued by our colleagues and by modern university management procedures?

Daniel: In my experience, the way colleagues value a full range of measures of success is pretty [varied]. I've received lots and lots of great advice [on how to achieve academic success] from many great people and [the recommendations have] been mixed. Some have just advocated writing lots of good publications and getting some grant income and everything else will fall into place. Others have been closer to what Stephen described, about doing things that satisfy you while meeting the key [expectations] of producing publications, obtaining grant income and doing teaching well. So, it's a spectrum of views, from one end being 'All that matters is grants and papers' to the other end of 'Do whatever you want'.

Personally, I have found satisfaction from enough colleagues valuing the things I do beyond papers and grants. Not everybody will value what I've done, but I imagine those who are dissatisfied probably won't say so. Getting a few colleagues who are positive or offer praise or support or encouragement to do things [like public engagement or EDI work], I take to be quite meaningful. It may well be the case that other colleagues are dubious about [some of the things I commit time to], but they've not been vocal about that so far.

Public engagement, broadly defined, is now [incorporated into] my institution's promotion criteria. But what happens when you submit your promotion document is still a black box. So, it's great that a wider set of criteria are explicitly listed as things to be striving for that will receive recognition, but behind the scenes, when the panel is actually making a decision about someone's promotion, some kind of weighting of these criteria must take place. How these criteria are actually weighted against each other is the bit that remains deeply unclear to me. Lucy, we touched on this in our recent paper (Schillereff et al., 2023). Imagine someone had [a few] publications and had done tonnes of public engagement, how would that be viewed by a panel compared to someone with [many more] publications but that's all they did? I think the academic community should be more open in discussing this point.

Finally, my institution now has a strategic priority around climate and sustainability. This is great. But, so far, it seems to be almost entirely focused on research. [For example,] the initiative is providing seed funding and running events to support colleagues to apply for these big interdisciplinary calls like the UKRI Net Zero or Climate Adaptation hubs (UK Research and Innovation, 2023, 2024b). The initiative is still quite new: It could evolve and become a bit more holistic, but in some ways the message from the institution is: 'Look, there's money in this field, so how can we empower our researchers to go and get that grant funding?'. So, it's definitely a positive path but the vision [and what is being valued as success] seems a bit narrow so far.

Heather: I think universities are often very risk averse and I think this is something that provides a background to much of our dialogue. They need to maintain their strategic advantage. They want to be successful, they need to make money and they need to meet student demand. In many universities, there is massive student demand for teaching on climate and climate change. Some people feel that every student should be skilled and knowledgeable about climate change by the time they leave the university. There's lots of work now to take that forward. But universities often are balancing many different things, and I think that really does influence the kind of promotion issues that you're alluding to, Daniel. Universities [...] bank on the people that they think are going to be successful. If that view of 'success' is too narrow, this can cause problems. We need role models who have been successful for a broader range of things, as then it makes it much easier for others to write their case with confidence. Given the general lack of transparency over promotion decisions, it's very difficult. But I think it's really important and that's something that I think we should keep thinking about.

In terms of directly answering this question about whether measures of success are appropriately valued by colleagues, I would agree with Daniel that it's impossible to answer, as academics are an unruly bunch. At minimum, I would hope that colleagues are collegial, and that colleagues support and value a whole diversity of different things. We need encouragement to recognise diversity in people's contributions. I think that's at the heart of what we should be doing.

I just want to finish my answer by thinking about different career stages; for example, at the doctoral training stage. I think it's really interesting now that there are lots of opportunities and perhaps even compulsion for students in some doctoral training schemes to do internships outside academia. And I think that's really good. But, again, we need to show that this is bringing value to their doctorates, not just being an additional thing they've got to do. At the job application stage in some universities, you have to produce an EDI statement as part of your application. I wondered whether we should be encouraging people to also write an environmental statement to explain how they would contribute to addressing the climate and biodiversity crises? But then I'm aware that that makes more work and puts more pressure on academics. Another important consideration for some career stages is external recognition and I do think that learned societies should do more in terms of reflecting achievements beyond pure research in their medals and awards. I know that the European Geosciences Union (EGU) has an outreach award,⁵ but I don't know whether cognate organisations have specific awards for contributions to addressing the climate crisis. I think that this is something that would help to give people external recognition, which they could then feed into their promotion applications. Finally [I think that] some grant-giving bodies require environmental statements to accompany grant applications. This can be an extra burden but does help us reflect on our obligations. If we're not careful we're just going to set people a lot of different additional tasks, but I think we do have the opportunity at some of these inflection points in people's careers to keep some of these issues live and really bring them to people's attention.

Erin: I agree with Daniel and Heather's comments about how they've been advised in many different ways. I've been encouraged to write publications and think about grants, but also encouraged to take part in other opportunities as well, though not necessarily related to climate change. I've been encouraged to incorporate climate change into how I think about grant ideas both through interest but also because there is funding there. The five of us are all, as are many others, interested in climate change. So if there are funding opportunities linking climate change and geography, this would fit with how I see metrics for success in universities.

I think universities are some of the best places to hold open discussions with staff, students and communities [on the climate crisis]. But then I recognise that everyone is limited in terms of time, so it is hard to work out who should be organising these discussions within institutions. Similarly, as early career academics are often on fixed-term contracts, they don't really have the time to make really solid connections and build these communities. But I think having places to discuss climate change and the climate crisis and to network, perhaps with universities supporting these financially, would be really useful.⁶ Maybe having these set up and not expecting early career academics to do this so that they can [get involved] when they move to a new position would be great.

Lucy: I agree with what everyone said. I think there is a move towards universities towards having 'sustainability' named [as a key objective]; they've got relevant committees, but I think what's lacking is academic expertise from geography and other physical sciences that can feed into the emerging sustainability initiatives. So, one of the things that we need to do to address this is having a solid narrative around the significance of

our discipline and what we bring to these discussions. Quite often people talk about ‘carbon neutral’ or ‘net zero’ and they go to a Business School, but they don’t come to us [geographers] who are actually specialists in understanding the bigger picture around these issues and the wider narrative. So I think as academic geographers, we have more of a responsibility to push what the significance of our discipline is internally within our organisations as well as externally, so universities are aware of how important it is and the skills that they hold within the university.

This ties into what a lot of us have been saying about transparency and wider metrics of success because actually you could give time to this if it was something that was going to help your career. It’s about balance [...] If you’re going to get recognition, then you can afford the time to actually do these things and contribute. And then I think within universities there is also a role that ties back into skills development. Certainly as an academic, all we hear about is employability. What we need is one of those graduate attributes to be environmental awareness and it needs to be something that we’re assessing when we say: ‘Well, what skills do our students have?’ And then showcase how we’re giving this [environmental awareness] to them. So I think if we can badge it in the same way and say: ‘Actually, this is one of the key skills, not just for employability, but this is what they need to be citizens of the globe’. Students need to understand what we’re talking about with climate change because no matter what job you go into, it’s going to be something that you’re going to have to address going forwards, you know? So, I think if we can give credit to that [environmental awareness], then it raises the profile of everything that we’re doing.

My final point is around external drivers. We’ve talked about the next REF and improving research culture. And I think we could enhance the environmental statement that we have to produce [for the REF], so that we’re explicitly talking about what the impact of our research is and what the environmental cost of collecting data was. And perhaps how do we mitigate this [impact/cost]? So people start to think not just in terms of a carbon calculator but more widely. And similarly, we’ve got knowledge exchange but thinking about this not just as reaching out to communities, but what are we offering them in terms of environmental education and learning?

Stephen: I fully recognise Daniel’s statement when he was saying that the advice he’s given through his career—and I’m sure it’s same for all of us—has been highly variable and highly inconsistent. There are different pathways to success. You can play the numbers game if you wish [number of publications, grant capture and so on], and you can be terrible at administration. I mean purposely terrible at administration to avoid getting given any serious administration, and you can be successful in doing that. You’ve got to be successful at something else; if you’re not successful at administration, you’ve got to be publishing the high-profile papers and you’ve got to be getting the big grants. But you could also try and be a well-rounded contributor to a department and publish some good papers and get some good grants and do all the other things that we’ve been talking about doing. And that really is going to come down to individual choice. Academia is broad enough that you can succeed through a whole variety of pathways [...] I think Heather used the phrase ‘menu of opportunities [actions]’ earlier and that’s exactly right. We can’t all be doing everything all of the time, but we need to be doing enough things over a long enough period of time, and hope that does count for something.

Just in terms of how promotion applications are assessed behind the scenes, I think Daniel would be reassured ... maybe? Certainly, when people come to apply for Associate Professor or Professor, almost undoubtedly the application will be sent out for external review. I’ve reviewed probably maybe five or six professorial or similar high-level appointments for different universities over the last 10 years. And all of them asked for a statement to a question that essentially says: ‘Has this individual made a rounded contribution to the discipline?’ [Based on the application materials] I can say: ‘Yes, if you want to go by traditional metrics, the metrics are there [or they’re not there], but in terms of broader contributions, they’ve sat [for example] on a [society] committee they’ve done this, that and the other, and they’re doing outreach and engagement work’. And I know from my own experience this all this is a significant time investment. So, I make a point of specifically addressing the wider contribution issue.

I’ll give you one example from an overseas university. I had to assess someone who was applying for a senior position and there were five categories that the applicant had to address. These categories were something like: the scholarship of discovery; the scholarship of integration, which includes connecting across different departments within the university; the scholarship of teaching; the scholarship of application, which includes engagement with industry, government or community, and contributions to enhancing the employability of graduates and positive engagement; and leadership and citizenship, which includes demonstration of university values of scholarship, integrity and

empowerment through everyday behaviour and conduct, mentoring and development of others and self-reflective practice, and contribution to broader academic and non-academic community debates. So, for those last two criteria in particular, I think they're very strongly oriented around the sorts of things we've been talking about. They're not explicitly about the environmental and wider biodiversity crisis, but they could be. That's an overseas example, but I've seen similar things in the UK, as well as in other countries. So, I think there are positive moves in that respect. And as you get into later career stage, that perhaps becomes a little bit more important. Whether they should be embedded all the way through the system [in promotions criteria for all career stages] is another debate.

Lucy: Let's wrap up with any key thoughts and identify any areas that we have missed.

Stephen: Have we addressed whether success could be, or should be, judged differently at different career stages? Is there an expectation on later career stages to be doing more in terms of talking about the climate and environmental crisis, or should more emphasis for that be put on earlier career stages, or should we not specify? I don't really have an answer, but that's just something to think about.

And there's that journal called 'Public Understanding of Science',⁷ which started about 30 years ago. There was an interesting editorial some years back (Bauer & Howard, 2012) where they talked about the difference between citation and influence and how this relates to 'impact' [...] In this editorial, they looked at the best cited papers in the journal and then they asked a collection of the journal's readers and authors which papers they cited most and which papers they felt were most influential in their particular research and outreach work. And the lists didn't necessarily correlate as closely as you might think. Alternative metrics such as the number of downloads, number of reads, number of shares ... these might capture the notion of 'influence' more closely. They are not going to capture everything, of course, and the link between those metrics, 'influence' and 'impact' is still fuzzy.

Daniel: I've 'gone through' one REF cycle and very quickly I realised that what I thought of as impact is very different to 'REF-style' impact. I then realised the sorts of things I work on are unlikely to deliver 'REF-style' impact. That was eye-opening. Major impact case studies focused on the climate and environmental crises were submitted to the last REF, but I suspect a huge amount of the research we do could reasonably be judged to be [positively] 'impactful' for the planet yet wouldn't be considered a suitable REF case study.

Stephen: Daniel, if you read the new proposals, I think that 'impact' category is now going to be called 'impact and engagement' (UK Research and Innovation, n.d.). So there is a subtle shift I think, towards recognising that impact is notoriously difficult to measure, particularly over the relatively short duration of an REF cycle, whereas engagement possibly is a bit easier to measure ... the number of people coming to talks, the number of people sharing an article, the number of booklets distributed to schools and so on. So, there is a subtle shift and it might be worthwhile doing a little web-based trawl to see how many of the [REF2021] impact case studies actually mentioned the climate and biodiversity crisis. Of course, that's not the only thing that academics should be working on, but it would be interesting to see—particularly from geography and geoscience departments—just how many case studies actually talk to those issues?

As I was collating material [in preparation for this dialogue], reading the Résumé for Researchers (The Royal Society, n.d.) and reading the promotions guidelines and criteria at other universities, I was thinking that the issue is not so much with the guidelines for success as laid down or implied by institutions or the Royal Society or even the REF. I don't think that's the issue. It's how the guidelines or criteria for success are applied in practice by our colleagues. We could overstate this, of course, but there might be a bit of a generational shift underway. You know, as older people retire, who are perhaps more used to the traditional ways of assessing things [academic activities and outputs] and less used to valuing the broader contributions. And as earlier career stage academics take their places, there might be a shift in how success is evaluated. But maybe that's just hopeful thinking.

Heather: [...] What I worry about is that there are counteracting forces, and that academia is getting far more stressful, as we've all alluded to. My concern is that although there could be other metrics of success, there will still be a narrow group of people who are successful. It might be a different group but that's not what we want, is it? We want the whole university community to be as successful as possible. So I think there does need to be a large shift [...]

The final point that I think we should also reflect on is how different types of people are impacted. In our discussion, we have focused on how there might be different impacts on different career stages, but what about different genders, ethnicities, and class backgrounds? How might people in very different groups within the university system, and those that are not properly represented in that system yet, experience some of the things that we've been discussing?

Stephen: A point that I made near the start of this dialogue was: where do we draw the line between retaining our scientific objectivity and advocating for certain things we believe in, whether it be the climate and environmental crisis, or decoloniality, or social issues, or anything else? It's a tough line to tread. I'll restrict my comments to the climate and environmental crisis. I've been asked a couple of times to speak to Extinction Rebellion activists and I was hesitant for a few reasons. First, without wanting to stereotype too much, some activists are not actually very well informed about the [science of] climate and environmental crisis. They are passionate about the issue, but they're not necessarily well informed about it [the latest science]. Second, I don't think their disruptive tactics are always the smartest, frankly [in terms of getting the wider public on board]. But then third, I felt slightly hypocritical as someone who's lived and worked in four different countries, regularly flies across the Atlantic to see family, and regularly flies for research. I'm compromised quite badly. But having said all that, I would not be the researcher I am, I would not be the teacher I am, and I would not be the person I am without that travel. Travel has been enormously beneficial and all I can do, I think, is make the most of every opportunity I've got, try to reflect on what my footprint is, and do something [academically] useful with all the travel opportunities that have arisen. Long ago I decided that I won't fly long distance to a conference for a couple of days and then fly back; if I'm going to such a conference, I'll stay for a week or two. And I'll do academic things around the conference [to maximise the opportunity].

Erin: I think in terms of [whether we should judge] success at different career levels, I don't have an answer for that either. I think on one hand [aspiring towards improving] science communication within early career academics networks would be really useful in reducing the disconnect between research and impact, but also that's adding another criteria to the list to be assessed on [...].

And jumping back to the earlier discussion [about the sustainable institutes or institutes within universities], I think it's important to flag that sometimes engagement by early career academics can be limited by whether their PI is involved. Otherwise, they can be quite closed networks and it can be difficult to infiltrate even if you're interested in the topic. Especially if you're only there temporarily. So I think that taking a step back to make sure that these are open, welcoming spaces, is important.

3 | REFLECTIONS

Reflecting on our dialogue, in this section, we briefly summarise the key points that emerged, many of which are inter-linked. The order of these key points is not random, but rather they have evolved from the three core questions asked during the dialogue, that is, first reflecting on what success means and how it is defined, and then considering success within the context of the climate and environmental crisis, the demands of our jobs and university management procedures.

3.1 | We need to recognise that we can adjust and adapt how we portray our academic success

There are different 'levels' of actors and influence: ourselves and our immediate academic colleagues; research groups/clusters, departments and faculties; university management; learned societies. There are other levels too: funding agencies, governments and so on. Many of these different levels are dynamic: their agendas and thus their requirements for us as academics change over time. Therefore, as individual academic geographers, we are continually adjusting how we frame particular decisions or pieces of work depending on which level it is going to, and adapting how we pitch our 'success' depending on the audience (i.e. through conversations, presentations, publications and so on). Adjusting and adapting our own metrics of 'success' is something that many of us are skilled at doing without even necessarily realising it or talking about it.

3.2 | Definitions of academic success are becoming broader, but we need greater transparency regarding evaluation processes

Our online dialogue highlighted general agreement that the trajectory within (UK) academia is towards a more holistic view of success, and we considered this to be a positive. What is less clear is how these broader aspects are evaluated and weighted by different assessors. The evaluation processes are still something of a 'black box', both within our own institutions and elsewhere. In UK higher education, there are some key elements of academic jobs that are fixed across institutions—namely pay scales and pensions—but other elements can vary enormously, including hiring or promotion criteria and processes. When practices and processes in other countries are considered, the variation is likely to be even greater.

3.3 | We need to give greater consideration to where wider engagement in relation to the climate and environmental crisis sits within the traditional breakdown of academic responsibilities (teaching, research, administration/academic citizenship)

As we have noted, academic success is judged in different ways by different people and at different levels. Tensions can result from trying to balance the different measures of academic 'success', particularly when trying to address the climate and environmental crisis through wider engagement with non-academic audiences such as local communities, businesses and policymakers (e.g. Hillier et al., 2019; Hopkins & Souch, 2023). Figure 2 is a conceptual representation of the three spheres of traditional academic responsibilities (see Figure 1) and how various activities related to addressing the climate and environmental crisis intersect to affect the balance between the spheres. As depicted in Figure 2, the ideal is to have a portfolio of activities that keeps the pendulum broadly centred to achieve both career progression and personal

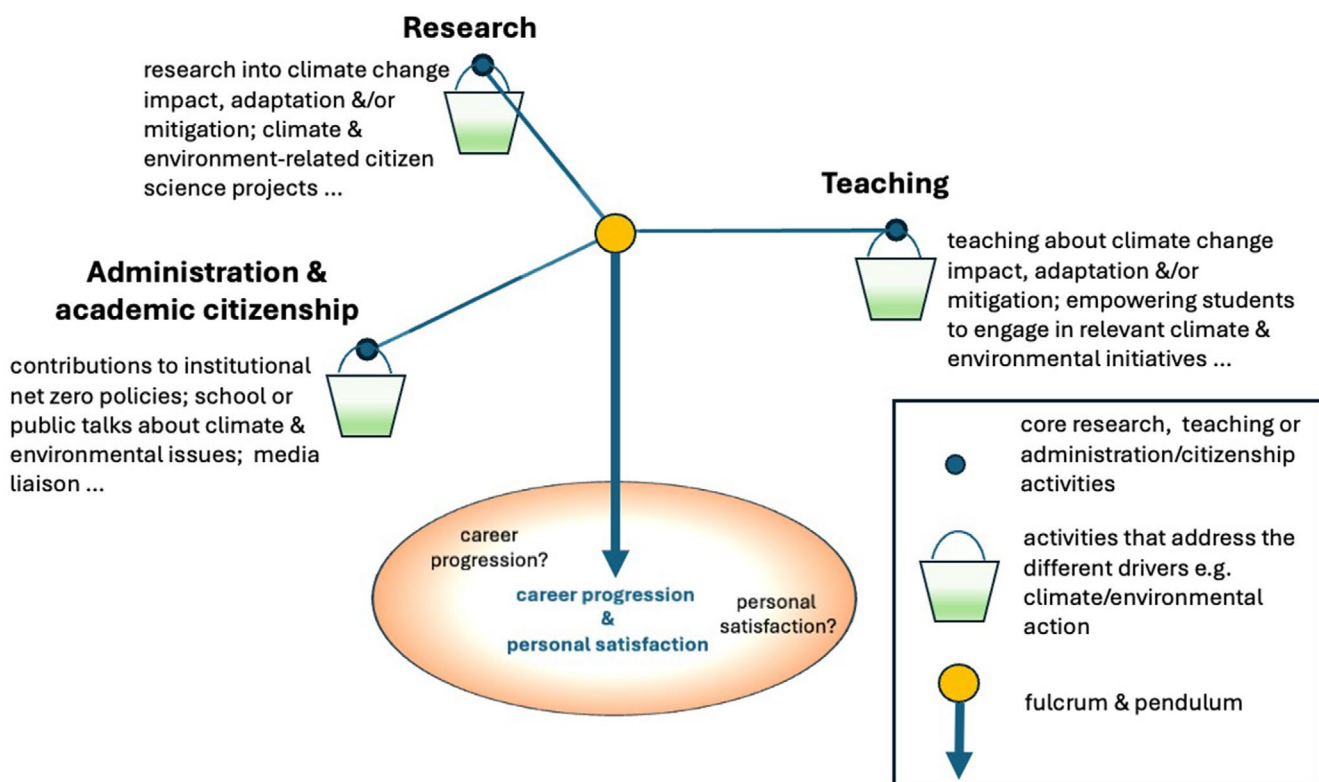


FIGURE 2 The 'core' research, teaching and administration/citizenship activities of many academics (see Figure 1) can be conceptualised as representing three arms of a balance. The buckets on each arm can be filled to varying degrees with activities that address the intersecting pressures, such as climate and environmental action (see Figure 1). The relative weighting of the three arms and the fullness of the three buckets varies between individual academics (e.g. with respect to early, mid and later career stages) and affects the position of the pendulum. [Adapted from the three-way 'Green New Balance' model of Bywater-Reyes et al., 2022].

satisfaction (the 'sweet spot'). An unbalanced portfolio, perhaps one that involves too little or too much wider engagement with the non-academic audiences, could knock the pendulum far from the centre, with risks for negative impacts on career progression and/or personal satisfaction. For academics on research- or teaching-only contracts, the portfolio of activities could be conceptualised as a balance with two arms and two buckets (i.e. research or teaching vs. administration and academic citizenship). Trying to represent the complexities of the different academic careers in a single diagram is challenging, especially as the range of activities that add 'weight' to the individual buckets also undergoes changes associated with career stage and/or personal career path.

3.4 | We can choose how to respond to multiple pressures, including those relating to the climate and environmental crisis

There are increasing challenges for academic geographers regarding how to respond to multiple pressures and other pressures, all of which intersect with the 'core' activities traditionally related to success (Figures 1 and 2) and many of which overlap. Higher education institutions are starting to address these pressures, including by focusing on EDI, decolonising and sustainability initiatives, alongside those activities more directly related to the climate and environmental crisis. As academic geographers, we have to respond to these multiple pressures, but we have some choice in how we respond. For instance, while we need to give ever greater consideration to the balancing of research or authentic student experiences against environmental cost (e.g. the sustainability and carbon footprint of travel), we can be creative in our choices. Some potential solutions are well documented; for example, at departmental or institutional levels we can give consideration to how to adopt the concept of slow travel (e.g. Dickinson & Lumsden, 2010) in geography undergraduate field activities. But at an individual level, we also need to consider the extent to which different academics are able to exercise choice; for instance, do people with different characteristics (i.e. gender, ethnicity and class backgrounds or those with caring responsibilities) have, say, the same option of choosing slow travel (or non-travel) for their individual research activities?

3.5 | We don't have capacity to do everything we might wish to, so directly tackling the climate and environmental crisis can sometimes become a lower priority for individuals

Academics still commonly feel pressure to choose publications and grants over public knowledge exchange initiatives, certainly at early career stages. Given the pressures of academic workloads and the time commitment required for new initiatives, it is almost inevitable that some individual geographers may sideline activities relating to the climate and environmental crisis. But if a critical mass of academic geographers remains engaged with a range of activities relating to the crisis (Figure 2), then collectively we can help ensure that these issues remain prominent in, or even at the forefront of, public thinking.

3.6 | We need to place more value on work to tackle the climate and environmental crisis

Higher education institutions and many professional organisations have acknowledged the climate and environmental crisis. Many universities have implemented sustainability and related climate change concerns as core principles at institutional level, for instance, and are working to raise students' awareness, critical thinking and ability to act practically such as through greater integration of themes such as the UN SDGs into undergraduate curricula. Academic geographers who are researching themes around the climate and environmental crisis may be valued by their universities in relation to the grant funding, publications and citation impact of this research, but wider activities by geographers that also address the climate and environmental crisis (e.g. public talks, community workshop organisation, producing booklets and infographics) often receive insufficient recognition and support. Some academic geographers—particularly those early in their career—might wish to be more engaged with these latter activities but hesitate because they are not sure that doing so will be valued 'down the line'.

4 | SUGGESTIONS FOR CONSIDERATION

From our dialogue and subsequent reflections, we have highlighted some of the challenges and tensions associated with defining academic success amidst a climate and environmental crisis. So, should academic success be redefined amidst the crisis? We have outlined some of our thoughts on this question above. In short, we suggest that there is a case for at least a partial redefinition that goes beyond the traditional measures of success. Table 2 presents some suggestions for how we might contemplate further and implement this redefinition of academic success.

TABLE 2 Suggestions for how to start redefining academic success amidst the climate and environmental crisis.

Reflection	Suggestions for consideration
We need to recognise that we can adjust and adapt how we portray our academic success.	<ul style="list-style-type: none"> Given enough space, time and resources, academics can be creative and adaptable. Following our online discussion, we have thought about how many different versions of ourselves we have created during our careers for different audiences and different priorities (e.g. researcher, educator, outreach coordinator, invited 'expert' and so on), and how this intersects with notions of 'success'. We should acknowledge that how we portray our academic success is highly individual and alters through time, which can be a real strength of this career path. A useful thought exercise is to ask: How many different versions of your 'academic self' have you created through your career, and what criteria (measures, metrics) have you used to define and demonstrate 'success' in each of these contexts? Light touch 'training' (e.g. through mentoring schemes) may help early career researchers to think explicitly about more diverse criteria that they can use to demonstrate 'success' as their careers progress.
Definitions of academic success are becoming broader, but we need greater transparency regarding evaluation processes	<ul style="list-style-type: none"> We need to ensure that there is greater clarity in the hiring and progression process within higher education institutions (including the relative weighting of the required skills and experiences). Any hiring and progression should be based on a broad range of skills and experiences that allow academics to pursue the different facets of researching, collating and disseminating information on the climate and environmental crisis. Comparison of the different hiring and progression models that are used in different institutions and different countries could help to create some integrated good practice guidance (e.g. through a working group of a leading geographical organisation).
We need to give greater consideration to where wider engagement in relation to the climate and environmental crisis sits within the traditional breakdown of academic responsibilities (teaching, research, administration/academic citizenship)	<ul style="list-style-type: none"> Academic workloads are increasing, particularly as there is now an expectation that traditional teaching, research and administration/citizenship (Figures 1 and 2) are only part of the portfolio of academic responsibilities. At an individual level, greater consideration needs to be given to how wider engagement with diverse non-academic audiences intersects with these 'core' activities, and how this impacts on academic workloads as well as notions of 'success'. Wider engagement is formally recognised by many institutions, but there is an important distinction between recognising these activities and formalising their value. Institutions need to provide more clarity on how they value and assess wider engagement, so that these activities can achieve the same level of recognition as teaching and research.
We can choose how to respond to multiple pressures, including those relating to the climate and environmental crisis	<ul style="list-style-type: none"> There are many initiatives that institutions are implementing around issues such as EDI, decolonisation, sustainability and climate and environmental action. These are all interdependent issues, and if we were to look at them in a more holistic way, we might be able to develop better guidance for how to embed related activities within reasonable workloads. The environmental consequences of research activities need to be acknowledged. Funders are starting to use environmental statements as part of the application and assessment process (i.e. the British Society for Geomorphology's Research Grants applications now require an environment statement that includes mitigations to reduce the carbon footprint and wider environmental impacts of the research). For some research activities, greater consideration could be given to whether travel is really necessary, or if online alternatives could be utilised instead (Picot & Grasham, 2022). Nevertheless, some environmental impacts from research activities are inevitable, so a judgement has made between the relative value of the research and those environmental impacts. Similar considerations apply to many teaching, administration and academic citizenship and wider engagement activities.

TABLE 2 (Continued)

Reflection	Suggestions for consideration
We don't have capacity to do everything we might wish to, so directly tackling the climate and environmental crisis can sometimes become a lower priority for individuals	<ul style="list-style-type: none"> Individual academic geographers should be encouraged to reflect regularly on their own priorities and how addressing the climate and environmental crisis fits within their career plans. To balance personal preference and career progression there needs to be greater clarity regarding how different academic activities are valued by university management, to ensure that everyone can prioritise what they find most intellectually exciting or important without being unduly concerned about impacts on their future career. Support for early career stages could be strengthened by the greater involvement of senior academics, either in a mentor role or through sharing their own career journey (such as the European Geoscience Union's 'meet the expert' type events). Greater clarity (and broader acceptance) from funders on what they will value as activities/ outputs (hence, 'success') of a grant could also help academics to follow different pathways. For instance, funders could be more accepting of higher levels of public engagement and fewer publications from a 'discovery' science grant (as opposed to a dedicated 'public engagement' grant). Consideration needs to be given as to how to collectively raise the visibility of geography (and the wider geosciences) to the general public and policymakers in relation to the climate and environment crisis. It can be challenging for those starting out to grow their profile and often it is individual voices that are heard rather than a coherent message supported by multiple sources. A first step could be to have a greater number of geographers (and geoscientists) registered with established outlets, such as the Science Media Centre and Pint of Science.
We need to place more value on work to tackle the climate and environmental crisis.	<ul style="list-style-type: none"> Colleagues need to be empowered and supported to explore diverse pathways to success that also tackle the climate and environmental crisis, whether through pioneering research, actively developing institutional or external working groups, or engaging the public. Professional geographical/geoscience organisations could also look at how recognition could be given specifically to activities by individuals or groups that contribute to addressing the climate and environmental crisis. At present, awards are commonly given by professional organisations to acknowledge individuals' research (and sometimes teaching) contributions to geography or geoscience, but having a special award for wider contributions to the climate and environmental crisis would raise the profile and value of these kinds of activities.

5 | CONCLUSION

Through our online dialogue, subsequent reflections and suggestions, we have made the case for at least a partial redefinition of academic success amidst the climate and environmental crisis. While we represent viewpoints from different career stages, nevertheless we recognise that we are only a small group of academic geographers who are not fully representative of the wider academic geographical community. The issues that we have outlined need to be the start of much larger, more inclusive discussions. Those discussions could take place formally or informally but should encompass measures of success in academia as well as how these measures are related to addressing the climate and environmental crisis specifically. Such discussions will contribute to enhancing job satisfaction and career progression for individual geographers and also strengthen academic geography as a discipline.

DATA AVAILABILITY STATEMENT

The data that supports the findings of this study are available within the material of this article.

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ENDNOTES

- ¹ The Research Excellence Framework (REF) is a system for assessing the quality of research in UK higher education institutions (UK Research and Innovation, [n.d.](#)).
- ² The Résumé for Researchers is narrative document designed to represent the varied contributions of researchers to their discipline (The Royal Society, [n.d.](#)).
- ³ A narrative CV is defined by the Declaration on Research Assessment (DORA) as a CV format that provides a structured written description of a person's contributions and achievements and that reflects a broad range of relevant skills and experiences (UK Research and Innovation, [n.d.](#)).
- ⁴ The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015 provides a shared blueprint for the future of the planet and at its core are 17 Sustainable Development Goals (SDGs).
- ⁵ Katia and Maurice Krafft Geoscience Outreach and Engagement Award recognises researchers who have developed and implemented innovative and inclusive methods for engaging with and communicating a geoscience topic or event with a diverse audience: <https://www.egu.eu/awards-medals/>.
- ⁶ The Oxford Networks for the Environment (ONE) mobilise Oxford University's expertise in science, technology, business and society. The Networks try to find solutions to the complex, converging challenges of energy, water, and food security, climate change and threats to biodiversity: <https://www.research.ox.ac.uk/area/trueplanet/oxford-networks-for-the-environment>.
- ⁷ Public Understanding of Science is a fully peer-reviewed international journal covering all aspects of the inter-relationships between science (including technology and medicine) and the public: <https://journals.sagepub.com/home/pus>.

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How to cite this article: Clarke, L., Tooth, S., Viles, H., Schillereff, D. & Harvey, E. (2025) Should academic success be redefined amidst the climate and environmental crisis? A dialogue between five UK geographers. *Geo: Geography and Environment*, 12, e70005. Available from: <https://doi.org/10.1002/geo2.70005>