



Challenging Conventions—A Perspective From Within and Without

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Academics globally are calling for urgent and proportionate action on the climate and ecological crisis (CEC), not only from governments and corporations but from leaders of academic institutions themselves. In this article, I argue that academic institutions are failing in their over-arching mission to humanity and the planet, and that they are increasingly part of the problem, not the solution. I explore the widespread use of league tables and metrics to capture and assess teaching and research performance and argue that these tell us little about how well academic institutions are faring in terms of their fundamental mission. I go on to chart the lackluster response of academic institutions to the CEC and a tendency to develop responses to the CEC that are centered on achieving carbon neutrality across estates and operations. I explore the moral and ethical case for transformative change within academia and give some examples of actions that institutions could readily take. The article concludes by stating that responsibility can no longer be shirked and that academic institutions must embrace Radical reform.

Keywords: climate emergency, activism, deliberative democracy, transformative change, mission

“Knowledge implies responsibility.”
Lord Deben, November 2020¹.

INTRODUCTION

On October 29th 2019, the Times Higher Education (THE) published an open letter I had organized,² signed by over 1,000 academics and scholars, calling on universities to act independently and swiftly on the climate and ecological crisis (CEC). The letter called on Vice Chancellors, Universities UK and UK Research and Innovation (UKRI) to support a “series of new programmes, fellowships, sabbaticals, and voluntary placements to help the critical efforts needed to save all life on our planet.”

Weeks earlier in September 2019, hundreds of Australian academics signed an open letter³:

“We can no longer tolerate the failure of the Australian government, or any other government, to take robust and urgent action to address the worsening ecological crisis.”

¹<https://www.youtube.com/watch?v=dIRit6dapBg> The Climate Commission for UK Further and Higher Education “One Year on” event (November 2020).

²<https://www.timeshighereducation.com/opinion/universities-must-act-swiftly-and-independently-climate-change>

³<https://www.theguardian.com/science/2019/sep/20/we-declare-our-support-for-extinction-rebellion-an-open-letter-from-australias-academicstating>

Scientists for Future organized a further global open letter,⁴ endorsed by over 3,000 scientists including Michael Mann, Katharine Hayhoe, Stefan Rahmstorf, Kevin Anderson, Gregor Hagedorn, and myself, expressing support for the striking school children.

That so many academics, including many distinguished scholars, around the world are openly calling for action on the CEC and supporting activism lends credibility to a key premise of this volume—that our academic institutions have somehow failed in their fundamental civic duty to enhance the quality of human life by intellectual, cultural, educational, technological, and practical means. In fact, it was this conclusion that led me to resign from my post as Pro Vice-Chancellor and to trade academia for advocacy. I had experienced at first hand over some years the numerous ways in which financial sustainability considerations drove decision making.

The severity of the present situation was recently echoed by the new US climate envoy, John Kerry, who said that the 2021 COP climate conference will be the world's "last best chance"⁵.

This perspective article will explore some of the constraints within which many academic institutions currently operate and argue that these serve to hamper both the evolution of curriculum and the generation of research and scholarship that adequately prepares students to play a part in enabling humanity to live well within planetary boundaries. What are we to make of these demands from academics and scientists that they be permitted to act, rather than simply calling for action on the part of academic institutions? How did the situation arise? Are calls for action being heeded? How might the sector respond and evolve, so that it becomes part of the solution to the CEC?

A SELF-PERPETUATING PROBLEM

Academic institutions around the world are the intellectual homes to many thousands of scientists, scholars and students. They develop and host courses on a range of subjects, from the traditional Arts, Sciences and Humanities to more vocational courses. Qualifications by and large serve as a "ticket" toward a chosen career, some tickets conferring advantages including what has come to be known as the "graduate premium"⁶. An irony of course is that one such example, classical economics, is widely seen as part of the problem (Wiedmann et al., 2020) yet institutions have tended to regard such courses as "jewels in the crown."

League tables are regularly published, providing information on which universities perform best according to set criteria. The THE for example publishes the World University Rankings. Here, the performance indicators are grouped into five areas: Teaching (the learning environment); Research (volume, income and reputation); Citations (research influence); International outlook (staff, students and research); and Industry Income (knowledge transfer). Teaching, research and citations collectively make a 90% contribution to an institution's ranking.

⁴<https://science.sciencemag.org/content/364/6436/139.2.full>

⁵<https://www.bbc.co.uk/news/world-us-canada-55836163>

⁶This is the term used to describe the increase in average wages that university graduates can expect having achieved a degree. These typically include courses in Finance, Engineering and Law, amongst others.

In the UK, exercises such as the Research Excellence Framework (REF) and the more recent Teaching Excellence Framework (TEF) similarly are intended to provide a broad indication of quality of research and teaching. There are however many criticisms of both the REF and the TEF,⁷ not least that these exercises take up an inordinate amount of time and energy. But are they really telling us much about the contributions academic institutions are making toward the problems of how life can prosper on a planet of finite resources? The metrics used are geared toward aspects of the quality of research and teaching, but not their respective contributions to the greater good.

In the case of the CEC, climate scientists have delivered the requisite research yet have been powerless to drive meaningful and proportionate action. Warnings⁸ and calls for action from scientists have been many, and yet a key indicator of planetary health—concentration of atmospheric CO₂—shows that with each new summit and convention, the situation has worsened rather than improved⁹. Academic institutions have certainly delivered in terms of advancing our knowledge of science, but where does the responsibility sit for the implications and outcomes of the research? It certainly does not sit with the climate scientists. It is a fundamental question that must be addressed.

Maxwell (2012) has long argued that we must shift our focus from knowledge enquiry to wisdom enquiry, and this allows for an understanding of the essence of the problem. How do we then move from that understanding to effecting change across a distributed and diverse global sector?

THE SECTOR'S RESPONSE TO THE CEC

In the UK, Bristol University was the first university to declare a climate emergency, back in April 2019. Many other academic institutions around the world subsequently followed. Writing for WonkHE, Facer¹⁰ considered what the sector might then do as a consequence of the declarations of climate emergency. Beyond merely getting their respective houses in order, in terms of setting a carbon budget and developing net zero plans, she argued that the academic sector needs to rethink its mission and consider what it is that higher and further education can offer in a world that is changing fast, and where unpredictability is the norm.

On the 10th July 2019, the Alliance for Sustainability Leadership in Education (EAUC), the United States-based higher education climate action organization Second Nature and UN Environment's Youth and Education Alliance, published an open letter stating that 7,000 higher and further education institutions from six continents were declaring a "climate emergency." The signatory institutions agreed a three-point plan to address the climate crisis:

- Committing to going carbon neutral by 2030 or 2050 at the very latest.

⁷<https://www.timeshighereducation.com/blog/now-good-time-uk-ditch-ref-and-tef>

⁸<https://www.scientistswarning.org/warnings/>

⁹<https://mobile.twitter.com/dwallacewells/status/1331590427980521478/photo/1>

¹⁰<https://wonkhe.com/blogs/declaring-a-climate-emergency-is-an-important-first-step-what-do-we-do-next/>

- Mobilizing more resources for action-oriented climate change research and skills creation.
- Increasing teaching and learning about environmental and sustainability education across curricula, campus and community outreach programmes.

The organizers commented that it was the first time further and higher education establishments have come together to make a collective commitment to address the climate emergency.

As 2021 unfolds, it is fair to say that while growing concerns about the CEC have been heard, the bold and dramatic action required of academic institutions has simply not happened. In November 2019, the Climate Commission for UK Higher and Further Education was established, almost certainly in response to the increasing pressure worldwide that nations and organizations declare a climate emergency. While this was noted by Universities UK,¹¹ a body that curiously has not itself led in this regard, it is unfortunately the *only* item of news that is centered on the climate and ecological emergency that is noted by UUK. UUK hosted an event centered on “The role of universities in tackling the climate emergency” in Feb 2021 ahead of the postponed COP 26, but the brief for the event¹² did not to include a discussion of the future purpose of universities:

“University research has allowed us to understand the threat that climate change poses and is leading the way in offering us solutions through new technology and innovative policy. **But what further role can universities play in addressing this global challenge?** How can we make our campuses carbon neutral and ensure that internationalization goes hand-in-hand with sustainability?”

Some work is underway in terms of “greening” academic campuses, but even there, progress is patchy. For example, UN Environment has produced the Greening Universities Toolkit V.2.0 to inspire universities to develop strategies for green, resource-efficient and low carbon campuses.

“Evidence, however, shows that many universities are struggling with the concept and agenda of university “greening;” achievements to date have been scattered and unsystematic,” the toolkit says. “While some noteworthy exemplars of university sustainability initiatives exist around the world, there is a need to maximize the potential benefits by encouraging their replication in as many universities as possible globally”¹³.

A problem is that there are different views on what it is that academic institutions could and should be doing in response to the current climate and ecological crisis, and in the case of the UK, seemingly little appetite from the sector for a serious discussion of transformative change. The objective of the UN Environment toolkit was stated thus:

“The objective of this Toolkit is to inspire, encourage and support universities to develop and implement their own transformative strategies for establishing green, resource efficient and low carbon campuses.”

¹¹<https://www.universitiesuk.ac.uk/news/Pages/University-and-college-leaders-launch-12-month-bid-to-find-ways-to-combat-climate-emergency.aspx>

¹²<https://www.universitiesuk.ac.uk/events/Pages/The-role-of-universities-in-tackling-the-climate-emergency.aspx>

¹³<https://wedocs.unep.org/bitstream/handle/20.500.11822/11964/Greening%20University%20Toolkit%20V2.0.pdf?sequence=1&isAllowed=y>

This is a stark contrast though with the relentless demands of Fridays for Future and young activists, and now academics themselves, that immediate and proportion action is taken—action that includes academic institutions, and that must go beyond institutions merely achieving carbon neutrality across estates and operations.

GROUNDHOG DAY?

In some regards, criticisms of the failure of academic institutions to help humanity and indeed all life flourish on a finite and increasingly fragile planet are curiously reminiscent of those made of the failure of the international negotiations to adequately address the CEC. There is a sense of déjà vu in these very diverse cases, in that problems are identified and acknowledged, yet not adequately addressed.

The Intergovernmental Panel on Climate Change (IPCC) and numerous Conference of the Parties (COP) events hosted by the United Nations Framework Convention on Climate Change (UNFCCC) have demonstrated the gravity of the situation since the first COP on Climate Change took place in Berlin in 1995.

Speaking at COP 1 in Berlin in 1995, Helmut Kohl noted:

“Because of the recent worldwide recession, however, the expected momentum had failed to develop. National self-interest had come to the fore and, in the desire for economic recovery, environmental considerations had often been disregarded and forward-looking projects placed on the back-burner as expensive luxuries, indicating that Rio’s message of sustainable development was not yet accorded sufficient importance by States. Yet it was a dangerous mistake to believe that long-term positive economic development could be achieved at the expense of the environment. Global environmental problems were increasing rapidly and no country alone could overcome the dangers arising from global climate change. What was needed, therefore, was not only joint action by States, but a streamlining and strengthening of international environmental protection machinery within the United Nations”¹⁴ (p. 48).

The United Nations Environment Programme (UNEP) has hosted related COP events centered on biological diversity. These have similarly tracked global concerns around loss of biodiversity and environmental degradation since their first event in Nassau in 1994. The President of the 49th session of the General Assembly of the United Nations, stated at that first event:

“... if there was one single area in which international solidarity was vital, it was that of sustainable development, of which the conservation and rational use of biological diversity constituted an essential element. Efforts to combat global warming, the squandering of biological capital or desertification were the task not of a few, but of all, since environmental degradation did not recognize national frontiers or ideological cleavages. Short-term strategies and short-sighted interests must give way to a vision of the world which would translate sustainability into the reality of the collective global experience”¹⁵.

¹⁴<https://unfccc.int/cop4/resource/docs/cop1/07.pdf>

¹⁵<https://www.cbd.int/doc/meetings/cop/cop-01/official/cop-01-17-en.pdf>

Scientists now speak openly and candidly about their frustrations with the failed COP process over decades^{16, 17, 18, 19}. A key point is that neither the science nor the scientists have failed—the science is sound, and scientists have diligently kept to their brief. Similarly, some academics have long expressed disquiet about the trajectory of education. One point is that recurring problems preventing progress have been identified and these speak to pernicious challenges, not only at the science and policy interface, but within academic institutions themselves. Maxwell (2019), puts it thus:

“What has gone wrong is the pursuit of science and technology in a way that is *dissociated from a more fundamental concern with our problems of living, including our global problems, and how best to solve them*. We have failed to develop a kind of academic inquiry centrally and fundamentally concerned to help humanity learn how to resolve conflicts and problems of living in increasingly cooperatively rational ways, science being an important but *subordinate* part of such an academic enterprise” (p. 108).

Maxwell has made these points often, and they are not new. In an address made in 1995, coincidentally in the year of the first COP, and shortly before he died, Ernest Boyer, then president of the Carnegie Foundation for the Advancement of Teaching, said: “What I find most disturbing? is a growing feeling in this country that higher education is, in fact, part of the problem rather than the solution. Going still further, that it’s become a private benefit, not a public good. Increasingly, the campus is being viewed as a place where students get credentialed and faculty get tenured, while the overall work for the academy does not seem particularly relevant to the nation’s most pressing civic, social, economic, and moral problems” (Boyer, 1996, p. 1).

In the case of academic institutions, there has been a collective failure to acknowledge their part in a system that is bringing humanity to the brink of catastrophe, and a failure to lead with the requisite integrity, strength and vision needed to combat the vested interests of corporations consuming the research and employing graduates. Leading climate scientist, Mann (2021) exposes the decades long campaigns of denial, delay and deflection mounted by various actors from the pro-gun lobby to the tobacco industry and now the fossil fuel corporations. The vested interests of big oil and big money are not new, and academia is not immune to them.

BREAKING THE IMPASSE

A vital first step is to recognize that there is a problem—that academic institutions are failing in their over-arching mission to humanity and the planet, and that there exists a huge opportunity for them to play a major role in anticipating and preparing communities both local and global for the changes we will see as

¹⁶<https://www.dandc.eu/en/article/indian-environmentalist-sunita-narain-dont-blame-us-climate-change>

¹⁷<https://abcnews.go.com/Technology/NaturesEdge/climate-change-struggle-note-copenhagens-successful-failure/story?id=9458804>

¹⁸<https://theecologist.org/2019/jan/24/irreverent-musings-cop24>

¹⁹<https://www.bbc.com.uk/news/science-environment-50801493>

we approach the “safe operating space for humanity” (Rockström et al., 2020).

Deliberative democracy, in which ordinary citizens are carefully briefed on a complex matter and then deliberate ways forward, is a promising approach to addressing deeply entrenched political problems. Dryzek et al. (2019) found that properly implemented, deliberative democracy can circumvent some of the problems that arise in present day democratic politics, such as manipulation and polarization.

Academic institutions may not be as prone to incivility as political institutions, but they are nonetheless typically complex, hierarchical bodies with distinct constituencies and “tribes,” and a wealth of diverse and at times conflicting views and values. Effecting organizational change is notoriously slow and difficult. Surveys of academic staff in the UK at least have revealed at times alarming levels of dissatisfaction with senior management²⁰. Could a more inclusive approach be a way forward in terms of addressing not just pervasive and corrosive feelings of staff being under-valued and over-worked, but also the immense challenges of harnessing the goodwill, creativity and energy that will be needed if academic institutions are to effectively rise to the challenges of the CEC described by Facer (2020)?

THE MORAL AND ETHICAL CASE FOR TRANSFORMATIVE CHANGE

In a tweet, the economic anthropologist Jason Hickel noted²¹:

“It never ceases to amaze me that policymakers assess the relative merits of climate action in terms of GDP, rather than in terms of life.”

In a similar way, many academic institutions are beholden to the same economic forces that drive the CEC. But there are some actions that can and should be taken, particularly as the “Greta Generation” looks to academic institutions in search of courses and careers that anticipate a rapidly changing world in which precarity is the norm.

First, academic institutions must remind themselves that they serve a public good and that they have a responsibility to those they educate and employ. It is for example both immoral and unethical to continue to promote and offer curricula in service of sectors likely to be obsolete within the first half of today’s students’ working lives. The fossil fuel industry is one example in this regard, but career obsolescence is not the key point—the point is that promoting careers in the very sectors that underpin and perpetuate the CEC is unethical. Academic institutions continue to offer courses in the fossil fuel sector, for example, and one could argue that it is misleading and even irresponsible to claim that “With continued worldwide demand for energy, there is no better time

²⁰<https://www.timeshighereducation.com/news/overpaid-and-overbearing-uk-university-staff-management>

²¹<https://mobile.twitter.com/jasonhickel/status/1355815525046075393>

to be a Petroleum Engineer”²². Students should be cautioned that such choices are likely to result in curtailed careers, and potentially harmful dissonance later on. There is a duty of care that needs to be exercised so that prospective students make informed choices.

That same duty of care extends to academic and administrative staff too, and much has been reported on the glacial speed at which institutions have grudgingly moved toward divesting from fossil fuels²³. There are many stark illustrations of the failure of university leaders to take responsibility for the knowledge and scholarship they have generated, and it is troubling indeed that some institutions that are home to renowned climate scientists and ecologists have failed to take timely and commensurate action²⁴. Divestments have implications for staff who teach, research and support those areas that will be culled. These issues must be addressed, rather than kicked into the long grass because they entail “difficult decisions.” Introducing more inclusive, deliberative processes could help institutions to initiate and hold much needed conversations about their future role in global societies.

Academics globally are calling for action, willing to play their part in finding solutions and interventions, and increasingly turning to activism (Gardner and Wordley, 2019). Two important areas that could be tackled are (i) curriculum and (ii) study leave and sabbaticals. “Greening” the curriculum will not suffice. Courses centered on a “carbon economy” and on business as usual will simply perpetuate the CEC. They must give way to curriculum that anticipates a different future. Academics have already expressed a willingness to use their contractual study leave to work on solutions-focused endeavors. Making this happen requires executive decisions and mechanisms that recognize and incentivise alternative uses of study leave and sabbatical time.

²²<https://www.abdn.ac.uk/study/undergraduate/degree-programmes/811/H851/petroleum-engineering/>

²³<https://www.theguardian.com/education/2020/oct/01/cambridge-university-divest-fossil-fuels-2030-climate>

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²⁴<https://manunion.com/2020/05/27/university-of-manchester-announce-full-divestment-from-fossil-fuels/>

CONCLUDING COMMENTS

While the coronavirus pandemic has challenged the capability of academic institutions to deliver on their missions, the climate and ecological crisis has exposed some of the flaws and paradoxes at the heart of higher and further education. It has also shown what can be achieved when something is deemed “essential.” Many academic institutions and schools deemed maintaining tuition essential to their survival. Montgomery (2021) notes the enormous efforts that were made to ensure that tuition did not suffer, much of this brought about *via* exceptional processes.

Now it is time to prioritize the CEC above all else and for institutions to recognize that addressing the challenges this poses is essential to their very survival. There is no alternative but to change—new generations of students will demand it. It is a great irony that many academic institutions exist to prepare people for sustainable employment and for life as active citizens in democratic societies, yet employers increasingly lament that graduates are not job-ready²⁵. A more profound irony though is that academic institutions are largely responsible for generating knowledge about the very societal problems that they themselves perpetuate, yet have failed to solve. Nowhere has this been brought more sharply into focus than with the climate and ecological crisis. Transformative change is now essential and academic institutions must embrace this.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

²⁵<https://www.timeshighereducation.com/news/firms-shift-towards-wanting-work-ready-graduate>

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Conflict of Interest: The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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