

Teaching the Psychology of the Climate Crisis: Why now, and how?

Clare Kelly, PhD

School of Psychology & Trinity College Institute of Neuroscience

Trinity College Dublin





Trinity College Dublin Coláiste na Tríonóide, Baile Átha Cliath The University of Dublin











Science & Society

The Climate Crisis Needs Attention from Cognitive Scientists Adam R. Aron^{1,*}

To prevent the devastating consequences of anthropogenic global heating, immediate collective action is needed to reduce fossil fuel emissions. Cognitive scientists are in a special position to facilitate collective action by researching the factors underlying belief and action, and by teaching students how to think about the biggest problem of their lives. crease to 1.5° C as soon as 2030 [1]. Notably, the projections do not generally factor in permafrost thaw that could eventually release massive amounts of methane – a potent greenhouse gas [2]. The impacts of AGH are manifold, including a huge increase in human migration^{iv} out of regions of drought and deadly heat, which will further strain national governance elsewhere.

Avenues to Action

The crisis grows more and more terrifying, especially for those of us with small children. Furthermore, the scale of the change that is needed, economically and politically, is absolutely daunting. This is fundamentally a strugcate within our institutions – we must see change where we are, and soon, before expecting wider societal change. Fourth, and this is the main point of this short article, we can teach and research.

In Spring 2019 I taught psychology of climate crisis (my syllabus and materials can be found here"). Although I came to this with no special knowledge, the class was a success as judged by the deep engagement of the students (30% subsequently got involved in action). Other benefits accrued, such as increased attention to the climate crisis in my department and more widely on campus. Regarding research, as a basic cogni-

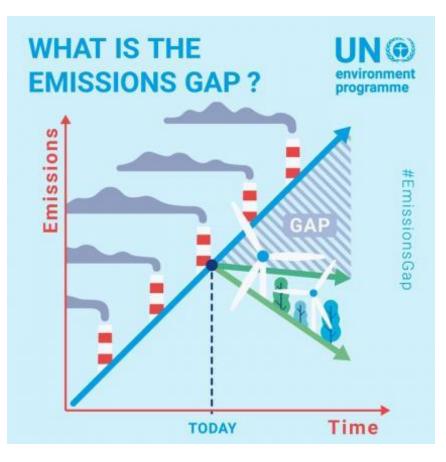
Trends in Cognitive Sciences, November 2019, Vol. 23, No. 11

Box 1. Seven Possible Avenues of Action for the Cognitive Scientist

- Look at it, inform yourself, grieve, start talking about it.
- Come to an honest reckoning of your emissions, make personal changes
- Advocate within institutions for increased attention, support fossil fuel divestment, make meetings virtual.
- Teach and research.
- Support grassroots advocacy groups such as 350.org and the Sunrise Movement.
- Pressure elected officials, preferably as part of grassroots advocacy groups; for example, to support a Green New Deal.
- Join civil disobedience groups such as Extinction Rebellion.

There are actions at other scales such as hundreds of legal cases being brought against the fossil fuel companies.

On the personal changes, flying dwarfs most things, especially for academics, some of whom fly 100 000 miles per year. There is a growing discussion within cognitive science and cognitive neuroscience about how to change our conference culture. We must leave fossil fuels in the ground.



To close the *emissions gap* we need to close the *education gap*.

Learning from experience is learning too late.

Climate change education:

- Increases the number of informed and engaged citizens
- Builds social will and pressure to change policy
- Enables informed decision making
- Creates skilled workforce educated in the issues & solutions
- Empowers people to *think critically* about information and the factors and systems that drive their behaviour
- Enables transfer of knowledge beyond the university

Shapiro Ledley et al., 2017

Curriculum

Piggybacking

Integration of climate-related teaching *within existing structures* by adding to individual sessions, modules, or courses.

Mainstreaming

climate-related teaching

but with emphasis on

broader cross-curricular

Integration of

within existing

structures

perspective

Existing

Specialising

Creation of *specific modules, courses, or degrees* that address climate-related issues (e.g., MSc in Climate Change)

Connecting

Integration of climate-related teaching through *new cross-disciplinary offerings* (e.g., course on Climate Change offered to ALL students in the university).



Trans-University Connected

Programmes: integration of climate-related teaching through new collaborative cross-disciplinary, cross-university initiatives

Structure

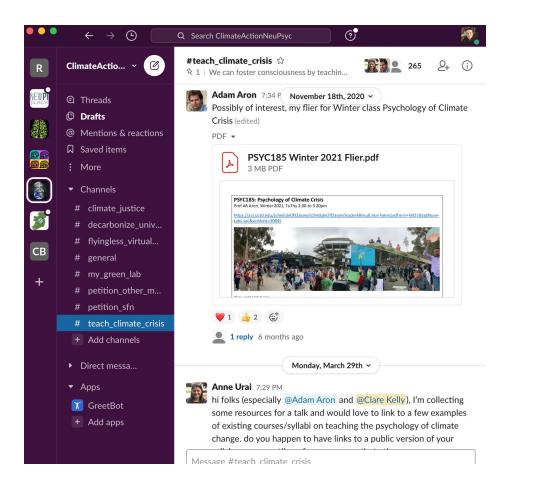
New

Molthan-Hill et al., 2019



How to beat the imposter monster:

- The crisis is too big to be addressed by a few
- Knowing too much can be paralyzing
- The "ignorant schoolmaster" = partners in learning
- The pleasure of learning something new
- We *all* teach outside our comfort zone at times
- Discomfort is not a bad thing!



How to beat the imposter monster:

- The crisis is too big to be addressed by a few
- Knowing too much can be paralyzing
- The "ignorant schoolmaster" = partners in learning
- The pleasure of learning something new
- We *all* teach outside our comfort zone at times
- Discomfort is not a bad thing!
- You're not alone! Support & shared resources

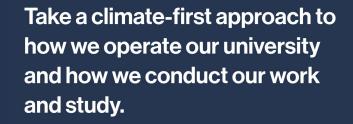
- Your roles offer other avenues for action
 - Researchers, educators, committee members, society members, members of university community
- Make climate & biodiversity the position that informs your work and decisions
- This does not have to come at cost of other important lenses (e.g., equality, diversity, inclusion), but can intersect with these



As Provost, I will:

(Click to expand)

Create a properly resourced and high-profile sustainability office.



Drive curriculum change to bring the climate-change lens to focus all we do.

Use our collective research talents to offer a new way forward.

Imagine Trinity in 2031

A Climate-First Trinity

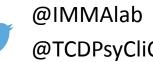




Thank you!



clare.kelly@tcd.ie



@TCDPsyCliCri