

FORUM

Effective Strategies to Counter
Campus Presentations on Climate Denial

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Although 97%–98% of the climate researchers most actively publishing in the field accept the basic tenets of the Intergovernmental Panel on Climate Change's (IPCC) findings [Anderegg *et al.*, 2010], there is a consistent undercurrent of doubt among the general public (A. Leiserowitz *et al.*, Global warming's six Americas in May 2011, online report, 57 pp., Yale Project on Climate Change Communication, Yale University, New Haven, Conn., 2011). To some extent, this doubt is fueled by high-profile climate change deniers who offer "the real view" of climate science [Oreskes and Conway, 2010]. Our campuses recently hosted two such speakers: Ivar Giaever at Rensselaer Polytechnic Institute (RPI) and Christopher Monckton (also known as Lord Monckton) at Union College. (Monckton's presentation can be seen at <http://union.campusreform.org/group/blog/live-webinar-lord-monckton-at-union-college>.)

While such speakers often intend to muddy the waters with respect to climate science [McCright and Dunlap, 2010], the effect at our campuses was to galvanize our students and colleagues to highlight the widely accepted facts of climate change and the nature of expert scientific consensus on this topic. This communication was achieved using social media and follow-up events that raised the profile of climate change discussions. These events proved to be so successful that we offer our experiences so that others can capitalize on similar visits by climate change deniers by converting them into "teachable moments."

It is our intention neither to address the content of the lectures nor to expand on the extensive rebuttals to their arguments [e.g., Nordhaus, 2012] (see also http://www.realclimate.org/wiki/index.php?title=Christopher_Monckton and http://courseweb.stthomas.edu/jpabraham/global_warming/Monckton/Monckton%20Presentation%20June%202012/index.htm). Instead, we describe the successful use of multiple strategies to present an accurate picture of climate science. The attention and publicity surrounding the presentations by the climate change deniers almost certainly engaged both of our institutions in a discussion of climate science to a far greater extent than would have occurred if controversial speakers were not brought to campus.

The announcement of each upcoming lecture was a cause for concern for us and our colleagues because—let us be clear—there is damage to be done by such (misre)presentations. Educating the public so that people understand the science of climate change, including its causes and potential consequences, is a difficult task. By distorting the scientific process or attacking the legitimacy of scientists, such as those involved in the presentation of the United Nations' IPCC reports, these speakers have a chance to undo much of the work we have done.

It was neither practical nor desirable to block either speaker from making his presentation at our campuses. Giaever, for example, is a member of the RPI faculty, and neither speaker received speaking fees from our institutions for his appearance. Furthermore, colleges and universities exist for the very purpose of exchanging ideas.

Rather, the most effective way to counter such distorting presentations is to provide a more accurate picture of climate science and to point out flaws in the speakers' analyses. We did this along with a diverse coalition of students and faculty from a variety of departments. Strategies included public displays with information and illustrations related to climate change science, the use of social media sites such as Twitter and Reddit to exchange information and ideas, and the organization of follow-up events that focused on the science of climate change.

The follow-up events, in particular, were essential to our efforts' success. The RPI event, called "The Science of Climate Change," took place approximately 2 weeks after the presentation by Giaever (<http://approach.rpi.edu/2012/03/09/the-big-picture-of-climate-change-science/>). The format was close to that of a lecture, with an opportunity for members of the approximately 150-person audience to ask questions. The Union College follow-up event was mostly organized around questions from the more than 60 students who attended. Significantly, Monckton came to the Union College follow-up and sat in the first row. This forum allowed students to ask questions of various members of the Union College faculty and carry on a high-level discussion of climate change, the threats it poses, and possible solutions. They were also able to engage Monckton in extensive exchanges about his arguments.

The principal lesson from our experiences is that our students are some of the most effective counters to such presentations by climate change deniers. Largely on their own, students at each of our institutions organized sophisticated campaigns to present a coherent message about the science of climate change. They engaged with each speaker during the question-and-answer periods that followed the lectures, used social media to communicate with one another and with their peers, and organized alternative forums in which the science of climate change was effectively presented. They displayed highly sophisticated critical thinking skills and the passion and energy to organize, to engage with the speakers, and to rebut arguments that misrepresented the state of climate science.

On the other hand, faculty involvement in the presentation of climate science can be critical as well. It is likely too much to ask that students shoulder the entire burden of rebutting prominent speakers who have well-practiced arguments. Even in the case of the student-organized question-and-answer forum at Union College, two members of the faculty, along with one student, moderated the discussion. Faculty members from several other departments were also in attendance to help answer questions.

The final challenge, and the one for which we were least prepared, was to deal with postevent publicity. While we had effectively used social media tools to organize and communicate within our own communities, the Union College event was subject to a well-organized campaign that used those same tools to discredit our efforts. (See comments at <http://www.concordy.com/article/opinions/march-7-2012/a-lords-opinion-cant-compete-with-scientific-truth/4222/>, <http://wattsupwiththat.com/2012/03/10/moncktons-schenectady-showdown/>, and <http://opinion.financialpost.com/2012/04/20/aristotles-climate/>.) Such campaigns have been mounted against a variety of other communicators of climate science as well [e.g., Mann, 2012]; yet we would have been far better prepared for the postevent publicity if we had anticipated that Twitter and other Internet tools can effectively nationalize discussions that take place even at small colleges.

The time and, more important, the expertise required to mount such an organized challenge can be daunting. The need for skills in social and media communications that typically fall outside scientists' graduate training is well described [e.g., Bowman *et al.*, 2010; Moser, 2010; Pidgeon and Fischhoff, 2011]. Yet, when we faculty engage climate science deniers, we make clear to our students and the entire community that we believe that much

is at stake. If we yield the argument to speakers who attempt to discredit our research and contradict what we teach in our classes, then we risk giving the impression that scientific literacy and public awareness of climate science are of little importance to us.

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