Cases for Teaching Responsible Communication of Science

The opinionated scientist: Should scientists blog their policy views? Discussion version

You are an assistant professor of biofuel engineering halfway through the tenure process. The five to seven years most junior professors spend working toward tenure represents somewhat of a trial-by-fire – they either prove themselves by securing enough external grants and publishing enough academic articles to be awarded tenure or they fail to meet the expectations of their colleagues and are forced to leave their university. Luckily for you, the chair of your department tells you that you are proving to be an accomplished researcher and just need to continue your current track of getting grants and publishing papers for a strong chance at tenure.

More than just being a good researcher, you also believe it is part of your responsibility as a scientist to use your expertise to enhance the public understanding and debate on science issues relevant to your work. On one hand, most of your grants so far have come from taxpayer-funded federal agencies, so you feel an obligation to ensure that same public is able to understand your work and its larger implications. But more philosophically, you feel that scientific knowledge is necessary for people to be able to make decisions about their lives, and who is better equipped to make that knowledge understandable than the scientists who help create it?

It is this underlying responsibility that convinced you to create a maintain a public blog for the past five years where you attempt to explain and interpret recent findings and societal interactions within biofuel issues for a wider audience. This blog has been modestly successful – your visitors have steadily increased over the years and you often receive complements from other young researchers in your field, saying they admire what you are doing to help non-experts understand the issues facing the field. Your blog posts have even helped your professional career. Some scholars have noted they cited your own work after reading about it on the blog and at least one collaborative project began after a colleague read one of your posts about a topic relative to her own research.

However, not everyone is complementary. There is a tension in many science fields between the desire to educate the public on science and related social issues and a belief that doing so compromises the objectivity that science works so hard to maintain. In other words, some feel that engaging with the public is not an appropriate role for a scientist and those that do are held in less regard. Fortunately, you have been publishing work that your colleagues find valuable, so even those opposed to your blog see it mostly as a trivial distraction.

Your most read blog posts are policy interpretations, where you summarize and sometimes criticize recent policy decisions that impact the biofuel industry. Your previous blog post was one of these interpretations where you criticized a new policy that altered tax credits for biofuel production based on carbon estimates that you consider greatly misinterpret the current scholarship on this issue. You addressed one of two problematic areas of the policy in the post and promised a follow-up post in one week where you would expand upon the second problematic area.

Your post attracted a lot of positive feedback from other researchers who agree with your critiques, and some have even sent requests for what you should mention in your follow-up post. You are also happily surprised to be contacted by a national media outlet that would like to

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feature you in their "Young Scientists Making a Difference" series, where they highlight scientists trying to make science more understandable for the public. Not all the feedback was positive, however, as some other researchers commented that you shouldn't take such a strong stand or shouldn't even be critiquing policy at all.

It is at this point that you receive a call to meet with your department chair. In the privacy of her office, she tells you that she received an email from a program officer at a federal granting agency who read your last post and is concerned your online presence is becoming too political for a scientist. Your department chair said she cannot reveal the identity of the program officer, but the email said that scientists should not be getting involved in politics and they can't be providing federal money to researchers who appear to have a policy agenda. In short, the email implied that you would be black listed from future funding from that agency if similar blog posts continued. Your chair notes that you have a first amendment right to post what you want and that she doesn't necessarily disagree with what you posted, but sometimes scientists shouldn't get involved with social or political issues. She says she can see both ways and will support whatever decision you make as best she can.

Your blog posts have increased your prominence in the field and you feel making your understanding accessible to the public is the right thing to do as a scientist. You could request funding through other agencies, but you do need further grants to receive tenure. What if other program officers take offence at your future online engagement? Your colleagues across the country are waiting to see what you write in your follow-up policy critique blog post, the media is asking for an interview about your public communication and you know whoever sent the warning email to your chair will also be watching to see what you write next. You have promised to post your follow-up post in a week. What do you do?

Discussion Questions

1. Benefits and Drawbacks

- What are the potential benefits of scientists engaging with policy issues online, for the scientist, science and society as a whole?
- What are the potential drawbacks of scientists engaging with policy issues online, again for the scientist, science and society?

2. Engagement

- How should scientists share their thoughts about specific policies, if at all? What are the appropriate boundaries?
- Would using online channels raise any additional concerns or opportunities?
- How important is it for you personally to ensure that non-experts are able to understand your science and its larger implications?

3. The Follow-up Blog Post

- What are the risks and benefits of writing a follow-up post at all? What about the risks and benefits of not writing one?
- What options do you have about how to communicate your thoughts in a follow-up post? Are there ways of discussing what you see as problems of the policy while avoiding appearing too political?
- What specifically would you choose to do in this situation?