

# Death knell has not yet been rung on evidence-based policy

**Opinion: Improving public understanding of science will help shape opinions, leading to more sensible political responses**

BY BEN PAYLOR, SPECIAL TO THE VANCOUVER SUN FEBRUARY 26, 2013



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When public policy is based on science, the results of research benefit society. But there is growing anxiety in Canada that policy is based not on science, but on ideology without evidence.

We are living in a time when government is not reflecting evidence in its policies. Examples abound; from the government's shift away from evidence supporting climate change to its mania for prison construction amid evidence of falling crime. The Department of Fisheries and Oceans' well-documented and continued disregard for science surrounding fish management when this evidence clashes with its political agendas is yet another instance.

Despite scientific consensus opposing these policies, the tendency to cater to voter sentiment, rather than expert evidence, seems to be the modus operandi of Canada's Conservatives. The antagonism felt by the scientific community is not so much that it is misunderstood by the government but that government doesn't value the evidence it produces.

There are several well-documented instances of conflict due to public misunderstanding about scientific advances, a problem that continues to grow as the pace and complexity of scientific progress increases. Public debates surrounding a wide range of scientific topics — including skepticism about the evidence behind climate change, effectiveness of a controversial multiple sclerosis liberation treatment, the danger of genetically modified organisms, and fear about widespread genetic

discrimination — continue despite overwhelming scientific consensus on the evidence.

So why does the public continue to support policy that conflicts with evidence that clearly contradicts it?

Viewing this as a fault of ideological divides may not be taking into account the entire picture.

The influence of media in shaping public understanding is well documented, with both balanced and biased coverage of polarized debates presenting individual problems. On topics ranging from evolution to climate change, certain media and government members increasingly politicize scientific data, often shrouding its legitimacy by suggesting political bias. Further evidence of scientifically accepted phenomenon will do little to sway individuals on the other end of the political spectrum. In other instances, the media can confuse audiences by attempting to present balanced coverage of polarized debates, giving both sides equal weight. Such coverage only serves to undermine the legitimacy of scientific evidence by representing it as equal to its unsubstantiated counterparts.

Drawing the line between science and ideology, however, may not be as sound as some may propose; scientific progress is hardly exempt from ideological motivations, and refusing to acknowledge its lack of objectivity will only hurt efforts to reconcile differences between public and scientific world views.

If the increasingly vocal scientific community re-examined its relationship with government, it might recognize that more than just an ideological divide is at play. In doing so, it would be able to reframe strategies to improve public understanding of key issues and begin to resist the “death of evidence” in public policy.

Such strategies must involve improved efforts to implement scientific communication training, as well as devoting more resources to public and media engagement, especially within complex emerging branches such as stem cell research and climate change. Technological changes in media have drastically altered how information reaches the public, and science requires different approaches if it is to make its case persuasively on the value of evidence-based decisions.

Ultimately, efforts to reconcile gaps between evidence and ideology will require the involvement of a wide range of stakeholders outside government who are often perceived to widen such divides. Although these strategies for improving public understanding of science will not bring overnight change, even small and incremental changes will begin to shape public opinion, and with it, a more sensible political response. Although a vocal and critical approach to government behaviour on science policy may sway popular opinion, an emphasis on public scientific education and media engagement offers a far greater potential for change.

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