Why do some people not care about science?

February 3 2014, by Joan Leach And Fabien Medvecky

Bored with science. Credit: Flickr/manwithbeard

Surveys on public attitudes to science regularly tell us that there are swathes of the public that simply seem to not care about science, despite our best effort to engage them.

But perhaps the issue is not with the public—the issue is with the question.

Recent research argues that there is no such thing as a public at large to engage (or leave disengaged), rather, individuals who cluster around issues to form multiple publics, and even counterpublics who diverge from consensus opinion.

With the Australian Science Communicators national conference kicking off in Brisbane yesterday, it's a good time to reflect on what we know and don't know from surveys and polls about science engagement.

A survey says

So what do we know? Every few years, a new survey on public attitudes towards science comes out showing remarkably consistent results. One fairly reliable statistic that usually receives attention is the proportion of the public that is interested in or engages with the sciences, and more importantly, the proportion of disengaged.

Arguably, one of the better known is the Eurobarometer which covers numerous aspects of public attitudes to science and technology in Europe (these have come out in 1977, 1990, 1992, 2001, 2005 and 2010).

Over the decades, the Eurobarometer has shown that about 15% of those surveyed have little interest in science. In a US study people do show a little more interest in environmental news and medical discoveries but a little less in generic scientific and technological discoveries.

Australia has not had a comparable long running survey, but a 2010 ANU poll on public opinion about science showed Australia fared better, with disinterest rates varying from 5%-10%.

Better result, but it still leaves a feeling that a proportion of the population is disengaged with what is one of the cornerstones of our society.

Similar results were revealed in New Zealand in a commissioned Nielsen poll on Public attitudes to science (2010), where 9% of the population were assessed as disengaged.

Why disengaged?

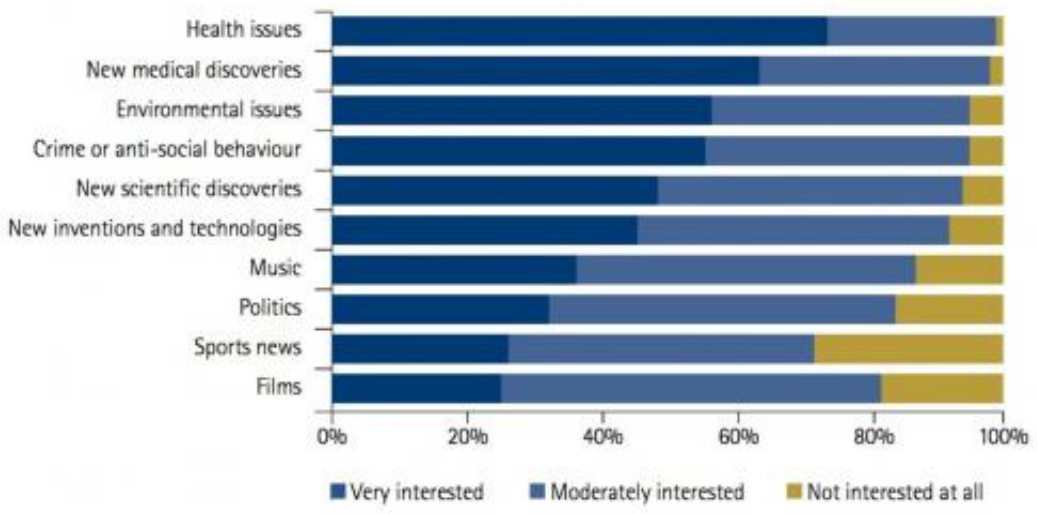
The vexing question here is: why does the proportion of people disengaged with science, those seemingly uninterested in science, not change despite our continuing effort to bring them into the engaged fold?

This might be cause for a bit of soul-searching among those promoting science engagement.

Both Mathew Kearns and Rod Lambert recently suggested we should reconsider how we talk about science if we really want an engaged public. They also separately argue it is time to embrace debate and disagreement, and accept the inherently social and cultural aspects of science.

Clusters of concern

The answer, as we suggested earlier, is largely borne out of recent research in *Science Communication* and Science and Technology Studies (STS). It's the idea that there is no such thing as a single public to engage (or leave disengaged), but rather, individuals who cluster around issues to form a number of smaller publics.



What topics engaged people. Credit: ANU Poll, Public opinion about science

These created publics might well be engaged, but they are engaged with a particular issue or controversy such as coal seam gas, vaccines, climate change or cancer.

Members of this particular publics don't consider themselves engaged with the topic of science, technology or medicine. They might well care about the science related to the issue, but only because they care about the issue. To that extent they are engaged with science but they may not think of this as an interest in science generally.

Sophisticated pollsters are aware of this problem, but being aware of this intellectual fact doesn't stop headlines like "Chief scientist Ian Chubb says young people 'disengaged' from subjects". Actually, the chief scientist recognised the problem well in his address to the National Press Club.

"Our younger generations appear to be disinterested - even disengaged from science – even though they use its applications every day: from their

food, to their pens, to shoes, to clothes, to smart phones, iPods, televisions and laptops." Professor Chubb said.

So what do we make of all this? Should we stop polling and surveying and acting as if ready-made publics exist and have attitudes? Not necessarily. But taking some suggestions from conversations happening in politics on the role of polling could be useful. We've come up with a few suggestions:

1 - Stop poll-gazing

While long-term trends in general attitudes to science are usefully compared (if Australia can support a continuing survey it will yield some interesting trends over time), polling on attitudes to particular areas of science probably shouldn't be driving policy. We need to dig deeper into the social contexts where there is disagreement about how science and technology functions.

2 - Consider the "donkey vote" in polling for what it could mean

What does it really mean when someone claims they are "disinterested" in science? An interesting comparison is to the "blank", "donkey" or "informal" vote in national elections.

In 2012 the French government decided to officially count blank votes as protest votes. Given voting is not compulsory in France, blank votes represent serious dissatisfaction with the election in general as opposed to not turning up.

By contrast, in Australia, the informal vote bundles both discontent and disinterest (as well as possible ignorance of the ballot process or bona

fide mistakes) and is not counted. The donkey vote is counted, but as a vote, not as a protest. The challenge for the pollster is to distinguish just what sort of disengagement is at play here: is it disinterest or discontent?

We think this is an analog of discussions about disinterest in science.

3 - What is the goal of the poll?

One trend is to think in maximising terms; to get as many people as possible to tick the "very interested" or "moderately interested" boxes next to the "What is your level of interest in new scientific discoveries" question.

If more people tick those boxes, what does that really mean? Does it suggest better general education or a laissez faire attitude to controversial science, or even general approval?

Let's talk further about what "attitudes to science" are considered good and what approaches to maximising those attitudes would be.

The conference

It is a heartening indication of the state of the field of research in science communication that we can tolerate a bit more soul-searching about why it is we want everyone to be interested in science.

As the science communicators meet for their 2014 conference this week, the very diversity amongst the participants shows that there is significant commitment to re-examining engagement.

We need to find better tools to do it with, but we also need better ideas with which to guide thinking about science in public.

This story is published courtesy of The Conversation *(under Creative Commons-Attribution/No derivatives).*

Source: The Conversation

Citation: Why do some people not care about science? (2014, February 3) retrieved 20 September 2024 from https://phys.org/news/2014-02-people-science.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.