

The future of public trust in science

The challenges of maintaining trust in science (see *Nature* 522, 6; 2015) can be understood in terms of corrupting pressures that make it harder for scientists to do the good work to which many aspire.

The sheer scale of science today is destroying colleague communities; it also demands 'objective' metrics of quality, which are perverse and corruptible. These effects are compounded by imported commercial pressures. The idealism that motivated 'little science' is no longer plausible.

Maintaining the public's trust in science calls for an urgent evaluation of its imperfections and vulnerabilities. We must identify what needs to be unlearned in the prevalent understanding of science: for example, we now know that any science-related policy problem poses more questions and solutions than can be derived from the illusory precision of models and indicators (a factor in the 2008 financial crisis).

Social-media channels are starting to teach the public more about new views of science. The growth of 'DIY science', which owes only minimal deference to established institutions, will eventually influence science education, and to good effect. In much the same spirit as citizen science has developed in parallel with established science, a movement of scientifically aware citizens could emerge within science. These citizens would develop an understanding of the connection between science's internal problems, such as morale and quality assurance, and external pressures of the sort we describe.

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