Science, ethics and citizenship:

How might we improve the practice and governance of scientific research to enhance community benefit?

Project Report for the University Research Office

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Summary

The PEALS Research Centre, led by Professor Erica Haimes, received funding from Newcastle University Research Office (URO) to explore the relationships between science, ethics and citizenship in order to address the issue of how the practice and governance of scientific research might be improved to enhance community benefit. The project, which was conducted in collaboration with the Newcastle Institute of Social Renewal, the Newcastle Institute for Sustainability, and the UK's Nuffield Council on Bioethics, had two main parts: a literature review and an international, interdisciplinary workshop. This report summarises the main activities of the project.

The literature review

The project was built upon previous work by the Nuffield Council on Bioethics that examined the impact of research culture on researchers themselves; PEALS and the Newcastle URO assisted this work by hosting a meeting in Newcastle for local researchers to discuss the challenges they faced (http://nuffieldbioethics.org/project/research-culture/). PEALS used this initial work as a base from which to develop further questions around the relationship between citizenship, science and ethics. As a first step, Dr Alexis Paton conducted a comprehensive literature review of the area which culminated in the creation of a database of current and relevant literature. Thirty peer reviewed journal articles were chosen to form the core of the database as they best represented the debate, and were supplemented by other relevant background literature. Central themes were then derived from the literature and used to generate 36 questions about the relationship between science, ethics and citizenship. These questions were then used to structure the overall workshop programme and were also the source of seven questions to kick-start small group discussions in the workshop. The literature review was also used to identify possible invited participants for the workshop; in some cases authors of relevant articles were invited to attend, while in other cases, academics conducting research in the field were identified through articles and were invited to attend. Finally, based on the overall themes and direction of the debate in the literature, three case studies from Newcastle and Durham universities were identified as best representing the current issues in the field.

The workshop

The invitation-only workshop, held on April 30th, 2015, at the Centre for Life, was organised and chaired by Prof Haimes and Dr Paton and involved over 30 participants. The featured case studies, that illustrated possible ways in which to build practical relationships between science, ethics and citizenship, were "Dilemmatic spaces: Engaging citizens with researchers in dialogue about the ethics of scientific research" from Prof Sarah Banks (Durham), "Ethical issues in access to expensive medicines" from Prof Judith Goodship (Newcastle), and "Capturing our Coasts" from Dr Jane Delany (Newcastle), a project that makes extensive use of 'citizen scientists'. The case studies helped to focus and anchor the wider discussions. Small group discussions, which included early career researchers, as well as more experienced colleagues, were then used to explore the triangular relationship between science, ethics and citizenship, in the local region and also internationally, from interdisciplinary perspectives.

The workshop was successful in bringing together local academics and members of the wider community, as well as colleagues from the UK more widely, Canada, Sweden and Italy. Further activities, to build on the success of this workshop, were identified for future development and funding proposals. One of these activities was a report outlining the key findings of the workshop; this has already been distributed to participants for comment.

Key Findings

There were several key findings from the workshop which highlighted new questions or concerns that should be explored further within academic debate. Participants in the workshop discussed how difficult it is to define the three key terms clearly, despite their initial 'obvious' meanings; participants were also undecided whether broadening 'science' to 'research', and thus being inclusive of all disciplines, made the task of identifying the relationships between the three elements easier or more difficult. These fundamental questions suggest why it is so complex to operationalise the relationship. Overall there were six key themes that the workshop identified for further consideration.

1) 'Citizenship' was understood in many different ways and has both specialist uses in particular fields, as well as various different lay uses.

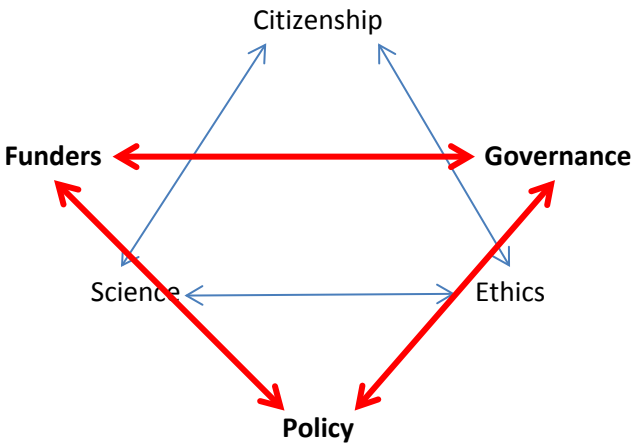
2) 'Responsibility' is a key aspect of the relationship between science, ethics and citizenship. This was understood in three ways within that relationship:

a) Science/scientists/researchers have a responsibility to citizens in both what they research and in conducting that research ethically; scientists have responsibilities as citizens as well as in their role as scientists.

b) Citizens have a responsibility to participate in scientific research, if possible, and to do so ethically.

c) Is there (or should there be) an ethics of citizenship?

3) There is a second, overlapping triad relationship that has significant influence on the relationship between science, ethics and citizenship: that is, the relationship between policy, funders and governance (see below). The impact that these two triads have on each other needs to be explored further to be better understood.



4) There is a policy and governance gap for 'citizen scientists'. In particular can citizen science be regulated so that it is considered legitimate across all disciplines, and how is 'ownership' (of data, research findings, etc.) understood for co-produced research?

5) How should institutions that engage in some or all aspects of the relationship between science, ethics and citizenship be held accountable? Especially since these institutions are an influential part of the relationship between policy, funders and governance.

6) Understanding and implementing the practical aspects and applications of the relationship is currently very difficult. What can be done to help clarify the relationship between all three areas and how can our understanding of that relationship result in further use in practice and/or policy?

Possible Next Steps

Participants at the workshop acknowledged that there were wider issues about the relationship between science/research, ethics and citizenship than this initial workshop could adequately address and were enthusiastic to continue the discussion further. Three possible 'next steps' were identified to continue the discussion and contribute to the wider academic and practice debates.

1) Organise a research network of interested participants who would like to continue sharing ideas, putting ideas into practice, receiving feedback, holding future workshops etc.

2) Submit a proposal for a special issue of a major journal (e.g. 'Science, Technology and Human Values') to develop and disseminate these discussions further.

3) Organise, in conjunction with the research network, a larger, international conference to explore the relationship between science/research, ethics and citizenship and to address more systematically the challenges of developing practical ways of implementing the relationship to the benefit of wider communities.