Professional and Technical Staff supporting Open Research: Case Study 4

Research-enabling staff and Open Research

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Headlines

The Future of Cancer Care project, a multidisciplinary, research-led teaching project in Glasgow, aimed to investigate a speculative, human-centred approach to future cancer treatment and care in relation to Precision Medicine. By weaving open research principles into the Future of Cancer Care project, almost from its initiation, we were able to demonstrate the contribution research-enabling staff make, allowing us to work better on challenging research problems. This project worked across disciplines, sectors and career stages to achieve and curate insights and experiences that enhance research quality and relevance. It highlights the value of research-enabling staff and open research in innovative research-led teaching practice.

Context

The Futures Project series are multidisciplinary, research-led teaching projects. They explore future societal contexts, generate new knowledge in collaboration with communities of experts and design professionals, and formulate hypotheses about how people may live or work in the near future.

In academic session 2018-19, the first project in this series 'A collaborative approach to exploring the future of Cancer treatment and care in relation to Precision Medicine: A design perspective' was conducted. The intensive eight-week project was jointly conceived by the Innovation School at Glasgow School of Art and the Institute of Cancer Sciences at the University of Glasgow. Graduating year Product Design students were presented with a challenge-based project to produce a vision of the future based on current trends that relate to Precision Medicine (PM) and Cancer treatment.

The objective of this project was to investigate, in both analytical and speculative ways, future forms and functions of cancer treatment and care in relation to Precision Medicine, to develop future scenarios and design artefacts, services, and the experiences associated with them.

Ambitions for openness

The project had initially been conceived as a ‘normal’ student project in that outputs would form part of the degree show for the graduating class, but preservation of the outputs beyond graduation had not been considered.

During the early stages of the project the project leads recognised the value of the work, knowledge and insight being developed and wanted to find some way to capture these for the longer term.

After discussion with staff in the Research Information Management (RIM) team at the University of Glasgow, it was decided to attempt to curate the varied outputs from the work and make them available, with contextual information, in a repository environment to enable preservation and sharing of the knowledge, experience and insight developed in the project.

This posed some challenges as the project was already underway. A member of the RIM team spoke with the teaching team at the Innovation School at Glasgow School of Art to discuss the values of open research, the possibilities for this project and determine if it would be possible to get all the permissions needed from participants for the materials to be archived and made publicly available. We also discussed how to licence the deposited materials to ensure that the creators got appropriate credit for their ideas. A CC-BY-NC 4.0 licence was decided on as the appropriate balance between openness and prevention of ideas being reproduced commercially. Had more time been available it might have been useful to bring in advice from the IP and Commercialisation team and we would consider doing this in the future.

A final challenge was getting all the materials assembled in a useful format before the students moved on to new opportunities.

People

The initial project brief was co-developed by lead research and teaching staff at the School of Art and the University of Glasgow.

A bespoke expert group (27 individuals) composed of scientists, NHS clinicians, patients, biomedical industry and academic professionals from Glasgow University, clinical staff at Beatson West of Scotland Cancer Centre, Patient Representatives and external design experts from industry was convened that would support the project.

The student cohort were 27 graduating year Product Design students.

A member of the RIM team from the University of Glasgow was brought in to support the open research aspects of the project and facilitate the curation and deposit of the final data set.

The project was driven by the students and involved co-development of the artefacts and outputs with the expert group and core academic staff. The post-project curation of outputs was done by the project leads, and the RIM team member.

Highlights

The overall challenge was focused on how young design students learn to participate in changing society. By adopting an open research and credit approach, the project delivered beyond expectation and has resulted in an annual series of joint projects, each benefiting and evolving through a process of continuous learning and curation of project process and outputs.

Importantly, the element of crediting all participants (students, staff and experts) in outputs is now embedded in practice.

This particular project culminated in an exhibition at the Reid Gallery in Glasgow, where the students presented their proposals to the public and in private viewings with stakeholders. The exhibition, with its underpinning research and processes is curated and managed within the project open research data deposit.

Figure 1 This is the New Normal: Supporting survivors of cancer in the near future. An example of some of the diverse range of artefacts, personas and systems co-created, exhibited and curated during the project.

Pay off

In the spirit of open scholarship, the project collection has been assembled under a digital identifier (DOI) and can be accessed through the following link to the University of Glasgow data repository: http://researchdata.gla.ac.uk/843/

The deposited materials are arranged as follows:

- Readme files. Help guide and navigate the project deposit.
- Overview poster. Gives a visual overview of the structure and timeline of the project.
- Data folders. The data folders for stage one of the project are named for the lens through which each group viewed possible futures. The data folders for stage two of the project are named for the individual students who conducted the work.
- Future Experiences Project Book. This is a comprehensive overview of the research brief, the project development over time, insight into ways of working, and its outputs.

Through interviews, it contains personal stories, views and experiences of those involved.

The students involved in the project can reference the curated dataset in their CV as an example of their work. The structure of the deposited dataset makes it straightforward to determine which work belongs to which student.

There were 513 downloads made from the repository materials in the first 12 months after publication, 308 in the second 12-month period and a further 86 downloads since then.

Key learning points

- Involve research professionals with expertise in open research from project inception.
- Build an open research plan into the project brief in order to curate appropriate materials.
- Brief the team and participants about the intent to work to the principles of open research and importantly discuss the value of doing so.
- Rapidly create an environment of trust
- Focus on why the people in the room are there (values, interests, lived and working experiences) and not what their job titles are or seniority.
- Bring together people with shared aspirations/values but with different views about the nature of the problem and solutions.
- Allows for the joint value to be visualised and thus enabling future collaborations across complex multidisciplinary projects.
- This open working/crediting/curating approach enables alignment of academic research with stakeholders such as Govt or funders (ie diversity/range of outputs & research culture)
- Beyond collaboration and became a community of practice that cares for the process, people and outcomes.
- Insights around processes and learnings as well as outcomes.

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