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Ernest Edmonds
Mike Leggett

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HOW ARTISTS FIT INTO RESEARCH PROCESSES

Ernest Edmonds and Mike Leggett,
Creativity & Cognition Studios,
University of Technology Sydney,
Australia. E-mail:
ernest@ernestedmonds.com and
mike.leggett@uts.edu.au

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Abstract

The study collects, compares and synthesises existing knowledge from specific sources about artists and creative designers working within research processes. The emphasis is on collaboration, evaluation and reflective practice.

Introduction

Artists and creative practitioners more generally are typically involved in research as part of multidisciplinary teams. The nature of these collaborations and the relevant success factors are important to understand. Increasingly, research oriented creatives are incorporating evaluation into their practice, often drawing upon methods familiar in human-computer interaction.

Following Schön [1], reflective practice has been explicitly developed and implemented especially, for example, in practice-based art and design PhDs.

We draw upon a small number of specific sources in which detailed research has already been undertaken. These include:

- the Engineering and Physical Science Research Council (EPSRC) funded projects conducted at Loughborough University, such as COSTART, in which artist-in-residence programs were used to study collaboration between digital artists and technologists [2, 3].
- the evaluation report on the Wellcome Trust's Sciart Program (1997-2007) [4], that surveys the successes and shortcomings of a funding program designed to be a stimulus for collaboration and, "to fund visual arts projects which involved an artist and a scientist in collaboration to research, develop and produce work which explored contemporary biological and medical science."
- the Beta_space collaboration between Creativity and Cognition Studios, University of Technology Sydney and the Powerhouse Museum, Sydney. The thrust of this work has been the development of concepts and methods for incorporating evaluation in public spaces into the creative process [5, 6].

- the recently initiated research programme at FACT, Liverpool, and the outcomes of its 2008 series of workshops.

Description

Credible evidence has been generated over the last decade to demonstrate the synergies and positive outcomes that arise from research processes bringing together diverse skills and expertise from amongst artists and scientists.

The COSTART Project was established on the basis that support for creativity in media arts implied collaboration with technologists. It was the first major research project funded from a scientific source in the UK that explicitly undertook to carry out research into creativity between artists and technologists. A notable realization was that there are many forms of collaboration and different kinds are required for different types of work and people. The nature of the collaboration observed during the project, in all cases studied, varied significantly. One of the key factors in those variations was the allocation of responsibility for different parts of the creative process. Who in the team is in control of what aspect of the work?

The development of a residency study as a vehicle for practice-led action research was the primary mechanism for facilitating creative projects and also gathering data. In this way, a series of investigations into creativity and digital technologies based on the co-evolution of research and practice was put into place.

The first phase of the project selected seven case studies from 20 artists who attended an orientation workshop with a group of prospective technology support staff and researchers. From the COSTART case studies three models of collaborative creativity were derived, reflecting important variations in the nature of collaboration itself. The variants on collaborative creativity were evident even where the participants were the same individuals but matched with different collaborators. The bringing together of different personalities, motivations, backgrounds and skills resulted in a rich set of collaboration models. This enabled the researchers to consider the implications of the different models for supporting creativity and their relationship to success factors.

One of the residents was an artist trained originally as a computer scientist. He characterised these initial collaborative projects: "digital

technology offers possibilities for the artist that can be enlightening, but by nature it demands an algorithmic predetermined input where all variables have been considered beforehand. My desire is to reconcile these two very diverse mind sets and explore the possibilities that emerge." Other artists realised quickly that the need was to move on "from the formula of having a technological assistant to one of having a technological equal partner and co-author" of the art in collaboration.

COSTART was concerned with finding ways of supporting artists by giving access to the technology and the people with the technical skills to advance the use of the technology. The project concluded that the idea of supportive environments for art and technology needs to be broadened to include the establishment of on-going collaborative partnerships, fostered by a host organization.

A fundamental requirement of an environment for creative practice, whether in the arts or sciences, is that it supports and enables the development of new forms and the new knowledge that is required to achieve such outcomes—creativity requires circumstances that enhance development possibilities. How do we ensure that both the creativity and the technology development are fostered in tandem? The technology requirements for creativity must be a highly responsive, iterative process where new insights are fed back quickly into the development process. This co-evolutionary process is a form of practice-based research where the existing technology is used in a new way and from which technology research derives new answers: in turn, the use of new digital technology may lead to transformation of existing forms and traditional practices across disciplines.

The Wellcome Trust Sciart program commenced in 1997, developing partnerships with various government and corporate partners over the decade, before being superseded by the Trust's Arts Awards in 2007. The objective of the grant program was to be a stimulus for collaboration between artists and scientists, in particular those in the medical fields. In a 2008 report following an ethnographic study of the Sciart program, a number of those questioned felt that the lure of Sciart funding had provided a positive incentive and stimulus for artists to enter into either exploratory discussions, or else more focused negotiations, with scientists.

“They are introducing ideas through a new prism of language. Sciart does not fund proposals where the art is illustrating the science, because that is not about collaboration. It is looking at difficult questions that both science and art are asking, and looking at how the two can aid each other in moving things forward” [6].

There was also some evidence that this interchange of resources and ideas had led to the development of new ways of working, innovative use of technology, and a more creative use of facilities and resources.

Of the 10 Sciart case study projects investigated, three had involved very close collaborations in which there was felt to be a high level of mutual commitment and input and a sense that some kind of parity had been achieved in terms of the outcomes or benefits that had resulted.

“X” had started taking that scientific approach, of questioning his own work, and conversely I had started to work more by intuition and was a lot happier not to ask the question ‘Why?’ It was the point at which the sense of true collaboration really became manifest and the two worlds crossed over. It took 3 years to arrive at that point. He had become the scientist and I’d become the artist” [4: 86,87].

Sciart’s impact on the wider culture of art-science collaboration produced a range of tangible outcomes. It enabled the development of a critical mass of practitioners and of projects, which has helped interdisciplinary work in the art and science field to become widely recognised; the funding consortium was a fruitful and influential experiment in co-operative arts funding; the example set by the Wellcome Trust and by the Sciart consortium encouraged other funding bodies to begin to support projects in the science-art area; Sciart had been valuable in helping to crystallise and to exemplify trans-disciplinary research with projects having acted as a ‘seed’ for future collaborations; the scheme overall had been a valuable catalyst for many new relationships to develop, at both an individual and an institutional level; it has attracted international attention and is seen to be innovative and influential.

A number of commentators and project participants referred to the practical influence that Sciart funding had had on helping to open up the doors to previously hermetic places of research,

particularly within the sciences. A degree of influence was ascribed to Sciart in terms of its having helped—through its alignment of art with themes from biomedical science—the general culture of contemporary art to become, and to show itself to be, more engaged with the public and social concerns of the day. It was felt that Sciart had helped to create an ambience wherein the activities of science could more easily percolate into the public domain.

Other examples of interdisciplinary research are many and varied. In recent papers from the University of Nottingham, a software tool (Digital Replay System) has been developed across computer science and English and psychology programs to allow users from different methodological backgrounds in the social sciences to re-use multimedia data sets suited to the needs of individual research programs [7].

The work in Beta_space, Powerhouse Museum, Sydney, in collaboration with the Creativity and Cognition Studios, has been summarised in a paper by Edmonds et al. [8]. The paper describes a programme of research and practice in which the evaluation of interactive artworks in a public space is undertaken as part of the creative process. The three viewpoints presented, of artist, evaluator and curator, add up to much more than each one can offer on its own. The paper reflects upon the different concerns and approaches and the ways in which they are entwined.

The main findings that emerged from the development of the multiple viewpoint evaluation process were:

- The value of enabling an artist to observe their interactive artwork in action, in a real context, and the need to provide methods that help artists learn from those observations;
- The artist’s need to consider the tension between the ease with which the audience can engage with the work and the need to provide a level of complexity that makes it hard to exactly grasp the rules being used;
- Evaluation techniques can help an artist to emphasize, rather than “smooth over,” difficult aspects of an experience;
- Artists can be supported, through evaluation methods, in responding to and working with audience experience as though it were a kind of “material”;
- Evaluation can support the curator in reducing the gap between the artist’s

“ideal” and the audience’s “real” versions of an artwork;

- That audience experiences with interactive artworks develop through phases, each with their own characteristics, and hence there is no simple single description of audience engagement.

Recommendations

The following points are drawn from the full set of references consulted:

1. Artists should agree to record their creative process, including failures.
2. Each project should have multiple planned outputs so that scientific and artistic goals are visibly achieved.
3. Observation and evaluation of the collaboration process should be explicitly included in the outputs.
4. New relationships and extended networks are common benefits of long-term commitments.
5. Team selection and team building are important. It cannot be assumed that a good artist and a good scientist will necessarily form a productive team.
6. Where artworks produced are interactive, provision should be made to undertake ‘beta-testing’ with audiences in realistic contexts.

References and Notes

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