REF IMPACT TEMPLATE

Institution: Royal College of Art

Unit of assessment 34: Art and Design History, Practice and Theory

A Context

The Royal College of Art delivers high-level research and knowledge exchange (KE) which achieves significant impact through its specialisation in art, design and the humanities, aligned to many RCUK and government strategic priorities. It is committed to the concept of translational research, by which research not only leads to excellence in teaching and scholarship but also achieves impact through outcomes which benefit many sectors of society, business and industry, as well as public life. As artists, designers, curators, commentators and historians, the College's academic staff have extensive experience of communicating and promoting the impact of their research beyond academia. The range of RCA research impact stems from a deep concentration in the visual and creative arts, design and innovation, and cultural interpretation. We therefore especially make claims for impact in the areas of civic society and cultural life, while also realising impact on education, industry and public discourse.

The College invests in support and infrastructure of its research to deliver impact through exhibitions in museums and galleries, formal and informal learning, innovation in art, design and manufacture, and the creation of physical and digital environments. To achieve maximum impact for its research, as evidenced in the Environment statement, the College actively enables all academic staff to develop partnerships, networks and joint research projects with other institutions and users locally, nationally and internationally. Accordingly, a high proportion of research staff effect change through membership of Research Council and university research advisory panels in the UK and overseas, through positions in professional subject associations and learned societies. and through editorial and invited consultancy positions for public and private sector organisations. Many speak internationally and are active as quest curators and exhibitors in galleries and museums worldwide, the latter achieving impact through acquisition as well as public display. Many of their design research outcomes go on to manufacture and the market through partnerships with users and manufacturers (eg Avela, Barron, Boontje, Conti, Harrow, McGinley, McLean, West, B. Wilson). Others advise government policy (eg Leon, Dunne and Myerson) or contribute their expertise to policy making (eg Brass, Buckle, Gheerawo, Myerson) and are an indication of the strategic importance and value of research and KE in art and design.

B Approach to Impact - the key impacts

The College's approach to impact is led by its Research and KE Strategy, which aims to deliver impact upon culture, society and the economy through the application of research beyond the academic community.

The strategic areas developed during the census period are primarily the cultural, digital, environmental and medical fields. They derive from the specialisms of the College's six Schools and its four strategic themes: Cultures of Curating; Design, Innovation and Society; Dialogues of Form and Surface, and Image and Language. RCA research achieves a high level of effectiveness through enjoining its partners to participate and invest in its agenda and a high percentage of College research is thus planned from the outset with the users of research in mind. Faculty from all areas of RCA engage with other researchers in ROs nationally and internationally, and partner with stakeholders in charities, trusts, cultural organisations, SMEs, major industry and government agencies.

In this way, consideration of impact is built into the early planning stages of most research initiatives, and informs the design of the research, its aims and objectives. Our research choices are thus informed from one direction by the College's institutional research strategy, and from another by research users' needs and interests. To take examples from across the spectrum of research development from multi-partner interdisciplinary research projects to individual research student projects: 1) Professor **Dunne** (Design Interactions) led Impact! (2010), a unique collaboration between science and design, which demonstrated the importance of the engineering

and physical sciences in everyday life by pairing sixteen EPSRC-funded research teams with RCA designers; 2) Professor **Wentworth** (Sculpture) collaborated with the Swiss architectural practice GRUPPE, to create Black Maria (2013) an event space, meeting point, spectacle and screening facility, which took creative practice to new public institutional spaces; 3) History of Design AHRC CDA student Catharine **Rossi** contributed her knowledge of post-war Italian design to the V&A Museum's major 2011 exhibition *Postmodernism*.

Inclusive and User-Centred Design has been central to the College's approach to pathways to impact, ensuring that RCA research outcomes, 'enrich and expand the lives, imaginations and sensibilities of individuals and groups' through the development of new products, systems and environments. This research is presented in two impact case studies in the submission, Inclusive Design: Royal College of Art research creates significant, far-reaching impact in design, industry and education, and Design for Patient Safety: creating significant professional, cultural and commercial impact through innovative design in a range of healthcare settings. Both these case studies derive from a College-level strategic decision to support and foster Inclusive Design, for which the RCA has been a subject leader over the last 20 years, especially through the Helen Hamlyn Centre for Design (HHCD). HHCD investigates specific design solutions to pressing social concerns in its research labs in ageing, health and well-being, and urban living. The Centre employs Research Associates, some of whom become PhD researchers and others lead applied or practice-led research projects as early-career researchers.

Since 2008, the HHCD has undertaken 49 research projects with 29 industrial partners including Glaxosmithkline, Kinnarps and Orange, and has had 10 projects funded by 11 NGO's, eg National Patient Safety Agency, Age UK and Scope. Two collaborative projects brought together NGO and industry funding: Scope and BT (inclusive digital technology), and The Design Council and Pearson Lloyd (humanise patient experience). HHCD's digital projects have resulted from industrial partnerships with Nokia (2008), Research in Motion (2008, 2009, 2012), Samsung (2009), Cisco (2011), Sony (2012) and EPFL+ECAL Lab Zurich (2012), particularly in communication technologies for the elderly.

In 2013, **Myerson** *et al* led the 'Include East' conference at Hong Kong Polytechnic University, intended to be a biannual event, alternating with the 'London Include' conference. Through this, new participants and users in Asia were introduced to the HHCD model of Inclusive Design. The HHCD was also central to the College's successful award of HELIX, investigating multi-disciplinary approaches to design-led innovation embedded in a clinical environment (HEFCE, 2013). The work of other RCA researchers such as **Hall** (Industrial Design Engineering) and **Ashworth** (Animation) demonstrates how questions and methods formulated in the context of Inclusive Design can achieve impact in other fields. In the case of **Hall**, this led to applying inclusive and sustainable design methods to lighting solutions for a positive impact on the quality of life of the local community in remote Malian villages (2011), while **Ashworth**'s project 'Children's Health State Preferences Learnt from Animation' adapted ideas from animation therapy to enable health professionals to better understand children's states of health. High impact was assured through the project's partners: the London School of Hygiene and Tropical Medicine and Great Ormond Street Hospital (CHILDSPLA, MRC, 2013).

Digital technologies have also been identified as central to the College's research strategy, particularly research addressing the relationship between the analogue and the virtual, an intersection of importance to the future of the economy and quality of life. Two major research projects are currently exploring this area: 'Media, Community and the Creative Citizen' (AHRC, EPSRC) and 'The Creative Exchange' with Lancaster and Newcastle Universities (AHRC).

Throughout the census period, the College has enhanced its environment for digital innovation through investment in facilities for rapid prototyping, digital repositories, digital print, visualisation and materials. In 2009, Design London acquired an immersive visualisation environment (commercial price \$1.2M), funded by EPSRC, which is used by researchers with, for eg the HHCD,

Harefield Hospital Heart Unit, Imperial Material Science Group, the V&A and by **Harrow** in NHS-funded research on new designs for the emergency ambulance and taxi.

The College undertakes advanced work in physical computing and the integration of the digital into everyday experience and environments. Design Interactions research by **Dunne and Raby**, **Auger** and others led in 2013 to Intel funding the only technologist-in-residence in a UK design school. **K. Walker** (Information Experience Design) explores information experience design, especially in relation to cultural education, co-authoring Digital Technologies and the Museum Experience (2008) and is a Visiting Fellow at London Knowledge Lab. Focus on the digital city includes **Leon**, co-investigator on the £6M EPSRC Digital Cities Exchange project led by Imperial College, who has advised HM Government and the city of Barcelona on smart cities. **Bottazzi** has contributed to innovative digital installations visualising future cities in China (2010), Portugal (2011) and the US (2012).

As demonstrated in another case study, **Enhancing industrial capability to innovate in vehicle and transport design, nationally and internationally,** specialist workshop, technical and infrastructural support is a vital element in the pathway to impact for high-level research outputs in the context of 'Design, Innovation and Society'. Design research frequently involves strategic partnerships to bring world-leading designers together with expert collaborators in relevant fields from other universities and industry to develop innovative STEMM-related research with immediate impact on manufacture and the economy.

Design London was a collaboration 2007-2011, set up with HEFCE and NESTA support, between the RCA and Imperial College London to lead a joint response to the 2005 Cox Review by bringing together the scientific, engineering, business and creative design communities to enhance business and public sector innovation. In 2011 its academic and business incubation programmes were embedded in the core activities of the College through Innovation RCA. Incubation support is offered to staff and research students as well as taught students. A portfolio of intellectual property is licensed for development (e.g. a resuscitation trolley and a Carestation designed by staff were licensed to manufacturers Bristol Maid). Executive education programmes derived from the research for Design London have been run for international organisations, commercial and public. Innovation RCA and the Research Office together run collaborative workshops with the Knowledge Transfer Networks which have led to funded work by **Harrow**, **Hall** and **Leon** with the Transport Systems Catapult and SMEs (2013), jointly developing policy in new uses of live data in responding to passenger needs.

C Strategy and Plans

The College's strategic approach to research during the census period and in the future aims to ensure the maximum reach and significance of its research outcomes. Its Research and Knowledge Exchange Strategy are updated on a regular basis and it undertakes risk assessment through the work of the Research Committee, Senior Management Team, Senate and Council. The College maintains an environment conducive to excellence in research through its Estates strategy, including the provision of advanced equipment and IT resources commensurate with the realisation of high-level research outputs. Research impact is monitored by the Research Committee to achieve a smooth transition between Innovation, KE and Research and to meet agreed achievable milestones. RCA Media Relations increase research impact by publicising research successes and the College continues to collect evidence of research dissemination and impact through its digital repository.

In the academic domain, the College actively encourages its staff to take on advisory roles, peer reviewing and contribution to policy formulation in line with its researcher development framework. It offers pump-priming initiatives through the Research Development Fund and Research Remission, for which impact is a criterion for funding. In the future, the College will raise awareness of impact among researchers at all stages of the research cycle, by adding to existing impact training impact champions aligned to strategic fields.

D Relationship to case studies

A significant proportion of RCA researchers 'illuminate and challenge cultural values and social assumptions' through research which is articulated as texts, artworks or public presentations. Within the areas of 'civil society' and 'public discourse', the relationship between one of the submitted individual case studies, the case study, **Media Critique: the impact of Peter Kennard's artistic research into the representation of war and conflict**, and the institutional framework is illuminating. The case study represents an individual artist researcher's response to the potential for photomontage to engage with one of the most pressing societal challenges: war and conflict. **Kennard**, Reader in Photography, contributes to the RCA Image and Language research hub. His research, supported internally through Research Remission and Research Development Fund, and externally, eg through Arts Council England, is indicative of the wider interest in the socio-political significance of art at the College. For example, **Crimmin** leads the AHRC-funded research network 'Art and International Conflict: Building Networks, Discourse and Understanding', with project partners the Index on Censorship, SOAS, Goldsmiths, University of Manchester and the Center for Contemporary Arts Afghanistan. Direct beneficiaries are artists, curators, representatives of NGOs, charities and government.

The relationship between the impact case studies and wider research culture of the RCA can be further illustrated with research under the theme of Cultures of Curating. Emphasis is on the exhibition as a form of critical, creative and discursive practice. The case study 'Cold War Modern: the International Impact of an Exhibition on Modern Design on Public Understanding and Curatorial Practice and Critical Design at the Royal College of Art and its impact on design and the public understanding of science' achieved impact with specialist professional and academic audiences, educational visitors and the wider public through museum learning and interpretation. Other researchers who have led or contributed to historical and thematic exhibitions interpreting the work of major archives, collections and holdings include Adamson, Auger, Aynsley, Britton, Crimmin, Dagworthy, Dillon, Hammonds, Joseph-Lester, Kiaer, Klimowski, Kular, Millar, Smith, Thompson, Toran, K. Walker, Williams, Walsh and Wentworth. Significantly, many researchers are practice-based - studio artists or designers - as well as architectural, art and design historians. RCA researchers also develop strategies to widen impact through exhibitions which question the institutionalised space of galleries and museums (Dunne and Raby; Pope; Wentworth).

Another important pathway to impact is the exhibition of research outcomes of individual researchers or research projects. Over 40 RCA art and design researchers in the REF submission exhibit in museums and galleries internationally, reaching wide audiences and diverse publics. Other art and design researchers employ the methods of material science to investigate the properties and behaviour of particular materials or processes within the theme of **Dialogues of Form and Surface**. This involves experiment in laboratory settings as well as the studio and workshop often through collaboration with external users. The case study **Expanding Scale and Surface in Contemporary Ceramics** shows the impact of ceramic sculptor **Aylieff** (Ceramics and Glass), whose research into materials and scale is disseminated through public exhibitions. In March 2012, Professor **Johnston** (Textiles) led the inaugural international materials conference, 'Inspiring Matter'. This public event brought together RCA researchers **de Rijke**, **Dunne**, **Gaudion**, **Ginsberg**, **Guth**, **Myerson**, **Pajaczkowska**, **Raby**, **Teasley** and **Wentworth** with external speakers from science and industry to set the agenda for future materials research.