

<p><b>Institution: Nottingham Trent University</b></p>
<p><b>Unit of Assessment: D34 Art and Design: History, Practice and Theory</b></p>
<p><b>a. Context</b></p> <p>The approach to impact in the unit reflects the ethos of the Nottingham School of Design, established 1843, to support the economic and cultural life of the city and the region. Much of its teaching and research is practice-based with students and researchers engaged with the cultural economy, commerce and industry through live projects (see below) and international collaborations (V&amp;A, Adidas, Intel).</p> <p>This framing affords many routes to impact, from work embedded in science and technology in textiles with immediate commercial application through spin-out companies, through policy orientated work relating to sustainability, to art practice that influences communities' engagement with belief systems (see REF 3b) .</p> <p>Complementing this work, other impacts derive from technically focused design research, creative practice, historical/ theoretical enquiry and support for business. Design research includes the EU funded development of sustainable LED lighting with international partners (SU) and the commercialisation of advanced materials in health-care (Breedon). Work in textiles derives from the school's relationship to the East Midlands' textile heritage, relating this to contemporary practice (Briggs-Goode) and has international links through Edwards' work with craft textile producers in India. Impacts on business in the region derive from the unit's 'Future Factory' project.</p> <p>These impacts on cultural life, policy, civil society and the economy are complemented by the impact of the unit's strong profile in practice-based research in Fine Art and its influence on the cultural life of the city and region.</p>
<p><b>b. Approach to impact</b></p> <p>The UoA's approach to impact has the following elements: building strong relationships with the city's cultural life; building strong relationships with industry; stimulating cross-disciplinary relationships; designing impactful research projects; providing incentives for internationalisation.</p> <p><b>Cultural life:</b> The longstanding influence of the UoA on the cultural life of the city of Nottingham and its region are the basis for the unit's impact on its broader cultural setting. This is achieved through formal relationships with institutions such as the Broadway Cinema (postgraduate collaboration), Nottingham Contemporary art gallery (public programme funding and internships) and the New Art Exchange arts centre. These impacts derive directly from the original purpose of the Nottingham School of Design and are manifestations of the school's influence on the region's cultural infrastructure which achieved global scope with the unit's involvement in World Event Young Artists in 2012 (Shave).</p> <p><b>Industry:</b> Relationships between the UoA, industry and government to promote impact have been developed through collaborations that build both on the long-standing research strengths of the UoA, in Technical Textiles (Advanced Therapeutic Materials Ltd, Baltex, Entell Fibres Ltd, Exo and Smart Life: Dias), and more recent areas of focus, including sustainable design and consumption (Boots the Chemist and Defra: Cooper, Fisher,) and design for medical applications (Design Council: Rutherford; Queens Medical Centre: Breedon). These activities complement the impacts achieved through the £1.7m EU funded 'Future Factory' project, which supports SMEs in sustainable business development. 140 SMEs, 60% in the creative industries, have benefited from research-informed support from designing new products to improving business performance.</p> <p><b>Cross-disciplinary Relationships:</b> Engagement across disciplines, between the the unit, industry and government and between the unit and its broader cultural and economic setting characterise its work. Relationships between disciplines to promote the impact of research featured in EPSRC Cross-Disciplinary Feasibility project, Smart Materials – Designing for Functionality, EP/I016414/1, (Dias, Fisher, Johnson, Breedon), via three AHRC-funded Research Networks (Fisher/Briggs-Goode; Myatt; Abbott) and in collaborative practice-based research in Fine Art with partners in Norway, UK and Russia (Higgins).</p> <p><b>Projects:</b> To design impactful research we engage in extensive peer consultation (research surgeries) and industrial discussions (targeted workshops), to identify research areas which will lead to economic regeneration and a market pull. We reflect these in our research proposals,</p>

## Impact template (REF3a)

exploring any contribution to the Grand Challenges, specifically in the areas which are key to the university and regional strategies.

**Incentives and internationalisation:** We build on successful international activity (Higgins – Baltic States, Edwards – India, Su - China) by providing incentives through our Study Leave and Fellowship provision. This short-term funding gives staff time to focus on impact-driven projects themselves, or through researchers (e.g. Briggs-Goode – ‘Lace: Here: Now’). Achieving impactful research is rewarded as an element in the system for progression to Reader/ Professor.

### c. Strategy and plans

**University Strategy:** The UoA will build on impacts up to 2013 working with the University’s cross-institutional research themes – (i) Creative Economy; (ii) Health and Wellbeing; (iii) Low Carbon; (iv) Materials – focusing on key areas of strength to achieve impacts on economic regeneration and cultural wellbeing. Areas of focus will be Textiles, both technical and creative; Visual Arts, building on its regional, national and international presence; theoretical and practice-based work related to sustainability policy and consumption, and in product development; Product Design for Health & Wellbeing through the use of new materials.

The University organises various cross disciplinary activities, for example: (i) high level meetings with major organisations (e.g. NHS, Boots, Local Enterprise Partnership, BioCity etc.) to discuss long term partnerships, introducing the organisations to our core research base; (ii) cross university bidding workshop (e.g. on low carbon), preparing for future EU calls; (iii) use of cross university platforms, such as the HIVE (the University’s incubator for new business development) and Future Factory who provide advice and contacts for the academics.

We have developed strong partnerships with the CEO of our Local Enterprise Partnership and Nottingham City Council to drive the creative agenda forward. We sit on the board of all the major creative initiatives within the city and link these to our research base. A notable recent development is Nottingham’s Creative Quarter, its ‘incubator without walls’, through which it promotes its priorities around “green economy”, “digital content” and “health and wellbeing”. We participate in all these initiatives and the university/ QR funding has supported PhD studentships in the Sustainable Consumption and Advanced Textiles research groups to develop the impact of research in those areas.

**Unit Strategy** Impact is written into research strategy with targets, actions and milestones. Each research group identifies their areas of impact and related plans. The Unit aligns its impact strategy with teaching, engaging PGT students with industry to capture its needs and develop better relationships. Working with the Local Enterprise Partnership the School is building a portfolio of industrially sponsored projects at postgraduate level. The Unit is supporting work in Creative Technologies which will facilitate future impact through a programme of research leader appointments and collaborations in 2013/14.

**Targeted facilities:** A new industry-standard Creative and Virtual Technology lab (CVT), has been established, centrally located in the university; a designated city centre location for our Smart Cities Centre has been identified.

**Promoting our expertise to the outside world:** We are promoting our research through close engagement with our Press Office and through commercial development. A press officer attends regular researcher meetings, which has increased media coverage and external engagement. The research groups are experimenting on how to optimise their use of social media.

### Plans

Our **Immediate plans** to support impact include: facilitating the economic impact that will derive from work in *Advanced Textiles* through bringing innovations to market; continuing to promote the influence of the *Sustainable Consumption* group on sustainability policy; further engaging the work of the *Fine Art Research* and *Lace Heritage* groups with issues of post-industrial regional identity; continuing the work of the *Product Design* group on low voltage LED lighting.

Our **medium term objective** is to build impact into the developments in the research environment outlined in REF5. These include: in Fashion Marketing where research can have direct economic impact; in Creative Technologies where opportunities exist for impacts on culture and the public’s understanding of heritage, and in public engagement with climate change mitigation through the development and application of new technologies; in the *Product Design for Health and Wellbeing*

group, medium term opportunities exist to achieve impacts in medical care.

#### d. Relationship to case studies

In line with our strategy to support and enhance impact the work on which the case studies rest has received resourcing where necessary.

The **Advanced Textiles** case study evidences the strong relationship between research in the UoA and the impacts on business development and innovation outlined above. It relates current work using textile technology in health and wellbeing to work in the UoA developed out of the strong historical links between the Art School and the region's textile industry. It has been underpinned by support through four fully funded PhD bursaries (2 technical and 2 creative). This has proved a successful model to enhance collaborative relationships between creativity and technical research. The unit has supported this group through funds for a technician and providing bridging funds for the RA (Cork) through QR funds, during this REF period. A £225,000 investment in equipment has provided a small scale manufacturing facility for smart textiles.

Into the future, the university has made this area part of our economic regeneration strategy, to establish a UK based supply chain for this technology. This plan involves machine and yarn manufacturers and major clients to develop mainstream products. Boots has been introduced to the group as a client and workshops on product development have been held. In line with the University's strategy, the group is working with the Technology Strategy Board, Local Enterprise Partnership and the High Value Manufacturing Catapult.

**Public policy on the sustainability of consumer goods'** builds on the work of Cooper, recently recognised in a £1m share of the £5m 'UK INDEMAND' centre, focussed on embodied energy (REF: EP/K011774/1). This case study emerges from a collaborative PhD project and work for WRAP and Defra that draws on expertise in the School of Art and Design and is developed through university PhD bursaries. Three university funded PhD bursaries have been allocated for the UK INDEMAND centre, plus an additional two bursaries for the group. (one cross disciplinary).

**'Art and Belief'** is underpinned by the strong relationship between research practice in Fine Art and the local and regional cultural economy, outlined above. The majority of the investment has been in supporting the art work, e.g. part funding exhibitions and production of high quality publications (e.g. for Nottingham Contemporary) and supporting researchers whose work underpins the impact to promote it through the local and national cultural infrastructure.