Title of case study: Developing Collaborative Design Tools

1. Summary of the impact (indicative maximum 100 words)

Cruickshank's interdisciplinary research challenges the role of the professional designer and celebrates the potential of the citizen-designer. Insights from the research have developed a series of tools that facilitate design-creativity in the non-specialist. The research demonstrates that technology can be an enabler for the non-professional, impacting on design methods and their implementation. The process of developing the research has had a direct impact through significantly improving the consultation and design activities of the City and County Councils in Lancaster (with potential for scaling this up to other local authorities) and shaped the potential development of a 10-hectare city-centre green space over a 10-year period.

2. Underpinning research (indicative maximum 500 words)

Cruickshank's research explores how to enable everyone to maximise their potential to creatively contribute to society. Through this he challenges the nature of design practice, the role of the designer and that of the non-designer in creative collaboration.

This research into the 'design of knowledge exchange' is a form of human-to-human interaction. Exploring the experiences of participants in the design process has dramatically improved the potential of creative collaboration. The research produced insights (published in *Design Issues*, an A-rated design research journal) on the relationship between design and innovation.

Drawing on design and management theory to develop new approaches (Morttati & Cruickshank 2012), this research required non-academic participants and test-beds in non-specialist environments to establish its value. The result has been a powerful interaction between academic researchers engaging creatively with non-academic partners. Cruickshank's activity in this area has included involvement in projects totalling over £25 million since joining Lancaster University in 2007. Cruickshank's role in all of these projects focuses on the design, implementation and evaluation of new knowledge exchange processes and specifically on how new tools can be developed to assist in collaborative innovation and creativity. Using non-hierarchal collaborative methods as a foundation for this, activities include:

- Designing the cross-cultural innovation programme (for the HEFCE funded Lancaster China Catalyst Programme to foster innovation between UK and China)
- Designing tools and processes to help knowledge exchange between Arts and Humanities academics and companies (The Creative Exchange, AHRC Knowledge Exchange Hub)
- New processes for engagement in a project on citizen-led innovation in digital media (CaTalyST: Citizens Transforming Society (Tools for Change), EPSRC funded)
- Applying new thinking in innovation and knowledge exchange directly with companies, using the 300 company strong network centred around Daresbury Science and Innovation campus (IDEAS at Daresbury, ERDF funded)
- Developing new approaches for knowledge exchange aimed at developing digital and physical tools and innovative knowledge exchange (New IDEAS, HEIF funded)
- Investigating co-design as an innovative knowledge exchange mechanism for community engagement in the planning process (PROUD: People Researchers and Organisations Using Design, INTERREG funded).

These projects fund a wide range of activity and tool design. The case study presented here takes just one aspect of one of these projects as an example of the impact this theory/engagement approach is having, and its potential for further use. The case study looks at the PROUD project and as part of this a local co-design challenge. The research involved co-design as a community process and its implementation and testing on a planning

development around Lancaster Castle. For Lancaster University, this challenge was called 'Beyond the Castle' (hereafter abbreviated to BTC), and framed in our wider research project, 'building collaborative design.'

3. References to the research (indicative maximum of six references)

- Cruickshank, L (forthcoming, 2014) *Open Design and Open Innovation: facilitating creativity in everyone.* Gower Publishing.

- Cruickshank, L & Coupe, G (2013) *Beyond the Castle: Public Space Co-Design, a Case Study and Guidelines for Designers,* The Design Research Journal (in press)

- Cruickshank, L., Whitham, R & Morris, L (2012) *Innovation Through the Design of Knowledge Exchange and The Design of Knowledge Exchange Design.* Leading Innovation Through Design: DMI 2012 International Design Management Research Conference, Boston 2012.

- Cruickshank, L & Evans, M (2011) *Designing Creative Frameworks: Design Thinking as an Engine for New Facilitation Approaches*, Int. Journal of Arts and Technology, Vol. 4, No. 4.

- Cruickshank, L (2010) *The Innovation Dimension: Designing in a Broader Context.* Design Issues, Vol. 26, No. 2, pp. 17–26.

Grants

- PROUD: *People, Researchers and Organisations Using Design for Co-creation and Innovation.* EU (INTEREG), PI Institution: BrainPort Eindhoven (Cruickshank UK lead), 2011-14, €4.8 million.

4. Details of the impact (indicative maximum 750 words)

Activities Leading to Impact

Beyond the Castle (BTC) is a key component of the PROUD INTERREG funded project.

BTC developed new co-design processes and tools to improve a wild, green space within 5 minutes' walk of Lancaster City centre. Using interaction design, Cruickshank and 6 designers ran BTC from May to November 2012 (link). They held 5 major events (active collaboration/idea generation) for over 700 participants, with a further 2,100 local residents attending lighter-touch events.

The initiative was supported in the regional media, and featured in the Lancashire Evening Post, Lancaster Guardian; Lancaster University online news and web site; Radio Lancashire; Bay Radio and a 3 page article in @Lancaster magazine and online.

Impact from processes:

The processes developed for BTC changed council consultation and co-design activities. As a public realm officer at the council noted, '*before (BTC) we would have spoken to people and done a questionnaire, now we'd do an activity on site to draw people in.*' The paradigm shift for the Council '*is a whole new way of trusting people'*. Cruickshank and his team are designing and implementing tools for day-to-day use by council staff. These range from digital resources aimed at teenagers with smart phones, to tools that can be used in any context where idea generation is needed to improve local outcomes. From early 2013 these tools have been used for various projects by Lancaster Council, resulting in c.900 citizen-participants every month. The approach has also been disseminated through a major HEFCE funded programme that compliments the Lancaster China Catalyst Project.

Impact on the Design Profession

BTC provides a model for professional designers to facilitate open, mass creativity without sacrificing quality or workability of approach. BTC has contributed to this area of research by establishing 8 fundamental principles of co-design (see Cruickshank & Coupe 2013). These formed the basis for sessions for design professionals in the Netherlands, Belgium and

Luxemburg, and a keynote at the conference Kick Off Co-Design: Let's Design Together (link) at Dutch Design Week 2012.

These principles challenged the norms of co-design; but it is the quality of outcomes from BTC which has proved the most persuasive factor in shifting debate. BTC Master classes led to the initiation of the Co-Design Café series in Eindhoven (link). *'The co-design masterclasses by Leon Cruickshank were received with great enthusiasm in Eindhoven, the interactive approach he designed helped designers quickly and energetically adopt the co-design principles that give designers of services or social design projects (as well as many other design processes) a good basis to act upon. This helps designers to take up a new kind of assignment that needs active participation of future users in order to achieve optimal and sustainable outcomes'* Project Manager Capital D, Eindhoven.

Cruikshank's research has also lead to the redesign of the post-it for group collaboration and this 'hexagon tool' is now commercially available.

Impact from Co-design Ideas Generated

From numbers of participants, depth of engagement, and innovation, Lancaster City Council has reported there has never been a consultation project in the city to match BTC. The breadth and high quality outcomes of the process are both powerful and useful to local Councils; even more so as the current political context requires they re-structure priorities, and perhaps in the process create a less hierarchical, more collaborative approach to urban development. In addition, as community engagement is a prerequisite to heritage and lottery funding, BTC has laid the foundation for a multi-million heritage lottery funding bid.

BTC has ensured the local community are involved in the development of the city's castle area for the next 10 years. The results of the co-design process are accepted as the design brief for the City and County Councils; it is also being used for tendering documents for master-planners, which will plan for the space beyond 2020. This was achieved because the ideas produced by the communities and citizens involved were, in the words of a Senior Planner: Regeneration at the city council *'quite a wow to see the depth and breadth of the work that's been going on and the engagement with the local community.'* In the final exhibition over 120 people designed a solution for some of the issues and ideas documented in the 1100 ideas from previous BTC events.

The research in this case study connects innovation in design processes, interaction design practice, design and management theory to ensure direct impact and benefit with potential at regional, national and international levels. The adoption of these tools by individuals, companies and the public sector will embed this impact into everyday practice, in the case of BTC for at least the next 10 years.

5. Sources to corroborate the impact (indicative maximum of 10 references)

1. Beyond the Castle – Imagining the Future. Project Report. ISBN 978-1-86220-301-3. Documentation of Beyond the Castle activities (extensive photographic evidence of activity in communities) http://imagination.lancs.ac.uk/activities/Beyond_Castle

2. Interview Transcript, *Senior Public Realm Officer*, Lancaster City Council

3. Interview Transcript, *Senior Environmental Projects Officers, Environment and Communities Project Team*, Lancashire County Council

4. (2012) Out of the Dark. Castle's macabre past holds key to bright new future. Lancaster Guardian, 16th August 2012. p.1. (Attests to how the Beyond the Castle team have engaged with Lancaster residents to re-imagine the area around Lancaster castle and the potential impact on tourism).

5. (2012) Ideas to help re-shape historic city centre site. Lancashire Evening Post, 06 September 2012, p.16. http://www.lep.co.uk/news/local/ideas-to-help-re-shape-historic-city-centre-site-1-4900609

6. (2012) City interested in your vision. Morecambe Visitor, 18th September 2012. p.21.

(Attests to the engagement of the project with Lancaster residents through a participatory workshop).

7. (2012) Ideas flood in for Beyond the Castle. Lancashire Evening Post, 08 November 2012. http://www.lep.co.uk/news/local/ideas-flood-in-for-beyond-the-castle-1-5104380

8. HUNTER, E. (2012), Beyond the Castle. @Lancaster Magazine, 01 November 2012. p.56-7. http://issuu.com/atlancaster/docs/_lancasternov12web

9. GIBSON, R. (2013), Beyond the Castle. Business Matters Magazine, March-April 2013. p.4. http://www.lancaster-chamber.org.uk/download/download.pdf