

CO-DESIGN AND THE USE OF STORIES TO ENABLE EMPATHY

Christine KINGSLEY¹

¹University of Dundee

The altruistic concepts of social responsibility, citizenship and sustainability are set to reframe Design Education in the 21st century from feeding consumptive markets to responding to issue driven agendas. Current thinking suggests that a way of moving towards this may be through co-creation (Sanders 2008). The new transferable skill set, seen as giving competitive edge and economic value (Design Council 2007 et al), needs to be explicitly practiced within the design curriculum. If co-creation is the new design process it requires us to change how design education communicates. If this change is effective, it could have unimaginable significance in the way our graduates approach employment and utilize their transferable skills, forming graduates for the 21st century (QAA) that can cope with change.

The following paper considers co-design from two perspectives, a research perspective and a teaching and learning perspective. The unifying thread between the two is the concern with the issue of effective change. Recommendations are made for the development of projects designed to expose communities to a new way of design thinking and action.

Keywords: co-design; social responsibility; storytelling; transition; participation; reflection.

1 INTRODUCTION

Co-design is a method. It is a way of progressing through a problem or design scenario and is used as a means of, for example, attending to behavioural change. Elizabeth Sanders (2008), one of the strongest advocates of co-design notes (in a paper with Pieter Jan Stappers) that it “*refers to any act of collective creativity, that is shared by two or more people...co-design refers to the creativity of designers and people not trained in design working together in the design development process*”.

This paper provides two examples of co-design, both have people at their heart and are real-world situations. The first case study, (a research project led by the author) entitled *Dundee Expression* used co-design as a means of capturing what it feels like to experience Aphasia, as first hand understanding of the condition was little understood due to problems of accessibility. The second example, *Engage Lochee*, used co-design as a way of teaching novice designers about the issue of social responsibility as part of the changing responsibilities of design and the effect upon the design process. The examples are used to explore and observe the act of changing designers approach to designing so that the ways of working and thinking reflect the new issue driven agenda.

Co-design was employed as a means of nurturing effective behavioural change in people and through a literature review a framework for evaluation was created with five generic themes initially identified, namely, story, empathy, transition in self, sharing and time (Frank, 1995; Goleman, 2006; Richardson, 1990; Sanders, 2006; Sanders and Stappers, 2008; Taylor, 2008). For brevity purposes an overview of the case studies are provided with emphasis given to presenting the tentative findings within each of the five themes.

2 CASE STUDY 1: DUNDEE EXPRESSION

Aphasia damages the speech and language centre of the brain and affects all modes of communication - reading, writing, listening and speaking. Aphasia is an invisible disability in that it has no physical outward signs on a person. People with aphasia suffer internal and external frustrations. Most people have little awareness of the condition and misunderstandings of behaviour can lead to people with aphasia being treated inappropriately e.g. A bus driver asks a person with aphasia to leave the bus mistaking their slurred speech and confusion over destination for drunkenness. The problem of misrepresentation

in health care information was identified as a problem as existing formats did not adequately capture the levels of frustration associated with Aphasia, nor did they sufficiently or appropriately attend to the lack of public knowledge. The *Expression* project was devised to collect first hand information about the condition from the participants themselves by running a series of five workshops to explore effective visual communication. The co-design project team consisted of two speech and language therapists; one brain injury centre artist with extensive experience of patients with aphasia; a design educator/illustrator (the author) and six participants with Aphasia. A central challenge for the team was the highly variable nature of the condition. This posed a problem both trying to ‘tell the story’ of aphasia from an end-users perspective and ‘interpreting the story’ from the carers, family and health professional’s viewpoint.

A holistic approach to the inquiry was constructed to reflect the terms of disability used by the World Health Organisation: Participation, Impairment, Activity and Well-being. Participants were carefully selected on the basis that they had reached a level of understanding about their condition that they could reflect on the change to their life. In each of the five corresponding workshops participants used semi-structured discussion and visualisation techniques to communicate their levels of frustration associated with Aphasia.

2.1 Findings from the *Dundee Expression* project

2.1.1 Story

Participants took a holistic and personal view when visualising the maxim ‘making the invisible disability visible’. Some stories included the physical effects of a stroke and while this related to some participants medical histories, it was not representative of all. The subjective nature of the stories and experiences caused unrest among the participants and conflict emerged within the group about the representation of aphasia impairment. One participant claimed an image suggested lobotomy. Another participant’s representation told a metaphorical story. Another participant used figurative representation: reduced use of his left leg, arm and part of his head by compositionally cutting them out of the layout - a brutally honest account. There was not one image that defined the condition. It was the collection of stories and the collection of images together that provided a narrative that more closely reflected the reality of Aphasia for those who are affected by it, directly and indirectly

This narrative and the process of creating the narrative struck a cord and facilitated empathy. The participants recognized the collective need to exchange stories and move forward.

2.1.2 Empathy

During the workshops facilitators observed increased empathy between the participants, noting a move away from the self towards external and community concerns. The pace of the workshops and the emphasis on visualising their accounts of aphasia nurtured empathy and provided participants with the time and tool to attune to one another’s experiences.

The social barriers, (for example exclusion from conversation, loosing their train of thought in mid-conversation) that impeded the ‘flow’ of telling a story became less evident as the process evolved and trust was noticeably forming as conversation duration extended and frequency increased. Increased social aptitude; less introspection and talking over one another; reflecting on the change in roles aphasia had imposed on carer’s and family demonstrated an empathetic change in the participants attitude.

2.1.3 Transition in Self

The printmaking process adopted in the workshops enforced a sequence or process for image making that cannot be compromised. The relief printing gave participants a clear structure. This regulated routine and progression. Participants experienced immersion in their process and a state of flow (Lidwell et al, 2003). Family reported the participants having a new focus i.e. a new creative social activity, had an increase in self-esteem and confidence.

2.1.4 *Sharing*

The workshop process was driven by the incentive that a public exhibition at Dundee Contemporary Art Centre would take place on completion of the work¹. The sense of achievement seeing work in a professional environment was a factor. Family expressed pride in achievements on visiting the exhibition since acquiring aphasia participants had been a source of concern rather than celebration. General awareness of aphasia increased through coverage in the local press, attendance at conferences and dissemination in articles in multidisciplinary journals. The University and NHS primary trust stakeholders realised the significance and financed further support through the launch of a postcard pack showing selected images and method for use in rehabilitation.

2.1.5 *Time*

Time was a key consideration in planning the discussion topics as people with aphasia are talked over, ignored or answered for. However, the time required to move around the workshop with participants who were physically impaired and the time necessary to qualify individual and group agreement after discussions was underestimated. Time for the act of co-creation is of central importance, as the process requires you to look at the intersections between the problem, methods, techniques and users. It is at these junctions where relationships and trust are built.

3 CASE STUDY 2: *ENGAGE LOCHEE*

This second example of co-design is set within the context of teaching and learning, and is discussed from the perspective of the educator rather than student. It is explored in the context of teaching student designers about the changing social responsibilities of design to reflect the new issue driven agenda, for example issues such as sustainability and health. As Barnett (2000) notes, *'Part of the responsibility of higher education in a supercomplex age...is that of creating a disturbance in the minds and beings of students. Both a cognitive and an experiential disturbance are called for'*. Sanders & Stappers (2008) support this view noting, *'[educators] will need to provide alternative learning experiences and curricula for those who are designing and building scaffolds to support the collective creativity of others'*.

The teaching and learning project was devised to enable a group of students to work at the intersections of product and interactive media design and to create services that helped communicate a regeneration programme to, and with, a local community. Lochee², a significant area and community in Dundee, situated west of the heart of the city was chosen because (as typical of many industrialized areas in the early 20th century) it continues to suffer economically with the demise of the British textile industry.

3.1 Findings from the Engage Lochee project

3.1.1 *Story*

As an educator, the teaching aim was to induce a cognitive and experiential disturbance and the objective was for the students to learn about social responsibility. The cognitive shift was to reflect the change in the design landscape; students were learning to understand the role of designer as facilitator, moving away from designer as product maker. The experiential shift was provided through the choice of project location and the social issues driving the design brief.

It was observed that the level of awareness by students concerning their future role and potential responsibilities as a designer as facilitator of change was heightened. The level of social complexity disarmed the students because it was too great a 'disturbance', it did not allow them to use their existing skills to best effect and the skills that were required were ones the students had low levels of experience in using in a design context.

The theory to engage in a live co-design project within a local community context was simple; however,

¹The DCA is recognised as an international exhibition venue, showcasing emerging artists and visionary concepts. For the participants to be invited to exhibit their work as *expert* was significant in their eyes and in others.

²Lochee was once affectionately referred to as Tipperary due to the number of Irish immigrants who worked in the mills and gave the area identity

the project practicalities revealed there was insufficient time to build trust with the community and for a transition in them-selves to occur. Some students struggled with a self-directed route and the slow process of achieving genuine communication with stakeholders. For example, one student noted that it was in the *'giving and receiving'* of communication that his position changed with contact with an isolated group in the community and lots of reading of course material that design + people = success. It was not until listening to the community's needs that he found his direction within the brief.

3.1.2 Empathy

The theoretical and practical 'disturbances' witnessed by the author included the student's discomfort when dealing with a problem finding situation in that they appeared to lack confidence when applying their transferable skills. In losing confidence, they demonstrated confusion as to their role and they questioned the appropriateness of the project. As a result, a number of workshops were devised with a series of instructions for the students to use as a framework for navigating the scenario. For example, a key concern was the cohorts' lack of capacity to form and sustain connections with community groups and as such, one workshop discussion centred round this issue. In doing so, anxiety surrounding the student ability to cope with the project was reduced, knowledge of the local community was heightened and the skill of listening was highlighted.

3.1.3 Transition in Self

There was a noticeable disparity in the student's awareness of the role of the designer in the 21st century. It is fair to say they predominantly associated design with products rather than process with an emphasis on popular or highly commercial brands. The intention of the co-design project was to instigate an understanding of the role of designer as facilitator and to increase their awareness of social responsibility. In doing so a change of perspective from which the students viewed a situation needed to occur.

This shift did not happen easily or quickly. Although observation of community discussions enabled students to connect more closely with individuals and appreciate the realities of the problems associated with community regeneration, the shift was difficult. As a result a storytelling workshop facilitated by the teaching team was organised to help deepen awareness within the students themselves. Visualising the information gathered by the students and using a 'mapping' method to expose the collective group knowledge of the issue of regeneration within Lochee facilitated an increase in confidence in the students. An awareness of the shift in approach to questioning meant students were able to move from 'I' to 'we' or 'me' to 'you' perspective.

The transition in understanding the new landscape of Design deepened as students continued to engage with real users and real-world situations. As student knowledge of the local community increased, so did their empathy towards the local community.

There was also a transition of self from the educator perspective, in that the manner in which the project was contextualised required refinement, a more transparent approach to communicating the problem finding nature of the project rather than problem solving. Thereby helping the co-design team navigate the situation and identify appropriate issues for resolution.

3.1.4 Sharing

A key means of disseminating knowledge and information in design is via the method of exhibition because it allows a large body of visual work to be presented to a large number of people at one time and it is relatively cost effective in the educational environment. It was chosen to communicate the student project findings however, the choice of location for the exhibition proved ineffective because accessibility was insufficient to the local community which resulted in poor attendance. The method of exhibition did not connect with the user or local community and this can also be attributed to the level of engagement with the community.

3.1.5 Time

Considering the levels of disturbance created in the project time frame, twelve days was not sufficient to build trust between the students and the community and understanding of the problem finding brief. Trust, atonement and empathy are prerequisites for meaningful social interactions and relationships. Co-design within the undergraduate educational framework would benefit from a significant increase in the amount and intensity of time given to the teaching and learning associated with co-creation experience.

4 CONCLUSIONS AND COMMON THEMES IN THE TWO CASE STUDIES

To clarify the purpose of sharing observations of co-creation from the perspectives of a teaching and learning and a teaching and research both cases were used to demonstrate co-design with stakeholders for effective change: *Dundee Expression* to reduce misconceptions about aphasia by promoting awareness and in *Engage Lochee* enable the community to change through its citizens' motivations and decisions.

Disturbance in mind and being can differ greatly depending on the levels of empathy attained. Transformation in stance, role, and expectations has to change in co-creation as the role of expert is reversed and rotates continually. Support for student developing flexibility and building confidence to become co-creators needs to happen through the complexities of real world co-creation experiences if a transferable skill set is to emerge. Attuning and empathizing with stakeholders is fundamental to successful co-creation. The significant stories that emerged from both case studies were that '*Stories unite. They tell us who 'we are' Stories create memory and memory creates identity*' (Sacks, 2007). All stakeholders/participants/co-creators exposed fears and insecurities, uncomfortable realities, changes in behaviour, adaptability and transformation. Through the sharing of individual illness narratives *Expression* participants emerged with voices previously unheard. Their stories gave them a new identity enabled by co-design practice, which acted as advocate through visualisation and service. Story mapping enabled students to engage again with Lochee. By recall and recognition of individual and collective experiences in Lochee, themes were captured and categorised and sharing tentative interactions gave students confidence to push forward again envisioning new stories, characters and scenarios to share with the community. The stories showed change, student's stories were honest, reflecting their self-interests and compared them to stakeholders needs. It demonstrated to the students the realities associated with end-user research. The shortage and fragmentation of time in both case studies belies most issues in the 21st century. Subsequent projects of a similar nature will require a concerted period of time to build trust and develop relations in meaningful ways. As educators supporting students in this shift in design skills to design enablers and catalysts (Fuad-Luke, 2007) facilitators of thinking, negotiators and integrators of complexity and visualisers of intangibles (Inns, 2008), the conflict between students perceptions and expectation need to be aligned. The role of 'being there' is bridging this gap for students to envision skills in alternative contexts.

5 RECOMMENDATIONS AND STRATEGIES

It has been observed that stories enforce reflection (Greenhalgh, 2000) and stories enable connections to be made and synthesis to happen (Sacks, 2007). Creating stories about design practices should enable connections and synthesis between skills necessary for the 21st century. Data suggests from both case studies that resonant images can emerge from stories, which draw people together that can otherwise find it difficult to connect. Story forming and making take time, realistic goals are necessary in co-creation processes for meaningful learning outcomes to emerge. Co-creation epitomises the real world experience in all its complexity. To *press the stop button* more often and allocate time to reflect on what has been achieved through sharing processes and thinking can build a valuable transferable skill set. This affordance of time will exhibit designerly ways of 'being there'. The following tentative recommendations are presented to prepare students and educators for the 21st century. Sharing stories communicating process, thinking and reflection of design outputs can bring universal resonance and meaning. Promotion and publicity through the use of existing and complimentary networks, forums, student-led initiatives that empower students, question their expectations while encouraging self-belief can contribute to our changing world. Real world projects are an opportunity to consider a social model

of design practice (Margolin, 2002), enabling plentiful disturbance in mind and being (Barnett, 2000). Introducing the social toolkit will not be the accomplishment of a degree but the foundations for a life-long acquisition of social skills in social awareness and social facility (Goleman, 2006) However further research is required with stakeholders across the contexts of academia, industry and society. How we use these stories will reveal the value of transferable skills for the 21st century Design Graduate.

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Christine, KINGSLEY
University of Dundee
Design Studies Department, Perth Road, Dundee
c.m.kingsley@dundee.ac.uk
01382 388287