

Design in the Real world

BATEMAN, Roger and CRAIG, Claire

Available from Sheffield Hallam University Research Archive (SHURA) at:

http://shura.shu.ac.uk/14340/

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

Published version

BATEMAN, Roger and CRAIG, Claire (2016). Design in the Real world. In: Cumulus Hong Kong 2016: Open Design for E-very-thing - exploring new design purposes, Hong Kong, 21-24 November 2016. (Unpublished)

Repository use policy

Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in SHURA to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain.







21 – 24 Nov 2016 Cumulus Hong Kong 2016: Open Design for E-very-thing

CUMULUS HONG KONG 2016 PAPER TEMPLATE: FORMATTING GUIDELINES FOR 2ND DOUBLE BLIND REVIEW.

For purposes of the double-blind review, please note that all references to the author(s) in the body of the paper should be removed before submission.

Abstract

Social design highlights design-based practices towards collective and social ends rather than predominately commercial or consumer-oriented objectives. In this paper we share staff and students experiences of participating in an interdisciplinary approach to social design and describe the key learning that arose from the implementation of a pioneering approach to the teaching of social design practice on the MA/MFA Design Programme at Sheffield Hallam University.

Taking the conference theme holistically this paper highlights the values of situating learning beyond the classroom in real-world contexts. Holism here relates to the recognition that learning is socially situated, that it draws on the individual strengths and resources students bring and that by involving practitioners from different specialisms, learning has the potential to bring about real-world transformation and change beyond the boundaries of the subject discipline.

The authors believe that social design has a place in design education as threats including precarious economies, social and financial inequities, global warming, war and mass migration are real-world issues impacting on world citizens and the planet. Opening up the right forums for discussion and experimentation, including the right mix of skills and knowledge to enrich discussion needs careful consideration and facilitation. Our initial work focused on placing social design within a module and employing cross-disciplinary and interdisciplinary working and learning. Our current projects widen the learning experience taking place over a year-long period with dual entry and multiple points. This work includes the local City Council, city residents and our DeSIS Lab.

Keywords.

Holism, social design, student engagement.

Introduction.

Today, the word "design" means many things. The common factor linking them is service, and designers are engaged in a service profession in which the results of their work meet human needs (Friedman, K., Stolterman, E, 2015). Over recent years the design profession had undergone profound transformation continuing to do today as designers and design pedagogy struggles to keep up with equally rapid changes is the world.

Social design can be defined variously. In his book 'Design, Everybody Designs: An Introduction to Design for Social Innovation' Ezio Manzini writes; in it's original meaning, social design is a design activity that deals with problems that are not dealt with by the market or by the state, and in which the people involved do not normally have a voice.

Armstrong et al (2014) make the following differentiation,

Although all designing can be understood as social, the term 'social design' highlights the concepts and activities enacted within participatory approaches to researching, generating and realising new ways to make change happen towards collective and social ends, rather than predominantly commercial objectives (p.6).

This concept is not new. In one sense it has always been recognised that designers have an important role to play in contributing to society. John Ruskin, William Morris and Christopher Dresser writing in the nineteenth century were conscious not just of the quality of the objects produced but also about how they were being manufactured and the wider social conditions relating to their production. More recently social design has become synonymous with the work of Victor Papanek (1985) Ralph Erskine (1978) and Manzini. Manzini continues to champion design for social innovation through DeSIS, Design for Social Innovation and Sustainability, a network of university design labs that work with local, regional and global partners for change and sustainability.

It is no coincidence that the recent renaissance in social design has occurred at the same time as the emergence of a number of large-scale, complex global challenges including shifts in population demographics and an ageing population, climate change, increasing social inequalities and the ongoing economic crisis, which continues to place increasing pressure on public sector finances across the World. The skills of designers to develop creative solutions in response to societal problems are being increasingly called for. This has led to designers being actively sought out by governments, development organisations and commercial consultancies to address these broader social agendas. However the need for designers to be tuned into the impact of the social, economic, political and environmental contexts where design takes place is not confined to those who are already actively involved in this agenda. Authors such as Fry (2011) are calling for all designers to be more mindful of the bigger picture, highlighting how designers have inadvertently played a role in exacerbating many of the issues for which solutions are currently being sought. This is particularly in relation to the burgeoning consumer culture, climate change and sustainability.

According to Armstrong et al (2014) whilst designers are operating in an expanding field and claim to 'have the potential to address these [wider] issues, the question still remains as to whether they are adequately equipped to deal with them (Nussbaum et al 2010, Kiem 2013, Miller 2013)

Method.

This question of how to equip future designers with the necessary knowledge, skills and understanding to work in the context of social design is one that the authors have sought to begin to address through changes in this case, through a taught interdisciplinary postgraduate design module.

This project began as the result of numerous conversations between the researchers leading to the shared wish to introduce the practices of design and health to students studying on the MA Design Programme at Sheffield Hallam University (SHU). SHU's Art & Design Research Centre's (ADRC) Lab4Living has, over many years built up considerable experience in the area of Design for Health and the MA Design Programme has more recently developed a growing interest in socially responsible design. The researchers are keen to encourage student's to explore the theme of health as linked to social innovation and sustainability, therefore working with MA Design students provided an excellent link between the programme and the Lab4Living.

The MA/MFA Design Programme positions authentic learning and experiential learning at its core, learning that is grounded in theories of learning and cognition (constructivist learning) which in turn refer to cognitive development and constructivist learning theories (Bruner, Piaget, Vygotsky). The project described here took place in one module during 1 semester (of 1st year) involving 36 students from 7 different countries representing 6 design disciplines. The module was focused on Socially Responsible Design and broken down into 3 tasks of varying lengths and complexity that demanded the students: consider the 'environmental footprint' their designing has, is and might create; produce a number of small but meaningful design interventions (Thorpe, A) that can have immediate and positive impact for users and finally; to work with the broad area of 'memory loss' but with a particular focus on dementia.

For many design students designing responsibly is not something that has been part of their undergraduate learning experience but with the scale and nature of the problems facing the world's population the researchers designed a module curriculum that focused students on a series of escalating 'projects' exploring socially responsible within a health care dimension.

Action Research.

The module used a participatory action research methodology (Swantz, 2008; Wadsworth, 1998). The intention from the outset was that the 2014/15 project inform subsequent project iterations that would further explore collaborative co-creation across the MA Design Programme, other academic courses as well as with external (to the University) stakeholders. This approach was seen to be cognizant with the principles of social responsible design and recognized the value of working in partnership with individuals and communities so as to identify strengths as well as needs and ensure that the solutions developed together were culturally appropriate. A number of social designers (Shah 2012 and Kemp-Rotan, 2012) have highlighted the issues when designers fail to recognize the innovative capacity of local populations with whom they are working.

The pedagogic approach taken was based on social constructivism (Vygotsky,1978) which sat well with the overall philosophy of the approach and its emphasis on social learning and collaboration.

In particular the researcher wanted to explore the

- How to develop the fundamental skills required by designers who hope to work in social design and how do we best equip individuals with these skills.
- Is action research and a teaching pedagogy underpinned by social research an appropriate approach to educating future designers in this area?
- What is the value added to students learning from participating in such a collaboration in terms of (for example) acquired competencies, social capital and motivation to work on socially responsible design projects?

Project Outline

The overall socially responsible design project strategy focused upon enabling students to participate in socially responsible design practice, with a particular focus upon developing collaborative interdisciplinary student-generated responses to a number of design task set by academic staff. Thus far two projects have been completed;

- Project one focused on working in partnership with people with dementia (core project)
- Project two: took as its theme designing out vulnerability (elective project)

The inter-disciplinary make-up of the teaching team, drawing on expertise from health as well as design meant that students could be signposted to key resources. In project one initial immersive sessions offered students the opportunity to hear from specialists in dementia care, design for dementia and from the UK open knowledge sharing platform organization 'Fixperts' (www.fixperts.org) and ongoing contacts were made contact with a large third sector organization in the form of the Alzheimer Society. In this way students were supported in understanding ways of accessing communities and how to develop projects, avoiding Katie Swenson's (2012) concern regarding some curricula, which fail to 'teach students about how projects actually happen'. It also meant that support could be offered in relation to navigating and coping with the emotional complexities that working with people living with long-term conditions such as dementia could evoke. Within project one group-work afforded the students an additional form of support as well as an opportunity to see how students from different design disciplines approached the questions that arose.



Fig 1.

Figure 1 MA Design and Occupational Therapy students at 'Create for Dementia', The Great North Museum, Newcastle-upon-Tyne, 30-31st May 2015

In project two students were able to draw on this experience and learning to work more autonomously, identifying their own topic, identifying people, groups and organizations with who they could work, drawing on support of the tutors as and when required.

Throughout both projects students were required to document the process through digital video as a research practice (Shrum et al, 2005). Methodologically in an action-research context this was a key aspect of the student learning in relation to reflecting back on these with different stakeholders, offering a way of capturing learning as well as building skills in reflexivity. These films also provided a vehicle through which to disseminate the project and will form learning objects, to be viewed and used by future cohorts of students.

In terms of other aspects of learning and teaching practice, the utilization of social media and the affordances of Web 2.0 tools and services were core catalysts in enabling these project, the related communication and collaboration across the boundaries of discipline, location and timetables.

Results

Working in partnership with individuals and community groups, the students utilizing their design skills in real-world situations and created a number of sensitive, creative and credible responses which were greatly valued and validated by the individuals they worked alongside. The quality of work was such that students were invited to disseminate their work within the broader services and communities where they had worked. These partnerships were extremely affirming for many of the stakeholders who had not worked with designers or design students before. Many spoke of valuing what they had learned from the students. In the words of one practitioner, head of a service,

I learned a lot from them [the students]...I am thrilled that the students are receiving education on dementia and how it impacts on our society. Thanks to the two students who went on to develop their ideas by designing an interactive memory cabinet for people living in twenty four hour care'. The design proposal was recently presented to a group of occupational therapy colleagues and was very inspiring.'

Case study: Dudley and Geoff – Memory Project. Gillot, Gulliford, Richardson.

'Dudley and Geoff'. In this Project 3 students worked collaboratively with Dudley, an aging male with mid-late term Alzheimer's and Geoff his son who acts as his full time care-giver. The students' aim was to find way by which they could assist Geoff in is daily role. Through a series of research visits and activities with both Dudley and Geoff the students created a link with Dudley's past through his deep-rooted interest in railways.



Fig 2.

Figures 2. Dudley & Geoff courtesy of Gillot, Gulliford, Richardson

Buy using railways as part of the project, the students worked with Dudley's immediate community in the form of neighbours who had little to no prior knowledge of Dudley's condition. A short video of the project and the project outcomes can be found on Vimeo.com using this link: https://vimeo.com/126396168. Another project undertaken in the module can be viewed by using the following links: https://vimeo.com/126483920

During semester 2, MA Design students are asked to pick a live externally focused project from a list of projects proposed to them by academic staff and 'clients'. One project offered; 'Designing out Vulnerability' asked students to find ways by which they might work to address the broad theme of vulnerability with students choosing to work on the topics including homelessness, suicide, eating disorders, international studentship and social phobias. For one student, their work on understanding vulnerability issues is leading to developments within the university. This work has is also leading to discussions with an external business interested in developing the result of the project so the findings may be applied across the Higher Education sector.

The work produced by students has been recognized both nationally and internationally with invitations to present at conferences in both the fields of design and health. The potential of the work will live well beyond the projects.

Students interviewed after both projects 1 and 2 have described the transformational nature of their experience. It has expanded their role as designers in relation to how they think about design, about the places they may work, the types of design project they might offer.

The impact however has not only been with regard to design practice, it has spilled out into their personal lives. Students have spoken about an increased awareness of how they utilize resources, of their personal response to issues such as homelessness, ageing and disability. A number of students have continued to extend and develop their interest beyond the classroom, continuing to work on socially innovative/responsible design practice.

There were challenges. All videos were shared with participants who spoke of the value of being 'given a voice' to share their experiences. Yet in spite of this and of having formal permission from participants to share the videos some audiences have questioned the ethics of this. Some of the contexts of social design can by their very nature be emotionally challenging and students need to be supported and mentored to help them to navigate these. For some students the principles of social design challenged their fundamental understanding of what design and design practice is. As Emerson states,

'a socially responsible design practice may take on any number of forms for intervention, education or advocacy...at a certain point, a socially responsible design practice may cease to be recognized as design at all'

However, the overwhelming feedback from students was of the value of engaging in authentic learning;

'through this approach, I came to realize that I have transferable design and communication skills and the capacity to research unfamiliar subject areas sufficiently to be able to make a valuable contribution which can be applied to broad ranging themes and problems' (MA Design Student)

Discussion:

This project represents an important first step in building understanding of how to develop curricula to equip students with the skills required to work in socially responsible design. Social learning theory (Bruner) posits that isolated facts do not take on meaning and relevance until learners discover what these tools can do for them. Our study very much reflects this position and closely corresponds with Siemen's (2004) assertion that true learning occurs when the learner is able to make personal connections between the learners' own goals and the broader concerns of the discipline.

Social design sits well within the ten design elements that underpin authentic learning experiences (Lombardi, 2007). Our approach corresponds well to these: it is based in real-world experience, required sustained investigation and required the students to examine the situation from multiple perspectives. Students worked in collaboration with stakeholders and end-users developing and in doing so developed a level of cultural sensitivity, so central to practice. The value of cross-disciplinary working was particularly highlighted, reflecting very much the recommendations of the report, Social Design Futures, commissioned by the Arts and Humanities Research Council.

However if this change is to be supported and sustained it is important to design educational opportunities so that they are sustainable. Communities Of Practice are made up of groups of people with a common interest who act as peers as they explore issues within a particular context. Lave and Wenger (1991) assert that new peripheral (or partial participation) community members learn from the active members of a community, and learning occurs as they are gradually brought into an active role or full participation in the community. The process of moving from a position of legitimate peripheral participation to full participation

within a community of practice involves sustained activity and requires time for the ontological shifts that must occur. An ontological shift is "the re-assignment or re-categorizing of an instance from one ontological category to another" (Chi & Hausmann, 2003, p. 432), or simply put, a reconceptualisation. The sustained engagement of a community of practice creates a supportive framework for cultivating participant ontological shifts as members reconceptualise their roles from individual experts to members that facilitate co-generated content.

We are at the beginning of this process. Initial indications are that we have the foundations in place for ongoing development of this community. Stakeholders who have experienced the potential that design can make are keen to continue their involvement in future projects.

Conclusion.

The work undertaken constitutes a small study into teaching social design within a Postgraduate Design module. The authors believe that social design has a place in design education as threats including increasingly precarious economies, financial and social inequity, global warming and war are real issues impacting on world citizens. Opening up the right forums for discussion and experimentation, including the right mix of skills and knowledge to enrich discussion needs careful consideration and facilitation. Our work to date has focused on placing social design within a module and employing cross-disciplinary and interdisciplinary working and learning. Our current project (2015-16) widens the learning experience and is taking place over a year long period with multiple entry and exit points. This work includes the local City Council, city residents and design students and will finish in October 2016.



Figure 4. Page Hall District, Sheffield, UK. Courtesy of R.Bateman.

Borrowing from work within the health sciences the researchers; one designer, one occupational therapist, will be looking closely at a values based enquiry (VBE) and value based practice (VBP) models and considering their appropriateness for the teaching of social design (Fulford, K W M). VBE emphasizes that self-awareness, the professional values of care and compassion, and an awareness of the values of others are central to the students developing an identity. The researchers are interested to find out if through the development of VBE for design, staff and students will approach the challenge of social design naturally rather than seeing social design as an option or 'add-on' to already overflowing design curricula.

References.

Belch, G. E. and Belch, M. A. (2001) *Advertising and Promotion: An Integrated Marketing Communication Perspective*, 5th Ed., Holt, McGraw-Hill, New York. USA.

Bharucha, R. (2003) Rajasthan an Oral History. Penguin Books, India.

Bruner II, G. C., and Kumar, A. (2007) *Attitude toward Location-Based Advertising* (Online PDF) Available at

http://www.jiad.org/vol7/no2/bruner/Attitude%20toward%20locationbased%20advertising.pdf (Accessed 18 July 2015)

Chi, M., & Hausmann, R. (2003). *Do Radical Discoveries Require Ontological Shifts?* In L. Shavinina & R. Sternberg (Eds.), International Handbook on Innovation (Vol. 3, pp. 430 - 444). Elsevier Science Ltd. New York, USA.

Fulford, K.W.M (2011) *The value of evidence and evidence of values*. Journal of Evaluation in Clinical Practice, 17.

Kiem, M. (2013). 'If political design changed anything they'd make it illegal'. A review essay of Carl DiSalvo, Adversarial Design, MIT Press Press, 168 pages, published April 2012. Design Philosophy Papers, 11 (1), 31-38.

Klemmer, R.S., Thomsen, M., Phelps-Goodman, E., Lee, R. and Landay, J.A. (2002) *Where do web sites come from? Capturing and interacting with design history.* In Proceedings of CHI 2002, ACM Press, pp 1-8.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, University Press. Cambridge, UK.

Lombardi, M. (2007), *Authentic Learning for the 21st Century: An Overview.* Ed Oblinger, D, G., Educause Learning Initiative, Available at: https://net.educause.edu/ir/library/pdf/ELI3009.pdf, Last accessed August 7, 2016.

Manzini, E. (2015) Design, When Everyone Design. MIT Press. Massachusetts, USA.

McLean, C. (2012) *The Yellow Brick Road a Values Based Curriculum Model*. Nurse Education in Practice. (Online PDF) Available at: http://www.ncbi.nlm.nih.gov/pubmed/22154738 (Accessed 20 July 2015)

Nussbaum, B., Pilloton E., Fabricant, R., Popova, M., and Stairs, S., (2010). *Humanitarian Design versus Design Imperialism: Debate Summary*, Available at:

http://designobserver.com/feature/humanitarian-design-vs-design-imperialism-debate-summary/14498/ Last accessed May 16, 2016.

Papanek V (1985) *Design for the real world: human ecology and social change.* Thames and Hudson. London.

Shah, S., Kemp-Rotan, R., (2013) in *Design and Social Impact, A Cross-Sectoral Agenda for Design Education, Research and Practice,* Smithsonian Institute, New York, USA.

Shrum, W., Duque, R., & Brown, T. (2005). *Digital video as research practice: Methodology for the millennium.* Journal of Research Practice, 1(1), Article M4. Available at: http://jrp.icaap.org/index.php/jrp/article/view/6/12 Last accessed March17, 2015.

Siemens, G. (2004). Connectivism: A learning theory for the digital age. Available at: http://www.elearnspace.org/Articles/connectivism.htm Last accessed April 24, 2016.

Swantz, M. L (2008) 'Participatory action research as practice', in Reason, P and Bradbury, H (eds), The SAGE Handbook of Action Research: Participative Inquiry and Practice (2nd edn), Sage Publications, London, UK.

Swenson, K., (2012) Social Impact Design Capacity Building, Available at: http://www.cooperhewitt.org/2012/05/21/social-impact-design-capacity-building/ last accessed August 6, 2016.

Thorpe, A., (2007) The Designer's Atlas of Sustainability, Island Press, Washington.

Vygotsky, L (1978) Mind in Society. Harvard University Press. Cambridge, MA, USA