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FOSTERING ENGAGEMENT THROUGH CREATIVE COLLABORATION

Tara French[1], Gemma Teal[2], Leigh-Anne Hepburn[1] and Sneha Raman[1]

[1] *Institute of Design Innovation, The Glasgow School of Art, Forres, UK, t.french@gsa.ac.uk*
[2] *Institute of Design Innovation, The Glasgow School of Art, Glasgow, UK, g.teal@gsa.ac.uk*

ABSTRACT

Design innovation aims to tackle complex societal challenges through new design practices and bespoke methods of engagement (McAra-McWilliam, 2012). Creative collaboration is a core aspect of design innovation practice, involving diverse stakeholders including academic, business and civic partners, and importantly end users within the design process. Innovation in the health and care context requires collaboration between a variety of actors when designing transformative product and service solutions (Bradwell and Marr, 2008). Consequently, the focus of design has shifted from the artefact or outcome, to the design of an open and participative process that relies on the direct contextual insight of participants, their creativity and lived experience, and is inclusive of a multiplicity of perspectives.

Experience Labs open up the design innovation process to multiple stakeholders by employing a participatory design approach. The Labs provide a *space for collaboration* and co-creation among a range of stakeholders and end users (French, Teal and Raman 2016). Active participation within Experience Labs requires participants to engage both with the concepts being explored, and with each other's points of view.

We discuss our approach to designing spaces for collaboration which foster engagement and participation in the creative process, among multiple stakeholders. Through examples, we discuss the tools, artefacts and activities that support participants to meaningfully engage with ideas, and strategies for curating groups and managing collaboration. We share design learning regarding engagement and the resulting impact on people, processes and outcomes, and consider how this approach may be applied in other contexts to foster engagement.

Keywords:

Engagement, collaboration, creativity

INTRODUCTION

The practice of design innovation aims to tackle complex societal challenges through new design practices and bespoke methods of engagement (McAra-McWilliam, 2012). Creative collaboration is a core aspect of design innovation practice, involving a wide range of stakeholders and academic, business and civic partners, and importantly end users within the design process. Innovation within the health and care context requires the collaboration of a diverse range of actors when designing transformative product and service solutions (Bradwell and Marr, 2008). As a result, the focus of design has shifted from the artefact or end result, to the design of an open and participative process that relies on the direct contextual insight of

participants, their creativity and lived experience, and is inclusive of a multiplicity of perspectives.

Participatory design approaches seek to open up the innovation process to include multiple stakeholders and end users in the design of new products and services (Sanders and Stappers, 2008). When designing within the context of health and care, there is a need to employ methods that actively engage people in both collaboration with designers and other participants from similar or different backgrounds, and also in creativity to engage imaginations. Participatory design is foregrounded on the belief that people have a democratic right to be included in the design process of things that will affect their lives, and be empowered by participation (Bowen, 2009). What began as a movement toward democratization of work places in Scandinavia in relation to the introduction of new technology (Björgvinsson et al., 2012) can be seen in the active citizenship agenda currently advocated in the UK, and the concept of participation is now widespread in the public sector (Luck, 2007).

Experience Labs open up the design innovation process to multiple stakeholders by employing a participatory design approach. The Labs provide a space for collaboration and co-creation among a range of stakeholders and end users (French, et al., 2016). Active participation within Experience Labs requires participants to engage both with the concepts being explored, and with each other's points of view. We also aim to engage participants to collaboratively explore ideas and in creative exploration of new ways of working towards '*preferable futures*' (Dunne and Raby, 2013; McAra-McWilliam, 2014). In doing so, we aim to generate energy, creativity and empowerment, mobilising individuals and communities towards a shared purpose (Hancock and Bezold, 1994), and ultimately, towards developing sustainable solutions.

In this paper, we discuss our approach to creating spaces for collaboration which foster engagement and participation in the creative process, where multiple stakeholders are involved. Through practical examples, we discuss the values, tools and artefacts, and activities that support our participants to meaningfully engage with ideas, and present strategies for curating groups and managing collaboration. The paper will discuss ways in which the Experience Labs foster engagement, sustain participation, and support creative collaboration throughout the design process and among the participant group. We will share our design learning regarding engagement and the resulting impact on people, processes and outcomes, and consider ways in which this approach may be applied in other contexts to foster engagement.

CREATING A SPACE FOR COLLABORATION

The traditional space of collaboration is one dominated by formal structure, built around scheduled meetings and processes aligned to practices inherent in business. As working practices have expanded, becoming more open in nature, the understanding of collaborative space has also evolved to meet the needs of those participating. Central to this shift is a demand for a more social, inclusive and engaged environment within which to collaborate. This notion of an open, flexible and accessible space for collaboration fits well within the recognised value of design within a collaborative context. Engagement in collective creativity, design-led activity shared by two or more people, is acknowledged to encourage a collaborative approach and to facilitate interdisciplinary working (Sanders and Stappers, 2008; Sanders and Westerlund, 2011) and can be described as a participative process where people and organisations together generate and develop meaning (Ind and Coates, 2013).

The role of collaboration in the creation of solutions that extend beyond the perceived outcome can be linked to the ability to harness the adaptive capability of those engaged (Folke et al., 2003). Adaptive capacity has a focus on the creation of opportunities for learning and the ability of participants *'to experiment, adapt and foster resilient strategies to deal with complex socio-economical circumstances'* (Armitage et al., 2010). It is acknowledged that these complex challenges do not come with *'existing best practices or known expertise'* with which to solve the issue (Heifetz et al.,

2008), rather they present a unique space for interaction, influenced by the experience and capacity of those engaged to respond to that challenge in the moment.

The importance of identifying and creating the optimum conditions for participants is therefore a necessary element in enabling a space for collaboration. Any multidisciplinary collaboration involves the careful consideration and sharing of individual stakeholder's experience, perspective, knowledge and identity. Each participant brings to the collaboration space their own set of personal and professional values, both implicit and explicit, and how these are articulated and then interpreted within a group of participants can have an impact on the level of engagement and collaboration. One of the key challenges in multidisciplinary collaboration is in the creation of an open and reciprocal space within which participants can share (Hepburn, 2016). This sense of a safe space, one that enables both the individual voice to be heard while working towards a shared understanding is critical.

More specific to participatory design activities, this safe space and the creation of meaningful relationships requires participants to feel comfortable and able to collaborate and communicate with each other (Loi, 2004). In this context, collaboration moves beyond the business innovation model towards one that is more responsive to the needs of the participants. The involvement of multiple stakeholders creates a sense of collective ownership of the process and the output of the collaboration, generating value in both the way of working and in the solution that emerges. Hornecker et al. (2006) consider the use of participatory design as a way of working within an '*opportunity space'*, enabling the collaboration to capture and collate the perspectives of multiple participants or users in order to maximise a solution.

Within this creative collaboration space, problems can be re-framed based on the lived experiences of participants, raising and answering questions that without the user perspective might previously have been assumed. This alignment with personal experience works to make the problem being explored more relevant to participants and further supports engagement, allowing participants to feel able to make a contribution. This also works towards creating a common language and shared understanding between participants and fosters engagement towards a common goal by enhancing communication, bridging boundaries and building relationships (Thomas and McDonagh, 2013).

Within the Experience Labs, there are a number of important values involved in crafting the space for collaboration. In the following sections we present each value, explain the way in which it fosters engagement and supports collaboration, and provide evidence from completed Experience Labs.

Equality

Careful consideration is given to the physical space chosen for each Experience Lab, in order to create conditions conducive to collaboration and to promote equity among participants. Neutral spaces are often used when working with a mix of participants, so that the space is new to everyone with the aim of reducing any existing power dynamics. Spaces are used that foster a relaxed and informal atmosphere, offer inspiration (e.g. beautiful buildings or scenic settings), and can also involve using real or realistic spaces within which to simulate and test a proposed service or experience.

While a key advantage of collaborative activity is the differing perspectives brought in by each participant, it is acknowledged that with each perspective comes a set of values, both personal and professional. Collaboration must be carefully curated to ensure that each participant understands and respects the variety of views offered as well as valuing the competencies and unique expertise and experience of each participant. Carrier and Kendall (1995) describe interdisciplinary collaboration as the '*willingness to share and indeed give up exclusive claims on specialist knowledge and authority'* and the understanding that by disclosing personal experience, participants are not giving away part of themselves but rather are contributing to wider group value.

'Participatory design has the moral and pragmatic tenet of including those who will be most affected by a design into the design process' (Segalowitz and Brereton, 2009). However good participation is hard to achieve (ibid) and creating true partnerships may be challenging, particularly in an inclusive design process. As Experience Labs involve a diverse range of participants, additional considerations towards inclusivity are required to ensure participants are supported to make an equal contribution and that the design process is open and inclusive to all. Using asset-based approaches (Foot and Hopkins, 2010; McLean, 2011; Teal and French, 2016), designers can use their skills to empower participant's individual capabilities (Cipolla and Bartholo, 2014), supporting them to engage in the creative process.

Example no.1: Designing for inclusivity and equal partnerships

One project involved working with young people with learning disabilities, and in contrast to traditional design processes where participants may be limited to a consultative model of participation, the Labs were designed for collaborative participation. Even when there is intent of participatory design with people who have mixed levels of abilities, in practice it is often difficult to achieve. This group is often vulnerable to exclusion from participation within technology design projects, or be vulnerable to tokenism when they are provided with the opportunity to participate (Benton and Johnson, 2013). During planning, one of the first priorities was to understand from the project partners how participation from the young people could be supported, encouraged and enabled. Activities and tools were designed to be completed by the young people themselves, rather than facilitated by someone else on their behalf. Careful consideration was given to developing tools, keeping language simple, using minimal text and use of visuals and objects to communicate ideas. For one of the activities, a 'Superhero kit' with superhero badges, costumes, and design tools were created to help participants to overcome their fears and challenges and to imagine new possibilities. This helped to engage the participants as the tools were designed based on their interest in gaming and comics, and using the theme of superheroes with 'additional powers' helped to think beyond some of their everyday challenges. Use of costumes and role-play also provided them a new vocabulary to communicate their ideas.

Many Experience Lab projects depend on the participation of both service providers and service users and when structuring the Labs, existing power relationships require careful consideration when curating groups to ensure that participants feel able to engage and contribute. In order to create a safe and open environment where participants feel comfortable being critical and sharing their views, it may be necessary to design a series of separate Labs to build understanding of these different perspectives of the service, before moving forward to collective ideation. Through these earlier sessions design researchers can build trust and identify any potential barriers to inequality, and design collaborative activities to overcome them.

Example no 2: Experiences of living with a progressive illness

When exploring a new concept to support easier access to statutory services for people living with a complex progressive illness, it was important to understand the current challenges of accessing services and opportunities for innovation from the perspective of both people living with the condition and service providers. In order to ensure participants felt comfortable in sharing their frustrations, it was deemed important for these sessions to be held separately. While there may undoubtedly have been value in the participant groups understanding each other's perspectives for the purposes of participatory design, the challenge of ensuring equality within participant groups would have been complicated by the imbalance of power within the service users and providers. As a result design activities were explored initially with service users and communicated to service providers using prototypes. These ideas were then tested by service providers to understand their perspectives, building a set of requirements that reflected the needs of both groups.

Building trust and relationships

Researchers engage in a significant amount of preparatory work prior to an Experience Lab in order to gain a contextual understanding of participants and project context to create the space, and design the methods and tools for engagement within a Lab. Contextual understanding of participants often employs the use of design ethnography in the form of observations, interviews and visits. The insights gained are used to design scenarios, critical artefacts (Bowen, 2009) and experiences that are personally meaningful to participants, building the foundations through which to develop a trusting relationship. Understanding the project context can involve horizon scanning in the form of literature review integrating both academic literature, policy documents or existing publicly available project reports. Interviews with subject experts such as clinicians may also be conducted to gain a rich understanding of the existing research landscape.

Example no.3: Designing with contextual understanding

When designing an Experience Lab to explore and test a concept to allow older adults to live independently at home, home visits were made to all participants to gain a sense of the routines and everyday life of each older adults and gain an understanding of what is important to them in managing everyday life. The insights gained from the home visits were used in subsequent Labs to design personalised guided shopping visits and bespoke experience prototypes, permitting the concept being developed to feel more realistic by relating it to details from their everyday life. Discussion around the proposed technology was made accessible because it was built upon their own experience through the contextual work. The home visits supported a sustained engagement over three Experience Labs allowing participants to build trust and rapport with the researchers over the course of the project, leading to critical and creative engagement with the concept being developed (French and Teal, 2015).

Pre-Lab work can also involve organising smaller Lab sessions with project partners and relevant stakeholders (health professionals, academics or other civic partners who currently work with prospective participants) in order to gain a contextual understanding based on their expertise of the project context. In these sessions, partners and stakeholders can provide direction and guidance when designing Labs to ensure they will meet the needs of participants, and can offer expertise and advice in relation to the design of Lab materials such as participant information and supporting materials for Lab activities. The knowledge and experience of key stakeholders who work directly with prospective participants is key to establishing trust through their recommendations on what is appropriate for participants. Through this preparatory work, we can ensure materials are not intimidating, using appropriate language and familiar concepts.

Example no.4: Designing sensibilities with contextual sensitivity

When working with young people with learning disabilities, the researchers arranged a number of Pre-Lab sessions with both the project partners and care workers who worked with the potential participants. This was important for understanding and sharing the necessary skills involved in engaging with and supporting potential participants during the design process in a respectful and non-patronising manner. The materials that were designed for information and consent were reviewed in these sessions to ensure they were comprehensible and playful, but not child-like. We also arranged to meet with the prospective participants at one of their relaxed social meetings to explain the project and provide information to allow participants the opportunity to ask further information and have time to go away and consider their participation. Ensuring that these experiences were positive by paying attention to the needs and respecting their choice helped in establishing trust and fostering a constructive relationship with participants who consented to take part in the Labs.

Empathic dialogue

Within a participatory design process, dialogue is needed for creativity to happen (Pinheiro and Fonseca, 2016). Dialogical approaches within the Experience Labs engage participants beyond being considered as ‘users’ but as active participants in the design process (Cipolla and

Bartholo, 2014). Dialogic models of communication are used within the Labs to build and sustain relationships and allow multiple voices to be heard whilst also exploring any tensions (Escobar, 2011). When engaging participants in dialogue the key dynamics of the need for openness, respect, listening, storytelling, finding common ground and exploring differences, whilst balancing advocacy and inquiry, and building a safe space for collaboration, require consideration (ibid).

When the empathic dialogue is between a designer and an end user, the 'designer' does not relinquish his/her position to 'become the user', a position from which nothing new can be created, rather the designer responds to what they see as the user's world from their own perspective as designer" (Wright and McCarthy, 2008, p.639). Within Experience Labs we aim to use dialogical approaches to create meaningful engagement with participants and to promote empathy with and among those who participate, leading to insights and tangible design outcomes (French and Teal, in press).

Example no.5: Designing for dialogue using pop-up engagement

A recent project aimed to engage with the wider public to gain insight into their perceptions of digital health records, prior to a series of Experience Labs which explored how these might be used to better engage people in self management. In order to gain a broad picture of the opportunities and barriers, the team designed a pop-up engagement tool (Teal and French, 2016), which was used in public spaces. This approach used an intriguing prop and an open question to start a dialogue with passers by on the things that keep them well and the ways in which personal health records could be helpful. The conversations were captured by the design facilitators on cardboard 'apples' and hung on a large wooden tree. This approach enabled dialogue with a large number of people in a short space of time (Approximately 150 people in 8 hours), and informed the design of subsequent Labs.

Storytelling can be used as a way of articulating identity and self (Bruner, 2003) and of exploring experience and shaping our understanding of the world (Maxwell et al., 2014). This is aligned to Escobar's understanding of the reshaping of perspectives, enabling the continued re-articulation and re-interpretation of experience (2011). Adopted across disciplines, both consciously and unconsciously, storytelling has a significant role within creative collaboration. The collaborative practice of storytelling is most commonly explored through design methods such as persona development and storyboarding, however the space for collaborative conversation need not be so directed. Empathic dialogue in this context is enabled through the creation of conditions conducive to storytelling rather than through directed interaction. While a traditional focus group is facilitated, following predetermined line of questioning, collaborative storytelling encourages a more fluid approach, led by the stories and personal experiences of those participants engaged and with the space to allow conversations to emerge naturally.

Example no.6: Designing for dialogue through collaborative storytelling

As part of a project that aimed to design new ways of promoting breastfeeding, collaborative storytelling was used to gather insight from a number of perspectives. The group comprised midwives, health visitors, infant-feeding specialists, and a consultant, as well as academics with an interest in maternal care. The storytelling session began with an introduction to the project given by the Lab researcher, who then posed an open question, centred around experiences of breastfeeding promotion. Little facilitation was used, rather the session was led by the stories shared in a natural and emergent way. This peer to peer exchange created a sense of curiosity, with participants beginning to question each other as well as aligning themselves with particular perspectives shared. Storytelling in this way enabled a practice of open sharing, related to service delivery as well as eliciting responses to real and perceived challenges and opportunities.

Despite the removal of a structured framework of questioning, a core research concept is established prior and through collaborative conversation participants can engage with and

respond to the concept in an emergent way that is relevant to their own experience. Furthermore by foregrounding experience, participants can build upon each other's stories, generating a richer and more authentic articulation of evidence relevant to the concept.

Engaging imaginations and creativity

One of the key challenges within the Labs is to engage the imagination of participants to move beyond the mundane to the creative to consider futures that are preferable rather than possible or probable (McAra-McWilliam, 2014; Dunne and Raby, 2013). The Lab activities are designed to support participants to move through the design process, supported with the use of bespoke tools and artefacts to engage and empower participants to contribute. Even though the participants' contributions are based on their individual lived experiences and motivations, while imagining preferable futures their contributions extend beyond ideas that impact that own lives to other stakeholders and people in similar situations, and creating something that is socially meaningful. This offers the engagement a purpose and meaning beyond their own lives.

Creative exploration is grounded within a generic design process that supports emergence and ambiguity whilst ensuring timely decisions are made. As such, designers offer a heightened sensitivity and specialised set of skills to tackle complex or 'wicked' problems (Buchanan, 1992) such as the challenges facing the health and care sector. At the early stages of an Experience Lab there are many unknowns, and the opportunity identified is likely to be difficult to articulate at the fuzzy front end (Sanders and Stappers, 2008) of the development process. Uncertainty can be overwhelming to non-designers, and faced with the task of taking ideas forward, it can be tempting to revert to inductive problem solving, and tried and tested approaches that offer little scope for real innovation (Bate, Robert and Bevan, 2004). As such, it is our task is to ensure non-designers feel safe outside their 'comfort zone', enabling creative conversations to happen. The challenge to balance at this stage is ensuring that the idea remains open enough for participants to shape it, but defined enough to be meaningful.

Bespoke tools and artefacts

Within the Lab, generative tools and artefacts are used to guide participants through the fuzzy front end of the creative process, fostering engagement and collaboration. The tools and artefacts serve a number of purposes, making ideas tangible and allowing participants to discuss and explore how a concept could be embodied and implemented (French, et al., 2016). The tools and artefacts not only engage people creatively, but also experientially, empathically and metaphorically. Lab activities are carefully crafted and sequenced to engage participants in both the creative development and critical evaluation of new concepts. Techniques such as design fiction (Blythe, 2014) and experience prototyping (Buchenau and Fulton Suri, 2000) are used to allow participants to experience and interact with an idea.

Example No.7: Designing tools to manage uncertainty

When developing a digital tool for managing personal data and accessing services, the metaphor of a backpack was used to enable the participants to understand and relate to the proposed concept. The backpack metaphor was explored using a paper based tool that allowed participants to build their own backpack with basic modular elements that could be selected, annotated and adapted. In this case, design researchers collaborated one-on-one with participants, to enable the concept of personalisation to be explored by allowing the participants to each build their own personal backpack. The modular tool enabled the participants to develop a concept they initially found difficult to comprehend, by considering each attribute in turn and discussing and illustrating their needs through the tool, building to a fully realised prototype of the system.

Activities are designed to gradually build confidence in proposing ideas or using creative materials, and participants are encouraged to write or draw their ideas on Lab materials. Materials are deliberately designed with an unfinished aesthetic to look rough and sketchy, inviting participants to contribute. Despite this, participants may be reluctant to make a mark,

therefore design facilitators can support them to record and illustrate ideas if necessary. Tools and artefacts are designed to support collaborative engagement and are crafted in sizes that are big enough for groups of people to work together to encourage sharing of thoughts and making them public. They are often modular to allow multiple people to input into the process of making. By supporting a process of collaborative engagement, the tools also enhance dialogue and negotiation between different viewpoints. The end goal is not to create a beautiful artefact, but to create a meaningful artefact that aids sense making of multiple perspectives through an iterative creative process.

Often it is necessary for the designer to propose an idea in response to a challenge or opportunity raised by a participant. We find that participants respond by adapting the idea to better suit the context and need, or by suggesting an alternative, more appropriate idea. This initial exchange can 'get the ball rolling', opening up imaginations leading to many further ideas and insights. While this might lead some to discuss whether the design is being done by the participant or the designer (Sanders and Stappers, 2008), in practice this is a collaboration and innovative ideas are rarely the result of an individual.

Narrative approaches are often used to bring concepts to life by relating them to real life experiences. Personas and storyboards are frequently used to develop this perspective. While it might be intimidating to tackle the redesign of a service or product at a systems level, by reducing the task to redesigning the experience of one service/product user it can become a more manageable task. Participants may be asked to bring their experience to bear in designing a service user persona or scenarios based on people they know or have met, or we may draw upon insights gained from Pre-Lab activities. Participants may also be asked to describe the current service or scenarios where a new product or service would be useful, in order to begin the process or rethinking the scenario and generating new ideas. By employing narrative approaches, engagement can be enhanced through the sharing of lived experience and the integration of participant's stories in a meaningful and valued way.

CONCLUSIONS

In this paper we have discussed our Experience Lab approach to creating *spaces for collaboration* which foster engagement when innovating in the health and care context. Through our approach to gaining a contextual understanding of the project context and participants, we propose that engagement is made more meaningful for participants by designing bespoke Labs informed by their insights and lived experience. Contextual underpinnings allow participants to relate their own personal motivations and associations to create meaning that enables them to make valuable contributions in working towards the wider goal of the project. Preparing participants to be part of a design process requires a considered approach and we propose that this period of preparation happens at a much earlier stage to enable the depth of participation and supports the level of engagement.

Based upon our learning to date, Experience Labs allow for rich and meaningful interaction through a large, extended engagement however, there is also value in smaller, brief engagements with larger numbers of people. This requires as much attention to the design of the materials and the aesthetic of the experience regardless of the length of the engagement, or the number of people to be engaged. Consideration of core values including equality, trust and empathy is vital.

The design learning shared in this paper in relation to engaging participants in this approach, provides a number of implications for future research. We propose that the methods and tools for engagement and collaboration shared in this paper have the potential to enhance engagement in other contexts. In particular, the approach may be of value to public engagement in relation to a number of societal issues. Experience Labs value the voice of the people, and can provide a potential alternative framework for engaging effectively with the

public as the Scottish Government hopes to do through 'Our Voice' (https://ourvoice.scot) by continuing to involve the public in planning and decision-making. In Scotland, civic participation is becoming increasingly expected as members of the public become more willing to engage in decisions regarding issues that are important to them (Marcinkiewicz et al., 2016). However, in deprived areas, engagement is reduced (ibid) and this is an area of potential focus when considering how this approach could enable and support those living in deprived areas to ensure their voice is heard. Future research will explore how the approach may be transferable or applied to contexts outside health and care.

Further to the learning shared in this paper, we have identified an ethical challenge relating to the continued engagement of participants following the completion of a Lab. One way of addressing this may be to develop an Experience Lab community that builds upon the connection established through participating in a Lab and engages participants over a longer period of time. In this way, participants could be kept informed of the progress of the projects and see the impact of their contribution. As such, future research will be directed to consider the ethics of engagement.

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