Working paper 2
Curating Collaboration: The Experience of Collaborative Innovation in REACT

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Introduction

The purpose of this paper is to offer an insight into the experience of collaborative projects in knowledge exchange processes that engage University researchers with creative businesses. Through a series of observations and interviews with collaborators from REACT's first two funding calls, Heritage Sandbox and Books and Print Sandbox, this paper investigates how professional identities, personal experiences and curation interplay in collaborative R&D and offers some recommendations for those seeking to run similar projects. Specifically, the paper signals an important fact about REACT, namely that it is experimenting with new configurations of expertise, skills, ways of working and professional identities. This is challenging, exciting, and politically sensitive.

Key findings

The paper offers five key pieces of advice:

1. *Be open to the skills and expertise of your collaborators.*

   Successful collaborations are built on fluid professional identities that extend far beyond received wisdom about Knowledge Exchange where academics bring 'content' in the form of academic research and creative businesses operate as a 'delivery' service that deploys technology to share that content.

2. *Create protected space.*

   Quality of attentions is a key part of the REACT Sandbox methodology. High quality inputs, one-to-one attention and varied inputs all contribute to the provision of a high quality R&D space.

3. *Collaboration is a journey.*

   Collaboration, especially rapid collaboration, is an emotional process. But this experience adds value, ownership and energy to projects. Collaborative work is a journey that involves a series of experiences and interactions that build trust.

4. *Curate people as much as projects.*

   The space offered by collaborative work cultivates embodied skills, personal dispositions and acknowledges emotions. It is important not to assume specific approaches of participants as a consequence of their institutional or disciplinary affiliation. It might be assumptions about how they will work, what they will do, or how they may contribute. 'Creativity' doesn't reside in a job description.

5. *Recognise your own fingerprints.*

   Curation is an important process but it is not neutral. Although holding space and looking after projects is key, you must continue to recognise that you are bringing your own assumptions and way of doing things to a space.

The paper outlines the evidence that contributes to these key findings, and considers this learning in more depth.

About REACT

The REACT Hub is a four year project, established to support collaborative work between Arts and Humanities researchers working in Higher Education Institutions (HEIs) and businesses in the creative sector. The project is not an isolated initiative, but one of four hubs established by the Arts and Humanities Research Council to explore knowledge exchange in this field. Each hub has its own aims, objectives and methods to conduct this exploration. The Hubs are situated within a landscape where policy makers, and particularly the UK's Business Innovation and Skills Department (BIS), are looking for methods to promote business growth in the creative economy, where academic researchers are being compelled to disseminate and prove the impact of their research outside of the academic audience of their peers, and HEIs are looking for ways to exploit the social and commercial opportunities that this research could offer.

REACT is operating at the intersection of agendas to generate wealth, demonstrate impact, and help develop models for HEIs to better understand both the value of their own researchers, and also the systems needed to work with the microbusiness and SMEs that comprise the creative industries.

We believe that HEIs do not have the skills necessary to broker such lasting relationships with the creative economy. In order for Arts and Humanities research to find new sites for impact in the creative economy, the methods and approaches of creative businesses need to be afforded a more prominent place in University research practices. This requires a shift in how we understand the value of creative collaboration within HEIs.

Achieving these aims involves systemic culture change in HEIs and experimentation in research and methodology. In the case of REACT, this process of experimentation and intervention involves recognising the skills, inputs and expertise within the creative economy itself, developing new ways of working and promoting new ways of performing our professional identities, and changing HEI systems.

At the centre of this process of collaboration are people. At REACT we describe our collaborative projects as comprising academics and creatives. In many ways, this is a logical categorisation: we take individuals from different professional contexts and ask them to work together and produce something innovative. The context of our funding from the AHRC uses these categories because they speak to the language of the national interventions in the economy that they want to make. In our day-to-day work these categories are institutionally active – they mean something specific to the institutions we work with, and reinforce a series of assumptions about who our collaborators are, what they can do, or how they work.

These discursive frameworks operate as day-to-day short-hands. They connote assumptions – sometimes unconscious and sometimes conscious - about the abilities or predispositions of our collaborators. They're difficult to escape. Every day we hear sentences that begin 'As an academic I …', 'On behalf of the businesses here I want to say…'. Academics are cast as deeply knowledgeable, curious creatures, but slow moving, and obscure, with a tendency toward abstraction. Creative businesses are pitched as lean, hungry, agile and focussed, sinking or swimming by the quality of their product.

What we've found, however, is that these categories don't accurately describe the diversity and demographic of our cohort. For example, some of the individuals in our collaborations are artists or practitioners working in HEIs and others are trained academics who also work in a freelance capacity or as part of their own company. Some participants are traditional academics who have worked for a long time as lecturers while others are early career researchers who understand academic research in a very different way to their senior colleagues. Some participants come from young, recently graduated technology start ups and some are creative technologists with a

wealth of deep, critical knowledge that, although not codified by an academic qualification, are still no less capable of engaging in critical research activities than a collaborator with a PhD.

This tendency, for academics to identify their research processes as creative and business to frequently identify their research and development processes as analytic and critical., suggests that professional identities in this field exist in worlds where the languages and labour of cultural production, creative business and university life overlap and inform one another.

This observation led us to think more about the relationship between apparently objective occupational definitions and the lived experiences of the individuals we work with. We know that institutional discourses operating at one scale influence how collaborative work in this field is understood, spoken about, and performed at another. But what about the individual experience of collaboration in this field? How did those individual dispositions intersect with professional categories and expectations?

These questions led us to consider the ways in which participants experience working in a REACT-funded collaboration. We wanted to know what was being exchanged in our collaborations, what our participants experienced. In this research we asked what we could learn about this kind of collaborative work by analysing the experiences of our first two cohorts. This involves paying attention to the process that accounts for, makes assumptions about, or influences the subjective experience of being a participant in this kind of collaborative labour. These 'subjectivities', or personal and professional dispositions influence how we understand ourselves as people and how we take part in the everyday world. If projects like REACT are part of a process that reconfigures how we value personal and professional dispositions in the HEI and creative sectors, we need to better understand the consequences of our own actions within that process.

Background

REACT funds collaborative work primarily through a process called Sandbox. Sandbox was developed in 2008 by iShed, part of Watershed in Bristol and a leading partner in REACT. The inaugural Media Sandbox supported six companies from across the South West to develop early stage digital media ideas. Nineteen companies participated in three Media and Theatre Sandboxes, creating games, apps, installations and software between 2008 and 2010.

The REACT Sandboxes utilise the model developed by iShed during the previous Sandboxes, and adapt it to accommodate an academic researcher in project teams. This is an important difference from iShed's first round of Sandboxes, where each project was largely driven by a single company. However, like the early Sandboxes, REACT Sandboxes make use of Creative Producers. These individuals are integral parts of managing the collaborative process. They act as facilitators, brokers, researchers, administrators, relationship managers and creative voices within the process of founding and supporting collaborations in Sandbox.

The REACT Sandbox process begins with an Ideas Lab, where interested parties from all sectors gather to explore the theme, meet potential collaborators, and experience the collaborative process. This is followed by a period of brokering, where partnerships and ideas are developed into bids for REACT funding. This process is overseen, supported and facilitated by a REACT Producer. After the bids are submitted there is a process of selection involving input from experts in academic research and business.

Once the funding decisions have been made, the three month Sandbox production period begins. The premise is that each Sandbox will contain six to eight collaborative projects each comprising a researcher from a HEI and a company from the creative sector to develop something novel, innovative or disruptive in a short space of R&D time. During this time the collaborators will

work on their ideas with support from producers, industry advisors, receive PR help, attend regular workshops with the whole cohort and be supported to realise their aims. Although the projects are themselves discrete in their aims, they are united by a general theme (for example Heritage, or Books and Print) and all participants are encouraged to learn from one another as a cohort, as well as from their individual collaborations. The principle of iShed's original Sandbox model was 'crowding diversity', bringing different teams and talents together round a theme with a view to adding value to the development process.

Since REACT's first Sandbox, Heritage, in early 2012, we have suspected that something quite exciting was happening in these collaborations. We noted that at the beginning of the production process, collaborators maintained fairly distinct roles, often presenting separately at workshops on what could be described as the 'academic' and 'technological' aspects of their projects. By the end of the process, however, it was hard to tell who was who in a collaboration – academic partners were talking about design experiences, and creative business were talking like scholars about the challenges of, for example, historical interpretation or the ethics of archaeology.

We observed that occupational boundaries and categorisations became blurred. Our collaborators were borrowing from one another's professional languages, enthusing equally over the innovative or intellectual challenges they had faced, and generally seemed to find themselves in a place that was not where they started.

We became confident that REACT collaborations were beginning to muddy the waters of what we might expect individuals to bring to a project. For example, we might expect academics to bring research information and a creative might bring technical skills. In fact, we observed that a collaborator's job description isn't always a great indicator of what they actually contribute.

This was an important observation because it suggests that this kind of collaborative work relies not necessarily on professional standing or accolades but instead the complex mixture of dispositions, experiences, ideas, personalities, energies and expertise of individuals. What was being mobilised in these collaborations were often different methods for problem solving, or contrasting understandings of critical debates learned from the backgrounds that each partner brought to the collaboration. It wasn't always technical or research knowledge, but a way of looking at the world that was shared.

This led us to consider a number of questions, which this paper explores:

1) How has collaboration been experienced by our Sandbox participants?
2) What are the partners bringing to the collaboration in terms of approaches, skills or knowledges?
3) What role does REACT play in supporting or limiting the experience of collaboration?
4) What are our responsibilities in undertaking this kind of work?

What follows is based on our observations and interviews with 20 participants in our Heritage and Books and Print Sandboxes, conducted between September 2012 and July 2013.

EXPERIENCING COLLABORATIVE WORK AT REACT

Who's who in a REACT collaboration?

- *Successful collaborations are built on fluid professional identities that extend far beyond received wisdom about Knowledge Exchange where academics bring 'content' [academic*

research] and creative businesses operate as a 'delivery' service that deploys technology to share that content.

REACT collaborations are comprised of individuals from a wide variety of professional backgrounds. These backgrounds play a strong role in how many partners identify themselves and their roles within a collaboration. To date, our collaborations have included researchers working in a range of disciplines including History, English, Modern Languages, Geography, Journalism, Archaeology, Sociology, Film Studies, as well as app developers, choreographers, coders, street game designers, authors and theatre makers.

Although deeply influenced by the institutional context that collaborators come from, especially the University, we have come to recognise that the world of creative work and academic work are not sealed from one another. It may seem obvious to point this out, but sometimes when working in knowledge exchange with Universities and businesses, it is easy to assume a distinct model of knowledge flow in and out between two discrete spaces. So while the process may be novel, the desire to work in different ways, share research knowledge or take part in dissemination activities is strong in many instances.

Those working within Higher Education Institutions identified themselves frequently as academics. Phrases such as "as an academic" were common in conversations, reflecting the strong professional identity that accompanies research and teaching roles. These statements often emphasised institutional challenges such as workload management, teaching loads, or research assessment practices. They also spoke of distinct ways of approaching problems or challenges as a consequence of their research training.

Those working in creative professions were less likely to identify themselves as 'a creative', but often pointed out how their own backgrounds in complementary but diverse areas of work contributed to their current modes of working. For example, diverse backgrounds in performance, computing, film making or fine arts were not uncommon for those working in the fields of experience design, street games, technology, publishing or engineering today.

These professional backgrounds, skills and individual dispositions play a role in how the collaborations are formed and experienced. One of the things we learned was that while academic identities were strongly linked to an institutional context, such as a discipline or a University, they also often involved challenging assumptions about those institutions. One academic spoke strongly about seeing academia as a creative practice, while another emphasised their interest was not only in 'conventional' research, but something different:

> "[I'm interested in] radical interdisciplinarity where you don't just bring your different specialism…. I'm interested in this in research process and research outputs" (Academic 6)

Similarly, one academic noted that they were capable of working quickly, alongside slower research practices:

> "I'm used to a rather quick turn around, so [the team] took on a theatre production management mindset… which is you got a very short amount of time to get [to] the show, as it were" (Academic 4)

Another academic signalled that collaborative research and multi-partner projects were not new to them and their research. This element was noted in conversations with many of our University collaborators:

"I have [been involved with] collaborative doctoral awards, working with various organisations. So that's given me a lot of perspective in terms of the way in which, well the advantages of working in close collaboration with external organisations, of various different sorts." (Academic 3)

This suggests that assumptions about the way researchers operate as 'lone scholars' need to be approached with caution.

This is not to suggest that collaborators themselves don't self-identify with some of those assumptions. One academic positioned themselves as a traditional scholar and described specifically being unable to think creatively in a particular part of their research practice. Others expressed some trepidation about working in a new field, especially around technology.

It is possible to tease out where some of these diverse professional identities contribute to the project. One business collaborator, who had postgraduate qualifications and a general interest for the field of the project noted that this allowed the collaboration a great deal of mutual understanding, but there was something added by the knowledge and focus of the academic partner:

"I will understand [my collaborator's] kind of frame of reference and knowledge base. It's just that I don't have anywhere near their depth. That's got to be useful," (Creative 4)

Other business partners expressed similar opinions on the nature of depth and approach provided by academia, where "things are interrogated, but interrogated with an honesty" (Creative 3).

However, this sense of rigour is not only found in those collaborators working in HEIs. Sometimes, collaborators are surprised at the rigour of those working in the creative sector:

"I was so shocked when [the business partner] sent us their brief of how they saw the project and what our expectations were, and they … got into our head and said it in a really effective way" (Academic 5)

"There was an appreciation of the rigour of my knowledge base alongside the rigour of the academic knowledge base" (Creative 3)

For some, there was even a surprise at how an academic partner might approach source material or their creative skills:

"I think it's interesting [my collaborator] was less precious about the source material than I was" (Creative 4)

What does seem apparent is that across the collaborations, critical approaches and ways of being reflexive in the process of creating new work are brought to the forefront.

These build on skills and dispositions from across the collaboration. Collaborators working in businesses in this field are also highly educated, with many holding postgraduate degrees or prior experience in HEIs as researchers or lecturers. For example, one collaborator in particular expressed that they felt it strange that they were part of the 'creative' team, given their long history as a researcher and lecturer in the technology field. For others, the decision not to pursue an academic career was deliberate and had informed their choice to work in a business or cultural occupation, but this didn't diminish their capabilities or contributions in this environment.

This desire to extend knowledge development and interrogate themes was visible when many participants – from different backgrounds – expressed a desire for more opportunities to hold rigorous, intellectual debate within the production period. The comments ranged from articulating a need for academic input at an advisor level, to holding a space for seminar like discussions to unfold that valued and interrogated the knowledge base of all the participants. This kind of thematic interrogation informs and widens the production activities.

This blurring of boundaries between the categories we use is important to note. By recognising the passions and interests of individuals, while attending to how their backgrounds inform those passions, it is possible to understand the process of collaborative learning differently. Respondents valued being able to contribute to broad, intellectual conversations about themes. The consequence in some collaborations is a joint expression of knowledge and skills that values different inputs:

> "I'm [now] equipped with the language and the research base from which to communicate on at a different level. So there was actual development of skills and there was a development of academic and intellectual rigour as well." (Creative 3)

> "What REACT does is it makes something swiftly out of a lot of people's very slow, arduous research. And it makes extraordinarily good quality stuff, as a result of having to tap into good quality slow research." (Academic 3)

Where are collaborations happening?

- *Successful collaborations occur in a setting that gives both time and opportunity to work together. This can be seen as a protected space in which mentorship, advice and expertise are available. The care with which this space is managed by the creative producers creates a high quality, special, experience for the participants.*

Where collaborations happen shapes how collaborative relationships develop. REACT offers space and time outside of the usual working practices of our collaborators – away from the University and away from the office or studio. This space is understood as a place to work, but also as space in participant's diaries and space in their working lives. It is a space where academics can often be bought out of teaching or administrative duties, and the grant enables creative businesses to take some time away from their client facing schedule.

The space offered by REACT is carefully designed to produce high quality experiences for participants. The value of this experience is enhanced by the attention and support offered to the participants as part of the programme. A creative producer is assigned to each Sandbox theme and will oversee the whole process, making interventions, suggestions, trouble shooting and managing the complex relationships that develop inside the Sandbox production period. They will programme the Sandbox workshops, which are intensive, fun and task oriented, tailored for the different stages of the R&D process. The advisors attached to each cohort are frequently thought leaders in their field. They attend and take part in workshops and also make themselves available for one-on-one consultation outside of workshop time. REACT support a business advisor to meet regularly with the production teams and who pushes them to think about users, markets and commercial opportunities.

The space is important to make sure that there is a place where the dispositions outlined in the previous section can be respected, offering an alternative venue to develop the ideas and experiences participants and producers consider to be important. Many collaborators noticed that being outside of their usual working environment was unusual, because it presented them with the opportunity to be different

"...learning to step outside of more theoretical discussions...and into a more practical space. That was something I learned" (Academic 1)

"...just coming in (to the studio), just that has helped. Really enjoyed that. For me being quite far out of the circle (of daily work), allows me to have a bit of time to be in the circle" (Creative 9)

"You feel excited about the kind of practical things that people are doing and excited about the next step. Because you are about to go and do something else and you will be back in three weeks' time and have to show it off again. You have got to do something, to make sure it happens that way". (Academic 3)

Our participants recognise the strong influence their institutional cultures have on opportunities to work in other spaces. This was often expressed by academics as a form of disconnection from a world outside research communities that make it hard to share work with audiences outside that space:

"...as an academic [...] you tell yourselves in Universities [that] we all live in a bubble" (Academic 1).

"In academia and heritage and museums you're in your own little world, and you don't get this kind of mix of ideas and people and creative influx" (Academic 5)

To create a chance to bring such skills together, REACT attempts to create a space, that is neither business as usual for participating companies, nor the usual spaces of academic discussion or sharing, although the space may contain elements of both.

This chance to interact outside of that bubble in a collaborative environment is attractive to academics, who were enthusiastic about the opportunity to develop their research beyond its peer communities,

"...the research we do speaks to more people than just those in our immediate vicinity. It can't just be about academics talking to academics... [and] one of the reasons I was so interested in REACT was having that opportunity to work outside of an academic audience" (Academic 1)

One element of this space was the communal geographic space offered by the Pervasive Media Studio. Regular workshops for participants are run from this space where teams come together, share knowledge and experience. Workshops are structured around key areas of importance to their projects such as audiences, PR or production challenges. These have the consequence of building a community amongst the cohort:

"I think because the sandbox events themselves helped create a really open relationship, it meant when everyone was in the building, those who had a strong relationship already with the PM studio were helped to make sure that worked; bring everyone else into the fold." (Creative 3)

The more extensive, geographically dispersed networks are important, too, such as the use of the BaseCamp project management system for sharing information, Skype calls, remote meetings, or meetings with one another or REACT Producers in other spaces:

"There was a knowledge exchange going on between that, so where you'd be starting to think about something and somebody comes along and goes, "Have you seen this?" or

would email you going, "I've thought about – I saw this and thought of you", so there were nice things like that happening." (Creative 3)

Participants are also contractually required to blog about their research between meet ups so the sharing dialogue between teams (and others) is formally instituted.

A space to meet and interact, whether a central location, as part of a dispersed network, or even conceived of as 'time out' from usual business is an attractive proposition. Participants found carving out this space administratively, contractually and practically can pose a challenge.

This is especially true of Higher Education Institutions where the processes and procedures associated with the kinds of collaborative work supported by REACT are not well recognised. Although REACT can buy academics out of some teaching time, they will often have a roster of commitments that are part of a three year teaching, research and management cycle which is difficult to change. This impacts on the experience of the collaborations as one creative noted about the level of work their academic had to do outside of their collaboration:

> "...in some ways that's been very disappointing for me in that it's been very difficult not having to collaborate with them because they've been working on other things" (creative 7)

This means that holding space also involves negotiating at the margins to ensure collaborations are protected where possible from bureaucracy or other day-to-day interferences. This will help collaborations form and thrive. Indeed, for many, the ideas developed within the Sandbox might have gone unrealised were it not for the space, time and funding REACT offers:

> "It wouldn't have happened otherwise. We didn't have the finances to create the space to do that shift and we didn't have the [capacity]" (Creative 3)

Emerging relationships, emerging ideas

- *Collaborative work is a journey that involves a series of experiences and interactions that build trust. This is not always an easy process, and the result is a high level of role exchange and dialogue. The outcome of that journey might not always be apparent during the process; it may not make sense until the end.*

The participants work closely together in collaboration, where interpersonal relationships develop, rhythms are established and projects completed. But how do these relationships develop? Do the dispositions outlined above have a bearing on this?

Collaborative work of the sort supported by REACT is a process in which ideas, roles and identities within project teams are being continually developed. In REACT Sandboxes many collaborations are very new, with partners often having met only a handful of times before the start of the process.

Good working relationships take time to develop, and this process isn't always easy. Sometimes, participants noted difficulties at the beginning of a project in developing a means of communicating ideas or gauging levels of engagement from their partners:

> "...[project planning] involved some occasionally awkward conversations" (Academic 1,)

"...first meeting or two I felt like "Is my partner really engaged in it?" Actually as time went by, their enthusiasm was really picked up and they're very passionate about it now. They've been really positive and excited." (Academic 2)

Sometimes, these difficulties unfold as partnerships work out the roles they will adopt in the project. As each project is different, these roles can be unclear at the outset, Anxieties around how and where a partner feels they can contribute to a partnership are common. Similarly, the role of perceived expectations about that contribution matter:

"Then I was struggling with [how it was going] thinking "No, because as the academic partner what is my role?" (Academic 2)

"It's the academic way of questioning things, which takes some getting used to. (Creative 3)

"I suppose none of the research projects that I have done have ever been creative projects, in that respect, in terms of making something. So that was a new way, and ... that was all about curiosity. What will this do? How will this change things?" (Academic 3)

These difficulties can be exacerbated in situations where collaborations involve managing not only the interactions of the two lead parties, but also other delivery partners, such as artists, scriptwriters or coders who might be bought in to realise specific aims in the projects. In this instance, partners must sometimes manage both the collaboration of the production team, and subcontractors.

"I think, for me, the difficulty in the relationships around that is in one of allegiance, in a sense, that I am placed in the middle ... I suppose the uncomfortable moment for me is when, to some extent, the relationship between [academic partner and contractors] is successfully brokered. It slightly leaves me out a bit." (Creative 1)

Collaborations are thus often multi-faceted, involving time and energy to establish rhythms, shared languages and trust.

The process of developing relationships can sometimes be made more challenging as collaborations strive to agree their common aims, and how best to achieve them. As new things are brought into being, collaborators experience that sense of the unknown or unrealised qualities of R&D or innovation. This can cause tension at some points, envisaging the results of co-production in a space often unfamiliar to the collaborators can be disorienting:

"...I couldn't see any immediate application of what I was doing" (Academic 1)

"You lay the groundwork, and have a sense of where it could go. As you start building, it takes on different shapes" (Academic 1)

One of the ways in which trust arises from this uncertainty is the way in which the collaborators begin to recognise the value of the skills, expertise or outlook of their collaborators:

"That's a really harmonious balance and without the different ways that those three different skillsets tackle something [it wouldn't work]" (Creative 3)

"The best thing has been the interactive and multidisciplinary approach to this project, to get academics, creative people, technology wise people, and curators and everybody on board with this amazing project" (Academic 5)

Sometimes, the value of the production period only becomes clear at the end of the process:

> "I suppose like everybody, because it is three months, at the of end three months you're, "Oh, now I get it." That's just the way it is." (Creative 2)

> "I never thought of working with a company like this before… We wouldn't've known that market or that skill was there" (Academic 5)

> "…the opportunity to think of an outlandish idea and actually pursue it and to meet [my collaborator] and to spend some time with him. It was a very productive relationship." (Creative 1)

> "I had the opportunity to re-skill myself in a load of different ways to what I was expecting" (Creative 3)

> "It wasn't necessarily a new skill, it was just a skill you don't use that often in academia, because you're teaching and you're researching" (Academic 1)

The process of problem solving builds trust. Trust is an important element when working in the field of innovative or emergent projects, be it trust in one another to do the right thing, or trust that seemingly discrete initial ideas about success will align.

> "[the process has been] really fruitful and productive… our collaboration has felt really organic and there hasn't be a tech creative break and we all have input on all aspects of the project. It's felt really easy actually" (Creative 8)

The result is emergent partnerships in which the experiences of collaboration are influenced by the processes of exploration and the emergence that goes on in the projects. This requires mutual support and trust, which have to be recognised by both partners and participants, and encouraged as an essential part of the successful journey.

Appreciate the importance of emotional experiences in collaboration

- *The space offered by our collaborative work cultivates embodied skills, personal dispositions and acknowledges emotions. Curating this process requires the expertise of creative producers who are managers of talent, theme leaders and also empathetic creative individuals in their own right.*

One of the notable things about all of the interviews about the process of collaboration is the way in which participants articulate the emotional experience of being part of the collaborative process.

We've observed that the process of Sandbox involves a high level of personal investment. This includes, time, passion, energy, sharing ideas, listening, being sociable, recognising and respecting different approaches to work and being open to the difficult process of production.

Participants described feelings of anxiety, frustration, delight, self-doubt, alienation, excitement, anticipation and more. For example:

> "Frustrating, but also fantastic in other ways." (Creative 4)

> "It's also quite chaotic as a way of working…it could be disconcerting the amount of work we need to have done and developed in that time in that kind of structure." (Creative 6)

"...kind of goes through a process of panic and fear and moment of Eureka, and then suddenly at the end, but we have something actually" (Academic 3)

Collaborators working in realms to which they are not familiar, such as experience design, rapid prototyping or historical research, can experience discomfort.

"[the academic partner] was uncomfortable working like that, and we were quite uncomfortable working like that" (Creative 6)

Sometimes, the experience is not always experienced as being positive at the time.

"Actually yes, it seems to be quite a common thing, that the emotional journey is not necessarily entirely positive for everybody but actually the outcome [feels positive]" (Academic 3)

Collaborators' experience of Sandbox is shaped by emotion, self-investment. It is also clear that collaborators invested a great deal of their own time, energy and passion into the projects. This sense of investment in the process is important, because it reflects the interest and commitment to an idea and a dedication to see it completed. Moreover, an important element of creative labour is self-investment in a process that produces a specific kind of relationship with the work being done and with other collaborators. Of course, all forms of work require different configurations and intensities of emotional engagement. With creative work of this kind, it is perhaps the attendant vulnerability of bringing something new into being. The new ways of working and collaborating that come out of these new spaces, and emergent processes, are experienced in a highly emotive way.

There are also other challenges to the experience of this kind of work. Administrative challenges can have direct consequences for collaborations which effect the experience of a project, and its likelihood to complete in a satisfactory manner. For example, participants talked passionately about the direct problems caused by seemingly trivial procedures for contracts, finance or equipment procurement through the University:

"There's been a lot of admin. We got awfully bogged down in IP at the start of the project. Just... that sucked so much energy out of the project - just a waste – a waste of time, a waste of energy" (C7)

This suggests that supporting a safe space for the development of projects is key.

"...it's the emotional needs being taken seriously and knowing that there's a platform there that actually wants you to succeed and is there to help you, (this) was very, very important " (Creative 4)

"Because they've seen it before and they've been through it before, they can just provide that kind of steadying, "You're alright, everybody goes through these kind of worries," because it is a ferociously fast process really from start to finish." (Academic 2)

Be aware of what happens when you curate

- *Be reflexive about your methods. Organisational self-awareness is important in order to understand the consequences of how support is offered, and to make sure that methods can be adapted where necessary*

The idea of curation – the careful selection and nurturing of certain approaches, ideas, projects, attitudes and people – is key because it enables REACT to find the best way to adequately 'hold the space' for collaboration to occur.

REACT specifically is aiming to put in place new practices that minimise bureaucracy, value intuition and hunches, being accountable and open to change, and being able to adapt quickly to challenges and opportunities. An openness and performativity is required. A curiosity. These are not just desirable outcomes, but essential components of how innovation can be supported according to the distinctive ways of talking about creative work developed by Watershed and iShed.

We need to unpick this curation process because it determines how we imagine the methodology operates and how we imagine the world we are asking our collaborators to engage in. It also has a bearing on the kinds of processes we curate and the kinds of individuals we imagine our participants to be.

The aim of this approach is to make something quickly that couldn't have existed without the input of all collaborators. The structure of the process organises the shape of the experience of knowledge exchange. The structure in our case is a series of workshops, one-to-one meetings with advisors and producers, suggest work plans etc.

For example, projects come to the Pervasive Media Studio to meet with other teams.

> "Having the sandbox days when you come together with the other projects, was brilliant. It was really, really useful because you got to know the other projects and so you felt part of a bigger, wider thing, and the conversations then happening on base camp were more interesting and exciting." (Creative 3)

> "What I found was great with Sandbox is obviously there's that degree of autonomy that's expected and asked for. At the same time there's a lot of infrastructure that is not immediately apparent when you're putting the applications in, … but as you go through the actual Sandbox it becomes very clear; the nodes of support and the feedback that you get and in a sense the monitoring in a very positive way." (Academic 2)

By sharing information within collaborations and with the other teams in the cohort knowledge exchange unfolds as a form of mutual support:

> "It helped create a bigger knowledge exchange within the whole studio and made the studio feel quite buzzy and exciting" (Creative 3)

Not everyone in the cohort will necessarily find every stage useful, or every element.

> "I think the more formal aspects of the scheme, the workshops and meetings - I felt it was a bit of a waste of time for me. Most of it I already know." (Creative 4)

> "…there was too much pressure… that establishes a distinct rhythm [which] cuts across… an attempt to find a consensus rhythm between partners" (Creative 1)

> "I think as a participant one gets used to it as you go through. To start with you're thinking, "I'm not entirely sure of the purpose of all these exercises perhaps that we went through"… I think that having these formal kind of milestones is actually really important to make people structure their times." (Creative 2)

It can thus take time for people to go along with the process. However, by the end nearly all participants reflected that even if the content of some of the workshops or talks within the process was not explicitly useful, they recognised their part in the development of the cohort:

> "… even if an individual exercise might not have been terrifically useful, what was useful was being here at the same time as the other groups, and beginning to form relationships with people in the other groups of various kinds, and to pick up on their thinking" (Creative 2)

> "So I think that's what I found the workshops really good for, is that sense of community, rather than it being this kind of idea where you're sitting there with soldering irons and playing with things. Those are the things we did on other days." (Academic 2)

Timing is also a choice we make at REACT. Sandboxes last three months for intensive production. This shapes the way the collaboration is experienced:

> "I totally get why it can't be six months, or you can't have people working over a six month period. You wouldn't be able to put enough energy into a project over six months to sustain it. You would have to have a very different rhythm." (Academic 3)

These processes and methods develop their own cultures and languages. The language used at REACT is a product of its project partners and its development. Different professional languages are also in evidence in the collaborations, and in our role as brokers or curators, the REACT team must be attuned to when and where discourses might need translating.

> "I think with REACT, there was REACT speak for certain ideas or concepts that needed translating" (Academic 1)

> "…you don't need to use [jargon] I'm a firm believer in plain English. If you've got an idea you can express it in plain English" (Creative 5)

This is a reflection on how embedded the languages we use can be, the conceptual short-hands we share and the discourses we embody.

Language and discourse informs not just the words used, but how the world is understood. This is also a question of power, too: curation of any form is not a neutral process. It involves expecting people to act in a certain way…

> "So, yes we were disciplined, but I think we were not in a scenario where we needed – we were disciplining ourselves very effectively. So we had taken on board the disciplining regime and we adhered to the disciplining regime. " (Academic 3)

Talk of discipline is key here because it recognises the fact that the process of Sandbox is asking people to adopt specific ways of working, sharing or communicating that may – or may not – be something they are used to. The method of collaboration developed here is necessarily a disciplinary one: it calls for bodies and minds to be present in certain spaces at certain times, asks them to engage in particular ways in workshops and meetings, to think and act in accordance with languages – for example – about technology, audiences or innovation to produce something at the end of the production period. This is thus a process which responds to and articulates the wider institutional and political forces that shape it and that pay for it.

It is, then, a case of recognising that the way the REACT collaboration understands its position and role in the world influences how we run things. REACT is a political space in this sense,

because other institutional forces inform the way in which we carry out our work. In particular, the discursive frameworks that position the creative economy as part of UK growth policy, of Universities competing for their place in the international knowledge economy, of cities competing for a market position with regional development all have a bearing on projects like REACT.

Recognising our own fingerprints on the experience of collaboration is a good way to be reflexive, learn from mistakes and recognise when and where we intervene, or are complicit in a bigger agenda for knowledge exchange in this field. Though we know this to be the case, the when and where of this influence is something we don't always notice. It is easy to normalise what are in effect very specific, local and ideological methodologies. A commitment to being reflexive, to learning from our findings, faults, failings and successes produces better systems and better ways to support collaboration.

CONCLUSIONS

These observations have revealed insights into the experience of collaboration at REACT. We've seen how professional identities, emotion, curation and support are experienced in the act of collaboration.

1. ***Be open to the skills and expertise of your collaborators.***

   Professional identities have a strong hold in shaping how participants approach collaborations and what they expect to be contributing. Training and experience in a particular background, such as in academia, or creative industries, leads to distinctive professional identity. But what is exhilarating in collaboration is the reconfiguration, contestation and performance of these identities to produce a way of working that is not always possible solely in the worlds of business or academia. Successful collaborations are built on fluid professional identities that extend far beyond received wisdom about Knowledge Exchange where academics bring 'content' in the form of academic research and creative businesses operate as a 'delivery' service that deploys technology to share that content.

2. ***Create protected space.***

   Quality of attentions is a key part of the REACT Sandbox methodology. High quality inputs, one-to-one attention and varied inputs all contribute to the provision of a high quality R&D space. Successful collaborations occur in a setting that gives both time and opportunity to work together; this is constituted as a protected space in which mentorship, advice and expertise are available. The care with which this space is generated creates a high quality, special, experience for the participants.

3. ***Collaboration is a journey.***

   Collaboration, especially rapid collaboration, is an emotional process. But this experience adds value, ownership and energy to projects. Collaborative work is a journey that involves a series of experiences and interactions that build trust. This is not always an easy process, and the result is a high level of role exchange and dialogue. The outcome of that journey might not always be apparent during the process; it may not make sense until the end.

4. ***Curate people as much as projects.***

The space offered by collaborative work cultivates embodied skills, personal dispositions and acknowledges emotions. It is important not to assume specific approaches of participants as a consequence of their institutional or disciplinary affiliation. It might be assumptions about how they will work, what they will do, or how they may contribute. 'Creativity' doesn't reside in a job description. Curating this process requires the expertise of creative producers who are managers of talent, theme leaders and also empathetic creative individuals in their own right.

5. *Recognise your own fingerprints.*

Curation is an important process but it is not neutral. Although holding space and looking after projects is key, you must continue to recognise that you are bringing your own assumptions and way of doing things to a space. This will inform how collaborations unfold because it sets the parameters to what they are expected to achieve, and what they think they are expected to achieve. Being able to recognise and respond to the needs of your collaborations will help ensure that the process of ideas generation and growth is supported and tailored to the needs of the individuals and collaborations. In this environment the best of all collaborators has a chance to emerge and develop. Furthermore, where your processes, be they administrative, legal, contractual or organisational, interfere with any of the above, they may have a damaging impact on the relationships you are building. Be reflexive about your methods. Organisational self-awareness is important in order to understand the consequences of methods, and to make sure the methods can adapt where necessary