Bristol+Bath Creative R+D was established to support equitable, meaningful, and impactful research and development (R&D) into emerging digital technologies. We were awarded £6.8M as part of a much bigger £80M programme called the Creative Industries Clusters Programme (CICP), which was run by UK Research and Innovation (UKRI) and the Arts and Humanities Research Council (AHRC), to drive innovation and growth in the UK’s creative industries by getting universities and creatives to work together.
The Bristol+Bath Creative R+D programme took place between 2018 and 2023. In these five years, we established an effective R&D ecosystem for creative practitioners in the region. This ecosystem has facilitated a creative practice that has continued beyond our programme for many of our participants, demonstrating the value of supporting thoughtful and responsible innovation in creative technology.

Our R&D projects were designed to be both innovative and inclusive; we worked hard to create safe spaces in which artists could experiment, take risks, and make work that was rich and fulfilling. Participants were encouraged to develop ideas around the social, political, and cultural impacts of technologies — and not to focus solely on market success. The programme therefore cultivated many alternative ways of working, from practising inclusion to business development.

The work we have done in this programme has created a network of over 300 creative businesses and individuals, providing 90 investments in R&D. This has led to 72 new pieces of IP, generated more than 60 jobs and 18 new businesses. All this has attracted more than £20M of investment to support the community in the future.

This document shares some lessons we have learnt while delivering this programme that may be of interest to others seeking to deliver similar programmes.

These lessons have been collated from workshops with programme staff, data collected from surveys completed by our fundees, and in-depth interviews with both staff and programme participants.

By setting out what we got right, what we didn’t and what we found in the process, we hope our learnings can provide guidance to those planning to design and deliver similar R&D programmes in the future.
1. Programme Design

1.1 Complexity, Simplicity and Accessibility

Clusters are complex, but the work of supporting clusters should be simple.

We allowed the complexity of our understanding of creative industry ecosystems to complicate what it was that we were doing, and that made it difficult for people to understand it both internally and externally to get clear messaging.

This affected our ability to reach new communities and not just those that are already part of existing creative sector networks. For those who did take part in the programme, they found it hard to engage with the range of work happening across the cluster, as our ecosystem felt so vast and hard to grasp.

We tend to use language that makes most sense to academics or industry professionals. But how legible is this language across different groups? For example, universities define ‘research’ in very different ways to most companies. Many SMEs, start-ups and new entrants to the creative industries are intimidated even by the idea of research. We therefore have a responsibility to be clear about the different ways our words might be interpreted. We need a clean break between funding language and the moment of public engagement.

Similarly, we tend to use spaces that academics or industry professionals are comfortable working in. But such spaces
can feel intimidating or exclusive to those who are new to them.

Targeted outreach is needed to bridge the gap between what we can offer and communities that would never otherwise access these offers.

Key takeaways:
- Have a clear brand with a very clear set of offers.
- Use the languages and spaces of the communities you aren’t reaching.
- Localised, targeted outreach is needed to widen accessibility.

1.2 Building Regional Capacity

To support a creative ecosystem on a regional scale, the form your R&D takes needs to reflect the reality of how the creative industries operate within your region.

Our programme aimed to provide an environment for responsible innovation in creative technology across the Bath and Bristol area. Yet this region is not uniform. While Bristol has a long-established network of individuals, businesses and organisations working in the field of creative technology, Bath’s creative sector – with the exception of a few large companies – is much younger.

Identifying such regional features is a crucial step in designing a successful creative cluster programme. We could have planned dedicated time for the Bristol-Bath relationship to be researched in greater detail, especially early on in the programme, to consider the implications of this relationship for the structure and design of our R&D activities.

To support R&D across this regional diversity, our programme sought to build relations between Bath and Bristol: its universities, companies and creatives. While this process was not without problems, new relations have been cultivated and knowledge has been shared between these groups in several different contexts. For example, in Bath, the development of The Studio at Palace Yard Mews – a coworking space and hub for those working in creative technology – grew directly through learnings from the Pervasive Media Studio in Bristol.

In recognition of the diversity within our regional creative sector, our programme offered different levels of funding tailored to different stages of professional development. Our smaller funding pots for testing, developing and reflecting on creative ideas or inclusive practices were widely praised by programme participants, particularly among those in Bath who were new to the sector. If you want to support inclusion and sustainability as central values within your region’s creative sector, this work needs to be generously resourced. There is still a huge gulf in what people can achieve downstream from R&D investment, including becoming attractive to further investment. Sustaining enterprises after prototyping is a huge absence in the clustering process and is where most potential is lost to the creative industries.
The work we do is ultimately aimed at crowding interesting stuff together. We need to support these processes by accommodating as much of the diversity of our regional creative sectors as possible.

Key takeaways:
- Set aside time and resource at the beginning of your programme to study the creative sector profile of the region. Use the findings to inform how you design and structure R&D activities.
- Innovation expertise is unequally available across geographical clusters. Design and fund processes of knowledge exchange in order to raise as many boats as possible.
- Tailor funding opportunities to different stages of professional development, to have impact across the diversity of your regional creative sector.
- Supporting businesses to be inclusive and sustainable costs money and this should be reflected in SME R&D budgets.
- There is a pressing need for business development support and investment to fill the gap between prototype and market. Funding for innovation communities over extended periods of time will help to retain expertise, develop alternatives, and produce ongoing social and technological innovation.
- Bring diverse people together to support innovation clusters.

1.3 Inclusion and Diversity

If you want to be inclusive, you have to begin by creating an inclusive culture in the heart of the organisation, being welcoming and accessible, explicitly talking about inclusion, making different people’s needs explicit and giving people a sense that they can talk about what they need in order to be able to do their job in a way that’s non-judgmental and non-critical.

If you want to be inclusive, you probably need to create different pathways or entry points into your cluster project, for different levels of experience. You should be bringing people in who have not had that much experience in that space or sector before and therefore may not be ready for a £50,000 or £100,000 grant. It may be more appropriate to create different ladders of opportunity that offer people a developmental trail through the programme. Our Trailblazer Fund was an attempt to do this, which introduced small-scale or flexible pots of funding.

If you want to be inclusive, but you feel very unconfident about how to do that, you should probably involve inclusion partners who have experience of working with different kinds of communities. Be clear about what the arrangements are, what the exchange is, what they might be giving as well as what they might be getting in their relationship with your programme.
If you want to be inclusive, you should probably do some thinking about what kind of inclusion you want to practice. Is this for everybody? Is this for particular communities? What form of intersectionality does your inclusion practice follow? Because trying to do everything for everybody is not always the best recipe.

If you want to be inclusive, you should consider inclusive governance from the very beginning, think about where your knowledge is going to land in the world and where your R&D is going to lead in the world. Then you can make sure that you include the downstream beneficiaries of your R&D in your governance structure. You should try and make sure that your governance structure and your leadership structure reflect the wider community.

If you want to be inclusive, you should create a shortlist and interview panel team group, team or advisory board and make those names publicly available as soon as possible when entering into the project.

Embedded inclusion work is vital to direct conversation within the programme, but resourcing this work generously and making sure that one inclusion lead doesn’t have to carry the whole of that work is really important. You’re not always going to get it right.

Key takeaways:

- Inclusion work needs to be generously funded and resourced, avoiding tokenistic engagement or seeing it as a ‘spillover impact’ of existing work.
- Co-design programmes with third sector/businesses organisations whose work directly addresses questions of exclusion and inequality: they are experts.
- Actively invite people from outside higher education to ensure diversity of background and expertise. This expertise may reside outside the creative sector (e.g. talent development, advocacy, third sector).
- Design ladders of opportunity appropriate to new entrants to your sector. Talent development, early ideas funding and new start-ups are as important as service or product development for inclusive R&D.
- When awarding grants, ensure that the individuals who are asked to shortlist and interview applicants for funding come from diverse backgrounds. Pay these experts for their time.
- Test the language you are using in your funding calls with targeted communities. Consult with experts and communities directly so that team members responsible for writing funding calls can use the most inclusive language.
- Place opportunities in the forums reflecting the communities you are trying to reach. This might mean thinking ‘outside the box’ of the usual networks and recruitment sites you use.
- Transparency: your user community should know who is making decisions about investment and against which criteria. There should be clear recourse in the case of discrimination or complaint.
1.4 Programme Structure

The structure of your programme shapes the kinds of interventions you are able to make within the creative ecosystem you are engaging. Building collaborations across regions, especially building collaborations between new partners, can create a lasting, tangible legacy within local creative sectors.

Similarly, having structures that forge strong connections between research and development will maximise impact. In our programme, embedding early-career researchers within R&D cohorts brought many positive outcomes in generating new collaborations, publications and IP. Yet participants felt there was too limited engagement with university research across the programme in general.

What is agile enough? Systems and structures need to be legible to stakeholders and the SME community. Yet they also need to be repeatable and flexible enough to change over the programme lifetime, as events in the wider world unfold and demands on funders, fundees and the broader sector shift.

Where does your value lie? Through our programme, we have recognised that the creative ecosystem in our region is better equipped to support smaller, early-stage projects rather than scaling a small number of large projects. These are political projects. Make sure that institutional buy-in for any culture changes you want to make is there, particularly in universities, to create a supportive environment for collaboration.

Key takeaways:

- New partnerships across sectors or regions can be a significant legacy of ‘clustering’ processes.
- Ensure that ‘R’ does not become separated from ‘D’. Find ways to forge strong connections between university research and project development that maximise programme impact.
- Clustering systems and processes need to be agile enough, flexible enough to respond but repeatable enough for the partners to manage. Some fixed challenge processes and some responsive funds is, for instance, a good combination.
- Establish where the value lies in the creative ecosystem you are supporting and orient your programme towards maximising this value.
- Because conducting equitable and inclusive Creative Industries R&D is a novel practice for most cluster partners, it’s important to attend to the work of culture change at the start of the project. Mobilise not only the front of house delivery teams but also legal, finance and other institutional support teams so that everyone buys into the project.
1.5 Supporting Innovation

Creating an environment for responsible innovation can support the development of projects, collaborations, businesses, IP and learning in a sustained way over time.

It is generally understood that innovation involves an element of risk. Yet a significant proportion of individuals and businesses operating in the creative sector lack the capacity to take such risks. Furthermore, institutions involved in R&D, such as universities, are traditionally risk-averse.

Supporting fundees in managing their own R&D - without the pressure of producing set outputs - gives them confidence to explore new directions in their practice. It provides opportunities for self-reflection and iteration which market demands might not otherwise allow for.

Connecting programme participants to those outside the boundaries of their usual professional circles can prompt new directions for project development and collaboration.

R&D projects that are exploring new directions will need easy access to practical guidance to help them navigate the practicalities that new working processes involve.

Alongside the ‘cliff-edge’ of funding end dates, the social relationships that R&D initiatives cultivate can often fizzle out when programme support ends. Yet these relationships are a potential source of further value creation.

Key takeaways:
- Provide a supportive environment for self-guided R&D, which is focused on outcomes rather than outputs, to encourage confidence in taking risks and iterating to achieve innovation.
- Provide as many opportunities as possible for collisions between a diversity of people across the ecosystem you’re engaging with. Don’t create siloes unnecessarily: many of the most valuable connections are unexpected.
- Ensure that practical guidance (e.g. on business development, intellectual property, managing finances) is readily available for those wanting to take the next step in their development.
- Build capacity to support R&D participants after programmes have formally ended, to maximise the potential of newly-established creative networks.
2. Programme Delivery

2.1 Programme Management

There are two approaches (at least) to programme management: a traditional one, where research programmes are divided up into work packages that have high levels of autonomy in terms of methodology, recruitment, investment and HR. The other is that all these decisions are made collaboratively, as the responsibility of the programme is to the whole cluster. This needs a holistic management system with a 360-degree view. However, collaborative management systems still favour those with most experience, seniority and cultural capital.

If you want to create an inclusive partnership which celebrates differing needs and focuses, it is important to notice the power dynamics inherent in them at the beginning and formulate ways to work them through. You won’t always get this right, but airing and interrogating these differences before you negotiate about resources would help to create a more coherent and mutually supportive partnership.

You might want to set up a management structure that is repeatable, adaptable and legible to outsiders, but also has some flexibility within it. However, you need to set some limits on your ability to change things as you go along. In big complex collaborations, making changes to how money is allocated, for example, is very complicated and causes lots of negotiation between the contractual and financial departments of your partners.
Flat hierarchies are hard to produce in a bigger team because of assumptions about working practices. The capital of people who have done the work before masks how people new to this type of work can learn. In our programme, for example, we never fully addressed who would design the calls for prototypes, which led to those with the most experience and seniority ultimately taking on this task.

Key takeaways:

- All partners need to feel that their voices are equally heard in questions of recruitment, investment and methodology.
- Co-investigator roles and responsibilities should be better defined and managed. HR and performance management in a devolved collaboration structure is extremely challenging.
- Develop a common understanding of what is ‘agile enough’ at the outset and ensure that flexibility is built into the collaboration agreement. Collaboration agreements need to bake in an appropriate level of flexibility.
- In bigger teams, address any hierarchical assumptions around roles/responsibilities and identify opportunities for less senior or experienced colleagues to learn new working practices.

2.2 Clarity of Communication

The size and complexity of large creative R&D programmes affects not only wider public understanding of what they do, but also how staff responsible for delivering programme activities understand their roles. Staff can have many different working backgrounds and areas of expertise.

At times, we found that staff working on one arm of the programme delivery did not fully understand what was happening in other arms. To prevent unclear or inaccurate communication, we found the work of translation between different parts of the programme structure to be very important. Translation can be directly built into staff responsibilities: for example, in project management, executive producing and/or communications roles.

We especially thought that the onboarding of partners could have been clearer, both in explaining what the programme was as well as the terms of exchange. Clarity is needed around what the arrangements for partnership are and what being a partner means.

In this same vein, paying attention to how you onboard new staff is important, so that the aims, values and cultures of the project are coherent across programme delivery. Among programme participants, not being aware of what different activities are happening in other parts of the programme can limit opportunities for networking and collaboration. We found that participants in one cohort of
activity often found the wider cluster to be hard to grasp. Lastly, we have increasingly recognised the importance of clear communication in the story we were telling externally. How visible is this story to different audiences? How can we shout about the things we’ve achieved and how they fit into a bigger picture? What do we have to say at the end of a significant period of funded R&D?

It is crucial that processes for capturing data and communicating progress are in place from the very beginning. We could have also done more to draw upon the resources of our universities here, as we were short of the communication channels to articulate the great work that we’ve done effectively.

Key takeaways:
- Because clusters and cluster support systems involve many different kinds of people and teams, it’s good to write in the role of ‘translator’ into project management or executive producer roles.
- Onboarding partners and new staff needs to be clearer and more standardised. What kinds of partnership models are available? What are the aims, values and cultures of the project?
- Make different parts of the programme feel accessible to all participants, no matter which individual part they sit in. Clearly communicate where these different parts sit and how connections can be made across them.
- Ensure the overarching story of your programme is as visible as possible and presents a ‘bigger picture’ of what has been achieved. Ensure that data capture, and external communication processes are in place from the beginning.

2.3 Programme Activity

Among our programme participants, there was almost universal approval for the model of bringing participants together within cohorts focused on particular areas of creative industries R&D.

However, within the cohort model of R&D, we have identified several aspects of delivery that could be refined.

The size of cohorts, in particular, has a significant bearing on what kinds of activity are possible. It became hard to accommodate the range of needs across our larger cohorts, where there were many different people who wanted many different things. Particularly when sessions moved online during pandemic lockdowns, having a large cohort limited opportunities for less structured discursive activities in smaller groups, which many participants valued highly.

That said, participants thought our methods of running programme activities online worked well overall. In future, coordinating a mix of online and in-person offerings can achieve an appropriate balance between widening accessibility while also providing valuable opportunities for connection, discussion, idea generation and iteration.

The relationship between early stages of discovery, research...
and idea generation, and later stages of design and prototype development, will shape what emerges from your R&D cohorts. You need to carefully consider how conceptual and research-led conversations can usefully inform the implementation of design ideas, while also providing an environment for prototype teams to develop innovative products/services efficiently. This was a relationship we didn’t always get right.

The expectations of participants involved in the cohorts also need to be made clear from the beginning. How were different types of participants (academics, companies, industry partners, individual creatives, etc.) expected to contribute to the work developed through cohort activities?

In terms of timelines, participants often wanted more advance warning of the dates when activities like workshops were taking place, as well as when they were expected to produce outputs. Ideally, these timelines would be the same for all kinds of participants in the cohorts.

Key takeaways:
- Ensure the size of your R&D cohorts allows you to run activities that all participants will find useful. You will miss opportunities to provide the most valuable, tailored support if your cohorts are too large.
- Online programme activities can be effective and convenient for participants but should be balanced with in-person offerings, centred on facilitating connection, discussion, idea generation and iteration.

Carefully consider how the conceptual/research-led and design/prototyping stages of R&D can inform one another effectively and continually over time. A linear structure, where a large, broad cohort leads to a smaller group of prototypes, might not be the best approach.

Clearly outline the expectations and timelines that different types of R&D cohort participants should adhere to at the beginning of the programme, ensuring these are as coherent as possible across the different groups.

2.4 Collaboration

One of the most widely acclaimed aspects of our cohort-led R&D model was how it brought together individuals from a wide range of contexts: in terms of personal background, in terms of professional journey, in terms of interests and expertise.

In particular, participants valued the explicitly inclusive approach underpinning all of the cohort activities. They emphasised how important it was that the programme accommodated those who would not normally feel comfortable or able to participate in collaborative R&D, as they engaged perspectives and produced work that would not have been possible otherwise.

However, participants often wanted the programme to facilitate even more interaction between those involved. When R&D entered the prototyping stages, most participants felt that activity within the cohorts became too siloed. In
short, engagement and collaboration with diverse people was something that was valued at every stage of the R&D process.

Consider whether there are opportunities to make your activities even more interdisciplinary and even more cross-organisational. For example, those who had been involved in one part of our programme often wanted more opportunities to collaborate with industry partners, researchers, companies and creatives who had been working in other parts. They wanted a greater representation of different disciplines and organisations in the activities they were part of.

When supporting collaborations, you should keep in mind that there is no easily-defined length of time that it takes to build project partnerships. Participants in our programme regularly mentioned wanting more flexibility in the allocation and expectations of their funding, to account for the varying timelines of collaborative R&D.

While ‘labs’ and ‘workshops’ are now established R&D activities, future programmes should have an increased focus on putting this collective learning into practice. Participants have a shared desire in producing something tangible at the end. However, they also want these outcomes to be informed by the often illuminating conversations that are held in the early discovery stages of collaborative R&D.

Key takeaways:

- Be loudly and rigorously inclusive in your approach to collaborative R&D, making explicit how your programme opens doors for those who otherwise could not participate or would not feel comfortable doing so.
- Avoid collaborative R&D projects becoming too siloed, particularly in the later prototyping and development stages. Engaging with a wide group of diverse people is something that is valued at every stage of the R&D process.
- Consider whether there are opportunities to make your activities even more interdisciplinary and even more cross-organisational than they already are. Offer opportunities to support collaboration across different parts of your programme.
- Be flexible in the allocation of funding for collaborative R&D and the expectations you attach to it, to accommodate the large variation in timelines for this kind of collaborative work.
- Identify ways to put the collective learning from the early discovery and research stages of collaborative R&D directly into practice, with tangible and valuable outcomes.
2.5 Support Mechanisms

Creating an environment for responsible innovation entails establishing a series of support mechanisms for both programme participants and programme staff, which give them the capacity to do the best work they can while also caring for them as individuals.

Our formal support mechanisms for programme participants, such as accommodations for maternity leave and health issues, and allowing participants to pay themselves and their collaborators for their time, were widely praised. Yet participants equally valued less formalised aspects of support. They highlighted how an atmosphere of informality was cultivated, whereby the programme felt like a fun, inclusive, safe and supported space, as well as a lack of hierarchy, where participants felt equally attended to and included irrespective of expertise.

Most important of all were the producers who worked directly with individual programme participants. Producers were especially important in helping participants connect with relevant people in their field or related fields, encouraging them as they developed their ideas, challenging them in their thinking and helping them to drawing boundaries around their projects.

In terms of improvements, the most common response from participants wants a desire for greater support in structuring their independent research time. While participants appreciated the programme’s self-directed approach to R&D, many participants wanted more guidance in how they could get the most out of their time and not feel completely left to their own devices.

Among staff, the most mentioned opportunity for improvement in support concerned the pace of work. Delivering programme activities continually over multiple years was adjudged to have placed an unhealthy workload upon staff, especially when coupled with changing external agendas and expectations from funders and stakeholders.

Key takeaways:
- Establish formal support mechanisms that are generous and progressive, accounting fully for maternity/paternity, health issues and labour that would otherwise go unpaid.
- Foster a supportive culture within your programme, with spaces that feel fun, safe, supported and inclusive, and where participants feel equally attended to and valued.
- Draw upon the key delivery role of producers in providing different kinds of support to participants throughout the course of their projects.
- While participants value opportunities to work independently and define their own projects, don’t cut them adrift: support them in structuring their time to work as effectively as possible.
- Carefully consider the timelines of programmed activities, ensuring the pace of work remains sustainable and healthy for staff.
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