



THE UNIVERSITY *of* EDINBURGH

## Edinburgh Research Explorer

### Diversity and inclusion in the data-driven creative economy

**Citation for published version:**

Black, SR, Brook, O, O'Brien, D & Osborne, N 2024, Diversity and inclusion in the data-driven creative economy: An analysis of Creative Industries Clusters Programme approaches. in M Terras, V Jones, N Osborne & C Speed (eds), *Data Driven Innovation in the Creative Industries*. Routledge Research in the Creative and Cultural Industries, Routledge, pp. 101-127. <https://doi.org/10.4324/9781003365891-5>

**Digital Object Identifier (DOI):**

[10.4324/9781003365891-5](https://doi.org/10.4324/9781003365891-5)

**Link:**

[Link to publication record in Edinburgh Research Explorer](#)

**Document Version:**

Publisher's PDF, also known as Version of record

**Published In:**

Data Driven Innovation in the Creative Industries

**General rights**

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

**Take down policy**

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact [openaccess@ed.ac.uk](mailto:openaccess@ed.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.



# 5

## DIVERSITY AND INCLUSION IN THE DATA-DRIVEN CREATIVE ECONOMY

An analysis of Creative Industries Clusters Programme approaches

*Suzanne R. Black, Orian Brook, Dave O'Brien, and Nicola Osborne*

### Abstract

What is the role of data in our understanding of diversity and inclusion in the creative economy? How can decision-making be supported by the available data we have about the different characteristics of those employed, and innovating, in the creative economy? Focusing on the activities of Creative Informatics and other clusters in the Creative Industries Clusters Programme, this chapter will establish the importance of attending to the intersection of race, class and gender in the creative sectors and show how data can inform our understanding of mechanisms of exclusion in creative occupations. It will particularly focus on what we know about the makeup of the data-driven cultural economy and make recommendations on what we must do to ensure that both a diverse workforce and audience can engage in digital aspects of the creative industries.

### Introduction

The inequalities in who participates in and benefits from the creative industries are well documented (Brook et al., 2020; Carey et al., 2021; Creative Industries Council, 2020; Creative Industries Federation, 2017; Nwonka and Malik, 2018). Beyond redressing these inequalities, there is a clear business case for diversity in the creative economy, with diverse teams more likely to produce hit products (de Vaan et al., 2015) and diversity an important element in attracting new audiences (Wreyford et al., 2021). There is potential for data-driven approaches to help facilitate equality, diversity and inclusion (ED&I) in the creative industries, to the benefit of all. This chapter offers an

introduction to inequalities in the creative industries and the measures that are being taken to quantify and address these imbalances. It then presents an overview of the ED&I approaches of clusters in the AHRC-funded Creative Industries Clusters Programme (CICP) as context for Creative Informatics' (CI) ED&I objectives, actions and outcomes with regard to data use. We then offer some thoughts on key issues in this area around data monitoring, how to measure efficacy and sector specific concerns like a reliance on freelance workers. Finally, we offer a robust set of recommendations for future implementation, including developing and delivering a data-driven approach to ED&I that is created in conjunction with the relevant communities; incorporating feedback and accountability; and making key decisions around monitoring, criteria, transparency, fairness, public funding and accessibility.

### **What do we know about inequality in the creative economy?**

Inequality has become a major concern for policymakers and academics who are interested in the creative economy. Recent years have seen whole swathes of creative economy organisations, including the British Broadcasting Corporation (BBC), Creative Scotland and Arts Council England, the British Film Institute, UK Interactive Entertainment (UKIE) and British Academy of Film and Television Arts (BAFTA), alongside the UK's Department for Culture, Media and Sport, issue statements or enact formal policies to encourage diversity and address widespread inequalities in their sectors. Inequalities persist despite research that demonstrates that supporting diversity and inclusion in the creative sectors would bring benefits such as increased adaptability, a broader range of thinking and fresh viewpoints (Crook, 2016) and enable increased business opportunities, even regenerating towns and cities (Beckett, 2022), facilitating both economic and social activity.

In the screen industries, for example, there are well-known barriers to success based on race and gender (Nwonka and Malik, 2018; Nwonka, 2021; Dent, 2020; Wreyford, 2018). These barriers, and the associated acts of discrimination underpinning them, were given further prominence in the context of both #MeToo<sup>1</sup> and the Black Lives Matter<sup>2</sup> movements. Concurrently, key media organisations (BBC, 2018; Ofcom, 2022) have also begun to address socio-economic or social class diversity in response to both policy pressure and research findings (e.g., Friedman and Laurison, 2019). These three areas of inequality – class, race and gender – sit alongside the absence from the workforce of other key demographics. For example, discrimination against disabled people is another major and longstanding issue for the screen sector (e.g., Randle and Hardy, 2017).

These examples from the film, television and gaming industries that collectively constitute the screen sector are closely replicated across the rest of the creative industries. Whether music, performing arts, design, IT, museums and galleries, craft or publishing, all parts of the creative economy struggle

to be open to everyone irrespective of their class, race, gender, disability or other personal characteristics (Brook et al., 2020; Carey et al., 2021). Rather, notwithstanding the outliers of the IT and craft sectors, most parts of the creative economy exhibit, particularly in leadership roles, the dominance of middle-class–origin, able-bodied, white men.

The scale of demographic under-representations, alongside the discriminatory practices and career barriers that explain them, are made visible as a result of data and research. The long history of research on inequality in the creative economy (see Brook et al., 2020 for an overview of the more recent research) has seen various academic and sector partnerships designed to deploy research findings, whether quantitative, demonstrating the demographic imbalances in creative occupations or qualitative, often shedding light on hidden forms of discrimination.

In Hollywood, the USC Annenberg Inclusion Initiative<sup>3</sup> has worked to highlight the absence of women, people of colour and people with disabilities across major studios' cinematic and television products. In the EU, research programmes such as Developing Inclusive and Sustainable Creative Economies (DISCE)<sup>4</sup> have mapped the creative economy, and the stages of a creative career, to create recommendations for policy interventions. In the UK, projects such as the All Party Parliamentary Group for Creative Diversity's *Creative Majority* report (Wreyford et al., 2021) or the research by the Creative Industries Policy and Evidence Centre funded by the Arts and Humanities Research Council (AHRC) (Carey et al., 2021, 2023) and associated work with the Social Mobility Commission (Social Mobility Commission, 2021) used data to develop policy interventions to address workforce inequalities.

In the outlier sectors of IT and craft, while some dimensions of inequality may be reduced, others persist. For example, IT has a substantially higher proportion of people of colour in the workforce than other creative industry sectors or the workforce as a whole (Oakley et al., 2017), but analysis of the UK games industry census (Taylor, 2020) found that this over-representation was lower in the games workforce, especially at senior levels. The social class inequalities in both games and IT as a whole was as marked as in other creative sectors, and women were very substantially under-represented. This set of examples is by no means exhaustive. Indeed, the landscape is best characterised as one where data and research play a central role in the wealth of campaigning and mobilisation for change.

Of course, social inequalities in employment are not limited to the creative economy. Much of the initial work cited previously highlights how creative work demonstrates social inequalities on a similar scale to those seen in higher managerial and professional occupations such as medicine and law, despite the avowed left-leaning, liberal attitudes of the workforce (McAndrew et al., 2020) and the regret of those in senior positions in the sector (Brook et al., 2021). Social inequalities are also evident in the research and innovation sectors, prompting funding reassessments by UK Research and

Innovation (UKRI) and the British Academy of an Equality Diversity and Inclusion Caucus,<sup>5</sup> an interdisciplinary network of scholars led by Professor Kate Sang. They will work to identify, assess and share evidence on the effectiveness of current equality, diversity and inclusion practices in research and innovation across the humanities and science, technology, engineering and mathematics (STEM) subjects.

The very nature of an object of study such as ‘the creative economy’ is dependent on decisions about data categorisation and collection. This is important for two reasons. First, the long history of debates over how to define creative industries and the creative economy is intertwined with decisions that make visible, or hide, forms of inequality. Scales of measurement, occupational classifications and demographic data collection regimes are all as important as the choice to include industries that have high employment and significant gross value added (GVA) contributions within the definition of the creative economy. While the history of creative economy definitions has foregrounded the latter, the former have been crucial in understanding how the story of the creative industries is as much one of failures over inequalities as it is one of economic success.

Second, an emphasis on data, and data collection, is important in the context of the analyses of the creative industries organisations discussed in this chapter, which form part of the AHRC’s Creative Industries Clusters Programme. The CICIP, and the associated UK government industrial strategy and sector deal (Department for Business and Trade and Department for Business, Energy & Industrial Strategy, 2017) of which it was a part, were both underpinned by analysis of the potential of the creative economy to provide growth and employment. At the same time, questions of *who* made up the creative workforce were marginal in comparison to the focus on (place-based) economic growth. As a result, the organisations discussed in this chapter had scope to develop their own approaches to equality, diversity and inclusion without central policy guidance. Part of this chapter’s analysis reflects this process of how the case studies relate to the underlying problems of inequality across the creative economy, particularly as these problems were not the highest-profile focus of the overarching sector deal; it also reflects on how they used data-driven approaches in this context.

### **Equality, diversity and inclusion in Creative Informatics**

In this section we introduce CI’s approach to ED&I. This includes objectives around inclusivity, representation, accountability and commitment to ED&I, and monitoring and ongoing improvement, as well as how our actions met these objectives. For more detail about the Creative Informatics project and its activities, see the introduction (Chapter 1) and Chapter 2.

***ED&I statement and action plan***

CI's ED&I ethos and plans for action are laid out in two key documents – the 'Equality, Diversity & Inclusion Statement' (Creative Informatics, 2021) and 'Creative Informatics Equality, Diversity, and Inclusion Policy & Action Plan 2021–23' (Osborne et al., 2021) – and these are followed by the publication of ED&I data in the report 'Creative Informatics Annual Report 2022' (Creative Informatics, 2022). The 'Equality, Diversity & Inclusion Statement' introduces CI's ED&I priorities, which are to “be a safe and approachable space for everyone, regardless of background or status,” “provide additional support to help reduce barriers to participating in Creative Informatics events, funding strands, etc.” and be held accountable (Creative Informatics, 2021). This statement also introduces the more comprehensive Policy & Action Plan 2021–23 (Osborne et al., 2021), which lists the following four ED&I strategic objectives:

Ensure the programme is open to all and reaching the diversity of creative communities across Edinburgh and southeast Scotland.

Ensure Creative Informatics represents or exceeds a representative proportion of participants from diverse backgrounds.

Make our commitment to ED&I visible and open to all, ensuring the full range of our communities feel welcomed and included.

Ensure monitoring is in place and that Creative Informatics is held accountable for our ED&I aspirations.

*(Osborne et al., 2021, p. 2)*

We have gathered how Creative Informatics addressed these objectives into four sections, detailed in the following, which provide a road map that may be useful for other projects, under the categories: inclusivity (open to all), representation, accountability and commitment to ED&I, and monitoring and ongoing improvement.

***Inclusivity (open to all)******Recruitment and communication***

CI has sought to be inclusive to collaborators from many different backgrounds. This starts with messaging around who is welcome. This has included recruitment for the team and those delivering activities; selection of freelancers and other ad hoc paid contributors; outreach to stakeholders and partners; recruitment, application and selection processes for any funding rounds or support; and make-up of funding and selection panels. ED&I values also underpin key communications and engagement activities, such as programming of speakers and topics for events, particularly keynotes and those prominently promoted (moving beyond performatively adding a

panellist or contributor from an underserved community to an event that does not otherwise have an ED&I impact); promotion and communication of achievements and impacts to ensure they reflect the diversity of participants; and support offered to any applicants or participants, which may include making significant additional support available for those with diverse needs.

### *Scaffolding*

Once individuals are brought on board to CI, sustained support is offered through “scaffolding” (Vygotsky and Cole, 1978). This spans a range of interventions requiring significant budgeting of staff time, including focused in-person and online pre-application workshops; one-to-one meetings, chats and pastoral care check-ins at times of heightened challenge; support for reviewing draft funding applications; offering flexibility or alternative support for those with additional needs; follow-up chats and calls to discuss detailed feedback; and support for participants in seeking alternative funding or support.

For many applicants the programme being run from a university has itself been an off-putting factor, as formal educational institutions, particularly universities, can feel alien to those from diverse backgrounds, particularly less privileged individuals, and so there is a requirement for proactive engagement to address those barriers and concerns. We have found that this support and opportunity to develop proposal-writing skills, to understand funder decisions and to interpret critical responses to their ideas have been particularly helpful for applicants who may have previously encountered barriers in the application process.

### *Projects with ED&I relevance*

For our funding calls, this inclusive ethos applies to reaching both a diverse range of project collaborators and funding projects that will benefit diverse communities. One project that has obvious benefits for collaborators with an ED&I perspective is the Resident Entrepreneur Scottie<sup>6</sup> and their collaborator the Fringe of Colour Film Festival 2020.<sup>7</sup> Scottie is an online ticketing service that, at the beginning of the COVID-19 pandemic, pivoted to providing content management systems for arts organisations to collect donations and tie this to accessing content. Fringe of Colour was one of Scottie’s first arts partners, for whom they built functionality for the Fringe of Colour Film Festival 2020 website to make available their commissioned film content.

In addition, CI have funded projects designed to be beneficial to minoritised and disadvantaged communities. For example, Resident Entrepreneur Elena Zini and her company Screen Language<sup>8</sup> received funding for a project that developed a new way to deliver subtitles to individual users in cinemas.

Zini then pivoted to a new project to create an accessible website to improve access to audio described films. The Sound Cinema Project,<sup>9</sup> which launched in 2022, will not only benefit visually impaired film fans but also includes the community at many stages of the project: in the steering group, focus groups, providing feedback and potentially as staff for the service.

## **Representation**

### *Data collection*

In the Policy & Action Plan, CI discuss collecting ED&I monitoring data from applicants from the beginning (Osborne et al., 2021, p. 1) and regularly reviewing “which characteristics we collect data on and whether these provide adequate data to assess performance” (p. 4). The data collected include age, gender, ethnicity, sexuality, postcode (as proxy for socio-economic status) and, where relevant, disability and accessibility requirements and is always an optional element of applications and based on self-identification (p. 4). The data collected differs from the protected characteristics outlined in the UK Equality Act 2010 in several ways:

We do not gather data on several official protected characteristics: religion or belief; gender reassignment (we ask participants to self-identify gender); sex (we do not ask participants to declare their legal sex, just their gender); marriage or civil partnership status; pregnancy and maternity status.

*(Osborne et al., 2021, p. 11)*

### *Ethnicity data*

CI have published data on the gender, race and age of the participants funded. Here we take the example of ethnicity data for CI and suggest how these figures have been attained. A target was set for funding 8.3% Black and minority ethnic individuals, which is the percentage of the population of Edinburgh identifying as being “Asian, Asian Scottish or Asian British” or belonging to “Other ethnic groups” in the Scottish Census of 2011.<sup>10</sup> The rest of the population of Edinburgh identifies with the categories “White – Scottish”, “White – Other British”, “White – Irish”, “White – Polish” or “White – Other”.<sup>11</sup> Against this target, CI reported that the percentage of funded applicants identifying as belonging to the global majority<sup>12</sup> were:

For the Creative Bridge programme (building a digital product business at CodeBase): 12%

Resident Entrepreneurs (individuals or teams developing a new product or service): 18%



Connected Innovators (individuals within the creative industries developing a data-led project): 12%

Challenge Responders (responding to challenges proposed by creative organisations): 9%.

*(Creative Informatics, 2022, p. 10)*

These figures are consistently above the regional levels for global majority people in the community.

The CI team believes that the lower figure for global majority applicants funded through the Challenge Responders strand may be due to the types of respondents that strand attracted and other limiting factors. The Challenge Projects model looks more like an IT contract/consultancy framework for R&D and therefore tends to attract more IT-like companies. While UK IT is one of the most diverse sectors of the creative industries, this diversity is located in specific roles, for example, call centre workers, and regions, for example, London and major English cities, without necessarily carrying over to the available talent pools in the southeast of Scotland. Local talent pools can also be influenced by visa limitations for certain levels and types of roles.

By contrast the Resident Entrepreneur strand (which has very high global majority participation at 18%) has attracted a large number of applicants with international backgrounds and/or collaborators who chose to make Edinburgh and southeast Scotland their home and their place of business, some using their funding as part of application processes for entrepreneurial visas.

While all strands have had open application processes which are welcoming of applicants from all backgrounds, not all strands have appealed to the same types of creatives and start-ups. Additionally, only some of the selection processes have included diversity monitoring as part of scoring processes, depending on the criteria of the funding round.

### *Benchmarking*

There are excellent best practice guidance examples on ED&I, but, with many of the creative sector exemplars coming from organisations based in London or North America, assumptions around the types of diversity and underrepresentation can be inappropriate to a specific local context. We have therefore used both Scottish Census and Scottish Index of Multiple Deprivation (SIMD)<sup>13</sup> data, as well as wider Scottish creative and tech sector data, which are useful for understanding the baseline population we are working with.

### *Economic inequalities*

In the UK, class or social mobility emerges as a key barrier to equality, diversity and inclusion (Brook et al., 2020), with the proportion of people with

a working-class background involved in the arts declining (Tapper, 2022). Indeed, CI are working in a context where socio-economic diversity is a more major challenge. However, data relating to class is notoriously difficult to collect, and proxy measures, such as postcode data – which can be used to indicate the overall prosperity and education level of geographic areas – are used instead.

Creative Informatics have begun to map socio-economic inequality using the SIMD, which is a resource created by the Scottish government to assign a relative measure of deprivation across the categories of income, employment, education, health, access to services, crime and housing. This initial work, led by Dr Uta Hinrichs, has involved gathering postcode data from those who have applied for funding strands, both successfully and unsuccessfully. Figure 5.1 shows this data across the Creative Bridge, Resident Entrepreneurs and Connected Innovators strands.

As can be seen from the aggregated data across the three strands, the majority of the applications came from, and the funding was awarded to, participants from the least deprived areas. Further examples of work exploring the insights of socio-economic data – in conjunction with other data types – can be seen in the case study ‘Mapping the Creative Industries’ that accompanies this chapter, page 124.

### ***Accountability and commitment to ED&I***

ED&I activities do not end with the publication of a statement of intent, setting goals or collecting data. The activities and use of language across a project or initiative need to consistently reflect its shared and stated ED&I values, remaining flexible to adapt to new knowledge or circumstances.

### ***Changing needs***

While working with individuals and SMEs through the COVID-19 pandemic, CI learned the extent to which circumstances and needs may change radically over time. Needs arising from physical disabilities, long-term health conditions, mental health conditions and caring responsibilities are always subject to change. During the pandemic, additional challenges arose for many participants, including those who did not previously identify as requiring additional support needs. During this time, we learned the need for flexibility and compassion in both practical delivery mechanisms and in communicating with participants, especially vulnerable participants.

For example, a formalised process for project alterations was introduced to enable participants to articulate their needs and realistic timelines for delivery.<sup>14</sup> This emerged in response to the majority of project participants needing to immediately rethink projects and timelines due to lockdown.

Creative Informatics - Creative Bridge, Entrepreneurs, Innovators



FIGURE 5.1 Creative Informatics SIMD data. This image is reproduced with permission from Dr Uta Hinrichs. (Light grey circles = applicants funded, dark grey circles = applicants, size = volume).

However, this has continued to be a productive approach post-pandemic as the formal process gives participants confidence in agreed new timescales rather than feeling they are behind original dates. This approach benefits all, but we believe it particularly benefits those where diverse characteristics may be the cause of wanting or needing to amend plans by making this a mutually agreed-upon professional change, rather than a discretionary individual decision.

### ***Monitoring and ongoing improvement***

#### *Feedback*

Creative Informatics implemented a range of methods to monitor how we were meeting our objectives. This included the inclusion of general comments boxes on feedback forms for events and application process and in formal project reporting templates, enabling participants to note particular strengths, weaknesses and wider comments on their experience. These have frequently surfaced ED&I-related lessons for the team, who review such reports on a weekly basis for practical and reflective purposes. We have also implemented the inclusion of ED&I related open questions in relevant surveys; ED&I conversations as part of community engagement and events; and sharing and reflection on anecdotal feedback within the team, which can then inform more structured follow-up or reflection. Such open processes benefit the wider project and particularly enable ED&I issues to be raised in safe open spaces.

#### *Partnership forums*

CI consulted with peers and the wider community at a series of Partnership Forums held in person and online, which were open to all and designed to share updates and seek feedback from the CI stakeholder community. ED&I data on the programme are routinely shared as part of these events in order to hold the programme accountable to its stated objectives to be open and inclusive. These events allowed participants to surface issues like the difficulty of attending physical events (due to travel or childcare), difficulty of attending online events (due to inequalities in internet access), how to consolidate existing conversations, holding CI accountable to stated intentions and using inclusive terminology. Some of these suggestions have led to actions described in the CI Policy & Action Plan (Osborne et al., 2021), such as aiming to recruit a diverse range of speakers for events and conducting a consultation with dyslexic stakeholders on how to make application forms more accessible.

CI's experience has been that some of the most productive and informative feedback has come through informal and anecdotal routes, particularly feedback from potential applicants facing barriers, personal concerns or a specific

need for support on application processes. This feedback has directly fed into the design and improvement of processes, application forms, communication (including terminology, timing, formats and platforms), the ED&I Policy and Action Plan (Osborne et al., 2021) and the work undertaken by the programme delivery team in supporting applicants, participants and the wider community.

### **Equality, diversity and inclusion in the Creative Industries Clusters Programme**

Several of the other clusters in the CICP have made publicly available materials relating to ED&I that describe their plans, activities and results. In this section we give an overview of the approaches of Bristol + Bath Creative Research + Development,<sup>15</sup> Clwstwr,<sup>16</sup> XR Stories,<sup>17</sup> the Screen Industries Growth Network (SIGN)<sup>18</sup> and the Creative Industries Policy and Evidence Centre (PEC).<sup>19,20</sup>

#### ***Bristol + Bath Creative Research + Development***

Bristol + Bath Creative Research + Development is a cluster made up of the University of the West of England, Bristol, Bath Spa, the University of Bath, the University of Bristol and the digital creativity centre Watershed to support local creative industries. Their approach focuses on collecting data about its workforce, with an emphasis on seeing beyond statistics “to consider the experiences of people who are often left out of the ‘diversity’ conversation: people with disabilities, Indigenous people, caregivers, autistic people, those with intersectional or liminal identities, and many others” (Barron, 2021). In addition to rethinking the relationship between diversity monitoring and representational goals, they also institute a new measure, “belonging,” since “the balance data was only half the picture – it only told us who was there. It didn’t give us insight into how people felt and whether or not they had a sense of belonging” (Barron, 2021). In line with this, Watershed have published the report ‘State of Play Data Results December 2021’, which provides balance statistics for the steering board, executive team, delivery team and funding beneficiaries (Bristol + Bath Creative R&D, 2021), as well as a staff survey on belonging (Watershed, 2021). Bristol + Bath eschew representational targets, as such an approach “separated the aim of the building of belonging in teams” and “elicited a sense of false achievement” (Barron, 2021), although their approach still involves data collection and use.

#### ***Clwstwr***

Clwstwr, led by Cardiff University in partnership with the University of South Wales and Cardiff Metropolitan University, supported by BBC Cymru Wales, Arts Council of Wales and Cardiff Council, and also funded by the

Welsh government through Creative Wales, focus on research and development in the news and screen sectors of media production in South Wales. Clwstwr's approach is more typical of organisations in the creative industries in following a data-driven approach of collecting data about the projects they fund and seeking to exceed regional benchmarks for diversity. They collect data on the nine protected characteristics outlined in the Equality Act 2010 as well as caring responsibilities, employment status, geographical location and socio-economic background (Komorowski et al., 2021, pp. 2–3) and Welsh language. This data is benchmarked against Cardiff Capital Region data where available, then data for Wales, then the UK (Komorowski et al., 2021, p. 2).

In November 2022 Clwstwr published reflections on their ED&I activities (Fodor et al., 2022). In this, they enumerate various strategies beyond data monitoring, including appointing a dedicated inclusion officer and funding more projects led by diverse teams (p. 12). Clwstwr have also published the evaluative report '30 Opportunities for Optimisation: How R&D Funding Can Support the Sustainable Development of the Creative Industries in Wales' (Beverley and Ward, 2022), which presents lessons learned from the Clwstwr programme with regard to inclusion and sustainability.

### ***Policy and Evidence Centre***

The Creative Industries Policy and Evidence Centre provides independent research and policy recommendations for the UK's creative industries. The PEC is led by Nesta and is composed of a consortium of universities from across the UK (Birmingham, Cardiff, Edinburgh, Glasgow, Work Foundation at Lancaster University, London School of Economics and Political Science, Manchester, Newcastle, Sussex and Ulster). The PEC, understandably, take a data-driven approach to establishing shortfalls in ED&I practice and measures to rectify this, as "Despite growing momentum to address EDI in the workplace and in social impact work, the evidence base for what works remains limited" (Nesta, 2021, p. 3).

The PEC have published a series of reports on 'Advancing Equity, Diversity and Inclusion at Nesta.' Their March 2021 report identifies gender and pay gaps within Nesta as well as a staff that does not reflect the diversity of society (Nesta, 2021, p. 3). The report then sets out clear goals, targets, actions and measures of progress for 2025. The PEC use London-specific and UK data on representativeness (Nesta, 2021, p. 7).

### ***XR Stories and SIGN***

XR Stories, the cluster in Yorkshire and the Humber with a focus on R&D for immersive and interactive storytelling, works in partnership with the Screen Industries Growth Network, which is funded by Research England to support ED&I initiatives, skills and training, and provide business support

for the region's screen industries. They are focused on working with organisations within the screen industries to be more inclusive. In response to this challenge they set out a series of aims, objectives, values and governance (Screen Industries Growth Network, n.d.). These are accompanied by ED&I benchmark targets drawn from organisations such as the Social Mobility Commission and Stonewall and agreed by the BFI, BAFTA and the screen industry (Screen Industries Growth Network, n.d.).

### **Issues for discussion**

The previous overviews of the approaches of Creative Informatics and those of other CICP clusters to ED&I reveal several common areas of debate. In this section we compare and note common themes and also differences to the issues of the place of data monitoring, how to measure efficacy and the creative sector's particular reliance on freelance workers.

#### ***Data monitoring***

For the organisations discussed in this chapter, the core of their ED&I strategies is data monitoring, often for the purpose of measuring against local or national benchmark data. The report 'Creative Majority' arising from the All Party Parliamentary Group for Creative Diversity recommends that organisations "[p]ublish annual data on workforce demographics, along with pay, and pay gap data for key characteristics including gender, race, class, parenthood, and disability" (Wreyford et al., 2021, p. 161). It is notable that they recommend publishing *annual* data, as this allows for the comparison of data over time.

Benchmarking to national or industry data sources can allow for initial comparisons to be made but, as Bristol + Bath Creative Research + Development argue, true representation goes beyond hitting targets (Barron, 2021). While benchmarking diversity data to regional demographics can be useful – it can be a good indicator of where programmes are failing to connect with particular communities – representational demographics are a starting point rather than the end goal.

In a report about data practices in the creative industries Caitlin McDonald and Jennie Jordan (2023) raise issues with data collection from creative organisations not adhering to a set of data standards and therefore making comparison more difficult, as well as the short-term nature of many creative industries projects leading to a cycle of collecting data without having time to act upon it.

#### ***Measuring efficacy***

Despite the energy devoted to undertaking activities to improve ED&I, evidence about which measures work is lacking (O'Brien, 2021). Efforts

by the organisations covered in this chapter to collect meaningful data, set targets and benchmarks, solicit feedback and work to continually improve, show the central role that collective evidence has in ED&I activities. But beyond data collection, challenges arise when ED&I measures designed to improve diversity and equality don't address structural inequalities (Brook et al., 2020, p. 215) but instead preserve a “somatic norm” of “White, male, middle-classness” in the creative industries (p. 191) by training underrepresented groups to be more like the norm rather than transforming the norm to include multiple groups and perspectives (p. 215). Brook et al. describe a situation where “There is a real danger that speaking about inequalities is a new way to marginalise and ignore them” (2020, p. 256) and highlight that making ED&I practices visible does not necessarily mean they are effective.

### ***Freelance workers***

One factor of the creative industries workforce that needs to be attended to is the large number of freelancers working across its sectors. Freelancers are essential to the creative industries, with creative freelancers making up around 32% of the creative workforce in Scotland and 16% of the UK creative workforce (Connell et al., 2022, p. 4). Creative freelancers have been challenged by the COVID-19 pandemic, Brexit and the rising cost of living in specific ways that are often not seen and not helped by existing policies, such as the Coronavirus Job Retention Scheme or the Self-Employment Income Support Scheme put in place by the government (Easton and Beckett, 2021, p. 4).

Research by the PEC argues that the issues faced by freelancers are compounded when considered along with background, gender and ethnicity, age, disability and caregiving responsibilities (Easton and Beckett, 2021, p. 4). Indeed, recent efforts to ascertain the needs of freelancers in the Edinburgh area found that 28.3% of respondents were parents who had to balance caring responsibilities and work (Connell et al., 2022, p. 29). Taking into consideration the creative industries' substantial reliance on freelance workers is essential to devising successful ED&I activities. See the case study ‘Mapping the Creative Industries’, page 124, for further work on the benefits and challenges of working with freelancer data.

### **Recommendations for implementing a data-driven approach to ED&I in the creative industries**

In developing the Creative Informatics approach to ED&I, the team have always been mindful of the challenges of ethical and appropriate data collection and use in this space. In the final year of the project the team were able to secure an additional £250k of funding from the AHRC to increase the impact of the project and specifically to make beneficial ED&I impacts. This provided an opportunity to, for the first time, directly bring ED&I aspects



into application scoring criteria, which is something we had previously chosen not to do. We also looked for strategies to reach key audiences, drawing on our evidence-based knowledge of people and projects supported to date. Both our experiences delivering the project as a whole and our specific experience of undertaking this targeted ED&I work have led us to further reflection and exploration of inclusive work. In this section, we share some observations built on this experience.

### ***1. Developing a publicly shared set of ED&I values and buy-in of key stakeholders***

As noted earlier in this chapter, CI created a detailed ED&I Statement & Action Plan (Osborne et al., 2021). Whilst ED&I monitoring and inclusive practices were important from the outset of the project, the trigger for making our approach visible and accountable was the rise of the Black Lives Matter movement as well as a growing awareness that a failure to openly share any position could be read as an implicit statement of disengagement with the issues. For organisations in comparatively homogenous population contexts, there is a particular need to be vocal in supporting those who may not be visible.

### ***2. Actively delivering on ED&I values***

The actions and values presented in our ED&I Statement & Action Plan (Osborne et al., 2021) led to concrete actions in, among others, the areas of recruitment, communications and responding to the changing needs of participants.

### ***3. Capturing and actively making use of ED&I data***

Whilst organisations can be good at capturing ED&I data, it is only useful if it is actively used, reflected upon, and informs the planning and delivery of new activities. Publishing ED&I data holds organisations to account and it is important to both share success stories and be honest about where there are opportunities to do better (and there are always opportunities to do better).

We therefore recommend the following:

- Seek out initial data on the underlying population in your location and/or subsector(s) in order to understand the addressable population as well as any particular characteristics and known equalities issues.
- Capture ED&I data at all stages of the project in a way that is consistent but mindful of shifts in terminologies, of participants' willingness to self-disclose ED&I characteristics and of the possibility that individuals may change how they identify or self-label over time.

- Explain why you are collecting ED&I data and how it will be used to make yourself accountable to your community and ensure they understand the value of sharing what can feel like very personal information.
- Review ED&I terminology, as it can be extremely dynamic and sensitive. We recommend consulting your community on how they want to be thought of and discussed but also (where necessary and appropriate) cross-referencing comparable definitions so that there is a shared and common understanding. Terminology may need to be updated over time, and these changes may impact on how you can interpret and present your data in the future.
- Ensure you are regularly reviewing your ED&I data and reflecting upon it at multiple levels: internally to inform day-to-day planning and delivery, regular funder and partner reporting, and stakeholder and audience reporting.
- Use regular ED&I monitoring to identify key gaps and opportunities for new initiatives and collaborations that can either be self-funded or used as the basis for new funding applications.

#### ***4. Ensuring you are held to account: involving the community in governance***

We strongly recommend including the community in the governance processes for projects serving groups of stakeholders. Our twice a year Partnership Forums were advertised as open events with a shared agenda and discussion topics to inform participation. CI did not choose to ask the Partnership Forum to make specific decisions for the programme; instead they have provided a structure for consultation, accountability and iterative improvement of the programme that inform decision making. For projects seeking to develop and nurture communities that will become self-sustaining activities or structures, a more formal role in governance may be more appropriate.

#### ***5. Ensuring you are held to account: nurturing honest feedback at all stages***

ED&I monitoring forms and processes provide significant and (typically) easy to analyse data to inform decision making; however, we also recommend seeking qualitative feedback on processes and performance even though it is harder to analyse.

#### ***6. Taking an evidence-based approach to ED&I***

Conscious regular review of and reflection on both quantitative and qualitative ED&I data, particularly around key events or activities enables evidence-based shifts in practice, including how opportunities are being

communicated, how key stakeholders or partners are leveraged to correct for any significant emerging issues (e.g., the lack of a diverse funding applicant pool) and how future activities are planned and structured.

### **7. Meeting the community/communities where they are (not where you are)**

We recommend any project seeking to engage with their community think extremely carefully about where and how you engage to ensure you are making yourself accessible and relevant to the communities you seek to work with, particularly when targeting communities with specific ED&I challenges.

Approaches we have found effective include:

- Holding events across a region and partnering with local organisations and venues to reach and connect your emergent community with existing communities and networks. Going to a community in their own space helps them understand an opportunity is for them or people like them. It also reduces barriers to participation arising from cost of travel, accessibility of travel and the psychological barrier of potentially exclusionary physical spaces. (See associated case study for more on location as a factor in community participation.)
- To reach underprivileged and underrepresented communities, we recommend seeking trusted organisations embedded in those communities and taking an open, collaborative and where possible long-term approach to developing relationships and initiatives that make use of but don't take advantage of their existing networks and trust. For CI we have partnered with the Creative Community Hubs project – itself a trusted network of embedded organisations in less privileged communities – in the delivery of our Inclusive Capital programme, and this builds upon several years of engagement with the team and their host organisation WHALE Arts.<sup>21</sup>
- Thoughtful use of both targeted in-person, online and hybrid workshops and scaffolding for potential participants and beneficiaries. Offering online routes to participation benefits those with caring responsibilities for whom travel costs and access or physical access or energy levels may be a challenge. Online events also have affordances that may benefit those with accessibility needs (such as automated subtitling and/or transcripts for those with audio impairments or for whom English is a second language). Such events need to have feedback and contribution mechanisms to enable remote audiences to participate equitably.

### **8. Scaffolding and support**

Ensuring truly inclusive participation from a diverse community requires a significant commitment both to ED&I-informed processes and values and to practical methods to support and enable this participation. This includes

transparency and clarity of criteria and process, open recruitment for funding, provision of detailed feedback and an open dialogue with applicants.

### ***9. Decide whether ED&I objectives are better served by being monitored or being a direct part of criteria***

Where appropriate, we recommend considering making funding calls with a significantly targeted eligibility criteria and/or with ED&I criteria as part of the selection process. Sometimes either or both approaches will be appropriate; however, if undertaking the latter approach, it is crucial to be clear where elements of the application form are being captured for monitoring and where they will be disclosed to a selection panel to assess against stated criteria. Applicants may be comfortable sharing very personal ED&I characteristics on an anonymised monitoring form that they would not want to share in identifiable areas of an application seen by selection panels or funders.

### ***10. Balancing transparency, fairness, public funding and accessibility***

Publicly funded projects are required to be transparent and accountable in their processes, particularly when distributing funding. As part of that responsibility, most funders require extensive collection of data, and projects require sufficient factual and contextual information to both assess applications and monitor performance against project targets. However, long application forms and complex processes, even when clearly communicated, can be extremely inaccessible for groups, including those coming from less-privileged backgrounds, neurodivergent people and those with particular accessibility needs. In planning a project of this type, we therefore recommend giving consideration to the balance of needs for fairness and transparency with the needs to be inclusive and accessible and considering tactics to bridge these issues.

In supporting a diverse range of people, we recommend considering carefully how approaches that benefit one type of community may disadvantage others. For instance, for those with dyslexia, a video or audio submission may be significantly more accessible than a text form. However, video or audio submissions immediately make a wide range of diverse characteristics more evident to a selection panel, potentially subjecting applicants to unconscious biases, and can benefit applicants with a multimedia background and those with better access to filmmaking and editing facilities.

## **Conclusion**

This chapter has looked at how challenges surrounding equality, diversity and inclusion in the creative industries have been addressed in the Creative Industries Clusters Programme, focusing in particular on Creative Informatics' approaches. While a data-driven approach is prevalent, it generates several

issues around effective data collection and monitoring, how to set goals and measure progress and how to create ED&I approaches that respond to the particular challenges of the creative industries.

There are many very significant challenges still to be addressed in improving ED&I in the creative industries. To this end, we recommend a reflexive and iterative approach that includes working with all the communities involved; incorporating feedback and accountability; and thoughtfully making key decisions around monitoring, criteria, transparency, fairness, public funding and accessibility. A proactive and data-driven approach, including regular reflection and accountability, and an empathetic approach to diverse groups of people and communities, can help in the development and effectiveness of inclusive work.

## Notes

- 1 <https://metoomvmt.org/>
- 2 <https://blacklivesmatter.com/>
- 3 <https://annenberg.usc.edu/research/aii>
- 4 <https://disce.eu/>
- 5 <https://disc.hw.ac.uk/edica/>
- 6 <https://creativeinformatics.org/participant/scottie/>; <https://scottie.io/>
- 7 <https://www.fringeofcolour.co.uk/>
- 8 <https://creativeinformatics.org/participant/screen-language/>; <https://screenlanguage.co.uk/>
- 9 <https://virtual.mysoundcinema.com/>
- 10 <https://www.scotlandscensus.gov.uk/search-the-census/#/>
- 11 These categories of ethnicity demographic data were established by Scotland's Census (2011).
- 12 We have used the term global majority to refer to “people who are Black, Asian, Brown, dual-heritage, indigenous to the global South, and or have been racialised as ‘ethnic minorities’” (Carty, 2023) where previously the term BAME (Black, Asian and Minority Ethnic) may have been used, as this term is not preferred by the communities to which it is supposed to refer. We acknowledge that no term is perfect and that terminology around race and ethnicity is always evolving.
- 13 <https://simd.scot/>
- 14 This is modelled on the Information Technology Infrastructure Library (ITIL) concept of a Project Change Request.
- 15 <https://www.bathspa.ac.uk/research-and-enterprise/research-centres/centre-for-cultural-and-creative-industries/bristol-bath-creative-rd/>
- 16 <https://clwstwr.org.uk/>
- 17 <https://xrstories.co.uk/>
- 18 <https://screen-network.org.uk/>
- 19 <https://pec.ac.uk/>
- 20 While some of the clusters not included here (Business of Fashion, Textiles and Technology, Future Fashion Factory, Future Screens NI, InGAME, and StoryFutures) have engaged in ED&I activities like specific funding calls for inclusive projects and events or discussions around ED&I issues, they have not at this time published comparable materials like ED&I statements, diversity statistics or representation targets.
- 21 <https://www.whalearts.co.uk/>

## Reference list

- Barron, L. (2021) *Collecting Inclusion Data: Watershed's Approach to Balance and Belonging*, *Watershed*. <https://www.watershed.co.uk/articles/balance-and-belonging>.
- BBC. (2018) *Reflecting the Socio-Economic Diversity of the UK within the BBC Workforce: A Report on Career Progression and Culture at the BBC*. <https://downloads.bbc.co.uk/diversity/pdf/socio-economic-diversity.pdf>.
- Beckett, B. (2022) *Eight Things to Know about the Creative Industries*. Creative Industries Policy & Evidence Centre, 28 June. <https://pec.ac.uk/blog/eight-things-to-know-about-the-creative-industries>.
- Beverley, K. and Ward, J. (2022) *30 Opportunities for Optimisation: How R&D Funding can Support the Sustainable Development of the Creative Industries in Wales*. PDR Expertise Report. PDR. [https://www.pdr-research.com/cmsassets/general/How-R-and-D-funding-can-support-the-sustainable-development-of-the-creative-industries-in-Wales\\_PDR\\_Clwstwr\\_Jan\\_2023\\_Report.pdf](https://www.pdr-research.com/cmsassets/general/How-R-and-D-funding-can-support-the-sustainable-development-of-the-creative-industries-in-Wales_PDR_Clwstwr_Jan_2023_Report.pdf).
- Bristol + Bath Creative R&D. (2021) *State of Play: Data Results*. <https://www.bristolbathcreative.org/assets/uploads/State-of-Play-2021.pdf>.
- Brook, O., O'Brien, D. and Taylor, M. (2020) *Culture is Bad for You: Inequality in the Cultural and Creative Industries*. Manchester: Manchester University Press.
- Brook, O., O'Brien, D. and Taylor, M. (2021) 'Inequality talk: How discourses for senior men reinforce exclusions from creative occupations', *European Journal of Cultural Studies*, 24(2), pp. 498–513. <https://doi.org/10.1177/1367549419886020>.
- Carey, H., Giles, L. and O'Brien, D. (2023) *Job Quality in the Creative Industries: Executive Summary*. Creative Industries Policy and Evidence Centre and Nesta. <https://cdn2.assets-servd.host/creative-pec/production/assets/publications/PEC-GWR-Job-quality-in-the-Creative-Industries-Exec-Summary-v3.pdf>.
- Carey, H., O'Brien, D. and Gable, O. (2021) *Social Mobility in the Creative Economy: Rebuilding and Levelling Up?* Creative Industries Policy and Evidence Centre and Work Advance. <https://pec.ac.uk/research-reports/social-mobility-in-the-creative-economy-rebuilding-and-levelling-up>.
- Carty, C. (2023) 'To BAME or not to BAME – Do we need an alternative term?', *Inclusive Employers*, 28 March. <https://www.inclusiveemployers.co.uk/blog/bame-or-not-to-bame/>.
- Connell, L. et al. (2022) *Connecting, Collaborating and Creating: The Experiences of Creative Freelancers in Edinburgh in 2022*. White Paper. Creative Edinburgh. <https://doi.org/10.5281/zenodo.7106424>.
- Creative Industries Council. (2020) *Diversity & Inclusion Report 2019/20*. <https://www.thecreativeindustries.co.uk/site-content/uk-creative-overview-news-and-views-news-diversity-charter-update-report>.
- Creative Industries Federation. (2017) *Creative Diversity: The State of Diversity in the UK's Creative Industries, and What We Can Do About It*. [https://www.creativeindustriesfederation.com/sites/default/files/2017-06/30183-CIF%20Access%20%20Diversity%20Booklet\\_A4\\_Web%20\(1\)\(1\).pdf](https://www.creativeindustriesfederation.com/sites/default/files/2017-06/30183-CIF%20Access%20%20Diversity%20Booklet_A4_Web%20(1)(1).pdf).
- Creative Informatics. (2021) *Creative Informatics Equality Diversity Inclusion Statement*. <https://creativeinformatics.org/creative-informatics-equality-diversity-inclusion-statement/>.
- Creative Informatics. (2022) *Creative Informatics Annual Report 2022*. <https://creativeinformatics.org/wp-content/uploads/2022/06/CI-ANNUAL-REPORT-2022-FINAL-VERSION.pdf>.
- Crook, C. (2016) 'Cogs agency – the global talent agency', *Cogs Agency*, 4 October. <https://cogsagency.com/looking-for-people/diversity-benefits-vs-challenges/>
- de Vaan, M., Stark, D. and Vedres, B. (2015) 'Game changer: The topology of creativity', *AJS; American Journal of Sociology*, 120(4), pp. 1144–1194. <https://doi.org/10.1086/681213>.

- Dent, T. (2020) 'Devalued women, valued men: Motherhood, class and neoliberal feminism in the creative media industries', *Media Culture & Society*, 42(4), pp. 537–553. <https://doi.org/10.1177/0163443719876537>.
- Department for Business and Trade and Department for Business, Energy & Industrial Strategy. (2017) *Sector Deals*. <https://www.gov.uk/government/publications/industrial-strategy-sector-deals>.
- Easton, E. and Beckett, B. (2021) *Freelancers in the Creative Industries*. Creative Industries Policy and Evidence Centre. <https://pec.ac.uk/policy-briefings/freelancers-in-the-creative-industries>.
- Fodor, M.M. et al. (2022) *Clwstwr Policy Brief No 5 – Innovation for an Inclusive and Diverse Media Sector. The Role of R&D in Wales: Findings from Clwstwr. Clwstwr Publication Series 5*. Cardiff: Clwstwr. [https://clwstwr.org.uk/sites/default/files/2023-03/Clwstwr%20Policy%20Brief%20No%205\\_V7%20%20Innovation%20for%20an%20inclusive%20and%20diverse%20media%20sector.pdf](https://clwstwr.org.uk/sites/default/files/2023-03/Clwstwr%20Policy%20Brief%20No%205_V7%20%20Innovation%20for%20an%20inclusive%20and%20diverse%20media%20sector.pdf).
- Friedman, S. and Laurison, D. (2019) *The Class Ceiling: Why It Pays to be Privileged*. Bristol: Policy Press.
- Komorowski, M., Griffith, S. and Alatise, L. (2021) *Diversity Within the Clwstwr Programme in Relation to Wales' Creative Sectors*. Clwstwr. [https://clwstwr.org.uk/sites/default/files/2021-08/Clwstwr%20Programme%20Diversity%20Monitoring%20Report%201\\_Final\\_compressed.pdf](https://clwstwr.org.uk/sites/default/files/2021-08/Clwstwr%20Programme%20Diversity%20Monitoring%20Report%201_Final_compressed.pdf).
- McAndrew, S., O'Brien, D. and Taylor, M. (2020) 'The values of culture? Social closure in the political identities, policy preferences, and social attitudes of cultural and creative workers', *The Sociological Review*, 68(1), pp. 33–54. <https://doi.org/10.1177/0038026119871401>.
- McDonald, C. and Jordan, J. (2023) *Detecting Dark Matter Data: Data Gaps for Innovation and R&D Activity in the Creative Industries*. Creative Informatics. <https://doi.org/10.5281/zenodo.7418481>.
- Nesta. (2021) *Advancing Equity, Diversity and Inclusion at Nesta*. [https://media.nesta.org.uk/documents/Nesta\\_EDI\\_Strategy\\_FA\\_1.pdf](https://media.nesta.org.uk/documents/Nesta_EDI_Strategy_FA_1.pdf).
- Nwonka, C.J. (2021) 'White women, white men, and intra-racial diversity: A data-led analysis of gender representation in the UK film industry', *Cultural Sociology*, 15(3), pp. 430–454. <https://doi.org/10.1177/1749975520974565>.
- Nwonka, C.J. and Malik, S. (2018) 'Cultural discourses and practices of institutionalised diversity in the UK film sector: "Just get something black made"', *The Sociological Review (Keele)*, 66(6), pp. 1111–1127. <https://doi.org/10.1177/0038026118774183>.
- Oakley, K. et al. (2017) 'Cultural capital: Arts graduates, spatial inequality, and London's impact on cultural labor markets', *The American Behavioral Scientist (Beverly Hills)*, 61(12), pp. 1510–1531. <https://doi.org/10.1177/0002764217734274>.
- O'Brien, D. (2021) *What Works to Support Equity, Diversity, and Inclusion in the Creative Industries?* Creative Industries Policy & Evidence Centre. <https://pec.ac.uk/blog/what-works-to-support-equity-diversity-and-inclusion-in-the-creative-industries>.
- Ofcom. (2022) *Equity, Diversity and Inclusion in Television and Radio: 2021–22*. [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0029/246854/2021-22-report-diversity-in-tv-and-radio.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0029/246854/2021-22-report-diversity-in-tv-and-radio.pdf).
- Osborne, N. et al. (2021) *Creative Informatics Equality, Diversity, and Inclusion Policy & Action Plan 2021–23*. Zenodo. <https://doi.org/10.5281/zenodo.5227270>.
- Randle, K. and Hardy, K. (2017) 'Macho, mobile and resilient? How workers with impairments are doubly disabled in project-based film and television work', *Work, Employment and Society*, 31(3), pp. 447–464. <https://doi.org/10.1177/0950017016643482>.
- Scotland's Census. (2011). *Ethnic Group*. <https://www.scotlandscensus.gov.uk/metadata/ethnic-group/>.

- Screen Industries Growth Network. (no date) *Diversity and Inclusion Policy*. <https://screen-network.org.uk/about/diversity-and-inclusion-policy/>.
- Social Mobility Commission. (2021) *State of the Nation 2021: Social Mobility and the Pandemic*. <https://www.gov.uk/government/publications/state-of-the-nation-2021-social-mobility-and-the-pandemic>.
- Tapper, J. (2022) 'Huge decline of working class people in the arts reflects fall in wider society', *The Observer*, 10 December. <https://www.theguardian.com/culture/2022/dec/10/huge-decline-working-class-people-arts-reflects-society>.
- Taylor, M. (2020) *UK games Industry Census: Understanding Diversity in the UK Games Industry Workforce*. UK Interactive Entertainment. <https://ukie.org.uk/UK-games-industry-census-2020>.
- Vygotsky, L.S. and Cole, M. (1978) *Mind in Society the Development of Higher Psychological Processes*. Edited by Michael Cole et al. Cambridge, MA: Harvard University Press.
- Watershed. (2021) *Watershed Staff and Board Inclusion Data 2020–21*. [https://www.watershed.co.uk/sites/default/files/publications/2021-06-23/staff-and-board-inclusion-data-report-2020\\_2021\\_public\\_.pdf](https://www.watershed.co.uk/sites/default/files/publications/2021-06-23/staff-and-board-inclusion-data-report-2020_2021_public_.pdf).
- Wreyford, N. (2018) *Gender Inequality in Screenwriting Work*. Cham, Switzerland: Palgrave Macmillan.
- Wreyford, N., O'Brien, D. and Dent, T. (2021) *Creative Majority: An APPG for Creative Diversity Report on 'What Works' to Support, Encourage and Improve Diversity, Equity and Inclusion in the Creative Sector*. All Party Parliamentary Group for Creative Diversity. <http://www.kcl.ac.uk/cultural/projects/creative-majority>.



## CASE STUDY

### **Mapping the creative industries: dynamic visualisations, literacies, and agency**

To understand inequalities in the creative industries and address the imbalances found there, research that can dynamically visualise and explore these ideas is part of the process of measuring challenges and opportunities to work towards equality.

In the Edinburgh and southeast Scotland region, research which maps data about creative practitioners and cultural events geographically has shown how data can inform understandings and drive changes in approaches to creative practice and policy.

This case study includes two examples of mapping research projects that are data-driven tools for developing understandings of creative industries inequities and are also participatory in encouraging stakeholders to contribute to the maps and develop literacies and agency over the data that represents them.

In 2020 and 2021, Creative Informatics researchers Inge Panneels and Ingi Helgason created a map that aimed to understand and visualise the geographical spread and industry activities of individual creative businesses in the region. Previous research (Panneels et al., 2021) had found that freelance and self-employed workers – a group that is more prominent in the creative industries than in other economic sectors – are often underrepresented in available data. This mapping work aimed to promote ways to reach a collective understanding of the nature of the freelance and self-employed workforces in the region's creative economy.

In 2023, using data from the Edinburgh Festival Fringe box office, Creative Informatics Research Associate Vikki Jones was funded by the Data-Driven Innovation initiative (DDI) to work in partnership with the Edinburgh Festival Fringe Society to produce the 'Edinburgh Festival Fringe Open Audience Insights Map'<sup>1</sup> as part of the Edinburgh Culture and Communities Mapping Project, led by Dr Morgan Currie.

### ***Mapping freelancers in the creative industries***

The practice of mapping the creative industries began in the UK in the late 1990s, when the concept and construct of the 'creative industries' as an economic entity was recently established (Panneels, 2020). In 2010, the British Council published *Mapping the Creative Industries: a toolkit*, which presented mapping not only as the practice of mapmaking but as:

shorthand for a whole series of analytic methods for collecting and presenting information on the range and scope of the creative industries. Mapping

is intended especially to give an overview of the industries' economic value, particularly in places where relatively little is known about them.

(British Council, 2010, p. 11)

In the case of Creative Informatics' mapping of freelancers working in the region, the way that Standard Industrial Classification (SIC) coding is employed by the UK government's Department of Culture, Media and Sport (DCMS) means that freelancers and sole traders often fall through a "data gap" (Panneels, 2020). In response, two maps were created, one using publicly available data derived from companies' SIC codes and a second using Scottish Creative and Cultural Industries (SCCI) codes (Panneels, 2020). Creative businesses were invited to check whether they were represented on the map and, if not, to add their data (Panneels, 2020).

The use of mapping and the visual result was a means to show how the data gap around freelancers and sole traders in the Edinburgh and southeast Scotland region might be closed and to "make visible" (Panneels, 2020) the role of freelancers and sole traders as part of a bigger creative ecosystem. The data on the map shows both the geographical locations of creative freelancers and businesses by postcode and local authority area, and the creative industries sectors they are part of, mapped both to DCMS and SCCI definitions. The maps were updated in 2021 and remain open for submissions to creative businesses at the time of writing (Helgason and Panneels, 2021).

***Edinburgh Culture and Communities Mapping Project:  
the Edinburgh Festival Fringe Open Audience Insights map***

Like the map of freelancers in the Edinburgh and southeast Scotland region, the production of the Edinburgh Festival Fringe Open Audience Insights map sought to 'make visible' the creative economies of the Edinburgh Festival Fringe, which takes place for three weeks around the City of Edinburgh each August and, in 2023, included more than 3,000 shows and over 52,000 performances (Edinburgh Festival Fringe Society, 2023).

Building on existing research and resources – including previous research with Edinburgh festivals as part of the Culture and Communities Mapping Project – this project sought to explore ways to address the challenge of making data about ticket-buying audiences at the Edinburgh Festival Fringe open and accessible, democratising access to data for Fringe artists, producers and audiences (Jones, 2023). It was designed to consider and document the process of making the Open Audience Insights Map, as well as to analyse the data it holds and presents. As such, the project explored the stories that could be told or supported by and through the map about the multiple value systems and economies that interoperate at the Fringe and how these were dispersed across the city.

For the Edinburgh Festival Fringe, the unique nature of its open access programme and its vision “to give anyone a stage and everyone a seat” (Edinburgh Festival Fringe Society, 2022) creates a multi-perspective and multi-stakeholder landscape of interest and investment in the festival (Jones, 2023).

The map shows information about Edinburgh Festival Fringe tickets sold through the Fringe box office only, to those whose registered purchase address was in an EH postcode. In postcode areas with high numbers of ticket purchases, these areas have been further broken down on the map to show variation in this data. It also shows Fringe venues over the period of data on the map (2017–2022), data zones from the Scottish Index of Multiple Deprivation (<https://simd.scot>) that show the most deprived areas in the region (bottom three deciles) and plots year-to-year changes in ticket buying in postcode areas (Jones, 2023).

In exploring the idea of open audience insights for the Fringe, we found huge potential for data-driven tools like this map that might assist decision making about the festival experience. Representations of year-to-year change in ticket-buying audiences offer insight into where promotion of the festival in certain postcode areas might have been successful in growing audiences.

### **Conclusion**

Both projects explore and demonstrate the potential and challenging of using mapping as a tool for both research and participation in the creative industries. They share similar challenges, too in finding standards and in making visible what the datasets they visualise can, and cannot, tell us. The freelancers mapping project shows the shortcomings of government-level coding of the creative industries but relies on participation by creative businesses outside of these classifications to bridge that “data gap” (Panneels, 2020). The Edinburgh Festival Fringe Map includes only data held by the Edinburgh Festival Fringe Society and faces issues of granularity in the data in that complete postcode data has the potential to identify individual households and so, for ethical reasons, is not included (Jones, 2023).

However, in visualising these data-driven challenges for both researchers and for the creative industries, the maps included here make the case for using data about creative economies to explore new ways to tell their stories and address the economic, social, political and cultural challenges they face.

Vikki Jones

### **Reference list**

British Council. (2010) *Mapping the Creative Industries: A Toolkit*. [https://creativeconomy.britishcouncil.org/media/uploads/files/English\\_mapping\\_the\\_creative\\_industries\\_a\\_toolkit\\_2-2.pdf](https://creativeconomy.britishcouncil.org/media/uploads/files/English_mapping_the_creative_industries_a_toolkit_2-2.pdf).

- Edinburgh Festival Fringe Society. (2022) *Fringe Development Goals*. <https://www.edfringe.com/about/about-us/fringe-development-goals>.
- Edinburgh Festival Fringe Society. (2023) *Edinburgh Festival Fringe Begins*. <https://www.edfringe.com/learn/news-and-events/edinburgh-festival-fringe-2023-begins>.
- Helgason, I. and Panneels, I. (2021) *Mapping Freelancers in the Creative Industries: Progress Update*. <https://creativeinformatics.org/research/mapping-freelancers-in-the-creative-industries-progress-update/>.
- Jones, V. (2023) *Mapping Open Audience Insights from the Edinburgh Festival Fringe with the Edinburgh Culture and Communities Mapping Project*. <https://creativeinformatics.org/research/mapping-open-audience-insights-from-the-edinburgh-festival-fringe-with-the-edinburgh-culture-and-communities-mapping-project/>.
- Panneels, I. (2020) *The Trouble with Data: Mapping Freelancers in the Creative Industries*. <https://creativeinformatics.org/research/the-trouble-with-data-mapping-freelancers-in-the-creative-industries/>.
- Panneels, I., Terras, M., Jones, C., Helgason, I. and Komorowski, M. (2021) *Plugging the Data Gap: Freelance Workers in the Creative Industries*. <https://pec.ac.uk/blog/plugging-the-data-gap-freelance-and-self-employed-workers-in-the-creative-industries>.

### Case study note

- 1 <https://ddi.ac.uk/what-we-do/academics/previous-open-call-summaries/social-change-opencall/>