Evidence Review 2019/01

Skills, talent and diversity in the creative industries

Evidence synthesis and scoping: summary report

Heather Carey, Rebecca Florisson and Lesley Giles
The Work Foundation, Lancaster University
November 2019

ISBN: 978-1-913095-17-8
Acknowledgements

We would like to extend our thanks to those industry stakeholders who have supported the scoping phase of this project and have taken part in bilateral consultations, roundtables and workshops.

The authors would also like to extend their thanks to Dr Dave O’Brien, Mark Spilsbury, Dr Neil Lee and Olivia Gable for their support and input during the evidence synthesis and scoping phase.

About the Creative Industries Policy and Evidence Centre

The Creative Industries Policy and Evidence Centre (PEC) works to support the growth of the UK’s Creative Industries through the production of independent and authoritative evidence and policy advice.

Led by Nesta and funded by the Arts and Humanities Research Council as part of the UK Government’s Industrial Strategy, the Centre comprises of a consortium of universities from across the UK (Birmingham; Cardiff; Edinburgh; Glasgow; Work Foundation at Lancaster University; LSE; Manchester; Newcastle; Sussex; Ulster). The PEC works with a diverse range of industry partners including the Creative Industries Federation.

For more details visit www.pec.ac.uk and @CreativePEC

About Workstrand 2: Skills, Talent and Diversity

The Work Foundation leads the PEC’s area of work on Skills, Talent and Diversity, in partnership with other researchers from across the PEC consortium – forming Workstrand 2. In particular, it is progressing work with Newcastle University, which leads the research strand on International Competitiveness, including immigration.

Together we are pursuing a dynamic and diverse research agenda. This seeks to: provide an authoritative overview of the current strategic skills demands for creative workers; understand the distribution of opportunities and barriers to labour market and career success for a range of underrepresented demographic and socio-economic groups; and, ultimately, develop policy tools to incentivise innovation in business practices and support stronger investment to grow the creative skills base and meet the needs of the UK’s creative economy.
Contents

Executive Summary – p.4

1. Introduction – p.10
   1.1 Creativity, diversity and the modern economy – p.10
   1.2 Evidence synthesis and scoping: objectives and approach – p.10
   1.3 This report – p.12

2. Skills and diversity challenges
   2.1 Jobs and skills in the creative industries and economy – p.13
   2.2 Skills and diversity challenges: 9 critical issues – p.14

3. Information failures and evidence gaps
   3.1 Assessment of the evidence base – p.44
   3.2 Identifying specific knowledge gaps – p.45

4. Shaping the PEC research agenda
   4.1 Principles for future research – p.48
   4.2 Work packages for the Skills, Talent and Diversity workstrand – p.48
   4.3 Priorities and plans for Year 1 – p.50
   4.4 Get involved! – p.53

5. References – p.54

6. Annex A: Defining the creative industries and economy – p.71

7. Annex B: Consultees – p.72

Supported by

[Logos of Arts & Humanities Research Council, UK Research and Innovation, and Industrial Strategy]
Executive Summary

Introduction

The creative industries, from libraries, galleries and museums to the screen industries, design, advertising and the digital economy, are vital to the UK economy. Dynamic, innovative, and export-orientated, they are one of the UK’s greatest success stories, growing at double the rate of the rest of the economy. This is in no small part due to the skills and talents of the UK’s creative workforce.

The creative industries rely on world-leading talent, capabilities and highly developed skills, employing significant numbers of STEM as well as humanities graduates, combining a range of specialist as well as generalist skills. Drawing on a wide range of expertise of researchers, computer scientists, artists, dancers, makers, designers, and finance and marketing professionals, they contribute not only to economic performance, but also deliver substantial cultural benefits both in the UK and abroad.

With their role as a key area of competitive advantage and economic success in the global economy, and in a post-Brexit era, the creative industries have become a central part of the Government’s new Industrial Strategy (HM Government 2017) and the economic strategy in Wales (Welsh Government 2017), Scotland (Scottish Government 2015, 2019) and Northern Ireland (Department for the Economy NI 2017). The Sector Deal signed between the Creative Industries Council and Government will unlock over £150m in investment over the next five years to sustain growth and generate an additional 600,000 new jobs in the creative economy by 2023; growing the workforce by 20% (HM Government 2018).

Indeed, the future for the creative industries and economy is bright. Creative jobs are expected to prove more resilient to automation (Osborne, Frey and Bakhshi 2015) and the advent of new technologies such as Virtual and Augmented Reality, and the growing global appetite for UK content – from music to video games, film to fashion – is expected to not only fuel ongoing growth of the creative industries, but enhance the need for creativity across the economy (Bazalgette, P 2017; Easton and Djumalieva 2018).

But as we witness unprecedented tightness in the UK labour market, combined with a continued growth in high skilled roles, will there be talent available to fill these roles? In the face of rapid change in the market, can we be confident that the skills that businesses need to thrive in the future are being developed by those learning in schools, colleges and universities today? As we strive to build a balanced and inclusive UK economy, will the
opportunities created in this vibrant sector be accessible to everyone – regardless of their socio-demographic background or where they live?

**This research**

In November 2018, the PEC Workstrand 2 research team embarked on an evidence synthesis and scoping exercise. The primary purpose of the exercise has been to establish a robust, coherent picture of the most pressing skills and diversity challenges facing the creative industries; map existing evidence; identify current and anticipated gaps in knowledge; and agree a shared and dynamic research agenda.

This insight would then be used to shape the forward programme for the Skills, Talent and Diversity Workstrand; focusing on tackling evidence gaps and prioritising research areas where we can add greatest value. Relatedly, wherever possible, a key intention too has been to identify opportunities to work in partnership with key stakeholders to co-commission and co-produce research.

In total, the evidence synthesis and scoping process has considered over 300 sources of evidence and has engaged 80 individual stakeholders from 50 different organisations through a series of bi-lateral consultations, roundtables and workshops. So nine months later, what have we found?

**Our findings**

**Skills and diversity challenges: 9 critical issues**

In contrast to the impressive performance of the past and positive outlook for the sector in the future, the synthesis and scoping exercise points to a number of pressing challenges, which if left unaddressed could undermine the success of the creative industries and economy and their potential role in realising the ambitions of the UK’s Industrial Strategy.

In total we identify 9 key skills and diversity challenges. Some relate to the nature of work and of working practices; others to the way in which we value and develop creativity and creative skills. Some of these challenges are more immediate or short-term in nature; while others represent a longer-term shift. Many are so significant, broad reaching and complex that their resolution will call for more collaborative solutions than a single course of action.

Importantly, while some of these challenges are common across the creative industries; others are more distinct to particular parts of the creative sector. In articulating shared challenges we do not assume that the creative economy is comprised of a homogenous set of activities – indeed far from it. However, our aim is to develop a coherent and compelling narrative to help shape better policy and practice relating to skills, talent and diversity in the creative industries.
1. **Job quality, management & working practices**

While the creative industries and creative economy are now recognised as a policy priority; and many consider the sector to offer high value activities, highly paid, high-skilled roles, this is not the full reality.

Much of the work is often low-paid and precarious, jeopardising the health and wellbeing of the workforce, and there are significant concerns about how improvements are hampered by management and leadership capability and poor working practices.

---

2. **Skills evolution & skills fusion**

Evidence suggests that creative roles will be more resilient to automation and that creativity will become a skill in even greater demand in the future. However, the sector and the skills needed by those working in the creative industries are and will continue to change dramatically.

The future effects of technology and other megatrends need to be fully understood. This is both in terms of growing demand for certain roles, but also changing skill needs within occupations, with an increasing need for design, data, digital and ‘fusion’ skills.

---

3. **Valuing creative education**

While the creative industries are acknowledged as a vital part of the UK’s industrial strategy, there are growing concerns about the devaluing and deprioritisation of creative education.

This starts in schools and runs right through to higher education, where there is an increasing emphasis on courses that offer strong economic returns, without recognising wider value of creativity and culture.

---

4. **Careers and technical education**

Despite widespread reforms to different parts of the UK skills system – including to careers education, apprenticeships and technical education – there are concerns that these are proving challenging to implement in parts of the creative industries.

In particular, those working in the sector suggest they aren’t sufficiently aligned to industry needs in different parts of the UK, and are failing to create clear “future-proofed” learning pathways to support entry and progression within the sector.

---

5. **Accessing international talent**

There are growing concerns around the impact of Brexit on the ability of the creative industries to access international talent. While many creative occupations feature on the updated Shortage Occupation List, some have challenged whether the current £30k minimum salary is too high and will prove too restrictive for the sector.
6. Skill shortages and oversupply
Creative industries, occupations and skills are in growing demand across the economy, but the supply of talent to the sector is failing to keep pace, which risks increasing deficiencies and mismatches to critical levels.

As creative skills are in demand in other sectors of the economy, this is generating fierce competition for talent, accentuating skills shortages in some sub-sectors. In contrast, cuts due to austerity measures are also stimulating over supply in others parts of the sector at the same time.

7. Skill gaps and professional development
There is increasing awareness in a fast paced, modern world that a lack of industry investment in learning and development for those already in work, and support for lifelong learning, is creating skill deficiencies in the workplace.

This is particularly true in areas which have been / will be subject to substantial future change.

8. Maximising the value of diverse talent
The creative industries are failing to make use of the diverse talent that exists in the UK.

Consequently, there are growing concerns that the opportunities created in this vibrant part of the UK economy are ‘out of reach’ for many and that in some creative sectors and occupations the profile of the workforce looks dramatically different to the UK population.

9. Strengthening local talent pools across the UK
Relatedly, not all parts of the UK are benefitting from growth opportunities in the creative industries.

The industries are deeply segmented and parts of the sector are heavily London and the South East centric. In turn, many of the challenges to growing thriving creative clusters elsewhere in the country are impeded by the development and retention of creative talent.

Supported by

[Logos of Arts & Humanities Research Council, UK Research and Innovation, and INDUSTRIAL STRATEGY]
This synthesis and scoping report has highlighted that there is already a vast array of evidence pertaining to skills, talent and diversity issues in the creative industries. This not only includes research and analysis from academia and the wider research community, but also a wealth of insights and evidence compiled by wider stakeholders such as: national bodies with a stake in the arts, culture and creative industries; sectoral and sub-sector industry and occupational trade bodies; Government and others. But, despite this, there is more that needs to be done.

Our overarching assessment of the evidence base points to a number of information failures, in particular:

- A failure of official data to adequately capture specific parts of the creative industries, self-employed workers or microbusinesses.
- Delays in the update of official classifications means they often fail to reflect new sectors, business models and evolving ‘careers of the future’.
- Failure of official data to provide data granularity at a level that allows analysis of specific sub-sectors, occupations, or spatial areas.
- Fragmentation in the evidence base, where different stakeholders collect, commission or interrogate data and research in different ways, using different methods, measurement and definitions, which inhibits comparisons and the tracking of trends over time.

In addition to these overarching information failures, the synthesis and scoping has identified a number of thematic evidence gaps.

**Job quality**

While we now benefit from growing data on the number of jobs in this part of the economy; we lack real insight or transparency around the quality of work and its impact on the health and wellbeing of the creative workforce.

**Strategic skill needs**

We lack an accurate, coherent and up-to-date view of which careers and skills will be in greatest demand in the future; and what development / investment is required to up/re-skill.

**The value of creative education**

Amidst concerns about the deprioritisation of creative education, there is an urgent need to find ways to better capture the value of creative education end-to-end through the education system and life-course.

**Pipeline of talent**

We lack a regular, coherent source of intelligence on the pipeline of talent to the sector and the extent to which this is aligned with industry needs. There is also a dearth of evidence on either career progression or learning pathways.

**Creative professional development**

We need better understanding of opportunities for professional development; the effectiveness of industry levies in promoting learning; and what new levers or forms of learning could promote greater workforce development, up / reskilling; particularly amongst the freelance workforce.

**Productivity and management practices**

Against a backdrop of growing interest in the underlying causes of the UK’s productivity problem, there is a dearth of evidence exploring these issues in the context of the creative industries. This is particularly significant given concerns around management and leadership capability in the sector.

**Tackling the diversity challenge**

There is a lack of regular and robust evidence assessing the representation of all minority groups in the sector; insight which looks beyond participation to explore the quality of work & progression of those from disadvantaged backgrounds; the underlying barriers and what works in overcoming these.

**Local talent pools**

There is a dearth of robust evidence on local talent pools and skills pipelines; the extent to which these are sufficient to meet the needs of local businesses; and how to connect sector-initiatives with wider, placed-based programmes to support skills development and adult learning.
Shaping the PEC research agenda

There is clearly much we do not yet know. But, as a community with a stake in the future success of the creative industries and economy, we must go further to better understand the issues, and ‘what works’ in addressing them. The information failures we have identified help us identify some working principles that we must embrace. The evidence gaps additionally provide steer to where the PEC can add greatest value in enhancing in insight to shape better policy and practice relating to skills, talent and diversity in the creative industries.

Work packages & working principles for the Skills, Talent and Diversity Workstrand

We propose to develop a series of work packages; each with its own clear audience and aims:

1. UK sector skills monitor: a regular data-led assessment of the shape of the workforce, the Skills Monitor will provide steer on the most pressing employment issues and enable tracking of progress in addressing critical skills and diversity challenges

2. Targeted Future Foresight reviews: exploring alternative likely futures, assessing the implications of megatrends for employment and identifying tangible changes in the workplace, skill needs and workers in specific roles to better “future-proof” policy and practice.

3. ‘Deep-dive’ sub-sector / occupational skills reviews: to explore in detail evolving careers and skills for the future in specific sub-sectors of the creative industries, in different occupations, and in different parts of the UK.

4. Policy reviews and think pieces: including targeted briefings, updates and reviews focussing on different parts of the policy to practice cycle; seeking to understand challenges in more depth; shape the design of new policies and form an assessment of ‘what works’.

Priorities for the rest of Year 1

There remain two further outputs we are prioritising for delivery by the end of the year:

- UK Sector Skills Monitor 2019 – the first Skills Monitor will seek to establish a systematic and regular assessment of strategic skill priorities for the creative industries
- Policy Review Diversity Series – the first paper from this series will look in-depth at the participation, retention and progression of those of different class origin within the creative industries

The PEC is actively seeking partners to work collaboratively on shaping, delivering and commissioning research, so if you share an interest in any areas identified in this scoping paper, please get in touch!

Supported by
1. Introduction

1.1 Creativity, diversity and the modern economy

The creative industries, from libraries, galleries and museums to film and the wider screen industries, design, advertising and the digital economy, are vital to the UK economy. Dynamic, innovative, and export-orientated, they are one of the UK’s greatest success stories, growing at double the rate of the rest of the economy. This is in no small part due to the skills and talents of the UK’s creative workforce.

The creative industries rely on world-leading talent, capabilities and highly developed skills, employing significant numbers of STEM as well as humanities graduates, combining a range of specialist as well as generalist skills. Drawing on a wide range of expertise of researchers, computer scientists, artists, dancers, makers, designers, and finance and marketing professionals, they contribute not only to economic performance, but also deliver substantial cultural benefits both in the UK and abroad. And while rapid technological advance threatens to make obsolete jobs in some parts of the workforce, creative occupations offer significant resilience, with over eight out of ten creative jobs in the UK expected to be resistant to future automation (Osborne, Frey and Bakhshi 2015). As a consequence, we should in coming years see continued rises in the workforce share of creative occupations - as long as skills supply can match growing demands.

1.2 Evidence synthesis and scoping: objectives and approach

In November 2018, the PEC Workstrand 2 research team embarked on an evidence synthesis and scoping exercise. Its intention was to ensure that the work programme was informed by the current state of play of the body of evidence and expert thinking amongst key stakeholders about the most pressing priorities. More specifically this has sought to meet a number of objectives, not least to:

- Establish a robust framework for understanding the skills, talent and diversity issues;
- Collate, critique and analyse existing evidence, including academic and grey literature and data, in order to establish a robust, coherent picture of key skills and diversity challenges, as well as gaps in existing knowledge and insight;

“It is human creativity that drives the success of this sector”

Sir Peter Bazalgette
• Explore with key stakeholders their research priorities, plans and views on the key research questions the PEC should seek to answer, avoiding duplication as much as possible, and supporting collaborative working; and
• Develop a shared research agenda for the Skills, Talent and Diversity Workstrand; identifying opportunities for co-commissioning and co-production of research.

As with all evidence syntheses, it is important to define clear aims and research questions that this exercise seeks to consider. Skills, talent and diversity is a broad research area, and there exists a considerable evidence base. As such, we have sought to establish a strong analytical approach to define the scope of the evidence synthesis informed by world-class practices (Figure 1.1).

Figure 1.1: Framework for the evidence synthesis

When assessing the extent to which we are able to answer the research questions we have limited our assessment to: the existing evidence base; research published over the past 5-7 years; focusing predominantly on evidence concerning the UK creative industries and economy, with the exception of thematic areas where we know evidence from other countries is better developed.

In total, this exercise has considered over 300 sources of evidence and consulted 80 individual stakeholders from 50 different organisations, listed in the References and Annex B of this report.

Supported by
1.3  This report

This report summarises the findings from the evidence synthesis and scoping phase. It is structured as follows:

- **Chapter 2**: outlines the critical skills, talent and diversity challenges facing the UK’s creative industries, drawing together key findings from the evidence synthesis, stakeholder interviews, roundtables and workshops;
- **Chapter 3**: discusses the information failures and gaps in existing evidence, establishing priorities that the PEC and the wider research community, industry stakeholders and policy makers might seek to collaboratively address; and
- **Chapter 4**: concludes by outlining the future work programme for the PEC for the year ahead, in particular drawing on the findings from the “kickstart” events to develop plans for the forthcoming Skills Monitor and Policy Review for 2019/20.
2. Skills & diversity challenges

2.1 Jobs and skills in the creative industries and economy

Despite creativity becoming a subject of growing interest and study since the 1950s (Mumford, 2003), the creative industries and economy were only formally recognised as a central part of the UK economy in 1997. This is when the new Labour government led by Tony Blair established the Department for Culture, Media and Sport (DCMS) and launched the Creative Industries Taskforce to assess their value and the policies required to enable their future success (Flew, 2012).

Just over two decades later, the creative industries are now vital and vibrant part of the UK economy; contributing over £100bn in Gross Value Added (GVA) (DCMS, 2018) and employing 2m people – equivalent to over 6% of the workforce. Despite growing focus on the creative industries, there are a total of three million people working in the creative economy in the UK – over a third of which are working in creative occupations outside of the sector.¹

Figure 2.1: Employment in the UK creative industries and economy

DCMS (2019b)

Supported by

[Images and diagrams showing employment growth and sector distribution]
With their role as a key area of competitive advantage and economic success in the global economy, and in a post-Brexit era, the creative industries have become a central part of the Government’s new Industrial Strategy (HM Government, 2017) and the economic strategy in Wales (Welsh Government 2017), Scotland (Scottish Government 2015, 2019) and Northern Ireland (Department for the Economy NI 2017).

The Deal signed between the Creative Industries Council and Government will unlock over £150m in investment over the next five years to sustain growth and generate an additional 600,000 new jobs in the creative economy by 2023 (HM Government 2018).

Indeed, the future for the creative industries and economy is bright. The coming of the fourth industrial revolution, the advent of new technologies such as Virtual and Augmented Reality, and the growing global appetite for UK content – from music to video games, film to fashion – is expected to not only fuel ongoing growth of the creative industries, but enhance the need for creativity across the economy (Bazalgette, P 2017; Easton and Djumalieva 2018).

Creative jobs are also expected to prove more resilient to the effects of new technology such as robotics and machine learning, with 87% of highly creative workers at low or no risk of automation (Osborne, Frey and Bakhshi 2015). Research by Nesta suggests that if growth of the creative industries continues at current pace this could create up to one million new jobs by 2030 (Bakhshi and Windsor 2015); with this figure reinforced by recent work for the Creative Industries Council (Nesta 2018).

But as we witness persistently high employment rates, and unprecedented tightness in the UK labour market, combined with a continued growth in high skilled roles, will there be talent available to fill these roles? In the face of rapid change in the market, can we be confident that the skills businesses need to thrive in the future are being developed by those learning in schools, colleges and universities today? As we strive to build a balanced and inclusive UK economy, will the opportunities created in this vibrant sector be accessible to everyone – regardless of their socio-demographic background or where they live?

2.2 Skills & Diversity Challenges: 9 Critical Issues

The findings from the evidence synthesis, stakeholder interviews, two policy roundtables and a stakeholder event – which together incorporate over 300 pieces of evidence and insight from over 80 industry experts – suggest the answer to these questions is a resounding ‘No’. In contrast to the impressive performance of the past and positive outlook for the sector in the future, the synthesis and scoping exercise points to a number of pressing challenges. If left unaddressed,

“The creative industries – including film, TV, music, fashion and design, arts, architecture, publishing, advertising, video games and crafts – are an undoubted strength of our economy; indeed, they are at the heart of the nation’s competitive advantage”

HM Government (2018)
these could undermine the success of the creative industries and economy and their potential role in realising the ambitions of the UK’s Industrial Strategy.

In total we identify 9 key skills and diversity challenges. These featured across each ‘pillar’ of our analytical framework (Figure 1.1). Some relate to the nature of work and of working practices; others to the way in which we value and develop creativity and creative skills. Some of these challenges, such as an urgent need to safeguard access to international talent, are more immediate or short-term in nature. While others, such as the evolution and fusion of skills needed within the creative economy or deep-rooted and persistent skills shortages represent a longer-term shift. Many are so significant, broad reaching and complex that their resolution will call for more collaborative solutions than a single course of action.

Importantly, while some of these challenges are common across the creative industries; others are more distinct to particular parts of the creative sector. In articulating shared challenges we do not assume that the creative economy is comprised of a homogenous set of activities – indeed far from it. However, our aim is to develop a coherent and compelling narrative to help shape better policy and practice relating to skills, talent and diversity in the creative industries. Figure 2.2 provides an overview of these challenges; which we explore further in the narrative that follows. Figure 2.2: Key skills and diversity challenges

---

**Figure 2.2: Key skills and diversity challenges**

- **Skills Mismatch**
  - 1. Job Quality, Management & Working Practices
  - 2. Skills Evolution & Skills Fusion
  - 3. Valuing Creative Education
  - 4. Careers & Technical Education Reforms
  - 5. Accessing International Talent
- **Diversity & Inclusion**
  - 6. Skills Shortages & Over Supply
  - 7. Skills Gaps & Professional Development
  - 8. Maximising the Value of Diverse Talent
  - 9. Strengthening Local Talent Pools Across the UK
- **The Talent Pipeline**
- **Supported by**

- Arts & Humanities Research Council
- UK Research and Innovation
While creative Industries and the creative economy are now recognised as a policy priority; and many consider the sector to offer high value activities, highly paid, high-skilled roles, this is not the full reality. Much of the work is often low-paid and precarious, jeopardising the health and wellbeing of the workforce, and there are significant concerns about how improvements are hampered by management and leadership capability and poor working practices.

At the headline level, jobs in the creative economy are undoubtedly amongst the highest skilled, highest paid in the modern UK economy. Creative workers are more qualified than their counterparts in other sectors, with 63% of the creative industries workforce holding a degree or equivalent qualification compared to the all industry average of 35% (DCMS 2019a). Average weekly earnings for employees working the creative sector are also one third higher the UK average (ASHE 2018).

However, this overarching picture masks significant variation within the creative industries and economy (Figure 2.3) and the employment challenges being faced. For instance, there is evidence that in some sub-sectors: an oversupply of workers and fierce competition for jobs drives down wages (Arts Professional, 2019a; Dean, 2008; Alacovska, 2018); creates huge uncertainty about where the next pay cheque is going to come from (Lingo and Tepper, 2013) and leads many creative workers to take on a second job (Bennett 2017; Arts Professional 2019b; British Photography Council, 2010; Musician’s Union, 2012) or rely on the earnings of their parents or partners to sustain their living (Musician’s Union, 2012; The Guardian, 2018).

Figure 2.3: Work in the creative industries

<table>
<thead>
<tr>
<th>Qualified to degree-level (DCMS 2019)</th>
<th>Craft 20%</th>
<th>Architecture 87%</th>
</tr>
</thead>
</table>

Average earnings (ASHE 2018)

| Museum, galleries & libraries 499 p/w | IT, software & computer services 933 p/w |

60% Of musicians had done unpaid work in the past 12 months (Musicians Union 2012)

15 unpaid hours Worked by creative industry workers on average each month (Labour 2017)

---

2 Note: Median gross weekly earnings of full-time employees (exc. overtime). Data excludes self-employed or freelance workers. Given the prevalence of freelance working in many parts of the creative industries, these figures must be interpreted with caution.
This raises challenging questions about the long-term sustainability of a model which reinforces insecurity and vulnerability. For instance, practices where workers need to subsidise their creative work and where cultural organisations respond to uncertainty in funding by turning to volunteers, flexible labour and offering short-term contracts on a project-by-project basis in order to reduce overhead costs (McRobbie 2016). This is hardly creating the conditions for good work and a healthy, capable, happy and highly committed workforce that can drive business success. There is evidence that across the creative industries employees work unpaid overhours to the tune of an average 15 hours per month, and many self-employed workers and freelancers do unpaid or favour-based work (Labour, 2017). Create London’s 2018 report on the results of a survey conducted in 2015 among 2,487 respondents and an additional 237 interviews showed that overwhelmingly respondents said they had worked for free over the past twelve months (Create London 2018). For some subsectors and occupations, unpaid internships and ‘portfolio’ building are avenues that lead into opportunities for paid work.

Even then, evidence suggests that much work in the creative industries can be intense, precarious and challenging. While high-levels of self-employment and freelance working in the creative industries can offer flexibility for both businesses and workers (Bain and McLean, 2018; Menger, 2017; Umney and Kretos, 2015; Lindgren et al, 2014), others question how much autonomy workers genuinely have; where fierce competition for work, power imbalances, recruitment and working practices can lead to financial insecurity, isolation and exploitative working conditions (Alacovska, 2018; ArtsPay, 2018; Butler and Russell, 2018; GoodCorporation 2016) that can negatively impact the health and wellbeing of creative workers (BECTU 2017; Graham et al 2017). Additionally, freelancers have fewer rights and protections under labour law (Butler and Russell, 2018; Hesmondhalgh and Baker, 2010) and are often responsible for paying their own unemployment insurance and contributions to pension funds. Whilst recent policy reviews sponsored by Government are seeking to address some of these disparities between different types of employees and freelancers, such as the recent Taylor Review (Taylor 2017) and associated Good Work Plan (BEIS, 2018), their effects are yet to be fully felt. It is therefore not known whether the proposed actions will start to make a difference to the varying working conditions within the sector.

Given some of the challenges of this persistent employment position, there is an ongoing interest in the quality of leadership capability and management practices of those running creative businesses. In particular this is concerned with how variations in management might

---

"Many micro companies in the creative sector may be headed by an owner-founder where the move from ‘successful creative’ to ‘successful entrepreneur’ presents challenges, particularly around managing commercial growth.”

Armstrong and Page (2015) for ScreenSkills

---

3 One third of the creative industries’ workforce are self-employed, compared to 16% across all industries (DCMS, 2019)
be contributing to these more negative employment experiences, and inhibiting improvements. The focus on management capability is also concerned with the added pressures and disruption of a modern working world, caused by ongoing technological advances and new innovative organisational developments in ways of working, and there is an interest in this regard in how future developments are adding to the complexity of management moving forward and the decisions taken, which risks making the associated employment problems more widespread and entrenched. Research by Creative and Cultural Skills (2018) and Arts Council England (2017b) suggests shifts in funding and financing, flatter structures, the individualism that characterises work in parts of the industry, and the fact that many businesses are led by technical experts has led to a lack of leadership and management skills in the sector (Brighton et al 2016). These skills are amongst the most common gaps evident amongst those working in the sector (Work Foundation / ScreenSkills 2019; Creative and Cultural Skills 2018; Arts Council England 2017b) and general business and management skills are frequently cited by employers as skills difficult to find amongst candidates when recruiting (Spilsbury and Bakhshi 2019). The evidence also suggests the step from creative leader to business leader can be sizeable, leaving many unprepared, particularly in the face of rapid technological advancement, changing production methods and commercial models (Armstrong and Page 2015; Creative Industries Council 2014; Work Foundation / BFI 2016, Skills Development Scotland 2015).

In addition, there are questions over the quality of management practices within the creative industries, and the effects these are having on business success, employment opportunities and skills demands within the sector. One approach has been to explore the extent to which businesses adopt High Performance Working practices (HPW). This is where businesses deploy a management approach that is people-centred, and puts in place practices and ways of working that seek continuous improvement and strong business performance by valuing and nurturing their employees (Belt and Giles, 2009). HPW can also then set the vital conditions for more ‘Good Work’. Currently, there is a low adoption of such practices across the UK economy more generally and this is seen to be one key of the contributors to the persistent and deep-rooted UK productivity problem (Be the Business 2019). It is important therefore that the sector keeps abreast of general policy developments to understand the effects of poor leadership and management and what might best be done to help resolve them in a sector context. This will also play a crucial role in turn in driving better employment opportunities and more good work which optimises future performance through talent.
While evidence suggests that creative roles will be more resilient to automation and that creativity will become a skill in even greater demand in the future, the sector and the skills needed by those working in the creative industries are and will continue to change dramatically. The future effects of technology and other megatrends need to be fully understood. This is both in terms of growing demand for certain roles, but also changing skill needs within occupations, with an increasing need for design, data, digital and ‘fusion’ skills.

The creative industries have undergone immense change over the past two or three decades due to the effects of ongoing global ‘megatrends’ such as technological advancement, globalisation, shifting consumer behaviour, changing business models and organisational developments and policy measures. In this context of significant transformation, we have seen a rising interest in the future of work, with major studies published both in the UK (UKCES 2014; Nesta and Pearson 2017) and overseas (OECD 2017; World Economic Forum 2016; ILO 2017). Central to this interest is the impact on jobs and skills in particular from the proliferation of new technologies: such as virtual and augmented reality; automation and robotics; and the widespread developments in digitalisation including Artificial Intelligence and machine learning. With many parts of the creative industries at the vanguard of technology, pushing the frontiers, there is considerable debate about the future of work in the sector (Work Foundation / ScreenSkills 2019b; PWC 2018; Nesta, 2017).

This initial review of sector-specific evidence points to significant variation in the impact of these trends, and suggests many are still not fully understood. The effects of technology are arguably most widely felt, influencing the way consumers access content – covering online, non-linear viewing facilitated by on-demand streaming services and digital music streaming services (Work Foundation/ScreenSkills 2019b; IFPI, 2017); big data; consumer insight and digital advertising (Advertising Association, 2018b; WARC, 2019) and multi-channel marketing; and Building Information Modelling (BIM) in architecture.

Other trends are arguably more nuanced. For example, fiscal austerity has had a dramatic impact in particular on: funding in areas such as museums, galleries and libraries (Medoza, 2017; BOP Consulting & museums consultancy, 2016); globalisation on the opportunities for gaming or global cinema in international markets (Work Foundation / ScreenSkills 2019b); diminishing natural resources on the global fashion industry (Perry and Wood, 2019); and environmental policy on the design of buildings (Booker et al, 2018).

Different sources predict similar upcoming changes in skills requirements for work. Physical and basic (routine) skills are set to decline and higher cognitive skills (including creative skills), social and emotional skills and technological/digital skills are set to become increasingly important (Eurofound, 2018; McKinsey, 2018; NESTA, 2018). Various studies have sought to explore these effects. The ONS analysed the jobs of 20 million people in England in 2017 and found that 7.4% were at risk of automation (ONS 2019b). However, creative abilities are an area in which robots and algorithms still fall short. McKinsey’s study of automation analysed over 2,000 work activities in more than 800 occupations and has so far pointed towards machines’ proficiency at tactical
work, but revealed limited strides in work which requires imagination, creative analysis, common sense, or goal-setting and strategizing to reach that goal. These qualities are technically difficult and therefore more costly, to automate. Jobs requiring such skills – which dominate many creative occupations – are therefore likely to be more resilient to automation (NESTA, 2018; Pistrui, 2018; McKinsey, 2018; Osborne, Frey and Bakhshi, 2015). Indeed, evidence suggests that creativity is a skill in growing demand across the economy. Research for Nesta explored the link between the skills make-up of different occupations and their outlook for the future, and found that out of the 39 transferable skills considered, ‘creativity’ was the most significant predictor of an occupation’s propensity to become more important (as a share of the UK workforce) by 2030 (Easton and Djamaliéva 2018). Further, in January 2019, LinkedIn reported that its analysis of hundreds of thousands of job postings showed that creativity was among the 10 most in-demand skills (Petrone, 2019).

Furthermore, a range of studies also point to the importance of recognizing and developing general, and transferable, skills for life alongside creative skills, increasingly driven by modern forms of working. These cover areas, such as problem solving, interpersonal skills, personal agility, resilience and abilities to “unlearn and relearn” and adapt to change. Various studies have sought to measure the softer transferable skills required in a modern economy. For example, Nesta also in its future of work study highlighted a range of these “soft skills” growing in demand (Nesta / Pearson 2017). Taylor in his recent review of modern employment pointed to a common spine of “employability skills” (Taylor, 2017). The UK Employer Skills Survey (DfE 2018b) too shows that these are skills already in demand and not being met with reported shortages and gaps. For instance, employers reported a lack of digital skills, and a lack of complex analytical skills. The main people and personal skills lacking predominantly related to self-management skills, management and leadership, and sales and customer handling skills. With increasing changes at work they risk getting greater. The OECD Adult Skills Survey also draws attention to the global nature of this growing type of skills demand (2019). Demand for design skills is expected to continue to grow in the years ahead. Design lies at the heart of many creative industries – from fashion to advertising, architecture to publishing. But, design roles and skills are increasingly in need across the wider economy (Scottish Government 2019). Research by the Design Council suggests that over half of businesses expect demand for design-related skills to increase in their sector, and three-fifths suggested that design will contribute substantially to business improvement over the next 3 years (Design Council 2018).

“Everyone needs to have the capacity and skills to take advantage of new technology and have the confidence and skills to use the ever expanding range of tools to drive innovation.

Embracing new digital tools can change and enhance the way organisations run their operations, generate revenue, engage and broaden their audiences and influence their creative practices and processes.”

Creative Scotland (2014)
Evidence suggests the same is true for digital technology skills. Research by Tech Nation in partnership with LinkedIn suggests that ‘tech’ skills are found across a wide range of roles outside of traditional IT occupations and in sectors beyond Technology (Tech Nation 2018); and that the gap between the salaries of those in digital tech and non-digital tech roles is wide and growing (Tech City 2017). The technology industry particularly has opened up new avenues and markets for creative workers and the 2017 Bazalgette Review even called to reimagine these new techniques as a ‘creative-tech’ sector. There is an incredible growth in digital content, design and internet applications, which all require creative skills and are in great demand when applied in conjunction with digital or other technical abilities (McKinsey, 2019; WEF, 2018). Recent research by the PEC analysing 35 million UK online job adverts found such ‘createch’ skills to be important in a wide range of roles, and to be positively associated with those occupations that are predicted to be of growing importance in the future (Bakhshi, Djumalieva and Easton, 2019).

Figure 2.4: Evolving skill needs in the creative industries

**Average advertised salary in the UK in 2016**

- **£51k** for Digital Tech
- **£35k** for Non-Digital

**Firms combining arts and science skills show**

- 6% higher employment growth
- 10% more productive
- 3% more likely to bring radical innovations to market

59% of businesses believe design will contribute substantially to business improvement over the next 3 years

---

1. Design Council (2018)
2. Burning Glass, Tech City UK (2016)
3. Sipos et al. (2016)
Over the past decade there has been growing interest in the concept of ‘Fusion’ skills – across the wider economy but particularly within the creative industries. Research suggests we are seeing a convergence in technology and creative skill needs within roles, with increasing emphasis on the need for a blend of creative, technical and entrepreneurial skills (UKCES 2015; Bakhshi and Windsor 2015; Work Foundation / BFI 2016; Work Foundation / ScreenSkills 2019b). This is in line with wider research suggesting a growing need amongst employers across the economy for workers that offer ‘STEAM’ skills: that is science, technology, engineering and mathematics alongside ‘arts’, and particularly creativity and design skills (Cultural Learning Alliance 2017).

Evidence suggests that those businesses that are able to achieve this mix, successfully blend science with the arts, tend to be more innovative and grow faster than those that focus on individual disciplines alone (Siepel et al. 2016).

So there are considerable dividends on offer to those individuals and businesses that are able to keep pace with the evolving skill needs of the creative (& wider) economy, but a key question is whether shift in industry needs is being mirrored in the skills system.

**CHALLENGE 3. Valuing creative education**

While the creative industries are acknowledged as a vital part of the UK’s industrial strategy, there are growing concerns about the devaluing and deprioritisation of creative education, particularly in England. This starts in schools and runs right through to higher education, where there is an increasing emphasis on courses that offer strong economic returns, without recognising wider value of creativity and culture.

Despite greater recognition of the importance of the creative industries to the modern UK economy, many argue we have seen diminishing attention given to creativity and creative skills within education over the past decade.

“The roles in large publishing houses were traditionally sorted into teams such as marketing, sales, editorial and so forth. But in the past 5 to 10 years we have seen an increase in independent contractors and small publishing firms, particularly in the digital space.

Employment in this space requires ‘fusion skills’: a combination of creative and commercial and business skills. The sector requires ever more expertise around licensing & copyright, and generally adapting sales, marketing and business for a digital landscape, and particularly, for individuals to combine those skills in their own person, or to know how and where to outsource certain functions”

**Industry consultee, May 2019**
In 2015, the final report from the Warwick Commission concluded that the English education system fails to foster multi-disciplinarity, creativity and enterprise or identify and nurture creative and cultural talent. It suggests this would be to the detriment not only of the creative industries but the ability of the UK economy to develop world-class scientists, engineers and technologists (Warwick Commission, 2015). The review highlighted how current education policy is creating silos between ‘creative’ and STEM subjects, and forcing early specialisation and false opposition between Arts or Science disciplines.

This is something echoed by earlier reviews and wider research across the UK nations (UKCES 2015; Universities UK 2010; Creative Scotland / Scottish Government 2013; Smith 2013; Arts Council Wales / Welsh Government 2015, Barratt & Thomas 2016). In England, there is evidence of declining take-up of arts subjects at GCSE and A-level (Cultural Learning Alliance, 2018) and that few students combine Arts and Science disciplines at A-level (Warwick Commission 2015).

Figure 2.5: Creative learning in secondary education in England

**Between 2010 and 2018**
GCSE & A-Level entries in Arts subjects have fallen by

| 30% |

**In 2012/13, only**
8.4% of students
combined Arts and Science disciplines at AS Level

**Over a third of businesses**
agree that there aren’t enough young people studying arts & creative subjects in school

68%

---

*Cultural Learning Alliance data 2008
*Creative Nation (2017)
Nearly five years on and the final report from the Durham Commission on Creativity and Education suggests little progress has been made in addressing these issues.

The Commission reports an ongoing misconception that creativity is limited to the arts; finds huge disparity in teaching for creativity between schools, often reflecting socio-economic factors; and expresses deep concerns about the reduction in status of arts subjects.

While the arts are a core area of the curriculum in Wales, Scotland and Northern Ireland (including in the Baccalaureate), some argue the focus on STEM (Science, Technology, Engineering and Maths), the exclusion of arts subjects from the English Baccalaureate, the exemption of Academies and Free Schools from the curriculum, and declining numbers of teachers teaching creative or expressive arts is coming at cost to creative education in England (Easton, 2016; Arts Council England 2017a; NASUWT 2017).

Such developments are in spite of research suggesting that blending arts with STEM subjects to develop a broad range of technical and creative skills improves student engagement, innovation and problem-solving skills (Root-Bernstein, 2015; Utal and Cohen 2012; Groenendijk et al, 2013; Siepel et al, 2016). And, while the concept of ‘STEAM’ arrived well over a decade ago, research by the British Education Research Association found that terminology and research on STEAM was inconsistent and often lacked clarity (BERA, 2017). This is something that Scotland’s Curriculum for Excellence seeks to address, which includes expressive arts as one of eight curriculum areas, and also places emphasis on the importance of interdisciplinary learning, creating opportunities for young people to connect different areas of learning (Education Scotland 2019). As the market for higher education continues to evolve, there is also increasing scrutiny of universities offering courses in subjects where graduates struggle to find well-paid work, commensurate to their skill levels. Research by the IFS and others shows that, for graduates of creative arts and design, earning trajectories tend to lag those that have studied other disciplines and that after five years are only starting to approach the entry wages of those in other sectors (HESA, 2017; IFS, 2018; ONS, 2017 and Throsby and Zednik, 2010). The recent Augar Review of post-18 education also challenged whether public funding of creative arts and design and social studies subjects represented good value for taxpayers’ money given current levels of grant top-ups and debt write-offs (DfE, 2019b).

“The evidence shows that teaching for creativity confers personal, economic and social advantage. As a matter of social justice and national interest it should be available to all people, not only those who can afford it.”

Durham Commission on Creativity and Education (2019)

---

4 Adding ‘Arts and design’ to Science, technology, engineering and maths (STEM) to make ‘STEAM’
However, many suggest the ongoing emphasis on short-term graduate wage returns misses the true value of creative careers. There are a range of reasons for this including a failure to: capture earnings from self-employment (which accounts for over a third of employment in the sector); recognise career trajectories in parts of the creative industries which entail ‘portfolio building’ as an integral part of establishing a career in the sector; or acknowledge the wider value of the arts and creativity to individuals, the modern UK economy and society more generally (Scottish Funding Council 2019).

Research suggests that those who study arts and humanities subjects are more likely to participate in and contribute to civil society (Kreager 2013, Deloitte 2018). Reviews of the value of the arts and culture by Arts Council England, Creative Scotland and for the Welsh Government emphasised the role played in: supporting the wider economy through supply-chains, tourism and regeneration; in promoting community cohesion, tackling exclusion and isolation; and fostering good health and wellbeing (Arts Council England 2014, Creative Scotland / Scottish Government 2013; Andrews 2014).

So, in short, the assessment of value based solely on financial returns risks underestimating other ways in which creative skills contribute to society and the economy. The problem is further exacerbated by the fact that these other forms of value are not always easily identified, quantifiable, or agreed upon (DC Research 2012; AHRC, 2011; Deloitte, 2018). And despite an acknowledgement in the Augar Review of the need to move beyond graduate wage returns to better capture wider value, it provides no further information on how this can be done in practice. Even more worryingly, the review risks encouraging policy recommendations to be made based on narrower assessments of economic value that already exist with potentially detrimental consequences for the sector if left unaddressed.

**CHALLENGE 4. Careers and technical education**

Despite widespread reforms to different parts of the UK skills system to ensure it is fit for purpose for a modern world of work – including to careers education, apprenticeships and technical education – there are concerns that these are proving challenging to implement in parts of the creative industries, aren’t sufficiently aligned to industry needs in different parts of the UK, and are failing to create clear “future-proofed” learning pathways to support entry and progression within the sector.

Alongside broader discussion on how to better capture the value of creative education, lies the growing concerns that the skills system is failing to develop the technical skills required in many of the creative industries. The evidence review has particularly highlighted issues in England, albeit many of the underlying challenges are evident more widely across the UK nations. Despite there being no shortage of people looking to ‘break in’ to parts of the UK creative industries, there is widespread evidence of a lack of awareness amongst learners, parents and careers professionals of the job roles and career pathways in the sector (Creative
Industries Council 2018; Creative Scotland 2014 and 2016; Skills Development Scotland 2015; Arts Council Northern Ireland 2019, Arts Council Wales / Welsh Government 2015). This issue is particularly pronounced for film and tv (inc. animation and VFX), games, theatre, advertising and the digital sector. It is also directly linked to the lack of visibility, relative ‘newness’ and / or lower status of some roles compared to more traditional occupations; something compounded by portfolio working arrangements in some sub-sectors, the use of informal recruitment channels, and a lack of diversity (Creative and Cultural Skills 2018; Work Foundation / BFI 2016, ACE 2017; House of Lords 2018; Ecorys 2016; UK Theatre / SOLT 2018).

Even when individuals seek a career in the creative industries, they face significant barriers to developing the skills needed by employers.

The UK’s long-standing focus on academic education at the expense of vocational learning has had a sizeable impact on the availability, quality and take-up of technical courses related to the creative industries. Frequent reforms to technical education, particularly in England, has also aggravated this problem with continual reinventions to core programmes offered such as apprenticeships. Indeed, many of the failures of the skills system identified by the Sainsbury’s Review – particularly that technical qualifications were viewed as inferior to academics ones, divorced from the actual occupations they should prepare learners for, and not understood or sought by employers (DfE/BEIS 2016) – resonate strongly in the creative industries. This also means, however, that the sector stands to gain greatly from widespread reforms now being implemented in post-16 education in England, and which bring England into closer alignment, certainly in terms of ‘policy intent’, with earlier developments in Wales, Scotland and Northern Ireland.

Wherever they are on their creative journey, young people need access to balanced and informative advice on careers so that they are aware of the opportunities available and the skills required.

We recognise that there is work to be done with stakeholders and partners such as sector skills councils, and our national cultural organisations, on how young people can gain a better understanding about pathways into this sector.


Even when individuals seek a career in the creative industries, they face significant barriers to developing the skills needed by employers.

84% of businesses agreed young people are unaware of the breadth of career paths available in the creative & cultural sector7

7Creative Nation (2017)
However, five years on from the announcement that Government would introduce a levy to fund apprenticeships, and two years into its implementation, there remain ongoing questions around the value the creative industries are realising from this investment. The number of apprenticeships taken in disciplines aligned to the creative industries remains extremely low across all UK nations (Mirza-Davies, 2016, Skills Development Scotland 2019; StatWales 2019, ApprenticeshipsNI 2019). Further, while the Creative Industry Council estimates that the sector will invest £75 million in Apprenticeships through levy contributions (Bazalgette 2017), research by ScreenSkills suggests that the sector will struggle to spend a little over one quarter of that; estimating that around £35m is likely to be lost from the creative industries skills system (ScreenSkills 2018).

Research points to a multitude of challenges to implementing the apprenticeship reforms. These are most pronounced in England, where apprenticeship frameworks are being replaced by new standards and where the Levy is only available to support apprenticeships and is accessible via the new Digital Apprenticeship Service. So for employers located in England this presents a number of challenges (see Figure 2.7), not least: a lack of new ‘Standards’ for a wide range of job roles in the creative industries and in particular in film and TV (Work Foundation / BFI 2016, ScreenSkills 2018b); and the fragmented approach to apprenticeships, which negatively impacts their effectiveness (Nordicity & Smith, 2017).

While greater continuity in the Apprenticeship offer and administration and enhanced flexibilities around how the Levy is spent (for example, through the Flexible Workforce...
Development Fund in Scotland) means these issues are less pronounced in other UK nations, take-up of apprenticeships remains low, in part as a consequence of the distinct structure and characteristics of the creative industries and economy. Given the sector is dominated by SMEs and micro businesses, short-term project-based working and freelancing, businesses will have fewer employees who are eligible to be apprentices and are likely to face additional challenges in delivering them (Bazalgette 2017). Thus, wide adoption and use is being constrained.

For example, micro businesses struggle to cover the cost of apprentice salaries or accommodate time away from the workplace for the 20% of training that is ‘off-the-job’. The 12 month contract rule can also be difficult to commit to where companies work mainly on short-term projects – like in filmmaking where productions are often delivered through special purpose vehicles (SPVs) that only exist for the duration of the project (Creative Industries Council 2016; ScreenSkills 2018a). As fiscal austerity has seen a lack of public investment in particular in Sector Skills Councils since 2010, the infrastructure to support industry-led and industry-wide collaborative skills solutions has become substantially weakened and fragmented by 2019. As a result, this has limited the opportunities to collectively design and deliver relevant, responsive and high quality technical programmes sector by sector, to share skills investments and encourage the portability of skills acquisition and use between jobs, as seen in the past with, for example, the use of tools such as skills passports and individual learning accounts alongside technical programmes.

The UK government has granted additional flexibilities more recently in England and is investing in new standards and approaches for the sector, including the recently announced £100,000 to fund a pilot for 25 new apprentices in the film and TV sector. These apprentices will be employed by a provider and will undertake multiple placements on different film and TV productions over the course of the 12-month programme (DCMS 2019b), similar to the shared apprenticeship programme operating in Scotland (Skills Development Scotland 2019b). Such developments, clearly, provide the potential to reinvigorate stronger collective action in future, albeit provider-led, and to assess what might work in key sub-sectors to find industry-wide skills solutions that can be more relevant and therefore work in enhancing employment opportunities and skills, and supporting employment retention and progression.

More generally, however, positive developments are more limited and industry stakeholders are calling for a range of provisions to help overcome the challenges to implementing apprenticeship reforms in the creative industries. These include: enabling levy funds to be used to develop new standards for the sector; allowing unlimited transfer of funds to Apprenticeship Training Agencies or to fund placements in the supply chain; more modular apprenticeships that enable learners to build up credits towards their apprenticeships over a long period of time; and using levy funds to create a more flexible training fund enabling employers to choose how best to spend their investment, connecting this with investment made through the existing Skills Funds in parts of the sector (Bazalgette 2017, Creative Industries Council 2016, ScreenSkills 2018, Work Foundation / BFI 2016). It will be important for the Creative Industries PEC to track
ongoing developments in technical education and skills policy, monitoring what elements are adopted and reviewing the effects they have.

Similar challenges are associated with the implementation of the new T Levels in England. Evidence suggests there is general support within the sector for enhanced investment in and simplification of technical qualifications; and for the scope for T Levels to enhance work readiness and employability skills, support cleaner progression pathways in learning and work, and ‘level the playing field’ for those that cannot afford to participate in unpaid internships (DfE 2018a).

But industry stakeholders have raised questions about how current plans for the implementation of T Levels will work in practice in the creative industries. These echo broader concerns that are common to many sectors, but also emphasise how the distinct structural make-up, spatial concentrations, and working practices within the creative industries pose additional challenges.

For example, in an industry dominated by those who hold degrees and where businesses often hire through informal networks, will employers, students and parents accept T Levels as a credible and high-quality alternative to academic education in developing a career in the sector? Is the work placement component feasible, particularly in rural areas where there are limited numbers of creative employers and given micro-businesses may struggle to offer the full 315 hours or have sufficient staff capacity to effectively manage and support students? Is exam-based assessment the most appropriate way to assess learning in a modern world and in particular development in creative subject areas, and how can we fairly grade projects that have the potential to vary hugely in their originality, quality and focus? And how can businesses ensure the health and safety of young adults when work is often outside of 9 to 5 hours, or protect themselves when students could potentially be exposed to commercially sensitive information with no provisions in place to prevent disclosure?

In order to address these issues, many are calling for greater flexibility, funding and other support for students, employers and providers. This includes covering travel and overnight accommodation costs for students from rural areas and / or offering part-time, extended or home-based options. For employers, it is vital that administration and reporting is not burdensome, there is flexibility in the timing of placements and potential for these to be split across a number of employers; and that an adequately funded Employer Support Package is accompanied by sector-specific guidance, case studies, marketing and promotion (Bennett 2018; Whybrew 2018; Tambling 2018; ACE 2018c; UK Theatre / SOLT 2018). The recent update by the Department for Education on T Level Industry Placements shows signs that policy-makers are working to accommodate the needs of learners, providers and employers; offering concessions and enhanced support in a range of areas (DfE 2019a). But, there remains a range of challenges that must be resolved in order to ensure that technical education reforms in England work better for the creative industries.
## Figure 2.7: Challenges to implementing English technical education reform in the Creative Industries

<table>
<thead>
<tr>
<th>DISTINCT CHARACTERISTICS OF THE CI SECTOR</th>
<th>IMPLEMENTATION CHALLENGES</th>
<th>POTENTIAL SOLUTIONS?</th>
</tr>
</thead>
<tbody>
<tr>
<td>➤ Dominated by SMEs and micro businesses</td>
<td>Complexity and lack of suitable standards for a range of creative roles</td>
<td>Development of new standards, focusing on priority areas of need; enabling the use of the levy to fund this activity</td>
</tr>
<tr>
<td>➤ Short-term, project-based working and use of SPVs</td>
<td>Micro businesses struggle to accommodate cost of apprentice salaries and 20% time spent off-the-job training</td>
<td>Unlimited pooling and transferring of digital vouchers, to Apprenticeship Training Agencies / firms in the supply chain</td>
</tr>
<tr>
<td>➤ High levels of freelancing</td>
<td>Smaller businesses lack the capacity and expertise to develop new standards, which are costly and can take 3-4 years to develop</td>
<td>Modular apprenticeships that enable learners to build up credits towards their apprenticeships over a long period of time</td>
</tr>
<tr>
<td>➤ Existing skills levies already operating in parts of the sector</td>
<td>Specialist nature of some skill areas and costs of providing some standards is commercially unsustainable</td>
<td>Using levy funds to create a flexible training fund, empowering employers and aligning with investment made through Skills Funds in parts of the sector</td>
</tr>
<tr>
<td>➤ Spatial concentration of the creative industries, particularly in London and the South East and around urban centres</td>
<td>Lack of confidence that T Levels will be viewed as a credible alternative to academic education, phasing out applied general qualifications that often provide routes into higher education</td>
<td>National campaign of active marketing and promotion of the offer to the sector and facilitating links with industry</td>
</tr>
<tr>
<td>➤ Dominated by those who hold degrees, as opposed to technical qualifications</td>
<td>Providers may lack relevant professional experience, industry knowledge, networks and facilities to ensure quality</td>
<td>Greater flexibility and funding for students, inc. travel &amp; accommodation costs, part-time and extended or home-based options</td>
</tr>
<tr>
<td>➤ Atypical recruitment practices</td>
<td>Limited placement opportunities in parts of the UK where there are few creative employers</td>
<td>Minimising administrative burden for employers, while offering flexibility in hours and adequately funded Employer Support Package</td>
</tr>
<tr>
<td>➤ Creative nature of work, focussed around originality and intangibles</td>
<td>Micro businesses struggle to offer 315 placement hours, pay participants and have sufficient staff capacity to offer support and manage students</td>
<td>Potential to split work placements across multiple employers or scope for simulated, project working involving industry experts</td>
</tr>
</tbody>
</table>

CHALLENGE 5. Accessing international talent

There are growing concerns around the impact of Brexit on the ability of the creative industries to access international talent. While many creative occupations feature on the updated Shortage Occupation List, some have challenged whether the current £30k minimum salary is too high and will prove too restrictive for the sector.

The creative industries has a large global value and appeal. As such, in addition to ensuring the development of a strong domestic supply of skills to the sector, employers in the creative industries have long-since relied on international talent to enable growth, meet skill needs and access international markets.

Estimates of exactly what share of the creative industries workforce are non-UK nationals vary considerably, from 11% (based on the Labour Force Survey) to 25-30% (House of Commons / DCMS Committee 2018).

Recent figures from the CIC Migration and Skills Survey suggest that 18% of businesses employ at least one EU (non-UK) national, which suggests that more than one in five businesses depend on talent from elsewhere in the EU (Department for Education 2018b).

While headline figures may vary, few would challenge the role played by international talent in enabling the success of the creative industries. Evidence shows that creative businesses turn to migrant labour to access skills or talents not available in the UK workforce. This is particularly to target certain foreign languages and specialist work experience, technical skills, qualifications and specific software. In sharp contrast to the picture across the UK economy, creative businesses seek highly skilled migrants, including programmers, software developers and web designers, architects and product, fashion and graphic designers (Spilsbury and Bakhshi 2019). More generally across the economy, employers elsewhere rely on migrant labour to fill skilled trade roles and elementary occupations.

There is, however, considerable variation in the extent to which different sub-sectors rely on migrant workers. Just under a third of businesses working in Architecture, Design and Crafts, and one in four employers in ICT and Video Games employ non-UK nationals. The use of migrant labour is also higher amongst larger businesses, those located in London and the South East (Spilsbury and Bakhshi 2019; Tech City / Nesta 2017), as well as those more engaged in international markets.

Our global reputation has made us a magnet for world-class talent who, in turn, have helped build our international renown.

It would be reckless to lose this hard-won success. Therefore, we must radically reimagine our immigration system. Plans to end freedom of movement following Brexit imperil the creative industries and threaten further growth.

Creative Industries Federation (2017)
Music expected to be further affected by the end of free movement of labour (WF/ScreenSkills 2019a; Incorporated Society of Musicians, 2018).

Ninety percent of London-based advertising firms, for example, employ non-British nationals (Advertising Association, 2019). Similarly, businesses engaged in cross-border projects (such as Film and TV and Live Music) expect to be further affected by the end of free movement of labour (Work Foundation/ScreenSkills 2019a; Incorporated Society of Musicians, 2018).

Given this picture, employers in the creative industries are understandably concerned about the potential impact of Britain’s exit from the EU on their ability to access European talent. The burgeoning games industry, for example, competes for talent in the global labour market (UKIE 2017); and 70% of employers in this sector reported being worried about being able to recruit the workforce needed after Brexit (Spilsbury and Bakhshi 2019).

A comparative study of industry literature suggests that ‘Advertising and Marketing’, ‘Architecture’ as well as ‘Film and TV’ and ‘IT and software’ are also particularly concerned with Brexit’s potential impact on the sector’s ability to attract and retain international workers. In Advertising and marketing, the sector relies on these workers engaged specifically with international clients and audiences, and hence international markets compose a large share
of the overall revenue generated (Advertising Association, 2018a and 2018b; House of Lords, 2018; Ofcom 2017).

Architecture, Film and TV and IT and software industry sources refer predominantly to existing skills shortages in the UK, which could be exacerbated by withdrawing from EU and the consequent limits on the free movement of people. Of further concern, there is evidence that in Architecture, Advertising and Film and TV that international workers have already started moving away in anticipation of Brexit (Work Foundation / ScreenSkills 2019b; Advertising Association 2018a, RIBA 2019a).

In light of the vital role international talent plays as part of the creative workforce, many industry stakeholders have raised issues about how plans for Britain’s new immigration system post-Brexit will impact the sector (UKIE 2017, Easton 2016, Creative Industries Federation 2017, Scottish Government 2019). These relate to: the ability to access top talent from the EU and the rest of the world; the risk of increased administrative burden faced by employers; delays with getting visas approved; and constraints or difficulties for UK workers abroad (Creative Industries Federation 2017). Additionally, research for the Scottish Government suggests that the UK’s current post-study work offer, and that proposed as part of the new post-Brexit immigration system, compares poorly with international competitors undermining the retention of international students (Trevena 2019).

While many of these concerns are shared by businesses operating in all parts of the UK economy, the creative industries face additional challenges associated with comparatively low pay and high rates of freelance (self-employment) and part-time working in the sector. These factors may mean even highly skilled workers fail to reach the salary threshold required to obtain a Tier 2 visa, and those that are self-employed struggle to do so given the advanced criteria and caps on the numbers of exceptional talent and / or innovation visas (Creative Industries Federation 2017). Currently, the Migration Advisory Committee are accepting evidence on salary thresholds and implementing a Points Based System; and this creates an important opportunity for businesses, industry trade bodies and other stakeholders to shape the future of our immigration system in a way that works for the unique structures within the creative industries.

---

5 Tier 2 salary thresholds are set either at £30,000 or the 25th percentile for pay in the occupation in question, whichever is higher.

Supported by
Creative industries, occupations and skills are in growing demand across the economy, but the supply of talent to the sector is failing to keep pace, which risks increasing deficiencies and mismatches to critical levels. As creative skills are in demand in other sectors of the economy, this is generating fierce competition for talent, accentuating skills shortages in some sub-sectors. But, cuts due to austerity measures are also stimulating oversupply in others parts of the sector at the same time.

Getting immigration policy right is particularly vital in light of evidence that the domestic pipeline of talent to the sector is failing to keep pace with rapid expansion in demand or deliver the skills needed to support the ongoing success of the creative industries.

Research by Creative and Cultural Skills suggests that over 30% of businesses in the sector struggle to recruit suitably qualified, skilled and experienced staff (Creative and Cultural Skills 2018). This is consistent with research undertaken in the screen industries, where one third of employers reported recruitment difficulties (Work Foundation / ScreenSkills 2019a).

In light of such concerns, new research for the Creative Industries PEC finds that 42% of employers had skills issues, where they struggled to recruit people (for new roles or to replace staff that have left) with the required skills; or where staff lacked the skills required to do their job effectively and meet business needs (Spilsbury and Bakhshi, 2019). These are very significant in scale compared to other parts of the UK economy.

Unsurprisingly, then, recruitment difficulties and skills shortages are having a sizeable impact on the sector and in particular the workload for other staff. They also make it difficult for businesses to meet customer service expectations and quality standards and cause delays in introducing new products, services, working practices or technology; resulting in a loss of business or increased operating costs (Work Foundation / ScreenSkills 2019a; Creative and Cultural Skills 2018).

The picture is however more nuanced, with skills shortages widespread in sectors like creative ‘ICT and Games’; ‘Film and TV’ (including ‘VFX and Animation’) (Spilsbury and Bakhshi 2019; Work Foundation / BFI 2016; Work Foundation / ScreenSkills 2019a). At the same time, in other sectors such as publishing, museums and music, performing and visual arts there is anecdotal evidence of competition between workers for too few opportunities (oversupply).
The nature of skills shortages tends to vary from sector to sector (and also between nations and regions), but overall there is a recognised need for **business and transferable skills** (such as finance, marketing and digital skills) as well as **technical or vocational skills**. Shortages in these areas are specific to a range of roles such as computer programmers and software developers, architects, graphic designers, line producers, production accountants, editors, Visual FX artists and animators (Creative and Cultural Skills 2018, Spilsbury and Bakhshi 2019; Work Foundation / ScreenSkills 2019a, Barnes et al 2018, UK Theatre / SOLT 2018).

The recent review of the Shortage Occupation List (SOL) serves to emphasise the scale of skill shortages within the creative industries and the current level of policy recognition. Indeed, the Migration Advisory Committee (MAC) has recommended the inclusion of a further four Standard Occupational Classification (SOC) codes (Figure 2.8) and a wide range of additional roles within the creative industries to the existing list of shortage occupations. For example, this covers: Games Designers (included within 2136: Programmers and Software Development Professionals); UX and VFX Designers (part of 2137: Web Design and Development Professionals); 3D artists, animators, VFX artists, storyboards; and a whole host of other roles included within the Artists code (3411). Figure 2.8: Skills shortages in the creative industries

### Shortage Occupations

- Programmers & software development professionals (2136)
- Web design & development professionals (2137)
- Architects (2431) *
- Artists (3411) *
- Dancers & choreographers (3414) *
- Musicians (3415) *
- Arts officers, producers & directors (3416) *
- Graphic Designers (3421) *

* New addition to the SOL

Select jobs within this occupation code
Evidence suggests the causes of skill shortages are wide-ranging. For instance issues include: a lack of awareness of opportunities and career pathways within the industry (House of Lords 2018; ACE, 2017a); a failure of the talent pipeline to keep pace with growing demand, and a misalignment between those skills being developed and those needed by employers; the recruitment practices used by many creative businesses with an emphasis on informal channels and networks which limit the pool from which employers recruit (Creative Skillset 2015b; Work Foundation / BFI 2016); and fierce competition for workers that have transferable skills (e.g. digital skills) with other parts of the economy (Work Foundation / ScreenSkills 2019a, Creative and Cultural Skills 2018; Arts Professional 2018a; UK Live Music 2018).

**CHALLENGE 7. Skills Gaps, professional development & the freelance workforce**

There is increasing awareness in a fast paced, modern world that a lack of industry investment in learning and development for those already in work, and support for lifelong learning, is creating skill deficiencies in the workplace. This is particularly in areas which have been / will be subject to substantial future change.

Skills challenges across the creative industries take various forms and, in addition to skills shortages faced by businesses when they are recruiting, there are also challenges employers face in keeping the skills of the existing workforce up to date and ensuring workers are fully proficient at what they do – that is skills gaps. Recent evidence highlights that around one third of employers in the creative industries report skills deficiencies (or skills gaps) amongst the current workforce – at all levels and in all occupations (Creative and Cultural Skills, 2018). This is consistent with wider evidence for the screen industries, which suggests 35% of businesses report skills gaps; with challenges particularly pronounced in those sectors that have been growing rapidly and subject to substantial shift in skills needs in the face of rapid technological advancement – such as Animation and VFX (Work Foundation / Screen Skills, 2019a).

As we note earlier, leadership and management skills are an area where businesses report particular problems. These are the most commonly reported area of skills deficiency reported in the ScreenSkills Employer Survey 2019. Further, while creative businesses recognise technological change as important to their organisation’s future success, over a third of business leaders lack confidence in their ability to deliver this change (Creative and Cultural Skills 2018).
Supported by

Other business skills - particularly marketing, communications, fundraising and financial management are also key areas where existing staff lack sufficient skills to be effective in their roles. Alongside this were deficiencies in vocational skills related to creative design and digital skills for creating art, marketing and hosting art, as well as specialised or complex computer programming skills (Creative and Cultural Skills 2018; Work Foundation / ScreenSkills 2019).

Further, there is considerable research evidencing a digital skills gap, not just in the creative industries, but across a range of sectors, including construction and manufacturing, (Ecorys, 2016). The issue has exacerbated the fact that the creative industries are competing with other sectors, where earnings are often considerably greater than those on offer in the sector (Creative and Cultural Skills 2018).

While skills gaps can have a sizeable impact on organisations and the people they employ; resulting in an increase in workload for existing staff, higher operating costs, and difficulties or delays in introducing new products, services or working practices – all factors that have the potential to limit the long-term success of creative businesses.

Often the solution to tackling skills gaps lies in training – for leaders and/or their workforce. In a dynamic and fast-changing global marketplace, the importance of workforce learning (including formal and informal learning), training and development cannot be overstated. Research has consistently found a relationship between workforce training and the improvement of organisational retention, productivity and profitability (Aguinis & Kraiger, 2009; Das & Baruah, 2013). The empowerment of employees through training has been found to have a substantially positive effect on job satisfaction (Hanaysha & Tahir, 2016) and organisational commitment (Hanaysha, 2016). Over seven in ten creative businesses that report skills gaps amongst their workforce had taken steps to address them, with around three quarters undertaking training activity; and a similar share seeking to develop partnerships or collaborative working with other organisations.

Despite this, there is evidence that investment in skills within many parts of the creative industries is insufficient. For instance, evidence from the ScreenSkills Employer Survey suggests that while three fifths of businesses had arranged or funded training for their staff over the past

(creative and cultural skills, 2018)

- [Business marketing and communications: 53%]
- [Problem-solving skills: 48%]
- [Vocational skills relating to business support occupations: 45%]
- [Fundraising skills: 44%]
- [Social media skills: 40%]
12 months, only one third had done so for freelancers amongst their workforce. This also means that around two fifths hadn’t. Further, data from the Employer Skills Survey suggests training in the sub-sector is more likely to be on-the-job and training intensity (% of staff trained and training days per staff member) was significantly lower that average across all industries (DfE 2018). This is despite the fact that there are many factors placing an increasing emphasis on the need for ongoing investment.

For example, in the context of the future of work and the ways in which megatrends are driving substantial and continual shifts in the skills needed in the creative industries, continued professional development becomes ever more vital. This is especially as competition globally from other countries to gain the upper hand and press ahead intensifies. Notwithstanding this, only one third of businesses in the screen sector believe that their current training is insufficient to meet future skills needs (Work Foundation / ScreenSkills, 2019a). Given too that many creative businesses are also experiencing skills shortages and recruitment difficulties and are often responding by appointing at a lower skill level than originally sought, with the intent to invest in training, this is reason to further question the adequacy of current skills investment and work force development practices (DfE, 2018b, Work Foundation / ScreenSkills 2019a). Getting apprenticeships working for the creative industries is seen as key to preparing the workforce for future change (Creative and Cultural Skills 2018). But evidence from the ScreenSkills Foresighting Analysis outlines there is work still to do. Not only is there a requirement to support upskilling and reskilling of existing workers to ensure that their skills remain relevant in the face of industry changes, but also to address the training needs of the many freelancers too, who as we have seen earlier face significant employment uncertainty and pressures on their time and resources.

**CHALLENGE 8. Maximising the value of diverse talent**

The Creative industries are failing to make use of the diverse talent that exists in the UK. Consequently, there are growing concerns that the opportunities created in this vibrant part of the UK economy are ‘out of reach’ for many and that in some creative sectors and occupations the profile of the workforce looks dramatically different to the UK population.

Despite the success of the creative industries, the sector is not adequately making use of the full potential of the total working population, and the creative industries workforce is therefore not sufficiently diverse (HM Government 2018; Creative Industries Council 2015; Skills Development Scotland 2015, EHRC 2016).

Across the UK’s creative industries, 37% of employment is comprised of women (compared to the all industry average of 47% of the UK workforce) with female representation lowest in IT, software and computer services (21%) and architecture (34%) (DCMS 2019); and in visual effects (UK Screen Alliance 2019).

Although at a headline level, the ethnic profile of the UK creative workforce is broadly in line with all industries, the picture is varies considerably between different sub-sectors, where for example IT, the largest creative sub-sector, is an area where those from ethnic minority backgrounds comprise around one third of the workforce. Similarly, recent research by the UK
Screen Alliance found that those from Black, Asian and Minority Ethnic (BAME) backgrounds comprise 19% of the workforce in VFX and 18% in post-production (UK Screen Alliance 2019). The overall profile is also heavily affected by the geographical concentration of the creative industries - with much of the sector concentrated in ethnically diverse London (Creative and Cultural Skills 2019; Oakley et al 2017).

Those with a disability are also underrepresented (comprising 11% of the creative industries workforce compared to 13% of the UK workforce) (DCMS 2019); and there is also a persistent underrepresentation of working class background; particularly in publishing, film, TV and radio, music, performing and visual arts (Create London 2018; O’Brien et al 2016). Furthermore, the Arts Council England (2018b) noted that people with disabilities are underrepresented in senior positions, and the first cut of data from Project Diamond which measures diversity of programmes commissioned by five major broadcasters, found that just 5.5% of off-screen contributions were made by those with a disability (Creative Diversity Network 2017).

Figure 2.9: Diversity in the UK creative industries

Even when minority groups are successful in ‘getting in’ to the industry; they face substantial barriers to ‘getting on’; with evidence of pay gaps and a lack of diverse talent in senior and key creative roles (see for example: Gill, 2014; Arts Council England, 2018a; O’Brien, 2016;
Studies have shown that there are pervasive gender pay gaps in nearly every industry, and that women often do not progress as quickly in their careers as do men. Furthermore, they encounter more barriers than their male counterparts in maintaining and progressing their careers (Gill, 2014; Eikhof et al, 2018; Next Gen Skills Academy, 2015; Bookseller, 2018). In the UK tech industry, 35% of women surveyed in 2018 and early 2019 felt their gender had negatively affected their career progression (BIMA, 2019).

The reasons behind these trends are multi-faceted. Research by the Arts Council England found that barriers for disabled people include physical access; attitudes towards disability; inaccessible training provisions; recruitment practices; working culture; lack of role models and the ‘trap’ of benefits and lack of support.

Others argue that hiring is often a form of ‘cultural matching’ (Rivera 2015, Koppman 2016), meaning those who do not reflect the existing makeup of creative jobs are less likely to be hired. Additionally, the use of informal and formal networks in recruitment for projects and jobs can act to further undermine the ability of minority groups to access employment opportunities (Work Foundation / BFI 2016).

Unpaid internships and the propensity for freelance work and portfolio careers can act to deter or exclude those that are not subsidised by parental support and lack the financial resources to self-fund during their early career (Sutton Trust 2018). Furthermore, the geographical clustering of creative opportunities in the South East and London, where the cost of living is much higher than in the rest of the country and which, additionally makes it more difficult for individuals from low income backgrounds compared with middle or high income backgrounds to bear (Friedman l 2016)

“People who have already experienced disadvantage faces face further barriers to getting in and progressing”

“The industry has woken up to the fact it is very pale, male and stale. I’m hoping that the efforts we’re putting in now will lead to real change”

“There is lots going such as unconscious bias training, inclusive recruitment and transparency around pay. But ultimately it’s about having genuinely inclusive workplaces - what does that look like in practice? “
Ultimately, the lack of diversity in the creative industries acts to undermine the future success of the creative industries in a number of ways. For instance, a diverse workforce acts to maximise the "personalisation" or "identification" potential of the audience with those working in the sector and hence to enhance the relevance or appeal of the products and services. There is also increasing recognition that diversity can be understood as "cognitive difference" which can help foster innovation and help escape group think (de Vaan et al, 2015). Further, recruiting from a relatively more limited pool of talent only serves to exacerbate the significant skill shortages impacting the creative industries (Work Foundation / BFI 2016; Arts Council Northern Ireland 2013).

"We believe in fair access to careers in the creative and cultural industries, especially for our most talented people living in disadvantaged communities. Providing accessible routes into the sector is important if we are to avoid losing a generation of creative talent.
Arts Council Northern Ireland (2013)

**CHALLENGE 9. Strengthening local talent pools across the UK**

Relatedly, not all parts of the UK are benefitting from growth opportunities in the creative industries. The industries are deeply segmented and parts of the sector are heavily London and the South East centric. In turn, many of the challenges to growing thriving creative clusters elsewhere in the country are impeded by the development and retention of creative talent.

The importance of creative industries as a new mode of economic activity in the context of deindustrialisation and urban regeneration was central to the creation of the Government Department for Culture, Media, and Sport in the UK in 1998.

Despite this, creative sector employment and businesses are highly concentrated geographically in London and the South East (DCMS 2019a), and are furthermore clustered in urban hubs including cities in Yorkshire and Belfast (Bernick et al, 2017: Garcia and Bakhshi, 2016). Some sectors exhibit more signs of clustering than others, for example, film, TV, radio and photography is highly concentrated in London (47% of all enterprises in this sector) and has clusters in a few other urban areas around the UK.

**Supported by**

[Supported by logos]
Economic theory of course tells us that spatial clustering of the creative industries is a predictable outcome (for example see Porter 1992). This is largely derived from the positive benefits and spillovers that businesses realise from being closely located to those engaged in similar activities (think how strong local infrastructure, local networks of creative talent, potential collaborators and competitors, and established institutions could act to reduce production and transaction costs, increase efficiency and so on). However, what this means is that while creative activity is widespread, the economic success story is only confined to specific parts of the UK.

“The positive story of the UK Creative Industries to date has been achieved despite unequal distribution of opportunities, skills, finance and knowledge; with around half of the growth and jobs in the sector centred in London and the South East”

Sir Peter Bazalgette (2017)
Further, spatial clustering of creative activities becomes self-perpetuating. For example, the concentration of Film and TV in London has a ‘drawing effect’ on skilled workers across the country. In London, workers have more chances to determine their own career trajectory. This is because they are more likely to be able to choose from a myriad of projects that could support their development in a variety of ways. By virtue of availability of a greater array of opportunities this preselects and determines the career options and further enhances the trajectory of the creative worker, compared with more limited options from fewer projects in smaller creative hubs in other regions and nations. Unsurprisingly therefore, workers gravitate towards existing clusters with a critical mass of employment opportunities across many organisations, leaving the local talent pool depleted, and undermining future investment potential (Mateos-Garcia and Sapsed, 2011). As such, virtuous or vicious cycles are initiated and continue. Ultimately, past approaches to building creative clusters have at best showed mixed success (Garcia and Bakhshi 2016).

Recent research by the PEC highlights how sizeable the challenge is, finding that in order to catch up with London and the South East creative clusters in other UK regions and nations would need to witness employment growth at five times the current rate; and productivity growth 3 percentage points higher than the South East over the next twenty years (Tether, B 2019).

Despite this, there is currently considerable policy focus on building prosperous places across the UK and promoting the development of thriving creative clusters in the nations and regions outside of London and the South East (HM Government 2018, 2017; Scottish Government 2019). Developing strong local talent pools, and leveraging the wider benefits of education institutions (for example, as anchor institutions) will be vital in supporting aspirations to build thriving creative clusters across the country (Garcia and Bakhshi 2016).

“The presence of a skilled workforce has been proven to attract investment: cities that invest now to help build the creative workforce for 2030 and beyond will recoup the benefits of rising employment, increased GVA and higher levels of inward investment, creating a virtuous cycle of growth”

Creative Industries Council (2015)
3. Information failures and evidence gaps

3.1 Assessment of the evidence base

At such a vital time, when the Creative Industries PEC is establishing itself and finding its feet, our evidence synthesis is playing a crucial role, reviewing the most pressing priorities for the years ahead, so that investments can be more effectively targeted. It has highlighted that there is already a vast array of evidence pertaining to skills, talent and diversity issues in the creative industries. This not only includes research and analysis from academia and the wider research community, but also a wealth of insights and evidence compiled by wider stakeholders such as: national bodies with a stake in the arts, culture and creative industries; sectoral and sub-sector industry and occupational trade bodies; Government and others. But, despite this, there is more that needs to be done.

Our overarching assessment of the evidence base points to a number of information failures, in particular relating to:

- A failure of official data to adequately capture specific parts of the creative industries, such as the games sector (which is subsumed within wider software development activities) (Mullen, Barr and Mason 2019), self-employed workers or microbusinesses (which are often excluded from official datasets).
- Delays in the update of official classifications, (e.g. the Standard Industrial and Occupational Classifications) impact the creative industries disproportionately, given the pace of change evident in the sector. This means they fail to reflect relatively new sectors (such as VFX), business models and evolving ‘careers of the future’, for example.
- Failure of official data to provide data granularity at a level that allows analysis specific sub-sectors, occupations, or spatial areas. This is particularly important given the wide variety of activities that comprise the creative industries and the substantial variation we observe in their characteristics and challenges.
- A lack of up to date insight on different aspects of the creative industries and economy. This includes issues such as: industry employment and skills needs (e.g. the nature of skills, knowledge and capability requirements); careers of the future and the breadth of opportunities; the supply of skills to the sector; skill and demand deficiencies (i.e. shortages and gaps versus skills over and under-utilisation); or the education or training that would best equip learners with the skills they need to succeed in the creative industries.
- Fragmentation in the evidence base, where different stakeholders collect, commission or interrogate data and research in different ways, using different methods, measurement and definitions, which inhibits comparisons (i.e. the ease of...
3.2 Identifying specific knowledge gaps

1. **Job quality**

   While we now benefit from growing data on the number of jobs in this part of the economy; we lack real insight or transparency around the quality of work in the sector.

   While analysis earlier in this synthesis used a variety of data and research to emphasise that in some parts of the sector work is low-paid, precarious and intense; we currently lack strong quantitative baseline on this, to benchmark performance against other sectors or to measure progress in improving job quality over time. Understanding the conditions to create more good work across the sector is fundamental if the full future benefits for individuals and businesses alike are to be realised. Further, there are particular areas – such as the impact of working conditions on the health and wellbeing of the creative workforce – where we know relatively little about the picture or ‘what works’ in supporting wellbeing amongst those working in this challenging environment.

2. **Strategic skill needs**

   The demand for labour has grown substantially over the past two decades as the creative industries have thrived. Further, the success and pace of change is expected to continue, with evidence that while the sector will be more resilient to automation, the jobs and skills needed in the future will be substantially transformed.

   Yet we lack an accurate, coherent and up to date view of which careers and skills are, and will be, in greatest demand in the future; undermining strategic workforce planning and fully future-proofed preparations. Despite high-level discussion of a growing need for ‘fusion’ skills, general soft, design and digital skills, we lack a detailed understanding of what this really means for those working in the industry - in which roles is this most important, how are skill needs genuinely changing, and what development / investment in required to up/re-skill?

3. **The value of creative education**

   Amidst concerns about the deprioritisation of creative education, there is an urgent need to find ways to better capture the value of creative education end to end through the education system and life-course. This is important to justify public spending; placing additional emphasis on the need to go beyond the current focus on graduate wage returns, to better capture but also measure value; connecting with the increased evidence of the value of culture to the economy and society; but in a way that will be accepted as a robust and credible approach in the eyes of the Treasury;

   This is also important from the practitioner perspective; where there is a need to better understand learning pathways; including exploring how creative education provides a source of...
talent to other industries, and how the diminishing numbers studying the arts in schools particularly in England risks stunting the talent pipeline at the earliest stages in people’s development. There is also the issue of revisiting new modes of learning and how this can be supported through technology and digitally-enabled solutions in education institutions, the workplace and at home.

**Pipeline of talent**

Relatedly, we currently lack a regular, coherent source of intelligence on the pipeline of talent to the sector – at school, further education and university – and the extent to which this is aligned with industry needs.

In particular, there is a dearth of evidence mapping either career progression or learning pathways. This is particularly vital as we begin to ensure we are developing progression opportunities for learners, in areas of strategic importance to the creative industries.

We also lack regular, up to date insight on the extent to which creative businesses are able to exploit international talent – which will become more important in the context of Britain’s exit from the EU and the extent to which the new immigration system is meeting the needs of the sector.

**Creative professional development**

It is clear that the creative industries are failing to invest sufficiently in lifelong learning and that this (and other factors) is creating a skills deficiencies in the workplace.

We lack intelligence on the opportunities for professional development; the effectiveness of industry levies in promoting learning; or what new levers (e.g. Personalised Learning Accounts) or forms of learning (e.g. online courses, digital badging etc.) could promote greater workforce development, up / reskilling; particularly given the freelance nature of work in the creative industries.

**Productivity and management practices**

Against a backdrop of growing interest in the underlying causes of the UK’s productivity problem – and in particular the role of management practices – there is a dearth of evidence exploring these issues in the context of the creative industries.

This is particularly significant given management and leadership skills are both hardest to find in the labour market and (relatedly) the most common skill deficiency in the workforce. As the sector looks to explore the scope for new leadership programmes and schemes to enhance business skills, we need to look at the current offer and what has been tried elsewhere; to consider what might prove most effective given the dominance of micro-businesses, the constraints faced by these firms and the power to exploit the networks that exist within these industries to facilitate peer to peer support.
Tackling the diversity challenge

Despite increased awareness of these issues amongst government and industry; there are significant gaps in what we know about the picture of diversity in the creative industries. In particular, there is a lack of regular and robust evidence assessing diversity of the talent pipeline to the sector or the representation of all minority groups in the sector, including those with a disability and long-term health condition and those of working class origin (where current measures are skewed by the occupations that exist within the Creative Industries).

There is also a lack in-depth insight which looks beyond participation, to explore the quality of work for those from disadvantaged backgrounds, their progression within the sector, the underlying barriers and constraints that underpin these trends and ultimately ‘what works’ in overcoming these issues in order to promote greater diversity and inclusivity.

Local talent pools

While we know the local skills base is an important driver of the spatial clustering of the creative industries, and that developing thriving creative clusters across the UK is an important policy priority, in reality we know very little about creative skills supply in local economies and the extent to which this acts as a barrier to the success of creative (and other) businesses.

There is a dearth of robust evidence on local talent pools and skills pipelines; and the extent to which these are sufficient to meet the needs of local businesses; and how to connect sector-initiatives with wider, placed-based programmes to support skills development and adult learning.
4. Shaping the PEC research agenda

4.1 Principles for future research

There is clearly much we do not yet know. But, as a community with a stake in the future success of the creative industries and economy, we must go further to better understand the issues, and ‘what works’ in addressing them. This, in turn, calls for a stronger case for investment and action.

The information failures we have identified, however, help us identify some working principles that we must embrace. Whilst some issues are new, others are more well-known and long standing, which also raises issues about our ways and methods of working if we are to avoid persistent shortcomings from the past and to really make a difference in enhancing knowledge and understanding moving forward.

The evidence gaps additionally provide steer to where the PEC can add greatest value in enhancing insight to shape better policy and practice relating to skills, talent and diversity in the creative industries.

4.2 Work Packages for the Skills, Talent and Diversity workstrand

It is impossible for a single work package or output to fulfil all of these functions. Instead, we propose to develop a series of work packages over the course of the PEC’s 4-5 year research programme; each with its own clear audience and aims:

1. UK sector skills monitor: a regular data-led assessment of the shape of the workforce, with particular focus on the current strategic skills demands for creative workers both directly within the creative industries sector and wider creative economy. The skills monitor will provide regular steer on the most pressing employment issues and enable tracking of progress in addressing critical skills and diversity challenges.
2. **Targeted Future Foresight reviews:** exploring alternative likely futures, seeking to understand the ongoing effects of disruptive forces for change, including technological advances, demographic change, consumer trends, globalisation and innovation in working practices and business models. In particular, we will look to assess the implications of these trends for employment in the creative industries and creative economy, and Careers of the Future. This will seek to identify tangible changes in the workplace and understand what is driving shifts in the skills needed by industry and workers in specific roles, in order to advance our knowledge and preparations around the most pressing future skills and employment priorities. Better anticipation of the future aims to ensure a better “future-proofed” response.

3. **‘Deep-dive’ sub-sector / occupational skills reviews:** to explore in detail evolving careers and skills for the future, to establish how these are similar and different for specific sub-sectors of the creative industries, in different occupations, and in different parts of the UK. These reviews will also reflect on the institutional and organisational elements as well as the sector labour market(s) for individuals’ skills, skills clusters and the propagation of creative skills across other parts of the economy. Such analysis is necessary to drive adequate and robust action.

4. **Policy reviews and think pieces:** including a mixture of targeted briefings, updates and reviews of policies and practice around areas of skills development and use and broader issues of equality and diversity. This will include assessing evaluation evidence and practical and applied research and think pieces, assessing the working of policies and practices, and focused on distilling the learning and experience of those stakeholders involved at the coal face of implementation to provide a sound basis for effective advice. These briefings will focus on different parts of the policy to practice cycle: for instance, seeking to understand employment and skills challenges in more depth; shaping developments in the design of new policies and practices and supporting experimentation, testing and trialling; and undertaking evaluations of existing practices, forming an assessment of ‘what works’.

---

**Supported by**

[Logos of Arts & Humanities Research Council, UK Research and Innovation, and Industrial Strategy]
4.3 Priorities and plans for Year 1

While this evidence synthesis and scoping phase has dominated much early activity on this strand; there remain two further outputs we are prioritising for delivering by the end of the year.

UK Sector Skills Monitor 2019

Rationale: This evidence synthesis has highlighted that the creative industries and economy face a range critical skills issues; in particular pointing to significant skill mismatches and a lack of diversity. At the same time, we identify fundamental information failures, where we lack regular, robust, coherent and comparable insight on these issues, which would allow comparisons across different sub-sectors and jobs within the creative industries and different types of skills, and the tracking of trends over time. Our scoping work found that stakeholders wanted a regular and authoritative, over-arching perspective of the skills supplied and the skills required.

We need a more strategic and proactive approach, therefore, to anticipating and responding to evolving skills requirements in the sector. This is necessary to enable a more effective, long term perspective to be taken that signals and prepares for skills changes and, hence, responds to the most pressing and growing skills and employment priorities in good time and in a way, ideally, that enhances a more effective development and use of talent and reduces future skills deficiencies and mismatches. This needs to tackle disadvantage and ensure opportunities for all. It also needs to develop a rigorous approach to data collection and analysis, adopting common standards recognised by Government.

Aims: The Skills Monitor will seek to undertake a systematic and regular assessment of strategic skill priorities for the creative industries. So whilst the approach will be developed for year one, it will be repeated in subsequent years. Our goal is to secure world class skills for the UK creative economy in future to increase future employment, productivity and prosperity for all across the sector. The work will be informed by leading national and international approaches to assessing skills issues and seeks to address three objectives:

1. Employment and the skills required in the Creative Industries and Creative Economy – exploring the nature and shape of employment in the Creative Industries and Creative Economy and how this is driving the need for certain skills.
2. Skills Development and the Talent Pipeline - reviewing the pipeline of talent to the sector and nature of skills investment to establish how different parts of the skills system (e.g. schools, FE, HE and workplaces) is responding to the requirements of the Creative Economy’s workforce.
3. Skills Mismatch. Finally, the review will assess whether pressing skills priorities within the Creative Economy are sufficiently being met, and hence will seek to establish the nature and severity of any skills mismatches.
Approach

- Establish a robust framework for understanding the skills, talent and diversity issues, and begin to refine the data / evidence specification;
- Pool, and collate existing skills evidence, including academic and grey literature and data, which will involve (i) a standardised ‘top-down’ analysis of sub-sectors by varying geography (ii) identifying gaps in the data and (iii) provide a more textured analysis using ‘bottom-up’ data;
- Explore with key stakeholders their skills research priorities, plans and perspectives on skills and embellish the evidence base;
- Critique and analyse the evidence to establish a robust, coherent picture of key skills challenges, as well as gaps in existing knowledge and insight and report the findings.

Figure 4.1 sets out a framework for skills anticipation and development. The goal is to drive better high level outcomes for the creative industries driven by more people working effectively across the sector in good work that drives better productivity and social inclusion. An effective creative economy will be driven by ambitious strategies that identify and exploit new, emerging business opportunities, and can provide the skills and talent required to meet them. The skills will be more economically valuable”, more focused on the needs of business, and more targeted on existing skills mismatches so that there is a balance between the new skills required and available. The framework also provides the basis for driving the data collection, assimilation and analysis of labour market information.

Figure 4.1: Framework for the Skills Monitor

Source: UKCES 2014, 201
**Rationale:** Despite the success of the creative industries, there are growing concerns that opportunities created in this vibrant part of the UK economy are ‘out of reach’ for many and that in some creative sectors and occupations the profile of the workforce looks dramatically different to the UK population.

While there is increased awareness of these issues amongst government and industry, this evidence synthesis highlights the need for further analysis to address a number of issues, for instance: a lack of regular and robust evidence assessing the representation of all minority groups in the sector; limited in-depth insight which looks beyond participation, to explore job quality of work, progression; and a true understanding of underlying barriers and constraints and ‘what works’ in overcoming these issues. Consultation emphasised that promoting more inclusive recruitment and working practices was crucial to the future success of the creative industries.

**Aims:** In light of these findings, we expect diversity to be a key theme in our Policy Review series so we can build a deeper understanding of the experiences of different underrepresented individuals and what might best be done to tackle any barriers and disadvantages they face. This initial paper will look in-depth at the participation, retention and progression of those of different class origin within the creative industries. It will consider three research questions:

1. **How can we best capture an individual’s social class?** It seeks to clarify some of the confusion around social class, and suggest practical ways of understanding the term that might be useful for policy development and organisational practice.

2. **To what extent are those from working class backgrounds benefiting from the opportunities created within the Creative Industries?** The paper will construct an up to date picture of the representation of those from working class backgrounds across different sub sectors and will consider the job quality for those from working class backgrounds.

3. **How does retention and progression within the creative industries vary depending on an individual’s social class?** Finally, the paper will explore whether those from working class backgrounds display similar levels of churn, engagement in training, and advancement.

**Approach**

- We will begin by considering alternative approaches to defining social class, in particular assessing the validity of parental occupation as an indication of class origin.
- Assessing participation and the quality of work - we will then undertake new analysis of the ONS Labour Force Survey (LFS) and Understanding Society (US) to assess representation of those of working class origin across the creative workforce; and to explore the quality of work, including new analysis of the occupations.
employment status, working arrangements, job security and satisfaction, and earnings of those from working class backgrounds.
• Finally, we will undertake new analysis of longitudinal datasets to explore the propensity of those of different class origin to remain in employment in the creative industries, to participate in training, to progress into roles with managerial responsibility and to see their average earnings increase.

The insight gleaned from this paper will establish an important baseline picture of the participation and progression of those from working class backgrounds in the creative industries. We expect that future Policy Reviews will subsequently seek to better understand the effectiveness of the current policy approach and identify new policy, programmes and practices that might prove successful in promoting greater inclusivity.

4.4 Get involved!

Our priorities for year one reflect the urgent need to address information failures and progress quickly in some areas in order to catalyse a long-standing programme of work spanning the 4-5 year funded lifespan of the PEC. However, this focus does not come at the expense of filling other research gaps identified throughout this work. In year two, we will commence other work packages – in particular targeted foresighting and sub-sectoral / occupational deep-dives.

Equally though, it is clear that the PEC will not be able to address of the evidence gaps identified; nor does it seek to do so. What is key here is that we effectively work in partnership with different stakeholders who have interest in the issues we are addressing end-to-end in the research process that we move forward.

We are conscious our programme of consultations, roundtables and workshops must play a vital role in sharing our research interests and thinking and what we have found. But, an effective response to the wide-ranging skills, talent and diversity challenges facing the sector must go further and can only be achieved through shared problem-solving and collaborative action.

Where possible and appropriate, the PEC is therefore actively seeking research partners to work collaboratively on shaping, delivering and commissioning research. So if you would like to explore the potential to work with the PEC on any research areas identified in this synthesis and scoping paper, please get in touch!

Lesley Giles
Work Foundation
Lgiles@theworkfoundation.com

Heather Carey
Work Foundation
hcarey@theworkfoundation.com


Advertising Association (2018a), Advertising pays 6: World class talent, world class advertising.

Advertising Association (2018b), Written evidence (ADV0019), http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/communications-committee/the-advertising-industry/written/71651.html


AHRC (Arts and Humanities Research Council) (2011), Understanding the value of arts and culture: The AHRC Cultural Value Project.


All-Party Parliamentary Design and Innovation Group, Design Business Association and Design and Technology Association (2018), Design skills and UK’s industrial strategy.


ApprenticeshipsNI (2019) ApprenticeshipsNI statistics from August 2013 to April 2019


Arts Council England (2018c) Response to government consultation on implementation of T level programmes

Arts Council England (2017a), Exploring the role of arts and culture in the creative industries. (June).

Arts Council England (2017b) Leadership, workforce development and skills in the arts, creative and cultural sector: evidence review


Arts Council England (2014) The value of arts and culture to people and society

Arts Council England (2012), Publicly-funded arts as an R&D lab for the creative industries? A survey of theatre careers in the UK.
BCS (British Computer Society) (2017), Diversity in IT: Shaping our future together.
BECTU (2017), Eyes half shut: A report on long hours and productivity in the UK film and TV industry, October.
Bennett, J. (2017), Crafting the craft economy, CAMeO Cuts No. 4, University of Leicester and Research Institute for Cultural and Media Economies.
Bennett, J. (2018), New T Levels to include Craft: What does it mean? Crafts Council
BERA (British Educational Research Association) (2017), Reviewing the potential and challenges of developing steam education through creative pedagogies for 21st learning: How can school
curricula be broadened towards a more responsive, dynamic, and inclusive form of education?


BPI (2018), Yearbook: All about the music.


British Academy (2017), The right skills: Celebrating skills in the Arts, Humanities and Social Sciences (AHSS), (November).

British Council (2016), Creative Hubs: Understanding the new economy.

British Council (2017), New and changing dynamics: How the global creative economy is evolving.


British Fashion Council (2018), The value of the UK fashion industry.


Brook, O., O’Brien, D., Taylor, M. (2018). There was no golden age: social mobility into cultural and creative occupations. Online: https://osf.io/preprints/socarxiv/7njy3/


Business of Fashion (BoF) (15 March 2019), How big retailers are selling sustainability, online https://www.businessoffashion.com/articles/professional/how-big-retailers-are-selling-sustainability.


Comunian, R. and Gilmore, A. (2015), Beyond the Creative Campus: Reflections on the evolving relationship between higher education and the creative economy, King’s College London.


Creative and Cultural Skills (CCS) (2010), The Performing Arts Blueprint: An analysis of the skills needs of the performing arts sector in the UK. (February).

Creative Diversity Network (2017) Diamond: the first cut

Creative Industries Council (2014) Create UK: Creative Industries Strategy

Creative Industries Federation (2014), Creative diversity: The state of diversity in the UK’s creative industries and what we can do about it.
Creative Industries Federation (2018), Growing the UK’s Creative Industries: What creative industries need to thrive and grow.
Creative Scotland (2016), Mapping the visual arts in Scotland: Survey of individuals working in the visual arts sector in Scotland: A report of key findings
Creative Scotland (2014), Unlocking Potential Embracing Ambition a shared plan for the arts, screen and creative industries 2014-2024
Creative Skillset (2015a), Creativity and constraint: Leadership and management in the UK creative industries.
DCMS (2019b), “Film and TV apprenticeships launched as new Charter pledges greater diversity in Creative Industries”. July 2019

Supported by
Department for Business, Innovation and Skills (2016) Post-16 Skills Plan
Department for Education (2018a) T Level Action Plan
Department for Education (2018b) Employer skills survey 2017: UK findings
Department for Education (2019a) T Levels Industry Placements: Update on delivery models and support
Department for Education (2019b) Review of Post-18 Education and Funding

Design Council (2017), Designing a future economy.
Design Council (2018), the Design Economy: The State of design in the UK.
Digital Catapult and Innovate UK (2018), 5G Nation: The UK 5G ecosystem (June).
Directors UK (2018), Who’s calling the shots: Gender inequality among screen directors working in UK television (August).
Ecorys UK (2016) Digital skills for the UK economy. Report for BIS and DCMS.
Easton, E and Djumalieva, J (2018), Creativity and the future of skills
Econsultancy (2018), Navigating Brexit: A provisional guide for marketers and HR (talent), June
Education Scotland (2019) Scotland’s Curriculum for Excellence
Equality and Human Rights Commission (2016) Thinking outside the box: Supporting the television broadcasting industry to increase diversity

Supported by


HESA (2017) Table 13 - UK domiciled leavers 2012/13 in full-time paid UK employment (excluding self-employed) by level of qualification obtained, subject area and salary band.


http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/communications-committee/the-advertising-industry/written/77044.html


IFS (Institute for Fiscal Studies) (2018), The impact of undergraduate degrees on early-career earnings, Research Report (November)

Immerse UK (2018), The immersive economy in the UK: The growth of virtual, augmented and mixed reality technologies, Innovate UK, Nesta and MTM.


International Labour Organisation (2017) Future of Work, various publications


Labour (2017), Acting up report.


Lindgren, M., Packendorff, J., Sergi, V. (2014), „Thrilled by the discourse, suffering through the experience: Emotions in project-based work,” Human Relations.


Livingstone, I. and Hope, A. (2011), Next Gen: transforming the UK into the world’s leading talent hub for the video games and visual effects industries.

Supported by

Mateos-Garcia, J and Sapsed, J (2011) The role of universities in enhancing creative clustering


Migration Advisory Committee (2018), EEA migration in the UK: Final Report (September).

Migration Advisory Committee (2019).


Mumford, M. D. (2003). Where have we been, where are we going? Taking stock in creativity research. Creativity Research Journal 15


Museums Taskforce (2018), Report and recommendations.

Musician’s Union (2012), The working musician.

Musicians Union (2018), Understanding how income effects likelihood to learn an instrument. Report prepared for Isabelle Gutierrez at the Musicians Union (September).


Supported by
Nesta (online), Creative Nation: visualisation graph, available from: http://data-viz.nesta.org.uk/creative-nation/
Next Gen Skills Academy (2015), Gender balance research & development programme for the games industry.
Nordicity and Smith, A. (2017), Workforce review of offstage theatre.
ONS (2018), Earnings and hours worked, industry by four-digit SIC, Table 16
Opposable Group and TechSpark (2018), Creative tools and workflows for immersive content creation. For digital catapult, June.
Performers’ Alliance All Party Parliamentary Group (2019), Breaking the Class Ceiling: Why it pays to be privileged.
Petrone, P. (2019) The Skills Companies Need Most in 2019 – And How to Learn Them LinkedIn
Scottish Funding Council (2017) Creative Graduates and Innovation

Supported by

[Logo: Arts & Humanities Research Council] [Logo: UK Research and Innovation] [Logo: Industrial Strategy]
Skills Development Scotland (2019b) Apprenticeship Equality Action Plan
Smith, D (2013) An independent report for the Welsh Government into Arts in Education in the Schools of Wales
StatWales (2019) Apprenticeship learning programmes started by quarter, sector and programme type
Tech City / Nesta (2017) The Nationality of Workers in the UK’s Digital Tech Industries
Tether, B (2019) Mind the gap: Regional inequalities in the UK’s Creative Industries
UKCES (2014) Skills Assessment Framework
UKCES (2010) Ambition 2020
UKIE (2017) State of Play: The UK Games Industry’s priorities for the EU negotiations
UK Music (2018), Securing our talent pipeline.
UK Screen Alliance (2019) Inclusion and Diversity in UK Visual Effects, Animation and Post-Production
UK Theatre (2016), From live to digital.
UK Theatre / Society of London Theatre (2018) Response to the implementation of T Level Programmes
UNCTAD (2016), Creative Economy Outlook: Trends in international trade in creative industries.
UNCTAD (2018), Creative Economy Outlook: Trends in international trade in creative industries.
http://www.universitiesuk.ac.uk/highereducation/Documents/2010/CreatingProsperityTheRoleOfHigherEducation.pdf
V&A (Victoria and Albert Museum) (n.a.) “Marketing the V&A”, http://www.vam.ac.uk/content/articles/m/marketing-the-v-and-a/

Supported by


WARC and Mobile Marketing Association (MMA) (2018), The state of the industry: Mobile marketing in the UK 2018.


Welsh Government (2017). Prosperity for All: economic action plan

Whybrew, S (2018) A technical route into the Arts. Arts Professional

Work Foundation / BFI (2016) Skills Audit for the UK Screen Industries

Work Foundation / ScreenSkills (2019a) Annual Skills Assessment for the UK Screen Industries

Work Foundation / ScreenSkills (2019b) Skills Forecasting Analysis for the UK Screen Industries


As there is no agreed international method for categorising creative industries, definitions and measures of the creative industries differ across countries. It is therefore important to note that the DCMS definition is a strictly UK definition, although it has been emulated to varying extents by other nations.

The DCMS provides its own estimations of the creative industries and the nine areas of activities it comprehends, based on national data sources and using the Standard Industrial Classifications (SIC) and the Standard Occupation Classifications (SOC).

The DCMS definition of the creative industries includes the following sub-sectors as industrial classifications, with 30 associated SIC codes:

<table>
<thead>
<tr>
<th>Creative industries sub-sector</th>
<th>SIC Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising and marketing</td>
<td>70.21</td>
</tr>
<tr>
<td></td>
<td>73.11</td>
</tr>
<tr>
<td></td>
<td>73.12</td>
</tr>
<tr>
<td>Architecture</td>
<td>71.11</td>
</tr>
<tr>
<td>Crafts</td>
<td>32.12</td>
</tr>
<tr>
<td>Design and designer fashion</td>
<td>74.1</td>
</tr>
<tr>
<td>Film, TV, video, radio and photography</td>
<td>59.11</td>
</tr>
<tr>
<td></td>
<td>59.12</td>
</tr>
<tr>
<td></td>
<td>59.13</td>
</tr>
<tr>
<td></td>
<td>59.14</td>
</tr>
<tr>
<td></td>
<td>60.1</td>
</tr>
<tr>
<td></td>
<td>60.2</td>
</tr>
<tr>
<td></td>
<td>74.2</td>
</tr>
<tr>
<td>IT, software and computer services</td>
<td>58.21</td>
</tr>
<tr>
<td></td>
<td>58.29</td>
</tr>
<tr>
<td></td>
<td>62.01</td>
</tr>
<tr>
<td></td>
<td>62.02</td>
</tr>
<tr>
<td>Publishing</td>
<td>58.11</td>
</tr>
<tr>
<td></td>
<td>58.12</td>
</tr>
<tr>
<td></td>
<td>58.13</td>
</tr>
<tr>
<td></td>
<td>58.14</td>
</tr>
<tr>
<td></td>
<td>58.19</td>
</tr>
<tr>
<td></td>
<td>74.3</td>
</tr>
<tr>
<td>Museums, galleries and libraries</td>
<td>91.01</td>
</tr>
<tr>
<td></td>
<td>91.02</td>
</tr>
<tr>
<td></td>
<td>59.2</td>
</tr>
</tbody>
</table>
The listed industries comprehend both creative and non-creative occupations in these sectors. For example, the Labour Force Survey data will count administration within a creative business as part of the creative industries, although the role does not necessarily require creativity. Therefore, as Nesta (2013) suggested and consequently adopted by DCMS, each occupational profile was scored in terms of creative intensity, and this score of all occupations within a given industry was required to reach a given threshold to be included within the creative industries.

As described in the most recent update of the DCMS (2019) methodology, the current conception of the creative industries is based on APS (Annual Population Survey) data from 2011 and 2012, in which the number of creative jobs is divided by the total number of jobs in that particular industry. Industries which have more than 6,000 jobs and a “creative intensity” of more than 30% are considered for inclusion. Industries on the threshold are considered for inclusion through a consultation process.

This approach has done much to facilitate better approximations of the scale and scope of the creative industries. However, it does not account for creative occupations outside those select industries. Furthermore, over the past decades, the creative industries along with all other industries have been subject to external trends, which have had far reaching implications for the way that work is done and the skills that are required to perform tasks (Eurofound, 2018).
The main occupations used by DCMS within the Creative Industries in SOC code terms are:

<table>
<thead>
<tr>
<th>Creative occupations Group</th>
<th>SOC (2010)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising and marketing</td>
<td>1132</td>
<td>Marketing and sales directors</td>
</tr>
<tr>
<td></td>
<td>1134</td>
<td>Advertising and public relations directors</td>
</tr>
<tr>
<td></td>
<td>2472</td>
<td>Public relations professionals</td>
</tr>
<tr>
<td></td>
<td>2473</td>
<td>Advertising accounts managers and creative directors</td>
</tr>
<tr>
<td></td>
<td>3543</td>
<td>Marketing associate professionals</td>
</tr>
<tr>
<td>Architecture</td>
<td>2431</td>
<td>Architects</td>
</tr>
<tr>
<td></td>
<td>2432</td>
<td>Town planning officers</td>
</tr>
<tr>
<td></td>
<td>2435</td>
<td>Chartered architectural technologists</td>
</tr>
<tr>
<td></td>
<td>3121</td>
<td>Architectural and town planning technicians</td>
</tr>
<tr>
<td>Crafts</td>
<td>5211</td>
<td>Smiths and forge workers</td>
</tr>
<tr>
<td></td>
<td>5411</td>
<td>Weavers and knitters</td>
</tr>
<tr>
<td></td>
<td>5441</td>
<td>Glass and ceramics makers, decorators and finishers</td>
</tr>
<tr>
<td></td>
<td>5442</td>
<td>Furniture makers and other craft woodworkers</td>
</tr>
<tr>
<td></td>
<td>5449</td>
<td>Other skilled trades not elsewhere classified</td>
</tr>
<tr>
<td>Design: Product, graphic and design</td>
<td>3421</td>
<td>Graphic designers</td>
</tr>
<tr>
<td></td>
<td>3422</td>
<td>Product, clothing and related designers</td>
</tr>
<tr>
<td>Film, TV, video, radio and photography</td>
<td>3416</td>
<td>Arts officers, producers and directors</td>
</tr>
<tr>
<td></td>
<td>3417</td>
<td>Photographers, audio-visual and broadcasting equipment operators</td>
</tr>
<tr>
<td>IT, software and computer services</td>
<td>1136</td>
<td>Information technology and telecommunications directors</td>
</tr>
<tr>
<td></td>
<td>2135</td>
<td>IT business analysts, architects and systems designers</td>
</tr>
<tr>
<td></td>
<td>2136</td>
<td>Programmers and software development professionals</td>
</tr>
<tr>
<td></td>
<td>2137</td>
<td>Web design and development professionals</td>
</tr>
<tr>
<td>Publishing</td>
<td>2471</td>
<td>Journalists, newspaper and periodical editors</td>
</tr>
<tr>
<td></td>
<td>3412</td>
<td>Authors, writers and translators</td>
</tr>
<tr>
<td>Museums, galleries and libraries</td>
<td>2451</td>
<td>Librarians</td>
</tr>
<tr>
<td></td>
<td>2452</td>
<td>Archivists and curators</td>
</tr>
<tr>
<td>Music, performing and visual arts</td>
<td>3411</td>
<td>Artists</td>
</tr>
<tr>
<td></td>
<td>3413</td>
<td>Actors, entertainers and presenters</td>
</tr>
<tr>
<td></td>
<td>3414</td>
<td>Dancers and choreographers</td>
</tr>
<tr>
<td></td>
<td>3415</td>
<td>Musicians</td>
</tr>
</tbody>
</table>
Annex B. Consultees

Animation UK
APPG for Creative Diversity
Arts Council England
ArtWorks Alliance
BECTU
British Printing Industries Federation
British Film Institute
Confederation of British Industry
Contemporary Visual Arts Network
Council for Higher Education in Art & Design
Crafts Council
Creative and Cultural Skills
Creative Diversity Network
Creative Industries Council
Creative Industries Federation
Creative Scotland
Department for Business, Energy and Industrial Strategy
Department for Culture, Media and Sport
Department for Education
Design and Artists Copyright Society
Design Council
Engage
Featured Artists Coalition (FAC)
Heritage Crafts Association
Incorporated Society of Musicians
Independent visual artist
Institute for Apprenticeships and Technical Education
Institute of Practitioners in Advertising
Migration Advisory Committee
Museum Association
National Council for the Training of Journalists
Nesta
Overseas Development Institute
Pact
Production Services Association
Prospect
Publisher’s Association
Royal Institute of British Architects
Scottish Government
Screen Yorkshire
ScreenSkills
Tech Nation
TechUK
The British Institute of Professional Photography
The Direct Marketing Association
The Society of Learned & Professional Society Publisher
Trade Union Congress
UK Music
UK Live Music Group
UK Screen Alliance
UK Trade & Investment
UK Interactive Entertainment
Welsh National Opera