creative
& cultural
skills

Creative & Cultural Skills: Sector Skills Assessment for the creative and cultural industries

An analysis of the skills needs of the creative and cultural industries in Northern Ireland

December 2010

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1 Introduction

As part of the licensing agreement with the UK Commission for Employment and Skills (UKCES), Creative & Cultural Skills is required to provide a picture of our sector of the UK economy, presenting robust, comparable and comprehensive Labour Market Intelligence (LMI) across the four UK nations. LMI describes what is happening in the labour market or in employment, using data about the numbers of people employed, skills needs and salaries. Importantly, all Sector Skills Councils (SSCs) collect LMI within a common framework so that it is possible to compare sectors and to map trends in the UK economy as a whole.

Creative & Cultural Skills published its Sector Skills Agreement, *The Creative Blueprint*, in April 2008. This covers: craft, cultural heritage, design, literature, music, performing arts and the visual arts. Over 2,000 employers throughout the creative and cultural industries were surveyed for *The Creative Blueprint*. It was followed by Blueprints for each of the UK nations, English regions and a further series each concentrating on particular sectors. *The Design Blueprint*, *the Cultural Heritage Blueprint*, *the Craft Blueprint*, *the Visual Arts Blueprint* and *the Performing Arts Blueprint* have already been published in partnership with industry[1], and the *Literature Blueprint and Music Blueprint* are due for publication in early 2011.

This report is the second sector skills assessment (SSA) for the creative and cultural industries and follows Creative & Cultural Skills' February 2010 submission. This document provides an opportunity to assess and update the industry's current skills needs, workforce development, and future growth in Northern Ireland.

1.1 Methodology

This SSA builds on the research carried out by Creative & Cultural Skills during 2010 and in the preceding two years. As well as national datasets, the information contained in this report is from three specific research projects;

- Creative and Cultural Industries: Impact and Footprint 2010/11
- Creative and Cultural Industries: Workforce Survey 2009
- Creative and Cultural Industries: Occupational, Skills and Productivity Forecasting 2010.

1.1.1 Creative and Cultural Industries: Impact and Footprint 2010-11

This project highlights employment, general demographics (age, gender, ethnicity etc) and key economic information. The information is presented by creative and cultural sector, by nation and by English region.

1.1.2 Creative and Cultural Industries Workforce Survey 2009

Commissioned in August 2009 and published in February 2010, this research provides results of extensive desk research, data analysis and consultation with employers and stakeholders across the creative and cultural industries, including:

1http://ccskills.org.uk/Industrystrategies/Industrysectors/tabid/86/Default.aspx

- A telephone survey[2] with 1,000 employers across the UK creative and cultural industries.

The survey was completed between September and November 2009 and includes questions on:

- The profile of the workforce
- Business performance
- Skills shortages and recruitment difficulties
- Skills gaps in the existing workforce
- The use of and investment in training
- Future skills needs.

The Workforce Survey also included:

- In-depth case study interviews with 10 organisations across the UK, with a reputation for success exploring the factors behind achievement and the links to an investment in skills
- Industry workshops with six sectors (craft, design, cultural heritage, visual art, literature and performing art) and in-depth interviews in the music sector, in order to test interim research outputs and discuss future strategies for growth
- A quantitative analysis of behaviours that make businesses more productive[3].

1.1.3 Creative and Cultural Industries: Occupational, Skills and Productivity Forecasting

The research from the Occupational, Skills and Productivity Forecasting report analyses future skills needs in the industry, the supply of appropriately qualified individuals to meet this need and productivity measures as a consequence.

The data presented in this SSA from the report is based on three scenarios; “aspirational, baseline and negative” that creative and cultural industries must prepare for. This provides an assessment of:

- The current economic context in which the creative and cultural industry exists
- Creative and cultural industries performance in terms of productivity and how this changes over time
- Recent trends in the creative and cultural industries by sector and across the UK by nation and region
- Replacement and expansion demand
- Skills flow, qualification demand and occupational demand.

2 With the option to self-complete online

[3] Using datasets from the Annual Business Inquiry (ABI) and the Annual Population Survey (APS) a range of training and other workforce statistics are assessed, across the economy, in order to understand their contribution to the generation of high levels of Gross Value Added (GVA) per head. Data was investigated using logistic regression, which is a method for predicting group membership from other independent variables.

2 Profile and Economic Performance of the Creative and Cultural Industry

This SSA begins with a brief overview of the key features of the creative and cultural industries across the UK and in Northern Ireland.

2.1 Headline economic statistics

The UK has the largest cultural economy in the world, relative to GDP[4]. Across Northern Ireland the creative and cultural industries employ 13,850 people and contributes £0.59B GVA to the UK economy each year[5].

The industry is populated by small businesses, and a few very large organisations. There are just under 1,000 in Northern Ireland businesses, 90% of which employ fewer than ten people[6].

2.2 Headline employment statistics

The design industry employs the largest number of workers (52% of the workforce). This is followed by music (22%) and craft (9%)[7].

Wages per hour, in the industry in Northern Ireland are lower than in the industry across the UK (£7.58 compared to £8.60) and against the national average (£8.69)[8].

2.3 Headline skills and training statistics

The sector is highly qualified - 48% of people working in the creative and cultural industries in Northern Ireland have at least a level 4 qualification, but skills shortages and gaps are still a significant issue[9].

Across Northern Ireland, 29% of businesses who have tried to recruit recently have faced difficulties. Nearly half (47%) state that this is because of a lack of appropriate qualifications. A lack of experience and specialist skills were also key factors[10].

41% of all employers in the creative and cultural industries in Northern Ireland perceive that skills gaps exist in their current workforce. Skills gaps tend to relate to Information Communication Technology (ICT), marketing and technical skills[11].

Gaps in an organisation's existing skills base have a broader impact on businesses than skills shortages, with employers stating key impacts as being lost business, increased workload for others and delays to developing new products/services[12].

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[4] The Work Foundation (2007) Staying Ahead: The economic performance of the UK's creative industries http://www.theworkfoundation.com/research/publications/publicationdetail.aspx?oItemId=176&parentPageID=102&PubType=

[5] Creative & Cultural Skills (2011) Creative and Cultural Industry: Impact and Footprint 2010/11

[6] Ibid

[7] Ibid

[8] Ibid

[9] Ibid

[10] Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

[11] Ibid

[12] Ibid

Across the industry, more employers have not undertaken/provided any training or development in the last 12 months than have[13].

The most popular forms of training are those that people can engage in on an ad-hoc basis and which require investment in terms of time as opposed to money[14].

2.4 What do we mean by the creative and cultural industries?

The creative and cultural industries are characterised by a diversity of occupations, provision and business models, including: publicly subsidised companies and venues supported by the arts funding system (through the UK Arts Councils); local authority organisations; smaller companies accessing project funding; and commercial entities, some of whom are not-for-profit organisations. Table 1 (below) describes the specific industrial areas included in this report.

Table 1: Creative and cultural industries covered in this report

Industry	Industry subsector
Craft	Glass
	Graphic Crafts
	Heritage and Rural Crafts
	Iron and Metal Crafts
	Jewellery
	Pottery and Ceramics
	Stone Crafts
	Textiles Crafts
	Wood Crafts
	Taxidermy
Cultural Heritage	Museums and Archives
	Built Heritage
	Archaeology
	Other membership organisations
	Cultural Education
Design	Communications, Interior & Exhibition
	Product and Industrial Design
	Stage and Set Design
Literature	Authors / Writers
	Artistic and Literary Creation
Music	Composition of Musical Works & Music Publishing
	Production, Retail & Distribution of Musical Instruments / Audio Equipment
	Promotion, Management & Agency Related Activities
	Live Performance
	Recording
	Retail & Distribution of Recordings
Performing Arts	Actors / Entertainers
	Dancers / Choreographers

[13] Ibid
[14] Ibid

	Arts Officers, Producers / Directors
	Arts Facilities
	Other Entertainment Activities
Visual Arts	Artists
	Art Retail

2.5 Economic and employment structure of the creative and cultural industries

2.5.1 Economic contribution of the creative and cultural industres

There are just under 1,000 businesses across the industry, contributing £0.59B to the UK economy per annum. The vast majority (90%) employs fewer than ten people. The industry is economically productive, contributing over £42,900 per head each year to the UK economy – although this does vary by sector (see table 2)[15].

Table 2: Creative and cultural industries market features

Industry Subsector	Number of Businesses	Businesses Employing fewer than 10 People	Ave. Age of Businesses (Years)	Business Start-up (% Over 2006-2009 Ave)	Business Deaths (% Over 2006-2009 Ave)	Gross Value Added (in Billions)	Contribution to GVA Per Head pa (£k)
Craft	350	85%	21	14%	10%	£0.03	£24.8
Cultural heritage	*	99%	24	18%	16%	£0.2	£450.9
Design	233	94%	15	28%	16%	£0.3	£37.9
Literature	*	>99%	24	20%	17%	£0.01	£24.5
Music	151	87%	25	13%	13%	£0.07	£22.4
Performing arts	103	92%	12	16%	13%	£0.008	£7.8
Visual arts	*	92%	15	21%	18%	£0.004	£9.3
Northern Ireland total	941	90%	19	18%	13%	£0.59	£42.9
UK Creative and cultural industries Total	66,910	92%	18	20%	16%	£28.0	£35.3
UK economy total	2,152,400	89%	17	23%	16%	915.3	£31.8

Creative & Cultural Skills (2008) Creative and Cultural Industry: Impact and Footprint 2008/09
** Figure less than 100*

2.5.2 Employment in the creative and cultural industries

Design is the largest sector in the industry, followed by music and craft.

[15] Creative & Cultural Skills (2011) Creative and Cultural Industries: Impact and Footprint 2010/11

Table 3: Employment in creative and cultural industries

Creative industry sector	Total 10-11 Employment
Craft	1,240
Cultural Heritage	*
Design	7,190
Literature	*
Music	3,050
Performing Arts	1,050
Visual Arts	*
Northern Ireland Creative and Cultural Industries Total	13,850~

Creative & Cultural Skills (2011) Creative and Cultural Industry: Impact and Footprint 2010/11
** Figures below 500; ~Column figures may not add up due to rounding; Figure to low to be included*

More men than women work in the industry (see table 4)[16]. Women are also more likely to earn less money than their male counterparts and continue to find it difficult to progress to higher-level jobs[17]. With fewer than 1% of the sector from black, asian and minority ethnic (BAME) backgrounds, the creative and cultural industries are not ethnically diverse.

The industry is also characterised by self-employment (45% of people compared to 13% in the UK as a whole), and part time employment (33%). Again these do differ depending of specific sectors[18].

The industry is predominantly young; half of the workforce is under 40 years of age. Evidence suggests that people drop out of the sector in significant numbers in their thirties and forties[19]. This traditional reliance on a young workforce may be challenged in the future by a lack of people coming through the education system who meet industry skills and qualifications needs, coupled with this people working in the industry in Northern Ireland are twice as likely to have a second job outside of the creative and cultural industries.

Table 4: Profile of creative and cultural industries employees

Industry Subsector	Self Employment	Part-Time Work	% Women	% BAME	% Disabled	% Age Under 40	Have a Second Job
Craft	32%	20%	37%	<1%	21%	43%	2%
Cultural heritage	<0%	2%	96%	<1%	<1%	96%	<1%
Design	45%	14%	18%	<1%	23%	52%	<1%
Literature	18%	>99%	80%	<1%	<1%	<1%	<1%
Music	37%	58%	51%	<1%	21%	70%	16%
Performing arts	91%	67%	65%	<1%	<1%	27%	<1%
Visual arts	90%	87%	11%	<1%	3%	5%	<1%
Northern Ireland creative and cultural total	45%	33%	35%	<1%	19%	52%	4%
UK creative and	44%	26%	41%	7%	13%	49%	7%

16 Ibid
17 Cultural Leadership Programme/TBR (2009) Women in Leadership
18 Creative & Cultural Skills (2011) Creative and Cultural Industries: Impact and Footprint 2010/11
19 Ibid

cultural total							
UK economy total	13%	26%	46%	9%	13%	47%	4%

Creative & Cultural Skills. (2011). Creative and Cultural Industry: Impact and Footprint 2010/11

Across the UK, in terms of specific occupations, table 5 shows the three largest areas (by Standard Occupational Classification (SOC)) by average annual employment between 2003 and 2007 for each creative and cultural industry. For each of these occupations, the key skills needed to fulfill the requirements of the job are highlighted.

Table 5: Employment by top three occupations in each industrial area (average 2003-2007)

Sub-sector	Role	SOC	Av. Employment 2003-2007	Key skills
Cultural heritage	Archivists and Curators	2452	5,210	Technical knowledge, appraisal, event management
Cultural heritage	Sports and leisure assistants	6211	3,600	Facilities assistance, supervision, events assistance
Cultural heritage	Elementary security occupations	9249	2,050	Checks people, monitor activity, confrontation management
Design	Graphic Designers	3421	81,950	Project management, financial management, creativity
Design	Product, Clothing and Related Designers	3422	44,520	Client management, customer service, research, creativity
Design	Design and Development Engineers	2126	36,610	Technical knowledge, operating specialist tools, supplies management
Music	Musicians	3415	30,780	Writing music, creativity, performance
Music	Musical Instrument Makers and Tuners	5494	3,360	Technical knowledge, using specialist tools
Music	Arts Officers, Producers and Directors	3416	2,210	Project management, HR management, facilities management
Visual arts	Artists	3411	27,480	Creativity, technical knowledge, using specialist tools
Visual arts	Shopkeepers and wholesale/retail dealers	1234	560	Stock management, sales, financial management
Visual arts	Managers and proprietors in other services n.e.c.	1239	30	HR management, stock management, marketing management
Performing arts	Actors, Entertainers	3413	28,740	Creativity, research, performance
Performing arts	Arts Officers, Producers and Directors	3416	12,880	Project management, HR management, facilities management
Performing arts	Teaching professionals n.e.c.	2319	6,300	Co-ordinating, creating grading systems, advises
Literary arts	Authors, Writers	3412	48,750	Research, creativity, transcription
Craft	Assemblers (vehicles and metal goods)	8137	5,110	Using specialist tools, technical knowledge, facilities assistance

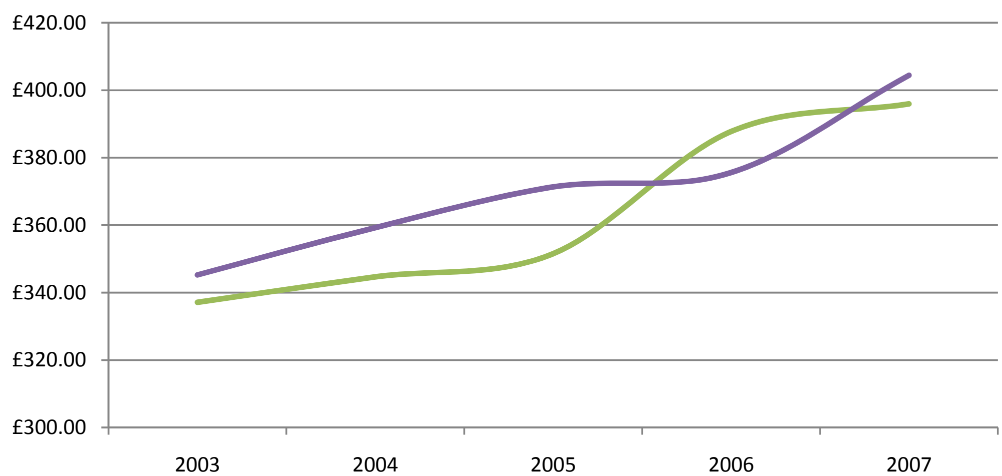
Craft	Furniture makers, other craft woodworkers	5492	4,860	Using specialist tools, set up specialist tools, technical knowledge
Craft	Glass and ceramics makers, decorators and finishers	5491	3,200	Creativity, using specialist tools, technical knowledge

Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

2.5.3 Wages in the creative and cultural industries

Between 2003-2007 wages in the creative and cultural industries in Northern Ireland increased by nearly £60 per week. While lower than the national average, in 2007, the difference in wages has fluctuated.

Figure 1: Average weekly wage in Northern Ireland in the creative and cultural industries compared with the total Northern Ireland economy 2003-07



Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

Across the UK, women earn less per hour than men in the industry, as do those working part time. Disabled workers also earn less money.

Table 6: Wages in the creative and cultural industries - gender, disability and part-time work comparison (UK figures)

Sector	**Wage per hour**	**Gender**		**Disability**		**Full or Part-Time Work**	
		Male	Female	Without a disability	With a disability	Full	Part
Craft	£9.20	£9.53	£8.05	£9.26	£9.23	£9.39	£8.22
Cultural Heritage	£8.39	£8.26	£8.43	£8.32	£6.94	£9.43	£7.93
Design	£11.50	£12.17	£10.21	£12.05	£9.74	£11.90	£10.71
Literature	£13.85	£13.64	£14.01	£14.34	£7.75	£14.71	£13.51
Music	£7.41	£7.92	£6.92	£7.46	£7.00	£8.21	£6.63
Performing Arts	£9.01	£9.50	£8.51	£9.20	£8.55	£9.50	£8.68
Visual Arts	£6.89	£7.51	£6.73	£6.81	£6.67	£7.33	£6.74
Creative and Cultural Industry Total	**£8.60**	**£9.18**	**£7.80**	**£8.66**	**£8.32**	**£9.39**	**£8.22**

UK Economy Total	**£8.69**	**£9.42**	**£8.18**	**£9.35**	**£8.69**	**£9.49**	**£7.72**

Creative & Cultural Skills (2011) Creative and Cultural Industries: Impact and Footprint 2010/11
Data for wages by ethnicity are too small for reliable analysis

3 What drives skills demands?

The UK has one of the largest cultural economies in the world as a share of its GDP[20], employing just fewer than 795,000 people (**13,850 in Northern Ireland**) and contributing just over £28 billion to the UK economy each year (**£0.59B in Northern Ireland**)[21]. The world's creative economy is growing faster than service industries overall and at more than four times the rate of manufacturing growth[22]. To remain competitive, UK creative and cultural businesses will need to train, attract and retain the right workforce, developing skills to ensure that the country stays at the forefront of artistic and business success.

3.1 Economic climate

The 2009 BIS report *Digital Britain*[23] emphasises the need to develop and maximise digital skills so that Britain will be 'a global centre for the creative industries in the digital age'. Technological advancements have a massive impact on professions in the industry – not only digital technicians but also a wide variety of practitioners who use digital technology in other roles.

The expected impact on the industry of the London 2012 Olympic and Paralympic Games is enormous. The Games will attract up to 300,000 overseas visitors, one million UK visitors and five million visitors from London, as well as 50,000 athletes, press and officials. The 2008-2012 Cultural Olympiad, a UK-wide programme of events and projects run by cultural organisations, will accompany it. These huge events will need senior technical staff, specialist technicians and a variety of practitioners and is an opportunity for the 'upskilling' of the sector.

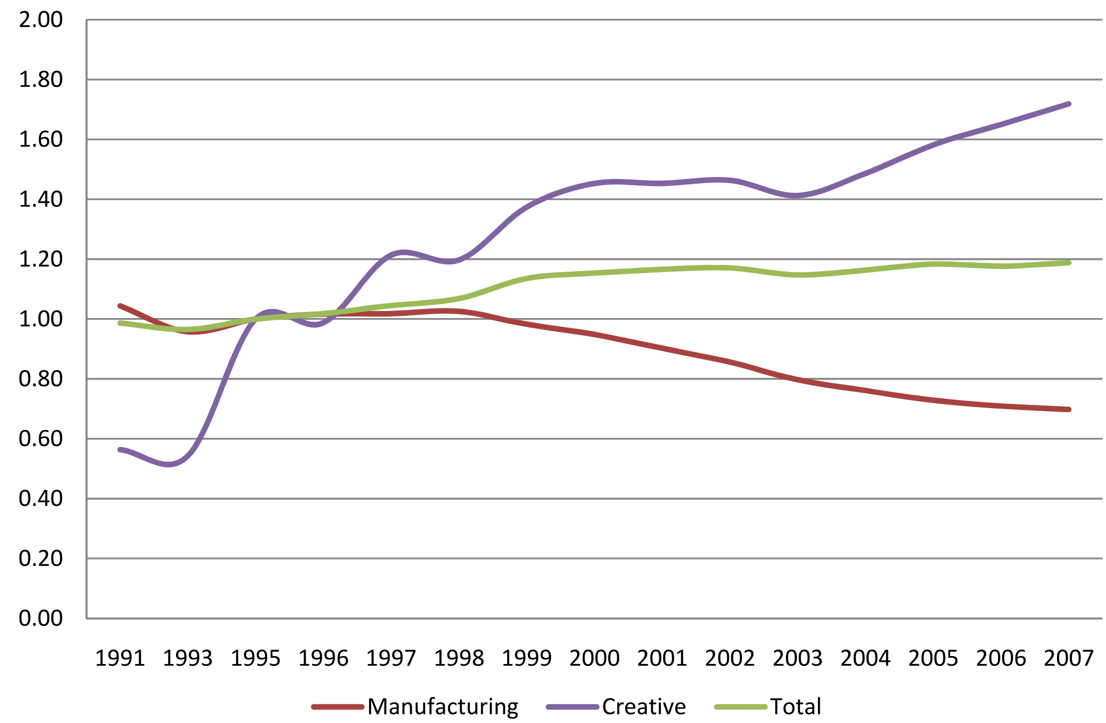
Changes in the funding structure to higher education (as set out in the Browne Report[24]) and the arts sector (in the Comprehensive Spending Review) will require the individuals to make more informed decisions regarding qualifications to pursue, and businesses within the creative and cultural industries to adapt to a changing environment.

In 2009 after 15 years of continuous growth, the UK entered a recession that is said to be the deepest for 80 years with far reaching impacts on all areas of the economy. The economy is now facing unprecedented challenges. As such there is a need to recognise that the development of the creative and cultural industries may be severely impacted. During the previous recession in the late 80s and early 90s employment fell in the recreational and cultural sector by 2.5%[25].

However, between 1991 and 1995 creative and cultural employment grew by an average of 11% p.a., compared to, for example, manufacturing, which declined by 1% p.a.[26]. The manufacturing sector has struggled to recover ever since (see figure 3).

[20] The Work Foundation (2007) Staying Ahead: The economic performance of the UK's creative industries
[21] Gross Added Value (GVA) measures the contribution to the economy of each individual producer, industry or sector in the United Kingdom. GVA consists of GDP minus taxes on products but plus subsidies on products – please see http://www.statistics.gov.uk/cci/nugget.asp?ID=254 for more information.
[22] UNCTAD (2008) Creative Economy Report
[23] BIS (2009) Digital Britain: Final Report
[24] Lord Browne (2010) Securing a Sustainable Future for Higher Education in England
[25] Creative & Cultural Skills/TBR (2009) An Assessment of the Creative and Cultural Industries in Periods of Economic Instability: Past Experience and Future Trends
26 ibid

Figure 2: Trends in employment 1991-2007



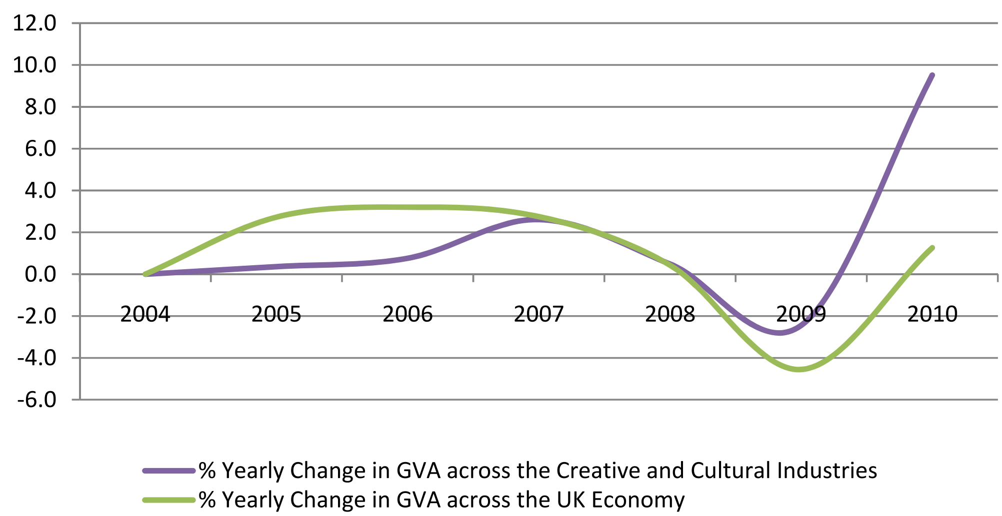
Creative & Cultural Skills/TBR. (2009). An Assessment of the Creative and Cultural Industries in Periods of Economic Instability: Past Experience and Future Trends

3.1.1 Economic growth 2004-2010

UK Gross Value Added (GVA) produced by the creative and cultural industries has increased by 11% between 2004 and 2010, almost double that of the UK economy in general. This period includes the most recent global recession. Figure 4 compares the percentage yearly change in GVA across the industry and the UK economy[27].

[27] Creative & Cultural Skills. (2011). Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

Figure 3: % yearly GVA change 2004-2010



Creative & Cultural Skills. (2011). Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

Despite a decline in GVA in 2009, the creative and cultural industries have performed well over the last year. The growth seen in GVA in the industry has being driven largely by some key sectors such as design, the performing arts and visual arts. Craft and cultural heritage have experienced a decline in GVA over the same period.

Table 7: % Change in GVA between 2004-2010

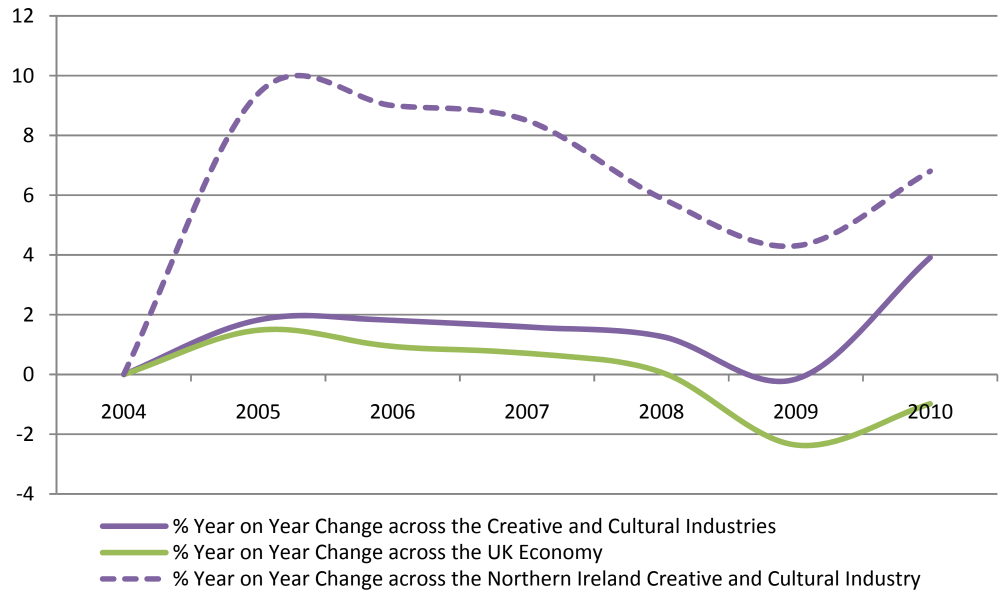
Sector	% Change in GVA 2004-2010
Craft	-20
Cultural heritage	-2
Design	25
Literature	7
Music	4
Performing arts	20
Visual arts	15
Creative and cultural industries total	11
UK economy total	6

Creative & Cultural Skills. (2011). Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

3.1.2 Employment

Employment in the creative and cultural industries in Northern Ireland will have increased by approximately 53% between 2004 and 2010. Over the same period employment in the creative and cultural industries in general will have increased by 11%, while the UK in general,has remained relatively static. Figure 4 shows the year-on-year % change in employment in the creative and cultural industries compared to the UK.

Figure 4: % Year-on-year change in employment 2004-2010



Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

This growth in employment has been driven by some key sectors, notably performing arts and visual arts and design, although most sectors have experienced at least modest growth in employment during this period, with craft and music the exception.

Table 8: Creative and cultural sector employment and change in Northern Ireland creative and cultural industries

Sector	% change in employment across Northern Ireland creative and cultural industry 2004-2010	% change in employment across UK creative and cultural industry 2004-2010
Design	+86%	+ 23%
Music	-9%	+ 4%
Performing arts	+202%	+ 38%
Craft	-12%	- 27%
Literature	+114%	+ 6%
Cultural heritage	+66%	+ 4%
Visual arts	+114%	+ 37%
Creative and Cultural Industry Total	+52%	+ 11%

Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

3.1.3 Business activity

Despite comparing favourably to the wider UK economy, it would be wrong to suggest that the industry has been untouched by the most recent economic downturn. During this period businesses must remain prepared to invest in appropriate training and skills for their workforce.

Across the industry in Northern Ireland (table 9), businesses tend to lose staff due to employees leaving voluntarily to find employment elsewhere, with 16% of employees having left in the last 12 months. More than 1 in 10 businesses have made staff redundant. This is significantly higher than across the creative and cultural industries in other UK nations.

Table 9: Retention of employees

	Northern Ireland creative and cultural industries	UK creative and cultural industries
Left voluntary	16%	7%
Made redundant	11%	3%
Employment terminated	0%	1%
Other reason	0%	1%

Creative & Cultural Skills. (2009). Creative and Cultural Industries Workforce Survey

Furthermore, across the UK, 66% of employers reported that turnover had either decreased or remained the same between 2007/8 and 2008/9 (table 10). Visual arts had the highest percentage of organisations that had experienced a decrease in turnover. Organisations in the performing arts sector reported the highest percentage increase in turnover.

Table 10: Business turnover (2007-2009)

Sector	Decrease	Increase	Stay the same
Craft	35%	26%	39%
Cultural eritage	26%	30%	44%
Design	39%	37%	24%
Literature	27%	32%	41%
Music	36%	24%	39%
Performing arts	35%	45%	20%
Visual arts	46%	29%	25%
Creative and cultural industries total	37%	34%	29%

Creative & Cultural Skills. (2009). Creative and Cultural Industries Workforce Survey

In Northern Ireland, 79% of businesses state that turnover has decreased or remained the same.

Table 11: Business turnover in Northern Ireland (2007-2009)

	Northern Ireland Creative and Cultural Industries	UK Creative and Cultural Industries
Increase	21%	34%
Decrease	66%	37%
Stay the same	13%	29%

Creative & Cultural Skills. (2009). Creative and Cultural Industries Workforce Survey

In order to successfully emerge from the recession stronger and more adaptable, more competitive skills will be demanded from employers alongside focused support to thrive in the coming years. Indications are therefore, that despite the impacts of the recession, training levels are and should remain firm[28].

[28] UKCES (2010). Ambition 2020 World Class Skills and Jobs for the UK: 2010 update

3.2 Globalisation

Increasing levels and standards of global competition are expected in the creative and cultural industries, as other countries recognise the economic value of creativity as a significant driver of growth. This has particular relevance during the current period of recession as the UK has been 'hit' especially hard due to the potential rise in the prominence of 'emerging economies' in Eastern Europe and Asia.

To manage competition on this global scale, the industry requires the best possible structures in place to develop the pool of talented people needed in the UK, attracting the best from across the world to work in the UK and to provide the right skills to meet the needs of the expanding creative sector[29].

The increasing importance of the knowledge economy in the UK is recognised as essential to economic growth and wealth creation[30]. Creative and cultural businesses are a crucial element of the UK's knowledge economy; as such it is essential to sustain high-level skills to support local, regional, national and international growth[31].

The world's creative economy is growing. The annual growth rate for OECD countries in the 1990s was more than twice that of the service industries overall[32]. In summary the main implications of globalisation for the sector are:

- Growing potential markets for UK-produced creative and cultural products
- An increasing range of foreign competitors with access to the UK market
- Increasing potential for sourcing services from the UK to overseas ('off shoring') to save costs.

In all three cases, it is the emerging economies of India and China that will have the greatest impact on the UK industry. The growing populations of both countries will help to ensure that they maintain their emerging roles as both suppliers and markets. By the end of 2010, India is projected to add 83 million workers to the global economy, China 56 million, and the EU just 100,000[33].

In addition, though high level technical functions such as design, product development, production management and quality control have typically been retained in the UK by suppliers or retailers, as the capability of overseas producers improves, there is a threat that these functions will also be transferred.

The increasing importance of the knowledge economy in the UK is essential to economic growth and wealth creation. To retain this skills and wealth generation and manage competition on this global scale, the creative and cultural industries require appropriate workforce development, training and skills structures in place to develop the pool of talented people operating in the UK, and to attract the best from across the world to work in the UK.

[29] DCMS, BERR & DIUS (2008) Creative Britain New Talents for the New Economy
[30] IDEA (2009) Investing in the Creative Industries, A Guide for Local Authorities
[31] Ibid
[32] UNCTAD (2008) Creative Economy Report http://www.unctad.org/en/docs/ditc20082cer_en.pdf
[33] UNESCO (2009) Key Role of Creative and Cultural Industries in the Economy http://www.oecd.org/dataoecd/11/47/38703999.pdf?contentId=38704000

3.3 Demographics

Few demographic changes have been identified that will impact the development of the creative and cultural industries specifically. However, the demographic characteristics of the whole of the workforce reflect the UK's ageing population and increasingly diverse society. Two possible outcomes of this are that;

- More experience exists within the industry so providing a wider range of tools to draw on, making the sector more productive
- A workforce is less adaptable to change, learning and implementing new skills (such as ICT) that might be needed to drive up productivity.

Research has indicated that for maximum productivity in business, a good balance of ages, sexes, ethnic and social backgrounds need to exist. The trend for people to need to undertake unpaid work experience to 'break into' the sector has the potential to distort this balance, as the option of working unpaid requires financial backing from other sources, which may not be available to all. Whilst undertaking unpaid work experience can support the development of skills that are needed to increase productivity, it can result in an unbalanced "mixture of backgrounds" and therefore potentially have a negative impact on productivity over the longer term[34].

Currently the industry demonstrates a below average proportion of black and minority ethnic (BME) employees and despite an increase in the number of women within the workforce, few are in higher-level job roles[35]. As such, (and as replicated across many professions) the top jobs still tend to be white and male dominated.

'Many professions are still unrepresentative of the modern society they serve and there is strong evidence that the UK's professions have become more, not less, socially exclusive over time'[36].

This has led to decreasing opportunities for social mobility[37]. The creative and cultural industries are taking a lead in promoting diversity and mobility through agencies such as the Cultural Leadership Programme (CLP), which aims to create opportunities for social minority groups to expand their leadership skills, practice and acumen.

Over the next decade, the creative and cultural industries will face the following challenges:

- Public sector spending cuts will impact those organisations in receipt of public subsidy
- The potential spending power of purchasers may reduce as public sector spending reduces
- Changes in investment in higher and further education will impact on the provision of specialist training at every level
- The impact of new technology, already influencing the industry, will be felt more widely

Businesses across all sectors are facing a period of contraction followed, hopefully, by growth as the economy recovers from the current downturn. In the creative and cultural

[34] Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey
[35] Cultural Leadership Programme/TBR (2009) Women in Leadership
[36] The Panel on Fair Access to the Professions (2009) Unleashing Aspiration
[37] Ibid

industry many subsidised organisations already know they face reductions in grant income from both central, national and local government and continuing reduced commercial sponsorship and individual giving. Others recognise that in a recession spending power reduces and people have to respond effectively to customer demand, offer better value for money and improve the effectiveness and efficiency of their organisations.

3.4 Technology

A key factor driving all sectors of the economy is the increased use of digital technology in business[38]. The skills needed to capitalise on technological change are especially pertinent to creative and cultural industries as advancements in the digital economy will increasingly require the application of creative skills within 'non-creative' sectors, to support innovation and meet the demands of the national and global economy.

'While innovation literature has often emphasised technical research and development activities, policymakers and academics increasingly recognise the importance of creativity and design to aid the process of innovation' [39]*.*

This provides a much broader scope for opportunity for those working in the industry in terms of the adaptability of skills and potential for diversification into alternative business sectors.

New 'digital' business models are increasingly viewed as the future in terms of both production and revenue. However, control over assets is problematic, with traditional approaches to copyright and intellectual property rights not necessarily effective in the online environment. Creating sustainable businesses in a world where many expect unlimited access to content without being charged is a major challenge.

In the music industry for example, the effects of digitisation are numerous, from convergence of product delivery onto digital platforms, to the ease of creating and recording new music, to digital publishing and marketing. 95% of all UK single sales are now digital, and the future is likely to be driven by the adoption of music delivery platforms which enable on-demand access regardless of location.

Digital technology has also had a major impact on the design sector, including shortened design timescales, faster communication, the emergence of rapid prototyping and businesses requiring fewer people carrying out more tasks. The majority of designers think skills needs are changing and the most commonly cited reason is technological advance[40].

3.5 Government Policy

An assessment of how far the UK has come in terms of developing a world-class skilled workforce is outlined in Ambition 2020[41].

- The UK remains 10th and 11th in employment rate and productivity rate – the two key drivers of prosperity. This is almost world class but just outside the top quartile of OECD countries

[38] BIS (2009) Digital Britain Final Report.
[39] Cox - 2005 - in NESTA (2008) Creating Innovation.
[40] Ibid
[41] UKCES (2010). Ambition 2020 World Class Skills and Jobs for the UK: 2010 update

- While UK skills levels have been progressing, so too have those in other countries, and at a faster rate. As a consequence, the UK's current international ranking has changed little since 2009, and is unlikely to improve
- The UK will remain in the bottom half of OECD countries in relation low and intermediate level skills.

In the recent Skills for Sustainable Growth[42] strategy document the Government outlines an ambition for the UK to achieve world-class skills attainment by:

- Prioritising funding support for learners with very low levels of skills, while co-investing with individual learners in meeting the costs of intermediate and higher level training courses
- Expanding adult Apprenticeships numbers by up to 75,000 by 2014–15
- Widening access by progressing Apprenticeships from Level 3 to higher-level skills, including Level 4 Apprenticeships.
- Providing a more flexible system of vocational qualifications
- Introducing, where appropriate, professional standards to increase skills in a sector or occupation.

The creative industries have been identified by the UKCES[43] as an emerging growth sector to be investigated further as such, the industry continue to be at the forefront of policy thinking on growth. In the recent Growth Review[6], the Government outlines four key themes for stimulating economic growth:

- Providing business stability
- Making markets more dynamic
- Supporting investment and growth
- Focused public spending

The digital and creative industries are considered key in achieving these growth opportunities, and are highlighted specifically in the report as areas where the Government sees the UK demonstrating competitive advantage.

In Northern Ireland the Northern Ireland Executive has established a growing dynamic and innovative economy as its primary strategic objective in the Programme for Government 2008-2011. Within that, the increasing importance of the creative industries has been recognised, with a specific goal to grow the sector by up to 15% by 2011.

The Department of Cultural Arts and Leisure is the Government lead on the creative industries, working closely with the Department of Enterprise, Trade and Investment, the Department for Employment and Learning, Invest NI, the Arts Council, local universities, Sector Skills Councils and other sectoral bodies to map out how best to support and develop the creative industries in Northern Ireland. In October 2008, 'The Northern Ireland creative Industries Strategic Action plan' and the 'Creative Industries Innovation Fund' were launched to enable this growth.

The Department of Cultural Arts and Leisure secured £5million from the Innovation Fund to establish the Creative Industries Innovation Fund to contribute to the growth of Northern

[42] BIS (2010) Skills for Sustainable Growth
[43] UKCES (2009) Skills for Jobs: Today and Tomorrow – The National Skills Audit for England 2010
[6] BIS (2010) The path to strong, sustainable and balanced growth

Ireland's cultural capital by supporting creativity and creative talents in their business activities. This fund has enabled a number of significant projects to begin. However, given the current economic situation the future of this fund is uncertain and at the time of writing has not been renewed for another period.

In June 2010, the Department for Employment and Learning launched its consultation of *'Success through Skills 2: The Skills Strategy for Northern Ireland'*[44]. This follows on from the Department's first skills implementation plan *'Success through Skills*' in 2006. The aim is to enable people to access and progress up the skills ladder, in order to raise the skills levels of the whole workforce; raise productivity; increase levels of social inclusion by enhancing the employability of those currently excluded from the labour market and secure Northern Ireland's future in a global marketplace. The twin goals of the strategy are to raise the levels of productivity and social inclusion within Northern Ireland, within the context of the programme for Government.

Underpinning this skills strategy is a report by Oxford Economics entitled *'Forecasting Future Skills Needs in Northern Ireland'*[45]. This report was commissioned by the Department for Employment and Learning in association with the Department of Enterprise, Trade and Investment and the Department of Finance and Personnel. It outlined a number of challenges that would need to be addressed if Northern Ireland was to meet the forecasted future (2020) demand for skills. Using this report, the government has identified aspirational strategic goals and five themes for action in their '*Success through Skills 2*' report. It should be noted that these aspirational goals, outlined below, are only realistically achievable if the economy recovers as predicted by the Oxford Economics model and if achievements in the school sector are realised.

The strategic goals are as follows:

- Increase the proportion of those people in employment with NQF level 2 skills and above to 84-90% by 2020, from a baseline of 71.2% in 2008
- Increase the proportion of those people in employment with NQF level 3 skills and above to 68-76% by 2020, from a baseline of 55.6% in 2008
- Increase the proportion of those people in employment with NQF level 4-8 skills and above to 44-52% by 2020, from a baseline of 33.2% in 2008
- Increase the numbers qualifying from Northern Ireland higher education institutions with graduate and post graduate level courses in STEM subjects (with an emphasis in physical and biological sciences, mathematical and computer science, engineering and technology) by 25-30% in 2020

Themes for action include:

- Understanding the demand for skills
- Improving the quality and relevance of education and training
- Improving productivity by increasing the skills levels of the workforce
- Tackling the skills barriers to employment and employability
- Engaging stakeholders
- Consultation on this strategy finished in September 2010 and the Department for Employment and Learning are currently working on an implementation plan

[44] DELNI (2010) Success through Skills 2: The Skills Strategy for Northern Ireland
45 Oxford Economics (February 2009) Forecasting Future Skill Needs in Northern Ireland

The Department of Employment and Learning has also launched the report *'Success through STEM: Draft Government STEM strategy in response to the 'Report of the STEM review'*[46]. There is a huge commitment from Government to increasing the number of skilled workers with qualifications in STEM because recent research[47] indicates that growing sectors of the economy will require these qualifications. This report will form the Executive's overarching strategy and contribute significantly to the government's skills agenda.

3.6 Current skill levels

The UKCES[48] has identified that for the UK to challenge its international competitors economically, the UK needs to invest in skills. Specifically, the report states that:

- Jobs growth is likely to be strong in a range of sectors and occupations, and that to fully maximise economic performance, the 'right' skills need to be supported
- There is demand for highly skilled workers in the labour market, specifically as managers, professionals, associate professionals and in technical roles
- That the UK needs to continue to stimulate the demand for high skilled jobs but that intermediate and generic skills and jobs are also vital for future economic growth.

In particular the UKCES has identified the importance of particular skills areas:

- Management and leadership skills,
- Professional skills in ICT
- Technician and equivalent skills across different sectors
- Intermediate vocational skills
- Customer service and employability skills.

In order to assess the current situation that the creative and cultural industries are in, it is useful to consider the industry's 'skills equilibrium'. It has been suggested[49] that relatively low wages but high employment is becoming increasingly common in some parts of the UK economy with a rising reliance on low skilled and low paid jobs in a number of sectors.

However, this is not necessarily the case for all industries. Evidence suggests[50] that the creative and cultural industries are in the high skills equilibrium quartile of figure 5.

[46] DELNI (2010) Success through STEM: Draft Government STEM strategy in response to the 'Report of the STEM review.

[47] Oxford Economics (February 2009) Forecasting Future Skill Needs in Northern Ireland

[48] UKCES (2009) Skills for Jobs: Today and Tomorrow – The National Skills Audit for England 2010

[49] DTI (2003) Tackling the low skills equilibrium A review of issues and some new evidence

[50] Creative & Cultural Skills (2008) The Creative Blueprint: The Sector Skills Agreement for the Creative and Cultural Industries

Figure 5: Low skills equilibrium and alternative scenario

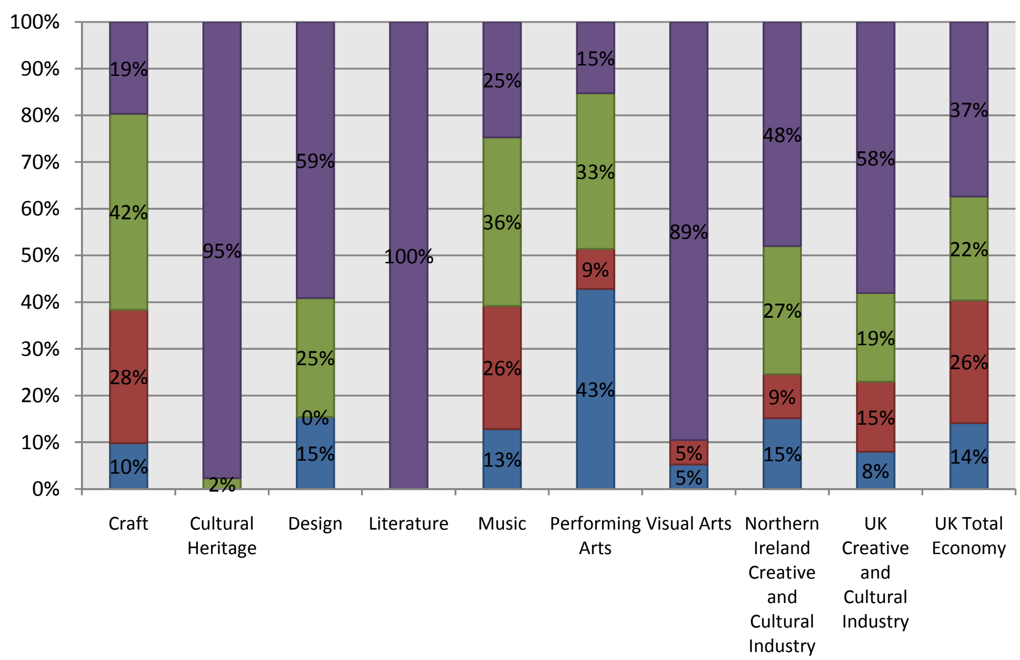
employer demand for higher level skills	skills surplus: low	skills surplus: high
high	**SKILLS SHORTAGE IMBALANCE** - mismatch caused by companies demanding higher qualifications than are available in the local workforce	**HIGH SKILL EQUILIBRIUM** – economy with a strong demand for high level skills, which has a positive effect throughout the supply chain on enhancing the aspirations and actions of individuals with respect to participation in education and training
low	**LOW SKILL EQUILIBRIUM** – employers face few skill shortages in a predominantly low skilled workforce, where there is little incentive to participate in education and training and raise qualification levels and aspirations	**SKILLS SURPLUS IMBALANCE** – mismatch caused by a workforce which cannot find local employment to match their skills and aspirations

Source: Adapted from Green *et al.* (2003).
Notes: The term training is used here and elsewhere to encompass both formal and informal learning.

The Leitch review of skills (2006) emphasises the need for such higher-level skills as a key factor influencing strong business performance[51]. This is particularly interesting in the context of the creative and cultural industries, which in Northern Ireland have a greater proportion of the workforce qualified to above level 4, compared with the rest of the UK economy in general (48%[52] compared to 37%[53]).

The question in this case being, in a sector where skills are already high, how is momentum maintained?

Figure 6: Qualification structure of creative and cultural Industries employment in Northern Ireland (2009)



Creative & Cultural Skills (2011) Creative and Cultural Industries: Impact and Footprint 2010/11

[51] Leitch, S (2006) Prosperity for All in the Global Economy: World Class Skills – Final Report
[52] Creative & Cultural Skills (2010) Creative and Cultural Industries: Impact and Footprint 2010/11
[53] Ibid

Although the whole economy largely reflects the recent qualification trends that are seen within creative and cultural employment, those working in the creative and cultural industries tend to be more highly qualified than the general UK workforce and are becoming more highly qualified over time and at a higher rate[54].

- First degrees are the most commonly held highest qualification in the creative and cultural industries in Northern Ireland between 2004-2009 (24%)
- Those working in the sector in Northern Ireland are more likely to leave than those in employment in general
- Only 19% of those employed in the industry in Northern Ireland in 2008 have subsequently left the sector, this compares to 12% across Northern Ireland in general, and leaving the sectors they are in

The table below shows the three largest occupations by average annual employment between 2003 and 2007 for each sector, across the UK. For each of these occupations, the percentage of employment that is qualified at NQF level 5 or above, and below NQF level 5 is shown.

Table 12: Occupational employment by highest qualification held

Sub-sector	Role	SOC	NQF 5 or above	Below NQF 5 (including 'Other')
Cultural Heritage	Archivists and Curators	2452	78%	22%
Cultural Heritage	Sports and Leisure Assistants	6211	39%	61%
Cultural Heritage	Elementary security occupations n.e.c.	9249	40%	60%
Design	Graphic Designers	3421	49%	51%
Design	Product, Clothing and Related Designers	3422	55%	45%
Design	Design and Development Engineers	2126	56%	44%
Music	Musicians	3415	53%	47%
Music	Musical Instrument Makers and Tuners	5494	21%	79%
Music	Arts Officers, Producers and Directors	3416	62%	38%
Visual Arts	Artists	3411	69%	31%
Visual Arts	Shopkeepers and wholesale/retail dealers	1234	16%	84%
Visual Arts	Managers and proprietors in other services n.e.c.	1239	52%	48%
Performing Arts	Actors, Entertainers	3413	36%	64%
Performing	Arts Officers, Producers and	3416	62%	38%

[54] Creative & Cultural Skills. (2011). Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

Arts	Directors			
Performing Arts	Teaching professionals n.e.c.	2319	62%	38%
Literary Arts	Authors, Writers	3412	70%	30%
Craft	Assemblers (vehicles and metal goods)	8137	1%	99%
Craft	Furniture makers, other Craft Woodworkers	5492	25%	75%
Craft	Glass and Ceramics Makers, Decorators and Finishers	5491	24%	76%

Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

It is clear therefore, that the proportion of jobs requiring higher levels of qualifications has been rising whilst the proportion requiring low or no qualifications has been declining. The creative and cultural industries currently have low job vacancy numbers compared to the UK in total[55] and reasonably low hard to fill vacancies in comparison with other industrial sectors[56]. This is potentially driven by the perception within the industry that there is a need for 're-skilling' as opposed to 'up-skilling', with new skills acquired in post and 'on the job'. The availability of training to meet high skills demands is potentially a problem[57].

In Northern Ireland, employer expectation of qualifications is still mismatched at the higher levels though; approximately half have a level 4 or above qualification whilst 35% expect a degree as a minimum level of qualification. 43% of businesses in Northern Ireland do not have a minimum expectation (in terms of qualifications) for new recruits at all.

Table 13: Minimum qualification level expectation

	Northern Ireland creative and cultural industries	**Creative and cultural industries**
QCF 2/SCQF 5	17%	15%
QCF 3/SCQF 6-7	5%	10%
QCF 4-6/SCQF 7-10	33%	29%
QCF 7-8/SCQF 11-12	2%	3%
No minimum level	43%	42%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

3.7 Finance

The availability of finance to support investment in skills is key to the development and growth of the industry. 90%[58] of creative and cultural businesses in Northern Ireland are micro-businesses (employing less than 10 people) ensuring sufficient finance is in place to support all aspects of the business can be challenging.

As identified by NESTA[59] almost half of creative businesses depend on personal savings for business set-up costs. Anecdotal evidence points to a lack of understanding of the mode of

[55] UKCES (2010) Employment and Skills Almanac
[56] Ibid
[57] Ibid
[58] http://www.ccskills.org.uk/LinkClick.aspx?fileticket=r%2bVLvvqzACU%3d&tabid=600
[59] NESTA (2008) Creating Innovation

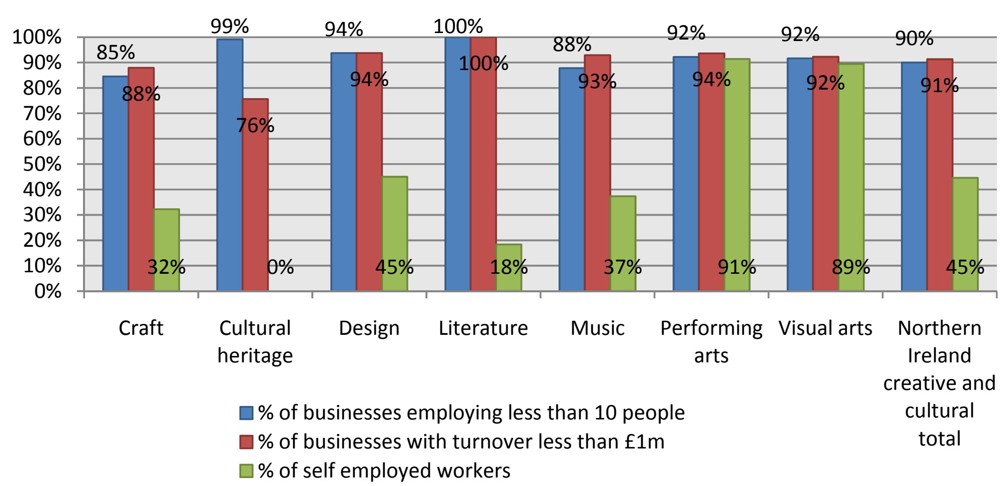
working in the creative and cultural businesses, leading to attempts to apply models which are effective in other sectors, without adapting to suit the industry context[60].

Despite the propensity for the industry to employ people with high skills levels, there are still chronic skills issues. Nearly a third of all businesses in the creative and cultural industry in Northern Ireland experience difficulties recruiting new staff, and say that applicants lack the right skills for the job. This is despite more than nine in ten being appropriately qualified[61].

The consequence of a potential workforce that is highly qualified but skills deficient, is that, businesses and employees in the industry, and those wanting to work in the industry require re-skilling in specific areas to be adequately prepared for work, or to increase productivity for the sector itself. Funding for second level 3 or 4 qualifications is not always possible, and thus the cost of such training falls either on the individual or the business providing the training.

This can be a huge burden on businesses in the industry as they are generally small (see figure 7) and, more than the UK as a whole, are likely to be self employed or freelancers. This can put great strain on the ability for businesses to fund and provide training for their staff.

Figure 7: Comparison of business size, turnover and self-employment in the creative and cultural industries in Northern Ireland



Creative & Cultural Skills (2008) Creative and Cultural Industry: Impact and Footprint 2008/09

As a result of this, in Northern Ireland 45% of employers did not arrange or fund training activity in the past year[62]. Indeed, across the UK, the percentage of those businesses in the industry arranging training for staff has steadily declined over the last seven years (see figures 8 and 9).

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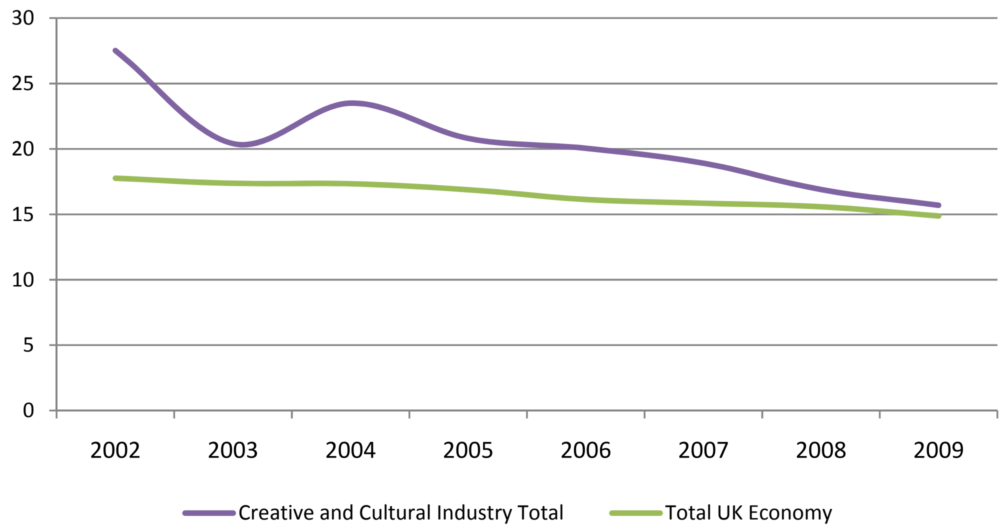
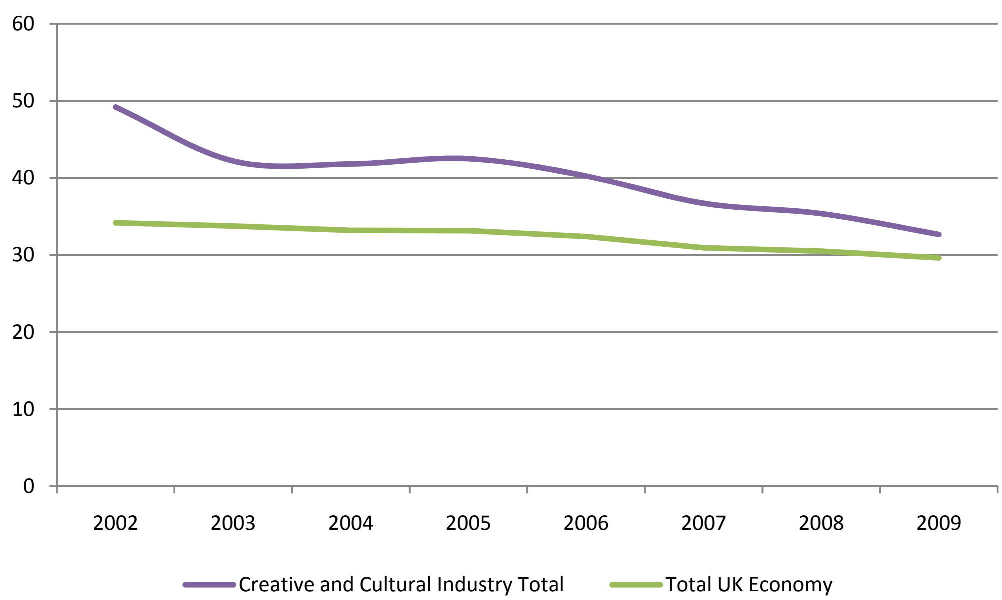
[60] Ibid
[61] Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey
[62] Ibid

Figure 8: % Businesses arranged for funded training for staff in the last four weeks (2002-2009)



UKCES (2010) Employment and Skills Almanac

Figure 9: % Businesses arranged or funded for staff training in the past 13 weeks (2002-2009)



UKCES (2010) Employment and Skills Almanac

4 Current skills needs

It is particularly interesting to look at whether the training on offer to individuals reflects the wide range of occupational roles in the industry. Since the development of both qualifications and training opportunities has been driven by student demand rather than industry need, there is a particularly large number of generalist courses and qualifications but many fewer for specialist technical roles[63].

As highlighted in Creative & Cultural Skills' Sector Qualifications Strategy (SQS)[64], employers in the industry are concerned about the disparity between what is available through the formal education sector and what the sector actually needs.

As such, and in many instances, employers have needed to create bespoke training solutions that, not being accredited and not leading to recognised qualifications, do not attract public funding. This has further exacerbated the divide between the needs of the sector and the offer from traditional training providers.

When seeking to fill the many roles that are available in the industry, especially those demanding very specialist technical skills and knowledge (roles known as 'associate professional and technical' occupations), employers say that applicants with appropriate skills are simply not there. This is especially worrying given that for example 30,000 skilled workers will be needed in offstage/backstage roles by 2017, of which there is a forecast shortage of 6,000[65].

4.1 What are the current skills shortages facing the creative and cultural industries?

In Northern Ireland, nearly a third (29%) of creative and cultural businesses have experienced problems recruiting. 73% say that it is because applicants lack experience, and 74% that they lack the right specialist skills for the job (see table 14).

Table 14: Reasons given for recruitment problems

	Northern Ireland creative and cultural Industries	UK creative and cultural industries
Applicants lack the specialist skills	74%	38%
Applicants lack the experience	73%	43%
There have been few or no applicants	47%	24%
Applicants lack the transferable skills	47%	23%
Applicants tend to have poor attitudes and low motivation	47%	15%
Applicants lack the qualifications	47%	6%
Firm unable to meet applicant expectations	1%	13%
Other	0%	5%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

[63] As can be seen by consulting the National Database of Accredited Qualifications (www.accreditedqualifications.org.uk)
[64] http://www.ccskills.org.uk/Qualifications/SectorQualificationsStrategy/tabid/135/Default.aspx
[65] Creative & Cultural Skills and TBR (2007) NSA Projections

The key issue, then, is that the future workforce of the creative and cultural industries are composed of a large pool of 'qualified' potential recruits who do not have the specific 'associate professional and technical' skills that more than 60% of jobs in the creative and cultural industries across the UK require (see table 15), and that the sector is not particularly engaged with these areas when it comes to planning training. As such, the acquisition and retention of hands-on skills and the existence of specialist training centres is absolutely crucial

Table 15: Occupational breakdown of the creative and cultural industries across the UK

Occupational category	Craft	Cultural Heritage	Design	Literature	Music	Performing arts	Visual arts	Creative and cultural industry	UK Total
Managers and senior officials (e.g. venue manager, artistic director)	17%	16%	2%	0%	15%	5%	2%	7%	16%
Professional occupations (e.g. finance)	2%	27%	22%	0%	8%	10%	4%	13%	13%
Associate professional and technical (e.g. actor, designer, sound technician, curator, master craftsman)	22%	14%	71%	98%	43%	71%	89%	62%	15%
Administrative and secretarial (e.g. arts administrator)	5%	13%	1%	0%	6%	3%	1%	3%	11%
Skilled trades occupations (e.g. carpenter, electrician)	31%	7%	4%	2%	7%	3%	0%	66%	11%
Personal service occupations	0%	11%	0%	0%	1%	2%	0%	1%	9%
Sales and customer service occupations (e.g. box office staff)	2%	0%	0%	0%	10%	2%	3%	2%	8%
Process, plant and machine operatives	12%	0%	0%	0%	3%	0%	0%	2%	7%
Elementary occupations - e.g. unskilled labourers	9%	12%	0%	0%	8%	4%	0%	4%	11%

Creative & Cultural Skills (2008) Creative and Cultural Industry: Impact and Footprint 2008/09

It is also important to note that in administrative, support and management roles, creative and cultural organisations often recruit from the rich over-supply of general creative and cultural graduates to roles that do not require higher level or creative and cultural-specific qualifications. In specific specialist areas such as IT, finance, customer services and administration the sector often misses out on the wider pool of talent available from other areas of study or those without formal qualifications.

Significantly (across England[66]) vacancies and skills shortages are much greater in the Associate Professional and Technical Occupation category in the creative and cultural industries than across the general economy (table 16).

[66] UKCES. (2010). National Employer Skills Survey 2009

Table 16: Vacancies reported as a proportion of occupational area

		Creative and cultural industries		
Occupational area	**Vacancies across total economy as a proportion of occupational area**	**Vacancies as a % of occupational area**	**Hard to fill Vacancies as a % of occupational area**	**Proportion of skills shortage vacancies as a % of occupational area**
Managers and Senior Officials	5%	10%	8%	11%
Professional Occupations	10%	15%	21%	30%
Associate Professional and Technical Occupations	17%	38%	43%	43%
Administrative and Secretarial	12%	12%	12%	3%
Skilled Trades Occupations	8%	1%	1%	1%
Personal Service Occupations	14%	3%	3%	0%
Sales and Customer Service Occupations	12%	10%	8%	8%
Process, Plant and Machine Operatives	5%	1%	0%	0%
Elementary Occupations	16%	10%	3%	4%

UKCES. (2010). National Employer Skills Survey 2009

This is despite three quarters of those working in the 'associate professional & technical category', across the creative and cultural industries in the UK being qualified to level 4 or above

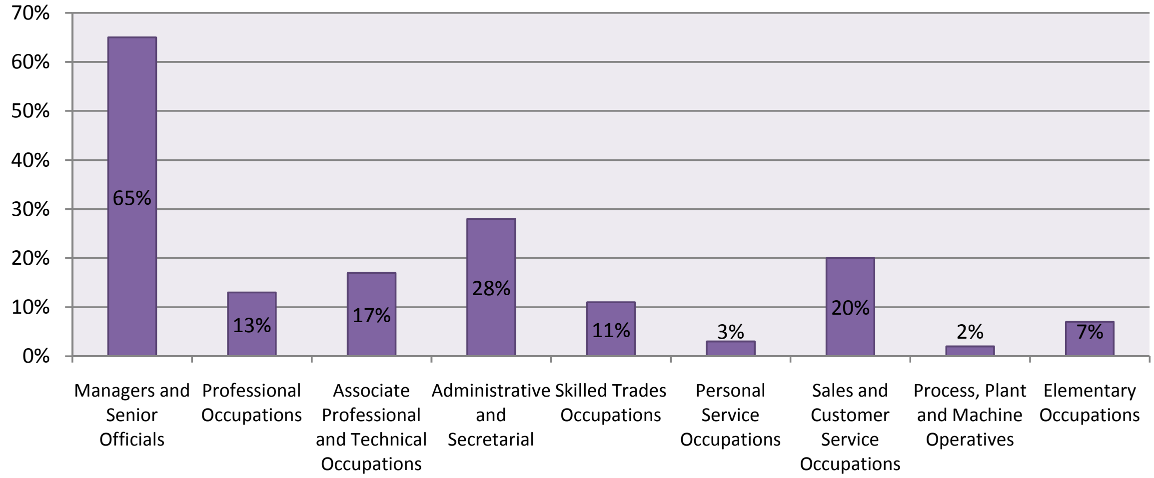
Table 17: Qualification structure by occupational area in the creative and cultural industries across the UK

Occupational Area	Below L2	Level 2	Level 3	Level 4 +
Managers & Senior Officials	7%	23%	20%	50%
Professional Occupations	4%	8%	16%	72%
Associate Professional & Technical	6%	10%	18%	66%
Admin & Secretarial	12%	32%	22%	34%
Skilled Trades Occupations	24%	34%	28%	14%
Personal Service Occupations	10%	15%	25%	50%
Sales & Customer Service Occupations	14%	32%	34%	20%
Process, Plant & Machine Operatives	36%	35%	26%	3%
Elementary Occupations	24%	31%	20%	25%
All	8%	15%	19%	58%

Creative & Cultural Skills. (2010). Creative and Cultural Industry: Impact and Footprint 2010/11

Training investment in 'associate professional and technical occupations' would seem to be vital. However, only a fifth of all people in the industry who undertake training do so in this category.

Figure 10: Percentage of training in occupational areas in the creative and cultural industries



UKCES (2010) Employment and Skills Almanac

4.2 What type of skills gaps are creative and cultural organisations faced with at present?

41% of businesses in Northern Ireland in the industry identify skills gaps in their current workforce (skills gaps are skills that existing staff need but lack, as opposed to skills shortages, which mean that employers cannot find job applicants with the right skills). These issues are exacerbated by the small business structure in the industry. In many cases, one or two individuals are required to perform a variety of different roles in the organisation, such as fundraising and programming, for example. Many employees take on management and business-related responsibilities, which are not in their areas of expertise. As such, administration skills suffer from as much of a skills gap as technical skills (see table 18).

Table 18: Types of skills lacking in creative and cultural businesses

Skill Name	Northern Ireland creative and cultural industries	Creative and cultural industries
Administration	42%	11%
Marketing/Advertising/PR	34%	14%
Technical	34%	13%
Management	33%	4%
Other	32%	26%
Business Development	28%	13%
ICT Skills	0%	27%
Finance/Accounting	0%	11%
Digital	0%	8%
Sales	0%	5%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

Creative and cultural businesses experience skills gaps due to staff lacking experience, no time for training and/or a limited budget (see table 19). None of those surveyed thought their skills gaps were caused by the limited availability of relevant training. The issue is not *how* the creative and cultural industries workforce can fill their skills gaps, but *how* they can find time for, and finance, training.

Table 19: Reasons for experiencing skills gaps

	Northern Ireland creative and cultural industries	Creative and cultural industries
Limited time for training	73%	39%
Lack of experience	62%	32%
Limited budget for training	62%	28%
Other	42%	23%
Difficult to keep up with change	34%	15%
Lack of 'time served'	26%	9%
High staff turnover	26%	2%
Limited availability of training	0%	7%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

The effects of skills shortages and skills gaps are different. The impact of a skills shortage is an increased workload for everyone else in the business, and missed opportunities to take on new business, causing business to be turned away (see table 20). Skills gaps, on the other hand, can lead to existing business being lost through poor delivery or impossible pressure on the workforce. In Northern Ireland there is more of a spread of consequences for skills gaps than there are skills shortages.

Table 20: Consequences of skills shortages and gaps for creative and cultural businesses in Northern Ireland

	Skills shortages	Skills gaps
Lost business	0%	68%
Increased workload for others	27%	55%
Delays to developing new products or services	0%	52%
More work is outsourced	0%	26%
Turned away business	26%	26%
Difficulties introducing new working practices	0%	26%
Difficulties meeting quality standards	0%	26%
Other	47%	8%
Increased operating costs	0%	0%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

4.3 Training issues in the creative and cultural industries

Skills gaps identified by employers themselves suggest the need for a more professional approach to training delivery in the creative and cultural industries. Traditionally Government investment is targeted primarily at further and higher education, and at support to acquire additional vocational qualifications.

The sector has tended not to influence provision in further and higher education, as this has been perceived by the sector as being determined by student interest in taking courses rather than by employment needs. The sector has been less successful therefore in benefiting from funding for vocational qualifications because their workforce tends to be qualified to a higher level than the average across the workforce.

However, employers are beginning to raise concerns that highly-qualified graduates are not 'job ready' and need to acquire further skills, either on the job or through ongoing training opportunities.

4.3.1 What kind of training provision does the creative and cultural workforce already undertake?

UK employees across all industries who undertake regular training earn on average between 5% and 6% higher than those who do not undertake workplace training[67]. Given that there are considerable issues around skills shortages and gaps in the industry, training staff and investing in training is vital if the industry is to remain economically successful.

Although many creative and cultural businesses have made use of training advice and accreditation schemes, in Northern Ireland only 55 % of businesses engaged in training for staff in 2008/9. This is the highest figure across the UK nations. More training is not conducted, however, due to the fact that there are few in-built requirements in the sector for employees to update their practice or to acquire and develop formal qualifications.

Employers across Northern Ireland report a number of barriers to offering their staff training (see table 21). A common issue in training provision is lack of available time (cited by 34% of businesses) or that training is not considered a training priority (12%). Many creative and cultural organisations in Northern Ireland (51%) also feel that their staff are already fully proficient and are in no need of continuing professional development (CPD) –indicating that they may not be thinking sufficiently about future skills issues (see section 5 for more details).

Table 21: Reasons for not training

	Northern Ireland creative and cultural industries	UK creative and cultural industries
Your staff are already fully proficient	51%	50%
There is not enough time for training	34%	27%
Training is not considered to be a business priority	12%	4%
Other	10%	24%
No appropriate training is available in terms of subject area	7%	7%
Your staff are not keen to participate in training	7%	1%
Your establishment lacks the funds for training	6%	14%
There is a lack of cover for training	0%	5%
Training is available but not at the right level	0%	1%
No suitable training is available in terms of mode of delivery	0%	1%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

4.3.2 Preferred ways of delivering training

In Northern Ireland, unlike across the creative and cultural industries in the UK in general, external training is most popular (see table 22).

[67] BERR (2006) Non-certified learning and skills: incidence in the UK, variation across countries and links to productivity

Table 22: Preferred training mechanisms

	Northern Ireland Creative and Cultural Industries	UK Creative and cultural industries
Informal training (e.g. on-site, on-the-job coaching)	31%	46%
In-house formal training (delivered by your organisation to its staff)	30%	33%
External training (e.g. college or university or other training provider)	53%	24%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

Attending conferences, personal knowledge development and knowledge and skills training by external providers are the most common types of training undertaken by the industry Northern Ireland (see table 23).

Table 23: Common types of training undertaken

	Northern Ireland creative and cultural industries	UK creative and cultural industries
Attending conferences	74%	42%
Personal knowledge development e.g. reading	58%	45%
Knowledge based sessions delivered by an external provider	52%	32%
Skills based sessions delivered by an external provider	39%	30%
Industry-accredited training	37%	18%
Networking	26%	41%
Mentoring	20%	25%
On the job coaching	20%	42%
Postgraduate level training	20%	6%
Graduate-level training	6%	6%
Other	6%	5%
Training developed internally by your business	1%	19%
An Apprenticeship	0%	3%
NVQs or SVQs	0%	4%
Other vocational training	0%	7%
Specific Union Learning	0%	1%
Structured CPD based on organisational needs	0%	10%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

Across Northern Ireland, the most common reasons given for undertaking training are, unsurprisingly, that it provides appropriate skills for employees (48%). Nearly 40% of businesses state that the recommendation of a particular course and industry recognition (27%) are important.

Table 24: Most common reasons for undertaking training

	Northern Ireland creative and cultural industries	UK creative and cultural industries
It provided the appropriate skills for	48%	50%

employees		
Recommendation	39%	18%
Industry recognition	27%	20%
Availability of courses	25%	12%
Because of the accreditation gained	25%	17%
Because I could get funding for it	20%	5%
It suited the need	20%	35%
It supported growing the business	20%	17%
It was a good networking opportunity	20%	13%
The cost suited my budget	20%	19%
To keep skills and knowledge up to date	19%	20%
Organisational policy/statutory requirement	0%	4%
Other	0%	3%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

When considering the value of training to their business, creative and cultural employers in Northern Ireland scored industry-accredited coaching at 9.9 and training developed internally at 8.8. Interestingly, training based on specific business needs is not considered particularly valuable.

Table 25: Value of training to the business

	Northern Ireland creative and cultural industries	**UK Creative and cultural industries**
Graduate-level training	9.9	7.1
Training developed internally by your business	8.8	7.8
Knowledge based sessions delivered by an external provider	8.1	7.5
On-the-job coaching	8.0	8.3
Other	8.0	6.8
Skill based sessions delivered by an external provider	7.5	7.7
Industry-accredited training	7.3	7.4
Attending conferences	7.1	6.4
Mentoring	7.0	7.6
Other vocational training	7.0	7.3
Personal knowledge development e.g. reading	6.3	7.6
NVQs or SVQs	6.0	7.5
Networking	5.8	6.5
Structured CPD based on organisational needs	5.0	7.7
Postgraduate level training	3.0	6.6
An Apprenticeship	-	8.0
Specific Union Learning	-	6.6

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

4.4 Funding for training

In Northern Ireland, across the creative and cultural industries, less than 1 in 10 businesses give their employees an entitlement to train (this is the lowest figure across the creative and cultural industries in the UK). Despite this relatively low figure, more than 80% of employees have undertaken some form of training in the past year, the highest figure across the UK (see table 26).

Table 26: Percentage of days spent training by staff

	Northern Ireland creative and cultural industries	UK Creative and cultural industries
0 days	19%	44%
1-2 days	14%	11%
3-4 days	7%	9%
5-7 days	43%	12%
8-10 days	3%	7%
11-15 days	10%	5%
16-20 days	-	3%
21-30 days	-	3%
31-40 days	-	2%
40+ days	5%	3%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

The continued availability of finance to support investment in skills is vital in the creative and cultural industries, where 90% of organisations are micro-businesses (employing fewer than 10 people)[68], but ensuring that sufficient finance is in place to support all aspects of the business can be challenging. The vast majority of businesses (94%) have neither an internal training budget or a record of accessing external training funding (72%). Only 3% of businesses in Northern Ireland have increased their training budget in the last year, far below the UK average (8%).

By far the most frequently stated reason for not increasing an organisation's training budget in the creative and cultural industries in Northern Ireland was a lack of funds (82%). 18% and 11% of businesses are also not increasing training because of fewer employees and the current economic climate respectively (clearly linked).

Table 27: Reasons for not increasing training budgets

	Northern Ireland creative and cultural industries	UK creative and cultural industries as a whole
Lack of funds	82%	30%
Fewer employees	18%	15%
Economic climate	11%	25%
Bureaucracy	0%	2%
Lack of knowledge of training opportunities	0%	2%
Less training required	0%	29%
More free training is available	0%	3%
Not enough time for training	0%	11%
Suitable training not available	0%	5%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

[68] Creative & Cultural Skills. (2008). *Performing Arts: Impact and Footprint 2008/09.* Creative & Cultural Skills.

Where training does occur, 56% of creative and cultural businesses will fully fund it, well above the creative and cultural UK average (42%).

Table 28: Funding of training in businesses

	England creative and cultural industries	UK creative and cultural industries
Fully	56%	42%
Don't know	21%	28%
Not-at-all - funding comes from another organisation	14%	8%
Not-at-all - employee funds	9%	11%
Partly, with funding from another organisation	1%	7%
Partly, with employee	-	4%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

Only 28% of creative and cultural businesses in Northern Ireland have accessed public funding. More than 40% of businesses in the industry do not so because they are unaware of such available funding (more than 5 times higher than the UK average for the creative and cultural industries).

Table 29: Reasons for not accessing funding

	Northern Ireland creative and cultural industries	UK creative and cultural industries
Unaware of funding available	42%	8%
Don't need funding	23%	23%
Don't have time to apply	17%	15%
Don't qualify	7%	17%
Not applicable	5%	1%
Not undertaking training	5%	7%
Don't want to apply	0%	2%
No suitable funding available	0%	4%
Other	0%	1%
Too difficult to apply	0%	7%
Training not available to apply for funding for	0%	2%
Unsure how to apply	0%	29%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

Of the 28% of businesses that do access funding, there is a mix of sources, most notably through Business Link (53%), Arts Council grants (44%) and trade or professional bodies (39%).

Table 30: Commonly accessed sources of funding

	Northern Ireland creative and cultural industries	UK creative and cultural industries
Business Link	53%	29%
Arts Council grant	44%	16%

Trade or professional body	39%	16%
Local, regional, central government funding	11%	27%
MLA	1%	0%
Learning and Skills Council	0%	10%
Trusts & foundations	0%	9%
Sector Skills Council	0%	5%
Other	0%	4%
Lottery funding	0%	3%
Project-based funding	0%	3%
Educational establishment	0%	2%
Don't know	0%	1%
Private funding	0%	0%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

5 Anticipating What Lies Ahead

The creative and cultural industries are expected to grow significantly over the next ten years. Employment in the industry will increase by 32% in the coming decade (see section 5.1 – Scenarios – for more detail). This is approximately five times the rate of the UK economy in general. In the industry, there will be a need for more than 310,000 more people to enter the sector whether it is by replacing existing jobs or through natural expansion[69]. Research undertaken by the UKCES[70] suggests that growth in the industry (55%) will be in 'associated professional and technical roles', those requiring specialist technical skills.

Meanwhile, employment in "professional" and "associated and technical roles" will increase at a faster rate than compared to the UK as a whole (26% compared to 15% respectively)[71]. This places a huge emphasis on the industry and its support mechanisms to prepare people with the right skills for these growth areas. It would seem vital, therefore, that businesses begin to invest in training in associate professional and technical roles as soon as possible.

Currently, organisations in the industry in Northern Ireland tend not to 'think forward' in terms of the skills issues that might affect them in the future. Nearly a third of businesses (30%) do not anticipate future skills gaps, and 16% are unable to predict what they might be, though online and marketing skills score highest (see table 31) [72].

Table 31: Perceived future skills needs

	Northern Ireland creative and cultural industries	UK creative and cultural industries
None	30%	32%
ICT skills	18%	10%
Don't know	16%	11%
N/A	16%	7%
Marketing skills	13%	7%
Online skills	11%	8%
Creative expertise	6%	8%
Digital skills	6%	16%
Management	1%	2%
Administrative skills	0%	3%
Business skills	0%	2%
Design skills	0%	2%
Finance/ Accounting	0%	2%
Foreign language skills	0%	1%
Fundraising	0%	2%
Sales skills	0%	2%
Teaching skills	0%	1%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

[69] Creative & Cultural Skills (2011) Occupational, Skills and Productivity Forecasting. Creative & Cultural Skills
[70] UKCES (2008) Working Futures 3
[71] Ibid
[72] Unless otherwise stated all data in section 5 comes from Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

Free training in certain areas (82%), subsidies (48%), funding via Sector Skills Councils (41%), and tax breaks for essential training (38%) are the four most commonly cited types of support that would help employers provide more training.

Table 32: Support for training

	Northern Ireland creative and cultural industries	UK Creative and cultural industries
Free training in certain areas	82%	65%
Subsidies	48%	53%
Funding available via Sector Skills Council's	41%	55%
Tax breaks for essential training	38%	47%
Availability – subject	11%	1%
None	10%	17%
Funding via any source	5%	2%
Other	0%	1%
Don't know	0%	1%
Awareness of provision	0%	1%
Greater capacity	0%	0%
Availability - delivery method	0%	0%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

Over two thirds of organisations in the creative and cultural industries in Northern Ireland (83%) would support a funding system where the money went directly to companies to manage, rather than via a funding body. Across the industry in Northern Ireland, 44% of employers state that all occupations will maintain their current importance. 22% of employers say that fundraising will become increasingly important and 18% understand that marketing will become increasingly important to achieving a high level of success over the next few years. Generally, a wide spread of occupations are considered important.

Table 33: Occupations likely to be important in the future

	Northern Ireland creative and cultural industries	UK creative and cultural industries
All occupations will maintain current importance	44%	39%
Fundraising	22%	4%
Marketing	18%	12%
ICT	16%	21%
Management	16%	6%
Programme/Project Management	16%	3%
Other	13%	5%
Public Relations	8%	3%
Creative	7%	2%
Retail/Sales	5%	4%
Education	0%	4%
Graphic Designer	0%	3%
Finance	0%	3%
Research	0%	2%
Facilities	0%	2%

Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

5.1 Scenario Planning

The section that follows indicates how the creative and cultural industry is likely to perform in the coming decade. Three scenarios are presented:

- The baseline – what would be expected to happen if current projections are realised
- The aspirational - what the industry could achieve in favourable economic conditions
- The negative – What could happen to the industry if current economic conditions worsen

5.1.1 Baseline scenario

In this scenario, the UK's creative and cultural industries recover from the recession to resume a steady path of growth that is consistent with pre-recession rates, both in terms of economic performance and employment. The international competitiveness of the industry remains steady. The financial and political constraints faced by publicly funded organisations and cultural institutions mean that occupational growth mainly occurs in the private sector until 2015; significant job cuts are seen in the public sector. In an attempt to replace lost income, fundraising and business development occupations in the public sector will grow at an increased rate – necessitating an increase in fundraising, communication and engagement skills to match demand. From 2010, annual public sector funding will decrease until after 2015, where it levels out and begins to increase again annually, though at a slower rate of growth than private funding. Occupational growth is therefore limited and slower in the public sector compared with the private sector post-2015[73].

Government procurement and private sector investment will be increasingly focused on the green economy. Occupations and businesses in the design industry which support work on these large-scale issues will grow, with a new green bank being established for SMEs to access finance to undertake work in this area.[74] Developments in digital technology will result in higher growth rates for occupations having a strongly digital element. ICT skills will also be in increasingly high demand as businesses and organisations continually integrate new technologies into their operations[75].

Both extremely specialised, highly skilled occupations requiring level 4 and above skills and specific technical occupations that occur at level 3 will be in high demand. While level 2 and below skills will not necessarily grow at a high rate, they are still essential to the makeup of the sector and so occupations will not decline significantly in these areas.[76] The number of creative level 3 Apprenticeships being undertaken will increase both amongst young people and adults, as individuals seek to up-skill or re-skill in order to enter into specific roles within the sector. This slight shift towards vocational qualifications is also facilitated by higher education policy under which Higher Education (HE) qualifications are more expensive to the individual and are accompanied by increased uncertainty surrounding finding work after the

[73] HM Treasury, Budget 2010, http://www.hm-treasury.gov.uk/d/junebudget_complete.pdf
[74] Ibid.
[75] BIS and DCMS (2009), Digital Britain, http://webarchive.nationalarchives.gov.uk/20100511084737/http://www.culture.gov.uk/images/publications/digitalbritain-finalreport-jun09.pdf
[76] UKCES, Skills for Jobs: Today and Tomorrow; The National Strategic Skills Audit for England 2010, http://www.ukces.org.uk/upload/pdf/NSSA_Volume%201_FINAL_BOOKMARKED_110310.pdf

qualification is completed.[77] Internships and unpaid work experience will continue to be one of the methods by which graduates can gain entry into such a sought after sector.[78]

Due to the consistent oversupply of graduates to the sector, creative occupations in non-creative sectors continue to grow. This is also in part due to increasing recognition by non-creative and cultural industries of the importance of creative thinking in innovation and the role it can have in driving more general economic productivity[79]. More generic employability and workplace skills are therefore in increased demand from those in creative occupations outside the industry.

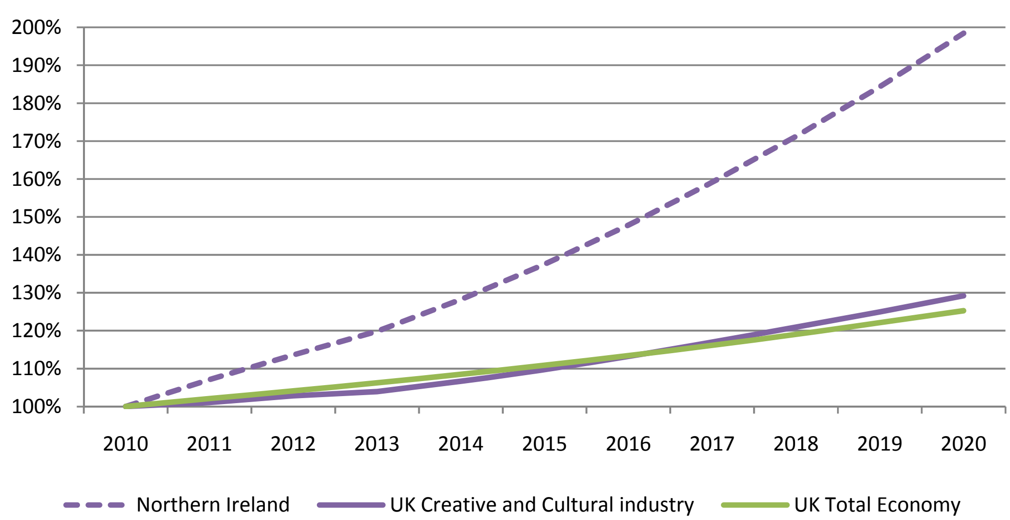
5.1.1.1 Gross Value Added (GVA)

GVA contributed to the UK economy by the creative and cultural industries is forecast to grow by 31% between 2010 and 2020.

In contrast, GVA for the UK economy is predicted to grow by only 25% over the same period. Annual GVA growth in the industry is predicted to be lower between 2010 and 2012 than in the years following this to 2020. Growth is lowest between 2012 and 2013, when it is predicted to increase by 1%, compared to between 2019 and 2020, when it is forecast to grow by 4%.

Northern Ireland is expected to experience significant growth in the industry (nearly doubling in size over the next 10 years).

Figure 11: GVA growth comparisons between the creative and cultural industries in Northern Ireland and the UK economy



Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

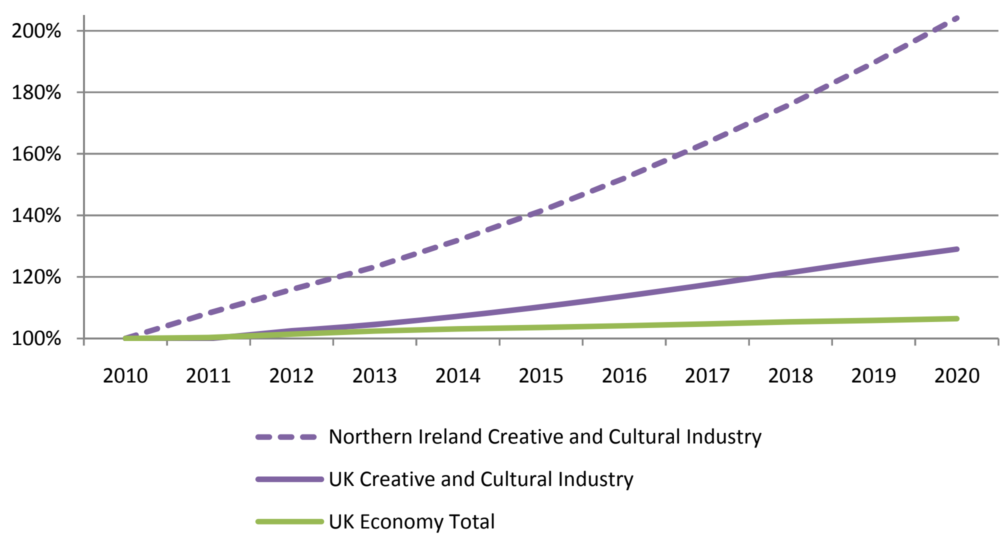
[77] See, for example, http://www.guardian.co.uk/education/2010/jul/06/graduates-face-tougher-jobs-fight
[78] New Deal of the Mind (2010), Creative Survival in Hard Times, http://www.artscouncil.org.uk/media/uploads/publications/Creative_Survival_NDotM_for_ACE_march_2010_FINAL.pdf
[79] NESTA (2008), Beyond the Creative Industries: Mapping the Creative Economy in the UK, http://www.nesta.org.uk/library/documents/beyond-creative-industries-report.pdf

5.1.1.2 Employment

Despite difficult economic conditions, employment in the creative and cultural industries is forecast to grow by an average of 3% per year between 2010 and 2020 and have an overall increase of 32%. In contrast, the whole UK economy is predicted to grow in employment by 6% in the same period.

Similarly to GVA, Northern Ireland's creative and cultural industry is expected to double over the next 10 years.

Figure 12: Employment growth of the creative and cultural industries and the UK economy 2010-2020



Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

Much of this employment growth is driven by the design, visual and performing arts industry.

Table 34: Employment growth in the creative and cultural industries in Northern Ireland

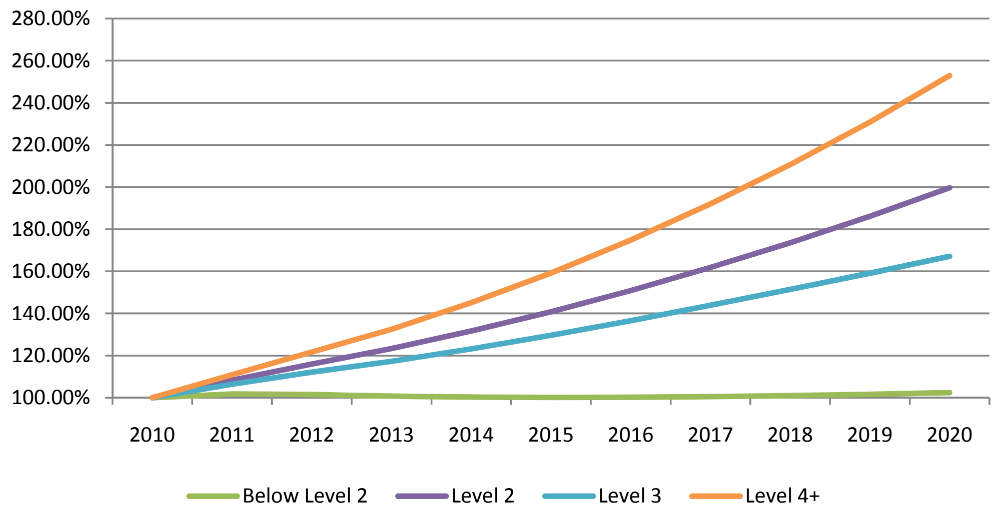
	% employment growth 2010-2020
Cultural Heritage	+61
Design	+130
Music	+68
Visual arts	+161
Performing Arts	+192
Literature	+76
Craft	-6
Northern Ireland creative and cultural industry	**+104**

Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

5.1.1.3 Qualifications held

The largest group within creative and cultural employment in Northern Ireland is NQF qualification level 4+, and it is growing over time to take a greater share. While growth in all qualification levels is apparent, there is minimal growth in people with no qualifications, or qualifications at level 1.

Figure 13: Qualification structure in the creative and cultural industries 2010-2020 (need to adapt this)



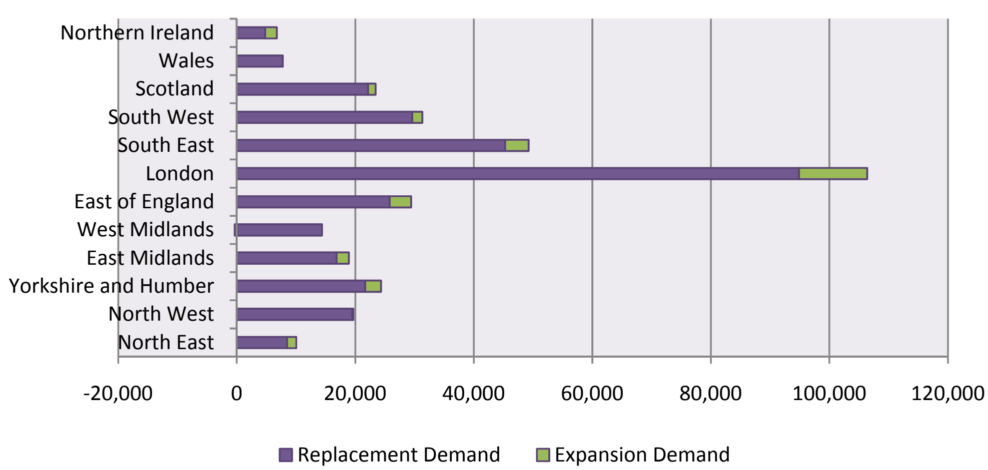
Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

5.1.1.4 Job flows

Within the creative and cultural industries, total annual employment demand is forecast to be 340,000 in 2020. This is the total number of individuals required to replace those who have left their jobs in a year (replacement) plus any sector growth in overall employment (expansion).

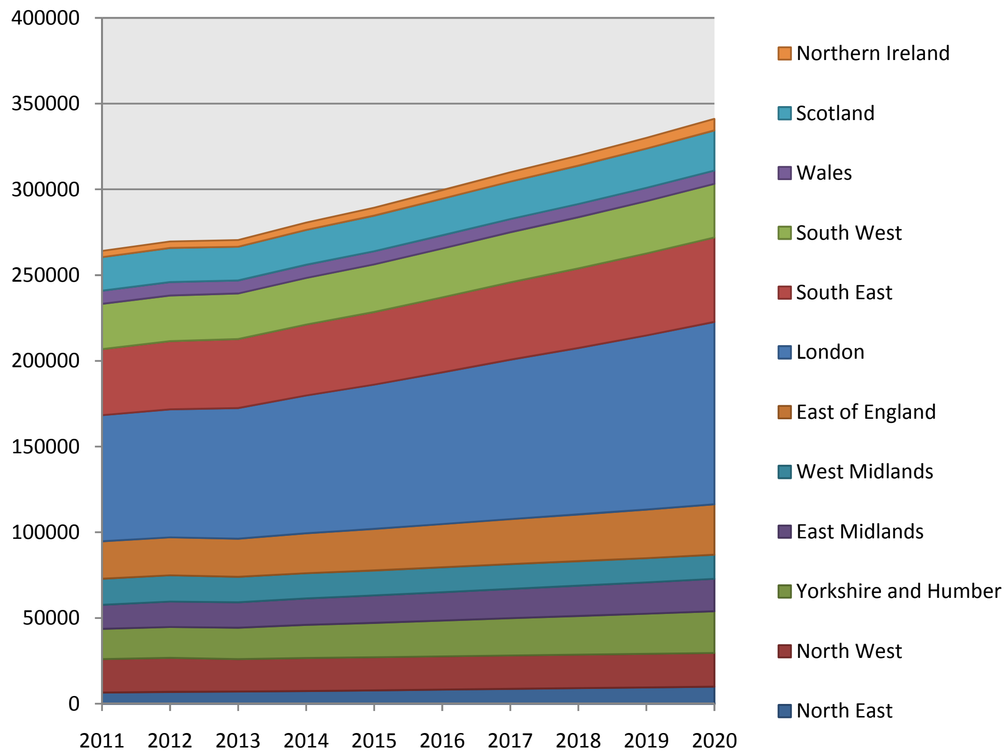
In Northern Ireland there is a total demand for just fewer than 6,800 people over the period 2010-2020. 30% of this demand will be due to expansion of the industry in Northern Ireland (see figures 14 and 15).

Figure 14: Employment demand in the creative and cultural industries 2020



Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

Figure 15: Employment demand 2010-2020



Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

The table below shows the three largest occupations by total annual employment demand in 2020 for each sub-sector across the UK. For each of these occupations, the key skills required to fulfill the role have been identified.

Table 35: Top three occupations by total employment demand 2020

Sub-sector	Role	SOC	Demand 2020	Key skills
Cultural Heritage	Sports and leisure assistants	6211	2,369	Facilities assistance, supervision, events assistance
Cultural Heritage	Social science researchers	2322	2,580	Compile information, analyse information, implement social research tools
Cultural Heritage	Leisure and sports managers	1225	1,088	HR management, facilities management, research
Design	Graphic Designers	3421	33,857	Project management, financial management, creativity
Design	Design and Development Engineers	2126	18,522	Technical knowledge, operating specialist tools, supplies management
Design	Product, Clothing and Related	3422	9,495	Client management, customer service, research, creativity

	Designers			
Music	Musicians	3415	6,503	Writing music, creativity, performance
Music	Arts Officers, Producers and Directors	3416	754	Project management, HR management, facilities management
Music	Photographers and audio-visual equipment operators	3434	685	Adjust equipment, using specialist equipment, check equipment
Visual Arts	Artists	3411	24,684	Creativity, technical knowledge, using specialist tools
Visual Arts	Shopkeepers and wholesale/retail dealers	1234	*	Stock management, sales, financial management
Visual Arts	Managers and proprietors in other services n.e.c.	1239	*	HR management, stock management, marketing management
Performing Arts	Dancers and Choreographers	3413	10,415	Creativity, research, performance
Performing Arts	Actors, Entertainers	2319	9,940	Co-ordinating, creating grading systems, advises
Performing Arts	Product, clothing and related designers	3416	8,330	Project management, HR management, facilities management
Literary Arts	Authors, Writers	3412	19,628	Research, creativity, transcription
Craft	Sales representatives	2129	1,065	Research, design, advise on patents
Craft	Vocational and industrial trainers and instructors	3542	*	Manage client relationships, keep financial records, expert advice
Craft	Precision instrument makers and repairers	5223	*	Construction, assembly, machinery operation

Creative & Cultural Skills. (2011). Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting
**Figure below 500*

5.1.2 Aspirational scenario

The aspirational scenario for the creative and cultural footprint places the creative industries at the very heart of Britain's economy. By 2020, the industry will generate more GVA than the financial services sector[80]. The creative and cultural industry will be a core player in the

[80] The Work Foundation, Innovation, Creativity and Entrepreneurship in 2020: A Work Foundation Statement, http://www.theworkfoundation.com/assets/docs/publications/241_pre_budget2010a.pdf

economy, not only in emerging from recession itself but driving productivity and innovation within all areas of industry.

Changes to legislation and general digital infrastructure will see the rapid growth and democratisation of content creation and online services[81]. The music sub-sector will experience growth from increased legal protection, allowing independent hobbyist labels to achieve modest growth. Alongside this, content creation for cultural heritage, certain areas of design and the digitalisation of literature will all create occupational growth in their individual sectors[82].

The implementation of infrastructure enabling wide-scale access to super-fast broadband will open the online market to those currently barred due to inadequate internet speeds; it will also increase the feasibility of relocation for creative businesses to regional bases outside of London in order to lower operating costs. The spread of occupational growth will therefore be wider, although creative clusters of high occupational density will remain centred on current hotspots; including London, Manchester, Edinburgh and the East of England.[83]

Despite increasingly open international markets, the UK is able to maintain its current competitive advantage through high levels of innovation, as well as the continuing cultural pervasiveness of the English language. The requirement for quality services and products prevents outsourcing of creative work outside the UK, allowing the UK to be the leading cultural centre in the world.[84]

Despite a continuing decrease in spending by the public sector on the arts, income is supplemented by private philanthropy. This occurs both at individual and organisational level, leading to improved links between creative businesses and organisations in other sectors[85]. Public sector organisations thus become less bureaucratic and target-led, instead being able to innovate and lead on large projects within the sector[86].

The ability of the creative and cultural industries to help tackle large societal and environmental problems is increasingly recognised. The design industry, alongside science, technology, engineering and mathematics becomes crucial to supporting the huge occupational surge towards the low carbon and green economy. The creative industries are seen as having a large and fundamental part to play in this shift.[87]

Entry to occupations in the sector will start to come from a wider pool of talent. Regulations on the payment of interns and the amount of unpaid labour that firms are allowed to use will begin to come into effect, allowing people from different social groups to gain valuable

[81] BIS and DCMS (2009), Digital Britain, http://webarchive.nationalarchives.gov.uk/20100511084737/http://www.culture.gov.uk/images/publications/digitalbritain-finalreport-jun09.pdf
[82] The Economist, The Future of Books, http://globaltechforum.eiu.com/index.asp?layout=rich_story&channelid=5&categoryid=15&doc_id=10370
[83] NESTA (2009), The Geography of Creativity, http://www.nesta.org.uk/library/documents/Report%2027%20-%20Geography%20of%20Creativity%20v4.pdf
[84] UKCES, Praxis: Skills are not enough: The globalisation of knowledge and the future UK economy, http://www.ukces.org.uk/upload/pdf/PRAXIS%20Edition%204%20WEB%20READY_1.pdf
[85] Conservative Party (2010), The Future of the Arts with a Conservative Government, http://www.vaga.co.uk/images/stories/file/future-of-the-arts_ashx.pdf
[86] Ibid.
[87] The Work Foundation (June 2010), A 2020 Low Carbon Economy, http://www.theworkfoundation.com/Assets/Docs/lowcarbonFINAL_CORRECTED.pdf

work experience that may otherwise have been closed to them.[88] While higher education qualifications at level 4 or above will remain the dominant route into the sector, the main shift will be towards vocational qualifications, manifested in Apprenticeships. This change will allow for skills shortages in occupations relating to technical theatre, backstage and offstage to be satisfied. Employers will increasingly employ people on the basis of having the correct skills rather than a certain qualification.

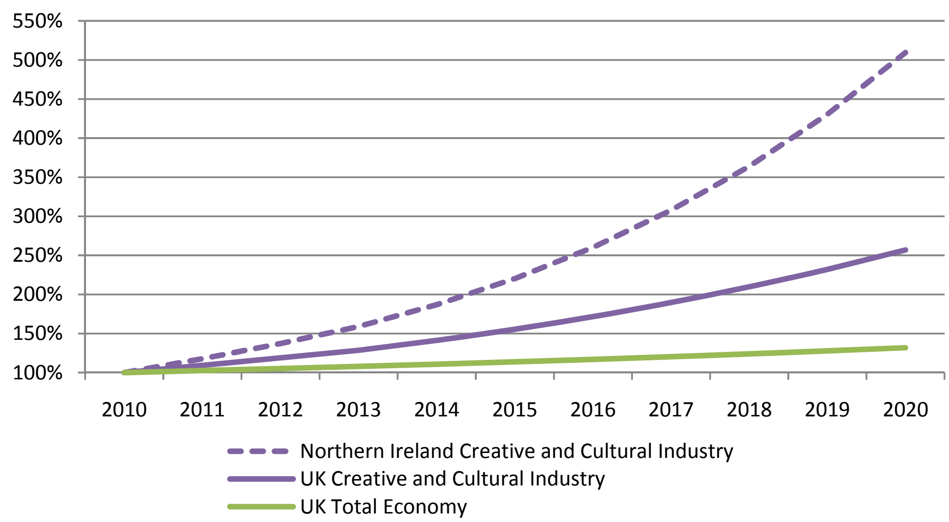
Finally, creativity is seen as commanding such a premium that creative occupations in non-creative industries grows rapidly, with the constant supply of highly educated graduates able to make an impact on other sectors, leading to broader economic productivity and growth.

5.1.2.1 GVA

In this aspirational context, GVA contributed to the UK economy by the creative and cultural industries is forecast to grow by 157% between 2010 and 2020.

- By contrast, GVA for the whole UK economy is predicted to grow in by only 32% over the same period
- In Northern Ireland GVA is predicted to increase by more than 400% over this period[89]

Figure 16: Comparison of GVA between creative and cultural industry and total UK economy



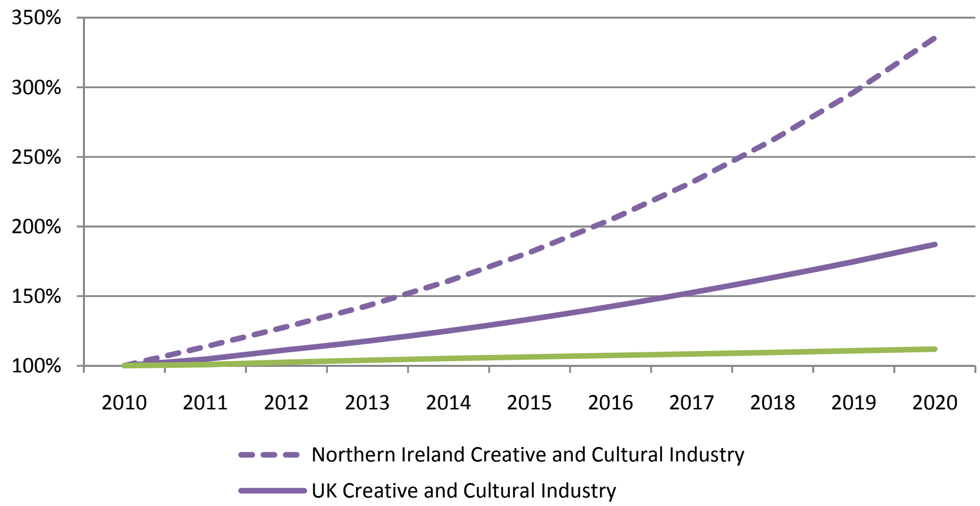
Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

5.1.2.2 Employment

In the aspirational scenario employment in the creative and cultural industries is forecast to grow by an average of 7% per year between 2010 and 2020, an overall increase of 94% over the period. By contrast, the whole UK economy is predicted to grow in employment by only 12% in the same period. In Northern Ireland this growth figure is more than 200%.

[88] Skillset, Code of Practise for Graduate Internships in the Creative Industries, http://www.skillset.org/uploads/pdf/asset_14315.pdf?1 and See, http://internsanonymous.co.uk/resources/
[89] Caution should be taken with this, as the starting figure is small.

Figure 17: Comparison of employment growth between creative and cultural industries and total UK economy



Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

This growth is driven predominately by the performing and visual arts.

Table 36: Employment growth by industry in Northern Ireland

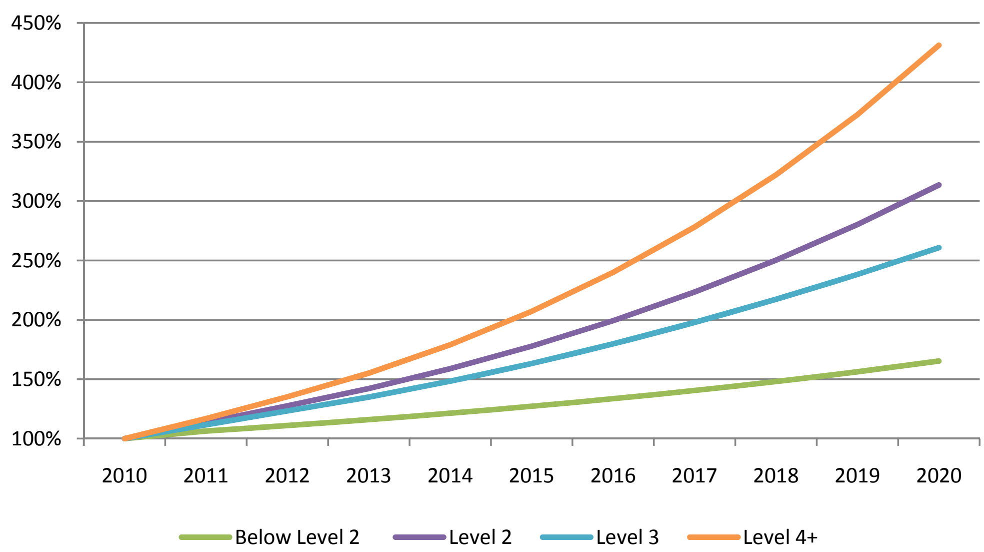
	% employment growth 2010-2020
Cultural Heritage	+150
Design	+283
Music	+178
Visual arts	+346
Performing Arts	+369
Literature	+187
Craft	+46
Northern Ireland creative and cultural industry	+235

Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

5.1.2.3 Qualifications held

The largest group within creative and cultural employment in Northern Ireland is NQF qualification level 4+, and it is growing over time to take a greater share. While growth in all qualification levels is apparent, due to large employment growth in general, those with no qualifications or level 1 qualifications are expected to increase at a significantly slower rate, decreasing the proportion in the industry at this level.

Figure 18: Employment growth by qualification level



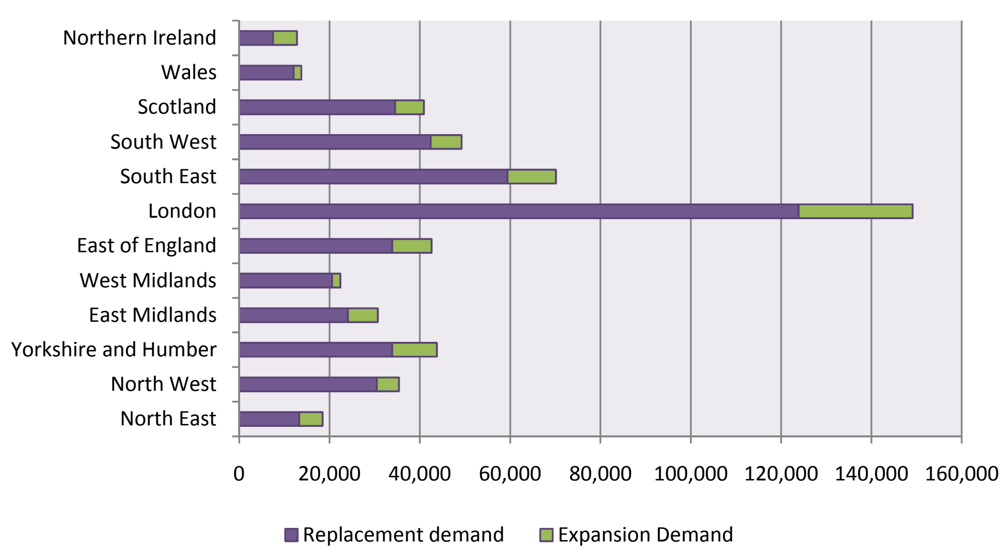
Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

5.1.2.4 Job flows

In the aspirational scenario, within the creative and cultural industries, total annual employment demand is forecast to increase from approximately 288,000 in 2011 to 527,000 in 2020. This is the total number of individuals required to replace those who have left their jobs in a year (replacement) plus any sector growth in overall employment (expansion). The number of people required to satisfy replacement demand is predicted to increase steadily in future years.

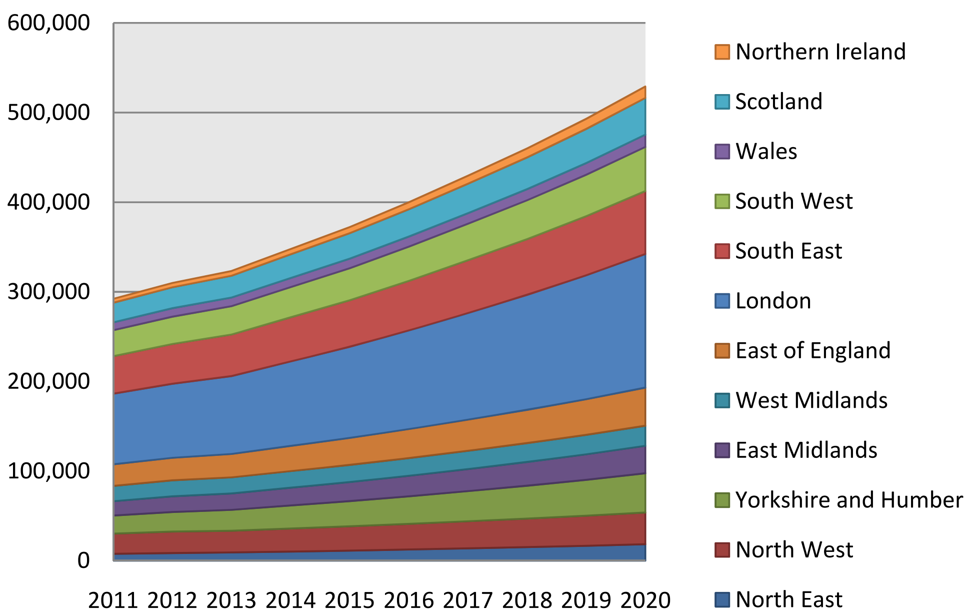
In Northern Ireland total demand is expected to increase from 4,400 in 2011 to 12,790 in 2020 (see figures 19 and 20).

Figure 19: Employment demand in the creative and cultural industries in 2020



Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

Figure 20: Employment demand by sector



Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

The table above shows the three largest occupations by total annual employment demand in 2020 for each sub-sector. For each of these occupations, the key skills required to fulfill the role have been identified.

Table 37: Top three occupations by total annual employment demand

Sub-sector	Role	SOC	Demand 2020	Key skills
Cultural Heritage	Sports and leisure assistants	6211	**3,738**	Facilities assistance, supervision, events assistance
Cultural Heritage	Social science researchers	2322	**4,317**	Compile information, analyse information, implement social research tools
Cultural Heritage	Leisure and sports managers	1225	**1,967**	HR management, facilities management, research
Design	Graphic Designers	3421	**72,398**	Project management, financial management, creativity
Design	Design and Development Engineers	2126	**29,395**	Technical knowledge, operating specialist tools, supplies management
Design	Product, Clothing and Related Designers	3422	**18,253**	Client management, customer service, research, creativity
Music	Musicians	3415	**13,461**	Writing music, creativity, performance

Music	Arts Officers, Producers and Directors	3416	**1,351**	Project management, HR management, facilities management
Music	Photographers and audio-visual equipment operators	3434	**650**	Adjust equipment, using specialist equipment, check equipment
Visual Arts	Artists	3411	**46,022**	Creativity, technical knowledge, using specialist tools
Visual Arts	Shopkeepers and wholesale/retail dealers	1234	*	Stock management, sales, financial management
Visual Arts	Managers and proprietors in other services n.e.c.	1239	*	HR management, stock management, marketing management
Performing Arts	Dancers and Choreographers	3413	**15,953**	Creativity, research, performance
Performing Arts	Actors, Entertainers	2319	**17,614**	Co-ordinating, creating grading systems, advises
Performing Arts	Product, clothing and related designers	3416	**15,117**	Project management, HR management, facilities management
Literary Arts	Authors, Writers	3412	**19,926**	Research, creativity, transcription
Craft	Sales representatives	2129	**1,929**	Research, design, advise on patents
Craft	Vocational and industrial trainers and instructors	3542	**503**	Manage client relationships, keep financial records, expert advice
Craft	Precision instrument makers and repairers	5223	*	Construction, assembly, machinery operation

Creative & Cultural Skills. (2011). Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting
**figure below 500*

5.1.3 Negative scenario

In the negative scenario the creative and cultural industries in the UK will grow at a slow rate post-recession, leading to marginalisation in the economy as a whole.

Investment from the public sector is consistently low in infrastructure, education and the private sector. Instead, the economic focus becomes almost completely centred on sectors utilising workers with STEM qualifications and these industries become the focus for achieving occupational growth and driving productivity[90]. As a result, the design sector is marginalised from the push towards a green economy. While design input is still required, it does not lead to significant government procurement, grants, or the availability of enhanced

[90] HM Government (2009), New Industries, New Jobs, http://www.berr.gov.uk/files/file51023.pdf

financial capital levels, which negatively affects UK business growth. By the time the green economy recognises the need for high level design skills; international organisations have developed competitive advantage over those based in the UK, with increased numbers of patents and new technologies coming from South Korea, Japan and other design hotbeds[91].

Skills shortages will be particularly prevalent in technical roles and occupations requiring level 3 skills. Insufficient investment in Creative Apprenticeships does not allow for enough new qualifiers to meet the excess demand. As a result of this, the major cultural events of the following ten years will be serviced primarily by EU migrant workers who are expert in areas such as technical and backstage skills. As in the green economy, businesses from other areas of the EU compete for contracts; possess greater productivity and have fewer internal skills gaps[92].

The current culture of unpaid work and internships intensifies, with a lack of protection for workers and competition for entry to the sector leading to longer periods of unpaid work. The diversity of the sector is increasingly stunted, with less investment in key regional areas outside London[93]. Replacement demand in the creative and cultural industries is satisfied by the over-supply of highly qualified graduates, however innovation and productivity is limited because other skills gaps within the workforce are not correctly addressed.

The increased cost of the UK as a tourist destination, along with a growing conscience about air travel, impacts negatively on industries reliant on international tourism. Cultural heritage, performing arts and the live music scene will be badly affected, leading to a general occupational decline across the industry. Government spending on the arts falls and is maintained at 75% of its 2010 levels, leaving diminished large scale public arts provision in the UK[94]. All public sector occupations are affected, leading to a widespread decline in occupations that exist with public financial support. Private investment will make up some of the public sector spending shortfall but overall funding remains reduced.

The digital economy bill is unable to stop illegal peer-to-peer file sharing which continues to impact on the profitability of the creative and cultural industries in general and the music sector in particular. Creative talent in digital occupations begins to leave the sector at a younger age to pursue more economically viable careers, rather than fail in their ability to form sustainable SMEs[95]. High speed internet access expands slowly, but is surpassed by international competitors, leading to higher levels of EU and international innovation and resulting in a slower growth rate for high performing businesses in the UK.

5.1.3.1 GVA

In the negative scenario, total GVA contributed to the UK economy by the creative and cultural industries is forecast to decrease by 28% between 2010 and 2020. By contrast, GVA for the whole UK economy is predicted to grow by 19% over the same period. GVA contributed by the creative and cultural industries in Northern Ireland in 2020 is forecast to decline by approximately 5%.

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[91] Design Council and IFM (2009), International Design Scoreboard: Initial Indicators of International Design Capabilities, http://www.ifm.eng.cam.ac.uk/dmg/documents/090406int_design_scoreboard.pdf

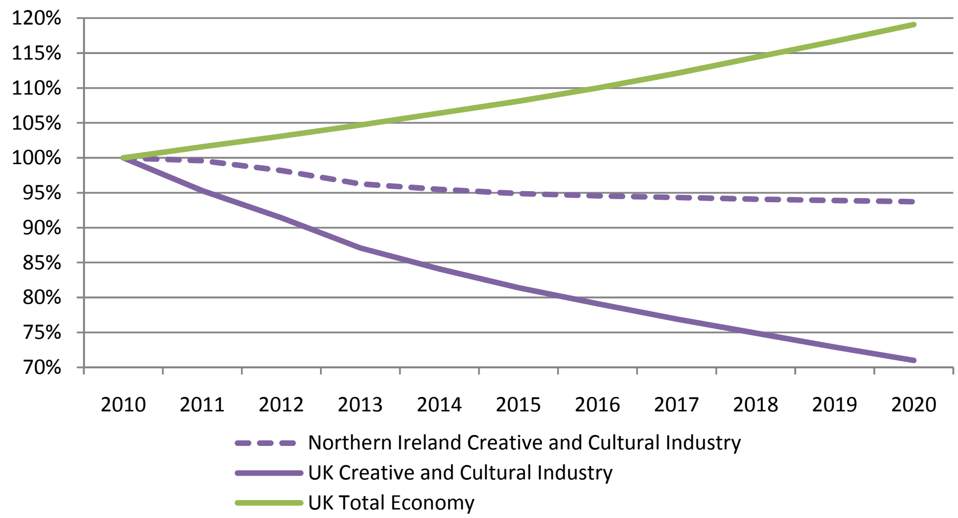
[92] UKCES (2009), Ambition 2020:World Class Skills and Jobs for the UK – the 2009 Report, http://www.ukces.org.uk/upload/pdf/UKCES_FullReport_USB_A2020.pdf

[93] The Work Foundation (2007), London's Creative Economy: An Accidental Success?

[94] HM Treasury, Budget 2010, http://www.hm-treasury.gov.uk/d/junebudget_complete.pdf

[95] Creative & Cultural Skills, Creative and Cultural Industry: Impact and Footprint, http://www.ccskills.org.uk/LinkClick.aspx?fileticket=fariQAqmP%2bU%3d&tabid=600

Figure 21: Change in GVA comparison between creative and cultural industries and total UK economy

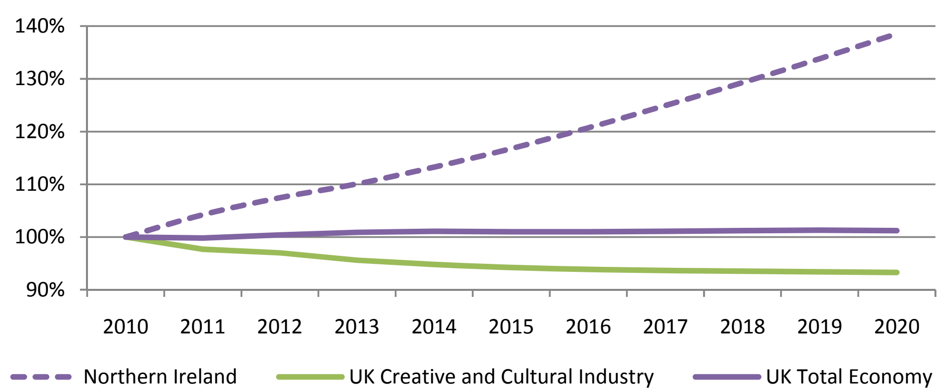


Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

5.1.3.2 Employment

Employment in the creative and cultural industries is forecast to decline by an average of 0.41% per year between 2010 and 2020, an overall decrease of 4% over the period. By contrast, employment growth for the whole UK economy is forecast at 1% over the same period. Despite these challenging economic conditions, employment in the industry in Northern Ireland is expected to grow by just under 40% over the same period.

Figure 22: Employment comparison between the creative and cultural industries and the total UK economy



Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

This employment growth is driven significantly by the performing arts industry.

Table 38: Employment growth by industry in Northern Ireland

	% employment growth 2010-2020
Cultural Heritage	+8
Design	+56

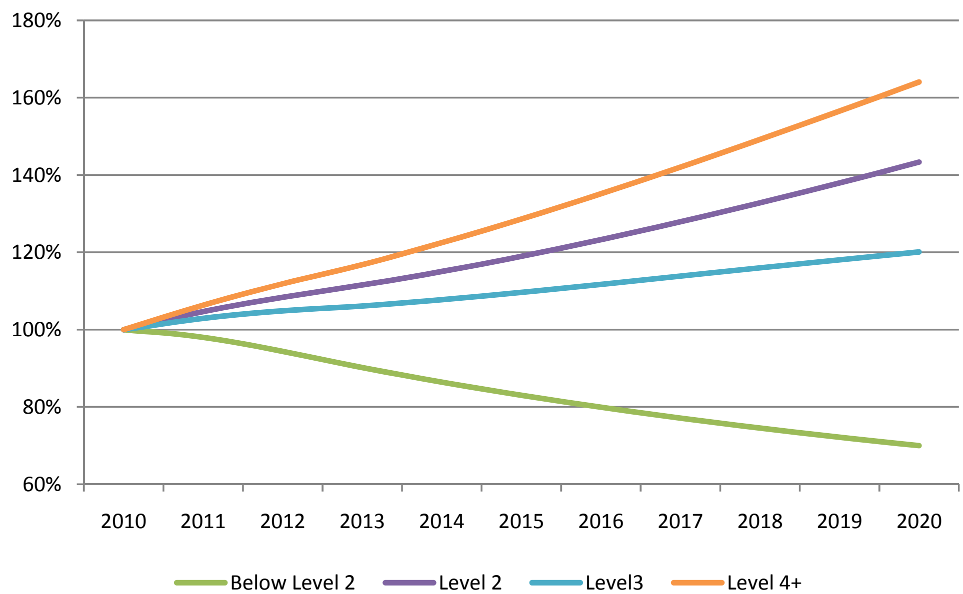
Music	+14
Visual arts	+74
Performing Arts	+101
Literature	+19
Craft	-34
Northern Ireland creative and cultural industry	+39

Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

5.1.3.3 Qualifications held

The largest group within creative and cultural employment in Northern Ireland is NQF qualification level 4+, and it is growing over time to take a greater share. The proportions of those employed at level 4+, 3 and 2 are greater than in 2010 in the negative scenario, given the smaller increase in growth and the decline of those with no qualifications or a level 1 qualification. While growth in all qualification levels is apparent, due to large employment growth in general, those with no qualifications or level 1 qualification are expected to increase at a significantly slower rate, decreasing the proportion in the industry at this level.

Figure 23: Employment growth by qualification level



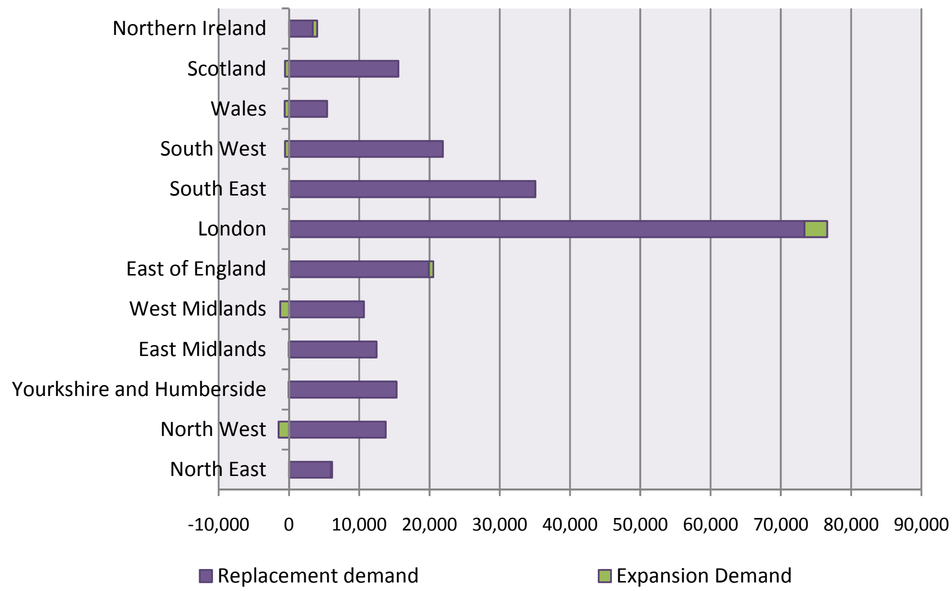
Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

5.1.3.4 Job flows

Within the creative and cultural industries, total annual employment demand is forecast to be lower in 2020 than in 2011, falling from 237,000 to 233,000. This is the total number of individuals required to replace those who have left their jobs in a year (replacement) plus any sector growth in overall employment (expansion).

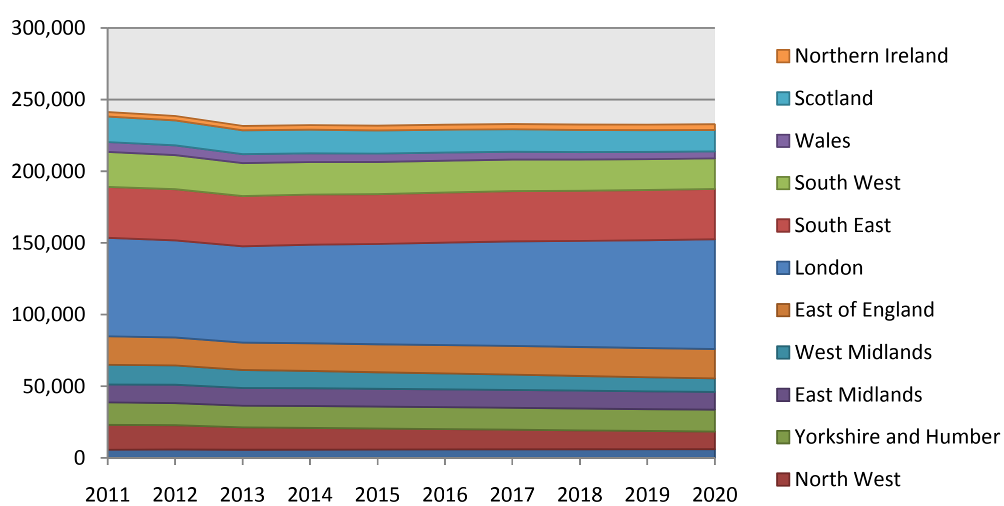
In Northern Ireland employment demand is expected to remain largely static at around 4,000 (see figures 24 and 25).

Figure 24: Employment demand in the creative and cultural industries in 2020



Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

Figure 25: Total employment demand by sector



Creative & Cultural Skills (2011) Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting

The table above shows the three largest occupations by total annual employment demand in 2020 for each sub-sector. For each of these occupations, the key skills required to fulfill the role have been identified.

Table 39: Top three occupations by total annual employment demand 2020

Sub-sector	Role	SOC	Demand 2020	Key skills

Cultural Heritage	Sports and leisure assistants	6211	**1,841**	Facilities assistance, supervision, events assistance
Cultural Heritage	Social science researchers	2322	**1,766**	Compile information, analyse information, implement social research tools
Cultural Heritage	Leisure and sports managers	1225	**747**	HR management, facilities management, research
Design	Graphic Designers	3421	**27,548**	Project management, financial management, creativity
Design	Design and Development Engineers	2126	**10,662**	Technical knowledge, operating specialist tools, supplies management
Design	Product, Clothing and Related Designers	3422	**6,384**	Client management, customer service, research, creativity
Music	Musicians	3415	**4,639**	Writing music, creativity, performance
Music	Arts Officers, Producers and Directors	3416	**529**	Project management, HR management, facilities management
Music	Leisure and theme park attendants	9226	**477**	Facilities assistance, general supervision, customer service
Visual Arts	Artists	3411	**19,249**	Creativity, technical knowledge, using specialist tools
Visual Arts	Shopkeepers and wholesale/retail dealers	1234	*	Stock management, sales, financial management
Visual Arts	Managers and proprietors in other services n.e.c.	1239	*	HR management, stock management, marketing management
Performing Arts	Dancers and Choreographers	3413	**7,076**	Creativity, research, performance
Performing Arts	Actors, Entertainers	2319	**8,422**	Co-ordinating, creating grading systems, advises
Performing Arts	Product, clothing and related designers	3416	**6,627**	Project management, HR management, facilities management
Literary Arts	Authors, Writers	3412	**12,372**	Research, creativity, transcription
Craft	Sales representatives	2129	**816**	Research, design, advise on patents
Craft	Vocational and industrial trainers and instructors	3542	*	Manage client relationships, keep financial records, expert advice
Craft	Hand craft occupations n.e.c.	5495	*	Using specialist tools, creativity, technical knowledge

Creative & Cultural Skills. (2011). Creative and Cultural Industry: Occupational, Skills and Productivity Forecasting
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5.2 What skills are needed to drive up productivity?

Given the scenarios presented above, what should be done to ensure maximum growth in the creative and cultural industries?

The central long-term economic objective is to achieve high and stable rates of economic growth and employment. Increasing productivity is set to be the driving force behind this and the route to higher prosperity. Despite no tangible link between increased skills levels and increased productivity being set in literature, developing and maintaining skills has been identified as one of the core 'five drivers of productivity'[96] needed to assure growth and competitive advantage.

Key performance indicators such as levels of global competitiveness, innovation, enterprise development and investment levels in education are suggested as links to increased productivity. Therefore, understanding the skills needs of the creative and cultural industries is vital to increasing productivity and directing investment into improving skills and better meeting the needs of business.

5.2.1 Skills factors

It is understood that 'skills' do not always need to be taught in traditional education to young people of school age. Studies have shown that it is valuable to maintain skills development outside of traditional education and learning. For example, where workplace training is undertaken, on average, people earn wages between 5% and 6% higher than those who do not undertake workplace training[97]. There is currently significant government investment to increase skills levels throughout the whole of the labour market[98], so this should, in theory, increase the performance of the UK economy in general as the availability of high-level skills should increase.

With regard to the creative and cultural industry specifically, the UK has a long history of excelling at invention and creativity but bad at investment and management. Therefore, to maximise growth opportunities these are key areas identified for improvement. Entrepreneurship has also been identified as an important base from which to increase innovation and develop productivity. This is particularly relevant in a sector such as creative and cultural, with a high proportion of small businesses and independent practitioners. However, '*there is currently no coherent national policy that addresses entrepreneurship for the [creative and cultural industries]*'[99.]

Further, NESTA state that '*long term Higher Education (HE) policy and funding strategies do not promote development of 'home-grown' entrepreneurial talent and opportunities that exist for developing graduate entrepreneurship for creative and cultural industries are provided on a piecemeal basis*[100]'. This has led to short-term, non-sustainable interventions and a gap in the industry's leadership.

Despite high skills equilibrium in the sector, the need to promote up-skilling, which in turn is expected to increase productivity, should not be neglected. However, as noted above, the emphasis should be, at least equally, on re-skilling.

[96] The five drivers are skills, investment, innovation, enterprise and competition
[97] BERR(2006) Non-certified learning and skills: incidence in the UK, variation across countries and links to productivity.
[98] Such as the Future Jobs Fund (ref), Guarantee to provide employment or training for all young people (ref), alternative routes into work (apprenticeships) and encourage for increased amount of people to attain higher level skills (Leitch 2006).
[99] DCMS (2006) Developing Entrepreneurship for the Creative Industries
[100] DCMS (2006) Developing Entrepreneurship for the Creative Industries

5.2.2 Digital skills

A key factor anticipated to drive up productivity in all sectors of the economy is the increased use of digital technology and media in business[101], along with a need for an increased ability to use and manipulate emerging digital technology for learning. The skills needed to capitalise on this are especially pertinent in the creative and cultural industries as advancements in the digital economy will require increased creative skills to maintain innovation and meet the demands of the national and global economy[102].

An important industrial policy influencing this workforce development is the 2009 BIS report, *Digital Britain* [103]. This emphasises the need to develop and maximise 'digital' skills to meet the aim of Britain being '*a global centre for the creative industries in the digital age*'. The report states that possessing the skills to enable interaction and development of digital based processes will be central to the development of an effective and productive creative workforce.

The government has made a commitment in this report to increase access to and usage of digital technologies in hand with ICT skills development across the workforce. This will provide an opportunity for the industry to make wider usage of the skills entering the workforce via increased promotion of creativity being embedded in ICT skills development and in the specific remits such as creative content development.

5.2.3 Higherl-level skills

Higher-level skills are needed to develop the knowledge economy. The knowledge economy underpins creative research and development, which is essential for growth. Higher-level skills are seen as the route to increasing employability and productivity in the workforce and provide the tools and knowledge needed for businesses to develop global competitiveness and therefore increase productivity levels.

The next ten years will be critical in securing advantage as emerging economies are also moving into more highly skilled industries[104]. To attain higher-level skills there needs to be a commitment to make further and higher education accessible for all, and to provide access to other opportunities to improve skills out of traditional educational routes through work or vocational schemes.

5.2.4 Innovation and entrepreneurship

In order to meet high-level skills demands and develop new creative talent, a more entrepreneurial and innovative creative workforce is necessary. Stimulating this mindset within young creative people before they enter the industry may result in increased productivity. The government states that to facilitate this, there needs to be a joined up approach to understanding skills demand and development along with increased networking and business relations skills[105].

Innovation development involves partnership working with government, universities, third sector organisations, entrepreneurs, businesses and consumers. It relies on networks built on trust, proximity, repeat engagement and 'social capital', all of which creative and cultural industries have been found to foster and support. While innovation literature often

[101] BIS (2009) Digital Britain Final Report.
[102] E-Skills, Creative & Cultural Skills & Skillset (2009) Strategic Skills Assessment for the Digital Economy
[103] BIS (2009) Digital Britain Final Report.
[104] DIUS (2008) Higher education at work. High skills: high value.
[105] DCMS, BERR & DIUS (2008) Creative Britain New Talents for the New Economy

emphasises technical research and development activities, policymakers and academics increasingly recognise the importance of creativity and design in the process of innovation[106].

NESTA has illustrated how the industry can often create fundamental links in developing innovative business-to-business solutions, identifying that linking with creative industries supports innovation. A systematic understanding of innovation, coupled with understanding the growing prominence of creative production and cultural consumption in the economy, leads to a proposal that innovation in the industry needs to be utilised for increased performance and pan-sectoral innovation development[107].

Further to this, '*the demand for creative goods, (unlike products in other parts of the economy) tends to increase the more that creative goods are consumed. Their consumption becomes a virtuous circle*'[108]. This enhances the importance of developin the right skills and aptitudes to build innovative, entrepreneurial and sustainable creative businesses. However, creative institutions and departments are inhibited in their entrepreneurial development due to:

- Sector-wide quality assurance requirements
- Academic management processes
- A lack of strategic development
- Collaborations with higher education being difficult[109].

5.2.5 Competitiveness

Up-skilling the entire workforce is a key aim of the government in order to '*sustain and improve our position in the global economy*'[110]. The creative and cultural industries are already acknowledged as being highly skilled, but this does not mean there is not issue. Rather, the industry needs to maintain a skills base and attainment level to ensure global competitiveness is achieved and that the high profile of the sector is maintained.

Creative and cultural industries need to be constantly reflective, managing and evaluating performance indicators in order to guard against complacency and ensure that the UK remains one of the most competitive countries in the world.

5.2.6 Business strategy

In order to maximise the potential productivity of the creative and cultural industries, they must make themselves open and accessible to all, lower barriers to entry and establish the correct make-up of leadership in organisations[111]. However, a challenge in the sector is that business strategies often are not a key priority:

'Half (49%) [of creative businesses] say that none of their senior managers have had any business strategy training. This is disproportionately higher than average for all industry small and medium sized enterprises (57% among those with one employee); this falls to 35% among the £1m+ companies'[112].

[106] Cox - 2005 -in NESTA (2008) Creating Innovation
[107] NESTA (2008) Creating Innovation
[108] DCMS(2006) Developing Entrepreneurship for the Creative Industries
[109] Ibid
[110] Leitch, S (2006) Prosperity for All in the Global Economy: World Class Skills – Final Report
[111] CLP (2009) Women in Leadership
[112] NESTA(2006) Creative Business Survey

It is clear that the industry needs a more strategic approach to business development, particularly young practitioners who should engage in CPD and gain experience of working with a variety of artists to develop their practice into a successful and productive career[113]. Therefore, business and strategic development skills are important to increase productivity but are areas that the sector is traditionally weak in. In addition to this, the government stresses the need for integration and understanding of ICT development into all business strategies to maintain and develop productivity[114].

5.3 Drivers of productivity

Given the range of activities encompassed by the creative and cultural industries, determining a definition of productivity is challenging. The standard measure of productivity GVA used in assessing labour market performance is often unsuitable in a sector where productivity is so often encapsulated in non-revenue generating activity.

This section of the SSA focuses on the creative and cultural industries' understanding of productivity, how it may be fostered within organisations in the sector and the consequent impact of such business strategies[115].

5.3.1 Defining productivity for the creative and cultural industries

Whilst productivity is generally associated with efficiency in achieving strong financial outputs (i.e. time spent vs. money made), organisations also perceive productive performance to be demonstrated through more intangible outputs such as;

- High quality goods/services
- Improved reputation
- Effective relationship management
- The development of knowledge or skills.

High levels of achievement in any of these areas is equated with 'being productive' and therefore associated with success. However, the development of knowledge and skills upon which the business or organisation can capitalise is perhaps considered to be the most important.

In terms of planning, to secure productive performance, there is recognition that because these intangible outputs are difficult to measure, it is often challenging to assess productivity on an ongoing basis. Rather, such outputs require an evaluation to be made at the end of a defined period. As such, organisations look to develop and implement 'productive' working practices. For example;

- Ensuring that all staff have a set of core competencies which allow them to be flexible across the needs of the organisation
- Reviewing the allocation of work to ensure that people are working efficiently and that the business is capitalising on the full extent of the team's skills
- Effective leadership and management, which gives people the freedom and autonomy to manage their own time and resources, rather than strict 'top down' management

[113] Ibid
[114] BIS (2009) Digital Britain – Final Report
[115] All findings from section 5.3 are taken from Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

- Planning for staff to spend approximately 80% of their time working and allowing for periods of ‘down-time’
- Collaborative/partnership working in order to learn from the skills of others
- Seeking work with high profile clients in order to build image and reputation.

In some cases organisations are also making attempts to put processes in place to measure traditionally intangible outputs, e.g. the time taken to generate workable ideas. However, it is recognised that this can be somewhat subjective and that ideally assessment needs to be made on a level playing field.

In a knowledge-intensive sector, such as the creative and cultural industries, the workforce (which can sometimes be just one or two people) is almost always the most important asset and is therefore the main area of investment, in terms of pay and reward and training and development. There is a general consensus that people drive productivity and that staff happiness and quality of life are important factors for high productivity.

In developing people as ‘knowledge resources’ it is imperative that investment in training and development provides skills and knowledge that improve productivity. This can be in terms of system improvement (for example, in response to new technology) or general knowledge advancement that gives the business a competitive edge.

There is an appreciation that without consistent generation (and evolution) of ideas, the business will fall behind and that to cease investment in skill and knowledge development is to accept that current levels are sufficient. This is at odds with the very fabric of the creative and cultural industries, which values the generation of news ideas and innovation. As such, organisations look to training that will develop productivity by providing people not only with new skills and knowledge to support inspiration and creativity, but also the ability to apply it.

Whilst it is recognised that individual learning styles are a key facet in determining productive approaches to training, businesses express a preference for in-house development such as on the job coaching, reinforced by external training with a high level of engagement such as coaching and mentoring or skill-based practical sessions. These approaches enable continuous learning and development, which allows for the business to avoid over reliance on existing markets and current skills and enables exploration of new opportunities.

The focus on knowledge development as a key route to achieving high productivity, combined with a preference for internal training, can also present a challenge for businesses. This is particularly the case when recruiting for a role that is built around the previous incumbent’s knowledge, rather than a skill set. The time taken to bring a new recruit ‘up to speed’ can often be significant, both in terms of time required for the recruit to train (and therefore not be producing work) and the time required from colleagues to support their development.

5.3.2 Achieving success

There are a number of factors influencing the development of an organisation that must be managed well in order to generate high levels of productivity. These range from effective staff management to the introduction of new technology and can be broadly categorised under the following headings:

- Business strategy and structure
- People
- Location/premises
- Marketplace
- Relationships

5.3.3 Business strategy and structure

The strategies pursued by the business in order to ensure success are the most crucial underpinning factor. As a knowledge intensive sector, HR/personnel strategies are particularly important. A clear and well structured hierarchy, appraisal systems, defined routes for staff development and professional and effective people management are all critical to a successful business.

It is recognised that much of this requirement comes with success and the growth of the business. As such, change management skills and strong leadership are also essential. Where they are not communicated effectively, alterations to business structure can be more problematic for existing staff. This can lead to negative repercussions such as low morale. However, a well defined business plan and ambitions that the whole company understands and can engage with are critical to success. Additionally, the ability to take an objective view of the business and engage formally in reflective practice and quality assessment improves engagement with the strategy and allows the business to develop from an informed position.

Striking an appropriate balance between commercial and creative focus in the business is also important. Businesses need to recognise the requirement to have strong business skills alongside creative talent in order to be successful. In addition, it needs to recognise that these skill sets might not be within the capability of the same person. Ensuring that the right people are in the right roles is paramount.

5.3.4 People

Staff and staff performance is key to success. The majority of businesses in the sector are small; this often means that the founder members play an important role throughout the life of the organisation, particularly in terms of the skills and experience that are available to develop it, and also the organisation's ethos and direction[116]. The smaller size of businesses also creates more scope for individual employees to gain a reputation in the sector, this allows for individual relationships with clients which can be profitable in building a company level image.

The age of the workforce can also have significant influence on the development of the business. Given the important role of individual knowledge, replacing staff that leave or retire can present either a challenge or an opportunity, depending on the circumstances.

5.3.5 Location/premises

The environment in which the business operates can also play a significant role in the success of the business. Organisations identify both the process of refurbishing or modernising buildings and equipment and moving to new, larger premises as key influences on their success.

[116] Indeed the working life of the founder members is often mirrored in the life-span of the business, with organisations being formed and then closed upon retirement.

Geographical location also plays a key role. Proximity to a centre of activity in the sector and other firms/organisations working in the same field can be advantageous in terms of identifying clients and collaborators and also for the reputation of the business. Being established as a branch of a larger company can also be beneficial for the success of the business. For example, firms which are established as a branch of a larger company in a different city/nation can benefit from capitalising on the strength of the image of the parent company in conjunction with the reputation and skills of individuals in the local team.

5.3.6 Marketplace

The ability to identify and respond to the marketplace is essential in achieving success. This includes exploiting opportunities in terms of generating revenue and also developing business practice where necessary. One of the most important influences on business in recent years has been general technological developments, leading to a 'digital' mode of operation. Keeping pace with change is crucial and presents a significant challenge to many in the sector. However, the process of listening to the market place and adapting /evolving in response to it is vital.

The economic climate is also a key influencing factor. The current recession has had the effect of changing consumer behaviours and as such the successful organisation must look to adapt its business model in order to suit the new marketplace. For example, developing the business to offer a package of services, rather than focusing on one specialist area. Having a current understanding of client needs is crucial to informing this development.

5.3.7 Relationships

The relationships that a business and its employees have within and outside of the organisation itself and the sector are key factors in themselves. Networking and organisational memberships (e.g. of trade bodies/professional associations etc.) are very important vehicles for generating business, building reputation, exchanging knowledge and developing collaborative partnerships. All of which contribute to the 'intangible productive outputs' previously noted.

5.3.8 Securing competitive advantage

In securing competitive advantage, businesses look to pursue a number of strategies, linked to the modes of achieving success detailed above. A clearly defined, overarching strategy for the business is essential and provides a 'road-map' to securing competitive advantage.

Equally important is ensuring that the vision and values advocated in the strategy are reviewed and, where necessary, refined to maintain a competitive edge. Given the pace of change within the sector, keeping up-to-date with trends and developments is crucial in keeping organisations competitive and profitable.

This significant focus on the commercial elements of the business, in addition to the creative, can often be challenging. For example, for older, more established businesses it can often mean a significant cultural shift. However, this could be seen as a positive opportunity to learn lessons from a long track record and apply them to a new model.

Additionally, in small businesses it is common for one person to take on multiple roles, which can have the effect of diluting both. However, there are also advantages related to a smaller size. For example, decision making processes can be more straightforward and businesses can respond quickly to new opportunities and changes in the market.

It is important to balance resources across the organisation so these two functions (commercial and creative) can interact effectively in order to achieve success and secure advantage. The development of the workforce plays an important role in this. Investing in the development of staff, as a team and individually, is vital both in terms of maintaining and improving quality but also pushing the boundaries in terms of capability.

Setting and maintaining clear quality standards is a crucial element in rising above the competition, but this has to be balanced with efficiency. As such, strong management (incorporating monitoring, evaluation and assessment) is key.

The reputation and profile of the business is also vital in securing advantage. Developing a reputation that is 'good all round' (e.g. not just providing quality work but also providing good value for money, being on trend, being aware of the wider creative economy and the client's position in it etc.) and building a strong brand awareness is very important. This means having the skills (and time or capacity) to keep a high profile and create good PR, as well as maintaining a quality output. Good relationship management is crucial to this in a number of ways:

- Developing and sustaining good client relations, and therefore client loyalty
- Developing and maintaining a professional working manner and practice
- Networking effectively with clients and potential collaborators on a local, regional, national (and often international) scale
- Developing good working partnerships with other organisations and managing collaborations effectively to build profile jointly
- Being able to demonstrate the value, impact and benefits of choosing to work with the business.

Keeping up-to-date with changes in a competitive environment is an important element of securing advantage within it. Equally, responding appropriately to change is vital. Businesses identify responding to a number of recent changes in the marketplace as important stages in their development.

Again, as noted the recession has had a significant impact of the marketplace and businesses have had to respond quickly to clients with reduced revenues and funding cuts. This has created a constrained operating environment. However, in some cases the recession has resulted in an increase in revenue, particularly where businesses have adapted their operating model to suit the new circumstances.

Organisations also note that changes in the competitive environment following the recession in the 1990s have been instrumental in shaping the approaches now followed in order to secure advantage, for example tighter/closer networking within and outside of the sector and pursuing collaborative working in order to broaden the market served. As the UK economy moves out of the current recession it is likely that new 'lessons learned' will need to be identified to this.

5.3.9 Investing in staff development

Isolating the value for and impact on the business of investment in staff development is complex. The outputs or outcomes of training are often intangible in the short term and contribute over the long term to the development of the business.

In many cases, the business case for investment in skills is understanding the extent to which the skills developed help maintain competitiveness and support the survival/development of the business in an increasingly competitive marketplace. Additionally, investment in the skills of staff across the business can 'spread risk' and prevent over-reliance on one individual. However, it is generally recognised that it takes time to see a return on investment and often returns are difficult to observe beyond subjective assessment of change in the individual.

Where businesses do observe an impact from investment in skills, it tends to be related to specifically successful incidences of training. For example, investing in leadership training enables work to be managed more effectively, to be costed more appropriately (which improves profitability) and delivered more efficiently (which improves productivity).

Additionally, impacts related to investing in skills in general include:

- Increased individual confidence (often invaluable for business development)
- Lower staff turnover, linked to high morale and positive working environment
- Rapid career progression/development, through gaining new skills/knowledge

Additionally, businesses perceive that their investment in people plays a role in developing skills across the sector as a whole, particularly in terms of making individuals (and therefore their employers) more competitive, which is essential for long term growth.

Often, investment in training occurs in an ad-hoc manner and this can have a negative impact for the business and individuals within it. As such, when planning investment in skills, it is important to ensure a strategy is in place to guide the development of the workforce and individuals within it. For example:

- Having a process in place that ensures members of staff undertake a set amount of training per year, which is of interest and relevance to them and the business
- Allocating time to give staff 'space' for personal development and training of their own choice, which may have little direct relevance to the business but be important to their own development
- A regular (at least biannually), well monitored appraisal system to ensure staff are happy and therefore functioning to their highest capabilities

The types of training businesses perceive to be most valuable to productivity are those which are knowledge based and focus on contextualising learning in the professional environment. Given this, there is a perception that a great deal of the required expertise that cannot be gained through highly formal training/education, particularly as external courses tend to be far removed from the business environment.

Short 'knowledge exchange' training courses (such as specific software or technology training) are also seen as valuable as they come with the expectation that staff will be able to apply the skills immediately after receiving the training. Additionally, the use of mentors in order to share experience and access specialist advice is also seen as invaluable for directors and senior staff.

Whilst businesses do tend to focus on training and development in a professional/business context, there is recognition that providing opportunities for staff to explore development outside the business itself can help to secure productivity and keep ahead of the competition, the perception being that in these instances the focus on learning can be better where training is undertaken in-house and diluted by the working day.

In choosing to provide training, businesses do undertake a process of review to understand whether or not training is worthwhile for the business. However, it is often an implicit assumption, rather than an explicit assessment, that investment in skills and training will positively impact productivity. A number of factors are taken into consideration when determining the type of training or development to invest in, these include:

- Whether the training fits with the objectives of the company
- The time and finance available for training (key in driving the decision to provide training internally or to buy-in training)
- The immediacy of the need for training, and the impact of not training (often linked to a review of the state and confidence of the market and economy and whether a clear benefit can be identified)
- The objectives of all members of staff and how training will complement the broader skill set of the organisation
- The availability and location of training (a key driver for not investing is that many of the top courses are based in London, which are expensive to attend and get to from other locations)

Identifying a tangible link between investment in skills and productivity is challenging as training and development tends to build skills and knowledge incrementally, rather than in one go. Additionally, the myriad of other factors that influence a person's performance can make measuring the direct impact of learning very difficult. The impact of training can also be diluted, depending on the specific training and the person receiving it, particularly if the person leaves the business soon after completing some training.

The benefits from investing in staff are recognised in the generation of better ideas, which often rests on providing individual training and encouragement. To some extent, faith in the positive impacts secures a belief that all training is incremental to staff development and that it is adding up over time to produce successful people and a successful business.

5.4 Increasing productivity

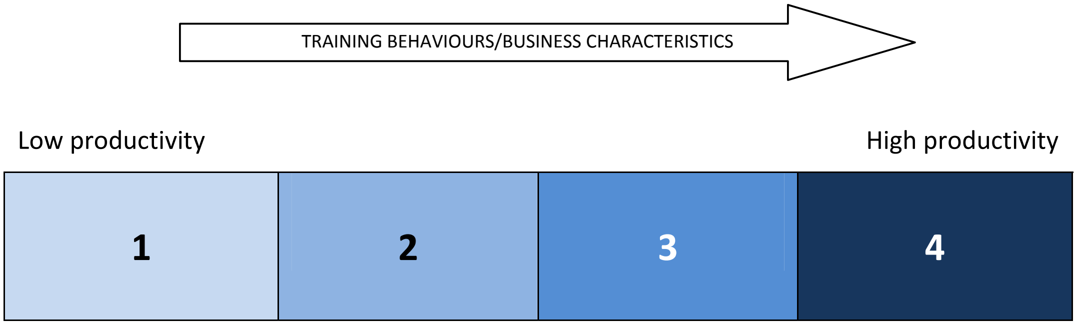
Understanding how businesses in the creative and cultural industries can increase productivity is now discussed, with specific reference to the link with investment in skills[117].

Assessing how businesses increase productivity works on the basis of dividing firms across the whole economy into 'quartiles', based on their performance in terms of GVA per head. A firm with a high level of productivity will be located in quartile 4 and a firm with low levels of productivity will be located in quartile 1.

The analysis considers the training behaviours and business characteristics that firms in each quartile display, in order to identify those that will help a firm 'move up the value chain' and become more productive. Essentially, the analysis considers what behaviours and characteristics a firm needs to exhibit in order to move from quartile 1 to quartile 4, as shown in figure 26 (below).

[117] All findings from section 3.5 are taken from Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

Figure 26: Training behaviours and productivity



Source: TBR 2009

The following sections explore the behaviours and characteristics that differentiate between businesses located in each quartile.

5.4.1 Differentiating between low productivity and high productivity

(Differentiating between quartile 1 and quartile 4)

In considering the factors, which clearly distinguish between businesses located in the low productivity quartile (quartile 1) and high productivity quartile (quartile 4), analysis identifies the following features (detailed in order of importance):

1. The higher the proportion of workers employed full time in the business, the more likely the business was to be in quartile 4. This is perhaps to be expected given that the measure used for analysis was GVA per head. As such businesses with a higher proportion of part-time workers will naturally have a lower per-head figure.

2. Higher proportions of workers employed as managers or in senior positions were associated with a greater probability of being in quartile 4. This corresponds with the high value placed on the job and other internal training, which in many firms will be dependent on the availability of management time to train (and therefore increase productivity).

3. Private ownership of businesses was associated positively with higher productivity. However, given the different priorities and aims of the private and public sectors (for example, publicly funded organisations are often less focused on revenue generation) this is perhaps unsurprising.

4. The proportion of the workforce completing Apprenticeships was positively associated with high productivity. Higher productivity was particularly evident in the year following the completion of an Apprenticeship. Similarly, higher productivity was more evident in the year following the completion of any kind of training. This demonstrates a time delay experienced in observing the impacts of training.

5. The proportion of supervisors employed and the take-up of opportunities to train were also positively associated with higher productivity. Again, this echoes the high value of on the job training in the sector and supports the view that employees are more productive if they feel valued and their employer is prepared to invest in them.

5.4.2 Differentiating between low productivity and mid-high productivity

(Differentiating between quartile 1 and quartile 3).

In considering the factors that clearly distinguish between businesses located in the low productivity quartile (quartile 1) and mid-high productivity quartile (quartile 3), analysis identifies the following features (detailed in order of importance):

1. In this comparison, higher levels of external training were associated with lower productivity. This possibly reflects the greater time away from the job (and therefore revenue generating time) associated with this type of training. Additionally, external training tends to be more expensive and therefore has a greater impact on profit.

2. The proportion of managers and senior employees again has a positive association with higher productivity. However, in this case a higher proportion of supervisors in businesses were associated with lower productivity.

3. The provision of off-the-job training had a negative association with productivity. However, the delayed impact of training was again exhibited, with having undertaken with those undertaking any training over the previous 3 months having a positive association with higher levels of productivity.

4. The proportion of the workforce that undertook formal education aged between 26 and 45 had a positive impact, suggesting that post-graduate and adult continuing education benefits productivity.

5. In some cases, larger firms showed a slightly more positive correlation with mid-high productivity.

Additionally, the analysis reinforces the extent to which a time delay is required in order for the benefits of training to be exhibited within the business and identified the value of participation in formal education beyond compulsory education age. The following concepts are key in understanding how the creative and cultural industries will be performing in coming years[118].

5.5 Recommendations for creative and cultural businesses to improve business performance

In order to achieve this, the creative and cultural industry should engage in the following practices.

5.5.1 Broader integration

Recognition of the broader benefits of engagement with creative and cultural organisations for social enterprise and community development needs to be widespread in order to realise the economic value of the industry's activities. It is expected that this would result in an increase in demand for creative products and skills. Additionally, the industry needs to try to engage further with other sectors in order to understand the benefits that creative input can have on innovation and enterprise development in their field. Policy, education and industry should work together in addressing and promoting the role that creative and cultural organisations can take within other business sectors.

[118] Unless otherwise stated the information in section 5.1 comes from Creative & Cultural Skills (2009) Creative and Cultural Industries Workforce Survey

Furthermore, young people will need to be more engaged with the industry and have a better understanding of the career opportunities[119].

5.5.2 Business support

There is a lack of private investment and insufficient business support and development services for creative businesses. Providing a more holistic package would develop consistent investment and support for new creative businesses and a greater focus on the commercial potential of those businesses[120]. The government has made significant pledges and investment plans in this direction, although the recession might change these.

Despite it being widely understood that the creative and cultural industries need more sector specific business support, it is difficult to identify in existing literature many specific employer workforce development strategies other than those reiterating such need. This is an area that needs to be clarified for future development of the sector. Little information exists about the responsiveness of the sector but this may be low given that a relatively high proportion of businesses do not have a strategic plan. Therefore, one could conclude that they may not know what business support they need or what is most appropriate for effective business development.

5.5.3 Future skills needs

It has been found to be essential for the future development of creative and cultural industries that higher-level skills are developed (or maintained) in order for fast and effective growth and to remain globally competitive. Higher-level skills are said to provide the tools and knowledge for effective business development and hence increase productivity levels. Skills should be developed through both formal and informal education routes to suit the needs of the sector and be encouraged from a young age.

The increasing importance of the knowledge-based economy in the UK has been recognised to be essential to economic growth and wealth creation[121]. This increases a need for the UK to trade and compete on knowledge and innovation[122]. Due to their levels of global competitiveness creative and cultural businesses are important in their contribution to the development of the economy. There is a need to increase skill levels to meet knowledge expansion and job growth aims in higher-level occupations to increase productivity in the industry.

Specific future skills needs for the creative and cultural industries include:

- Creative specific, leadership and management skills
- Leadership skills, crucial for strategy formulation and success
- Business skills, the sector has a historical lack of business aptitude but this needs to change to ensure productivity and success
- Negotiation/ selling skills, again historically not the essence of the creative and cultural industries, but very important for its survival and growth[123]

[119] Jones, S (2006) Expressive Lives
[120] NESTA(2006) Creative Business Survey
[121] IDEA (2009) Investing in the Creative Industries, A Guide for Local Authorities
[122] BIS (2009) New Industry, New Jobs
[123] Creative & Cultural Skills (2008) Creative Blueprint: The Sector Skills Agreement for the Creative and Cultural Industries

5.5.4 Challenges

There are a number of challenges facing the industry that could impact future development. A core challenge is access to the industry for people, and the capacity to make a living from full-time employment in the sector. There is a risk that without appropriate action, employment segregation will widen rather than narrow and there will continue to be a lack of ability to move in and on in the industry[124].

Other challenges include:

- Access to new customers
- Long-term, sustainable funding
- Maintaining the existing high levels of skills
- The recession, funding cuts and lack of money to invest in training

5.5.5 Opportunities

The United Nations (UN) estimates that cultural and creative trade represents 3.4% of all world trade and is growing at a rate of 9%[125]. Creative and cultural industries are expected to be one of the driving industries of growth throughout the recession, individually and alongside other sectors of the economy that have significant opportunities in digital expansion. Furthermore, creative innovation and its link with the development of a new 'green economy'[126] could be an opportunity for growth of the sector.

In 2007, DEMOS suggested a toolkit of improved access to the industry by way of developing:

- A digital resource for maintaining portfolios of people's learning and production life, access to potential employees and collaborators, mentors and knowledge
- Easy access to micro-finance, and underwriting risk in business-loans
- Creative spaces and meeting places that combine sector-specific expertise and local knowledge and provide a point of connection to new opportunities to build networks and provide a place for building informal relationships
- Develop articles of how others have made it to illustrate different avenues of success[127]

Other opportunities for the development of the industry include:

- Capitalising on the UK creative and cultural industries' high global positioning and reputation
- The creative economy being invested in as an area for fast and large growth
- Develop (more) creative hubs
- Developments of creative innovation being well placed to integrate with the new green agenda, which is a national and global 'hot-topic' for development.

[124] The Panel on Fair Access to the Professions (2009) Unleashing Aspiration
[125] Creative Economy Programme, Outline Programme (2010- 2013) Corporate Outcomes.
[126] Creative & Cultural Skills (2009) After the Crunch
[127] Wright, S., and C. Timms (2007) So what do you do?

5.5.6 Gaps in knowledge

Certain gaps have been identified that exist in current research into the development of the creative and cultural industries, specifically regarding the development of skills and sectoral growth. The most pertinent gaps are:

- Understanding how the specific demographic make-up of the sector has been established and how this might be impacting on productivity
- How this might be translated to attain a more representative mix from different areas of the population
- The full impact of the regular need for unpaid work experience to enter the sector is not understood
- A lack of understating about creative-specific business support; what support is most needed and suited to the creative sector and how is it most effectively delivered to aid growth
- That creative skills and knowledge can be a valuable asset to enterprise and innovation development in any sector. However, other than via the development of 'creative hubs or clusters' specifically how this might work and how creative partnerships could be established is not known
- Gaps in investment can be identified, in that there are many pledges to help support entrepreneurial development of the industry but little evidence of the support on the ground.
- There is a need to establish a specific entrepreneurial development strategy and more joined up working with relevant government departments and creative industry support bodies such as NESTA to facilitate this support.
- Finally, a key gap is a lack of understanding of how public sector budget cuts are likely to impact the industry.

6 Challenges for the creative and cultural industries

The creative and cultural industries face significant challenges over the next decade. Creative & Cultural Skills will work with employers to help the sector through this period of uncertainty. This section describes the key activity needed to deal with the sectors skills strategy, as discussed in sections 4 and 5 of this report.

6.1 Qualifications reform

A range of relevant occupational and prioritised vocational qualifications should be accessible to meet the current and future needs of employers is key to the industry.

Vocational qualifications need to meet industry requirements. Creative & Cultural Skills will ensure that industry has a say in which qualifications should be developed and in influencing the content of occupational qualifications. Unlike Higher Education qualifications, industry must have a real say in which vocational qualifications are developed.

6.1.1 Key activities to achieve this

- The development of new National Occupational Standards (NOS), Apprenticeship pathways and qualifications for new occupational areas in response to industry demand
- The piloting of new Apprenticeships in other sectors and at higher levels based on need
- The continuation of close partnership work with our National Skills Academy, as a key delivery partner for our Apprenticeships programme. Through the Apprenticeship Training Service offered by the NSA, we are in a position to broker new relationships with employers and partners and support the take up of Apprentices in the sector
- Further consultation on different elements of the Sector Qualifications Strategy as required by the sector

Through this programme of work we aim to ensure employer confidence in the qualifications system and improve and raise the profile of Further Education provision, thereby increasing access to appropriate skills and training.

6.2 Information, advice and guidance

The industry needs **clear information, advice and guidance for individuals aspiring to enter the sector.** Changes to the funding of higher education will mean that there is greater need for information, advice and guidance for individuals entering the sector. There is currently an over-supply of graduates with arts degrees aspiring to get jobs in the creative and cultural industries. Despite this over-supply, employers say that the majority of graduates lack the relevant skills for work. The need for improved advice that is tailored to the sector is vital.

6.2.1 Key activities to achieve this

- To provide and signpost relevant knowledge, tools and support to potential and current employees and employers in the creative and cultural industries
- To ensure that content is contextualised, relevant and accessible, and as far as possible, for the industry, by the industry

- To use Creative & Cultural Skills' labour market information and industry intelligence to help users make informed choices

6.3 Higher Education

An increased alignment between Higher Education (HE) and the skills needs of employers in the creative and cultural industry is needed.

It is vital that industry work closely with HE Institution especially given the large number of graduates within the sector. In those areas that are particularly relevant to the creative and cultural sectors universities should be encouraged to better equip students to gain employment in the industry. This is particularly true of specialist schools which feed the industry directly (including drama and dance schools, music conservatoires and specialist craft colleges as well as universities offering specialist courses such as creative writing, arts management and museum studies).

6.3.1 Key activities could include

- Increase the number of high quality work placements for students
- Internship and professional development for tutors
- Industry support and endorsement of high quality courses

6.4 CPD

Continuous Professional Development (CPD) is defined as "any process or activity that provides added value to the capability of the professional through the increase in knowledge, skills and personal qualities necessary for the appropriate execution of professional and technical duties"(Professional Associations Research Network). Hence CPD goes well beyond the bounds of formal qualifications and training to include the full range of learning and development opportunities including conferences, personal development using online resources, mentoring and more.

The importance of CPD to the creative and cultural industries should not be underestimated:

- 70% of the total UK 2020 workforce are already in employment
- 37% of businesses identify skills gaps in their current staff
- Employers say that training is often irrelevant, uncontextualised and difficult to find
- 10% of employers say they would provide more training if they knew where to source it
- Government support for business and skills development is regularly untapped by the creative and cultural industries who seldom engage
- The current challenging economic climate in which employers need to keep pace with changes in regulations, technology and respond proactively to opportunities exacerbates this need. In the current climate business skills and the management of change are likely to be essential elements

6.4.1 Key activities to achieve this:

- There is a broad range of CPD resources, courses and training available in the market place. It will be important therefore to identify relevant provision, gaps and mismatches with the industry

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