October 2024

Creative Industries (Virtual Production)
Skills Assessment

Executive Summary

Northern Ireland City and Growth Deals

PURPOSE OF ASSESSMENT

The main purpose of this assessment is to identify gaps in skills provision and to make recommendations to help ensure that an appropriately qualified and skilled workforce can be put in place to meet the anticipated development and growth of the creative industries sector in Northern Ireland, arising from the City and Growth Deals investment. Emphasis is placed on the expanding field of virtual production which is the specific focus of the BRCD Studio Ulster investment.

An expert panel was convened in the form of the Task and Finish Group, to develop the approach to the research element of the assessment and to provide recommendations as part of the assessment.

The approach to the research element of the assessment comprised:

- Examining existing evidence and directly engaging education providers, policymakers, business and industry to develop an overview of current and expected future skills challenges impacting the sector;

- Consideration of existing good practice and solutions in other sectors and in the creative industries sector in the region and beyond;

- Identifying opportunities for new interventions and scaling up of existing provision to meet demand in areas principally aligned to City Deals investment.

Based on the findings of the exercise, a set of five recommendations and aligned actions have been developed, aimed at addressing the identified skills gaps and wider challenges.

POLICY PRIORITIES

To provide focus for the assessment, the panel considered the current policy priorities [1][2] underpinning the City and Growth Deals, which included:

- Skills for Growth: to consider how skills programmes and employment opportunities can be aligned with the needs of the creative industries sector to realise potential for new apprenticeship pathways and development of mid-tier and higher-level skills;

1 https://belfastregioncitydeal.co.uk/overview/employability-skills
2 Belfast Region City Deal, Draft Inclusive Growth & Sustainability Framework, Version 0.8, March 2021.

- Inclusive Growth: to explore opportunities to address skills imbalances and improve access to employment opportunities across the region through progression pathways which prioritise inclusion and diversity;

- Supporting Innovation: to support the drive for increased innovation capability in the region to help achieve world-leading advantage, in this case in virtual production and the wider creative sector;

- Sustainability and net zero: to consider the critical importance of sustainability and the drive to net zero in future skills development initiatives.

THE POTENTIAL OF VIRTUAL PRODUCTION AND THE CREATIVE INDUSTRIES

Virtual production (VP) refers to a suite of technologies and processes that aims to merge digital and physical worlds, drawing on techniques from animation, gaming and more traditional film and tv.

The most familiar approaches often blend motion capture, camera tracking and real time rendering engines such as Unreal Engine; this creates photorealistic 3D environments displayed in real time on LED screens, with physical assets and actors added to these digital environments in studios to create worlds of unprecedented flexibility and scope.

VP is an example of a transformational intersection of art and science, developed to push at boundaries of existing workflows, with creatives such as producers and directors now collaborating with technologists who specialise in artificial intelligence (AI) tools and techniques, advanced infrastructure including robotics and high speed 5G connectivity, to deliver truly innovative cross-sectoral solutions.

The rapid adoption of VP has led to increased demand for new skills across a range of creative and technological disciplines, meaning that it is crucial to ensure investments are made to improve research and development (R&D) infrastructure and to build skills capacity at pace.

In Northern Ireland, creative industries account for 37,000 jobs representing 4.4% of the total employment in the region. The Gross Value Added (GVA) for the sector is £1,223 million which is 2.9% of NI's total GVA. In 2021, there were 3,500 creative businesses in NI, accounting for 3.8% of all businesses.

UK Government and industry stakeholders have identified the creative industries as a driver of economic growth and employment. HM Treasury's Plan for Growth and the Department for Science, Innovation and Technology (DSIT) and Department for Business, Energy and Industrial Strategy (now Department for Business and Trade) Innovation Strategy both affirmed that the creative industries are at the forefront of the country's growth sectors for the future economy.

Most recently, Lucy Frazer, the Culture Secretary, emphasised the UK's "tech know-how and production skills" in the screen industries and committed to growing the creative industries by £50bn and creating one million extra jobs for the sector by 2030.

The creative industries contributed £109bn to the UK economy in 2021 – equivalent to 5.6% of the UK economy in that year. However, despite the fact that the largest sub-sector was highlighted as IT, software and computer services (2.3% of the UK economy), signaling the increasing confluence of creative and technology.

This confluence, known as CreaTech, brings together creative skills and emerging technologies to establish new ways of engaging audiences and to inspire business growth and investment. The value of the UK CreaTech ecosystem has increased by 161% since 2017, and this growth is set to continue with the government's 2030 ambition for the UK to be world leaders in areas including: digital media production; live performance production; sustainable fashion; the application of technology to content creation, distribution, consumption and discovery; and even in the responsible use of AI across the sector, especially in new models for advertising and content creation.

Given the commitment from the UK and NI governments to support the growth of the creative industries, combined with a significant emphasis on digital technologies and infrastructure, it is a crucial time to consider the skills requirements for the future workforce.

RESPONDING TO CHALLENGES

The creative industries, and in particular the screen sector, which includes film, TV, games, animation and virtual production, are key drivers in the Northern Ireland economy.

The City and Growth Deals in the region are designed to act as a catalyst to increased innovation and scaling up of business and industry, leading to accelerated growth. However, this accelerated growth requires significant investment in people and skills.

> *Northern Ireland Screen will aim to provide opportunities for 70 trainees; offer up to 25 skills bursaries; support 45 Step Up places for crew; deliver bespoke and new entrant training for 50 candidates, and 8 director / producer opportunities.*

Significant progress is being made in addressing the key skills challenges facing Northern Ireland's creative industries sector, with a strong commitment to further action:

- With a more than doubling of its annual skills budget to £4m, Northern Ireland Screen continues to play a central role in collaborating with Further and Higher Education partners, industry and Government departments to deliver virtual production training and skills development opportunities.

- Northern Ireland Screen's 2024-25 Business Plan[3] describes skills as a core pillar of its economic strategy with future commitments across areas including Animation & Children's; Large-Scale Production; Television Drama; Factual / Entertainment; Independent Film; and Interactive.

- It will aim to provide opportunities for 70 trainees; offer up to 25 skills bursaries; support 45 Step Up places for crew; deliver bespoke and new entrant training for 50 candidates, and 8 director / producer opportunities. Importantly, Northern Ireland Screen has set the target of retaining 75% of trainees in the industry after 1 year of completing a traineeship.

3 Northern Ireland Screen (2024) Business Plan 2024-25. Available from https://northernirelandscreen.co.uk/wp-content/uploads/2024/07/Business-Plan-24-25.pdf.

- A particular success is the Creative Industries New Entrants programme (CINE). Delivered by Northern Ireland Screen, CINE aims to broadening access to the screen and creative industries at entry level. Funded by the Department for Communities (DfC) and working in partnership with BBC Northern Ireland, the scheme has identified new talent by prioritising applicants from underrepresented ethnic minority, socio-economic, and disabled communities, expanding the growing local creative industries sector and creating a more diverse generation of 'New Entrants' of all ages. Currently, there are 94 trainees taking part.

- Since its inception in 2018, Future Screens NI (FSNI) has played a key role in galvanising the creative ecosystem in the region, providing start-ups and SMEs with funding to scale up R&D activity and providing training opportunities across a range of environments in the sector. More recently, DfC has funded the next iteration of FSNI with substantial resources allocated to inclusive and socially facing training and upskilling provision.

- Ulster University, supported by Northern Ireland Screen, has been leading on upskilling and reskilling the sector with the launch of new progammes including 'Introduction to Unreal Engine for Virtual Production', 'Stepping into Virtual Production' and 'Virtual Production for Broadcasters', with plans to enhance and expand provision in line with the recommendations from this report.

However, the sector faces significant challenges which need to be addressed:

- Throughout the programme of research and stakeholder engagement there was a clear and consistent message that our 'skills system' is fractured and fragmented. Various bodies are responsible for different elements of skills provision and there is no consistent overall vision for what our skills system needs to deliver.

- Rapid changes and innovations in the sector, such as artificial intelligence, big data and automation will require continuous learning and upskilling of the workforce to be competitive and relevant in the global market;

- The complexity of attracting and retaining talent in the sector, including a lack of awareness of the opportunities and benefits of working in the sector, requires more effective promotion and engagement with schools, colleges, universities and communities to showcase the diversity and potential of careers across creative industries;

- The existing apprenticeship offering is nonexistent in creative industries locally. There is a need to better understand the challenges for creative companies to engage in apprenticeship opportunities and to align educational provision with the development of new apprenticeship frameworks at Level 3 and Higher-Level Apprenticeships;

- The gap between the skills demand and supply in the sector, which may result from mismatches between the qualifications and competencies of the existing and potential workforce and the requirements and expectations of employers. This requires more collaboration and alignment between the education and training providers and industry to ensure that skills provision meets the sector's current and future needs;

- Skills provision for sustainability and reaching net zero in virtual production is a complex and multifaceted challenge. Designing and implementing effective programmes to support skills development, reskilling and upskilling of screen professionals is critical if we are to meet net zero targets;

- Findings from research undertaken in this assessment highlight the fact that Northern Ireland is currently faced with significant challenges in developing an appropriately skilled workforce, which is critical to the successful realisation of its vision to be a leader in virtual production and the creative industries. However, the recommendations summarised below, if implemented, may provide a blueprint to address those challenges.

RECOMMENDATIONS AND ACTIONS

1

RECOMMENDATION

Increase attractiveness and raise awareness of career potential in the Creative Industries

2

RECOMMENDATION

Clarify alignment of new entrant and career development pathways

3

RECOMMENDATION

Increase access to creative technologies infrastructure and equipment

Actions

- Inclusion of a creative industries/ technology expert on the Department of Education's 'Digital Skills Oversight Group' as it seeks to develop a digital spine within curriculum

- Expansion of school support or additional focus on creative technologies in outreach activities via NI Screen Creative Learning Centres

- Develop a network of creative industries ambassadors to act as role models for new entrants

- Ongoing support for and delivery of Go Succeed programme.

- Ongoing engagement with Department for the Economy's Careers Service.

Actions

- Deliver a scoping exercise to map full learning and career pathways from GCSE through to Postgraduate

- Replicate St Malachy's Creative Digital Technology Hub (CDTH) across Regional Learning Communities to include primary sector

- Stronger alignment of Department for the Economy and Department for Communities skills objectives

- Expansion of 'Get into….' new entrant training programmes with a focus on diversity and inclusion

- Scope future of the CINE Programme and explore future funding arrangements

- Scope how 'Aim High' programme could be adapted for virtual production

- Formal engagement with DfE and industry on potential for a shared apprenticeship model for the creative industries.

Actions

- Scoping exercise to validate need for investment in a mobile volume screen for NI

- Exploration of a regional approach to deployment of virtual production technology across a hub network

- Creative industries/ VP to explore an SBRI or grant model within BRCD Innovation Challenge Fund to support and build capacity in local SMEs either seeking to or already working within creative technologies / virtual production

- Scoping exercise of accelerator programme(s) for SMEs offering access to equipment, infrastructure and mentoring.

4

RECOMMENDATION

Align and re-scale existing provision to meet the current and future demand reflecting industry needs

Actions

- Expansion of the NI Screen/ Ulster Screen Academy 'Introduction To/ Stepping Into' Virtual Production training for industry

- Increase awareness of reskilling and upskilling opportunities across the creative sector

- Increase interaction with employers to understand and address upskilling and reskilling requirements

- Support exploration of a DfE Collaborative Assured Skills rapid up-skilling / re-skilling academy model

- Support Labour Market Partnerships (LMPs) across the Region to explore the possibility of an academy model within creative and digital.

5

RECOMMENDATION

Prepare for emerging skills needs associated with sustainability and net zero

Actions

- Tailored sustainability modules to be developed and incorporated across creative industries curriculum provision in Further & Higher Education

- Development of sustainability / environmental education programmes for industry professionals

- Support businesses in accessing Council and other funded programmes to assist in measuring and developing action plans for more sustainable and carbon-reducing practices.

FOR FURTHER INFORMATION:

For further information, please contact:

Email: **brcd@belfastcity.gov.uk**
Tel: **028 9032 0202**
Visit: **belfastregioncitydeal.co.uk**