# StoryFutures /ACADEMY/

### **Annual Report**

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2019 - 2020









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### Chair's Statement

StoryFutures Academy is the UK's National Centre for Immersive Storytelling, a 3 year project to develop cutting-edge creative training and research programmes to ensure the UK creative workforce is the most skilled in the world in the use of Virtual, Augmented and Mixed Reality.

This report marks the second year of operations in which the National Centre has reached more than 1,000 beneficiaries - a project goal for the entire three years of the Centre's operation. In this measure, and in many other Key Performance Indicators, StoryFutures Academy has exceeded expectations. It has unlocked industry investment and partnership, driven researchled innovation, and enabled lifelong training for our leading creative industry practitioners and companies, reaching across the entirety of the UK and reflecting the country's diversity in everything it has achieved. That the calibre of this talent includes such luminaries as Oscar winner Asif Kapadia, Bafta winner Georgina Campbell as well as national institutions such as the BBC, is all the more outstanding.

This has not been without its challenges: a global pandemic and the beginning of a painful recession are not always fecund ground for innovation and experimentation, whilst one of the immersive sector's key routes to audiences - location based experiences - has been decimated for the immediate future.

Yet the National Centre has managed to keep the taps turned on with regard to its innovation funding, training, research and support throughout the year, enabling a staggering 318 screen industries professionals, and a further 278 traditional students at the NFTS and Royal Holloway, to walk through its physical or virtual doors in 2019-20 alone. It has also managed to lift our horizons to look beyond our own shores and find international collaboration and opportunity for our world-leading creative industries.

This report charts a remarkably successful year for the Centre and sets out a course for how it can continue to make an important contribution to the UK's creative economy. Looking to the year ahead - and the final year of the Centre's funding period - there is much to still achieve and I look forward to working with the team to deliver on an ambitious agenda.

**Bal Samra** 

StoryFutures Academy Chair BBC Group Commercial Director



### **Directors' Statement**

2019-20 has been an incredibly successful year for StoryFutures Academy, seeing us surpass many of our overall target KPIs a year ahead of schedule, including training a total of over 400 screen industries professionals, double our 3-year project stretch goal. Including students and those beyond the creative industries, 1022 unique beneficiaries have taken part in our programmes.

Significantly, we have done this in keeping with our proud record of reflecting the UK's diversity: over 56% of participants in our programmes have been female and 26% from black, Asian or ethnic minority backgrounds. Our approach to R&D fuelled innovation and training has unlocked over £3.3million in total leverage funding from partners across the UK's creative and cultural sectors.

Whilst Covid-19 has undoubtedly had an impact on our work packages we do not dwell on it across the report, instead detailing the significant changes we've made to our activities on page 8. We are incredibly proud of how the team has adapted to the 'new normal', working to ensure our objectives continue to be met and exceeded throughout this challenging period.

Through our efforts to support our partners, our productions, and our talent we have demonstrated that a continued appetite for training and innovation in creative industries' can not only be met but can produce compelling outcomes. From launching the first VR project of Oscar winner Asif Kapadia to ensuring over £800,000 of our own and partner leverage has been released for productions, through to delivering remote workshops on writing, games engines, photogrammetry and more to propel new entrants into this exciting sector.

As StoryFutures Academy enters its third year - the final year of its current remit and funding - our work as a National Centre for Immersive Storytelling has never been more important. Over the coming 12 months - and hopefully beyond - the National Centre has a substantive role to play in the UK's creative industries Covid-19 recovery plans and a post-Brexit road map for the sector in three significant ways.

Firstly, StoryFutures Academy can continue to support the demonstrable appetite for innovation in the sector - enabling companies and individuals to take risks that they could not take alone, leading to new jobs and careers (See Grace Baird on page 21), new products,, new business opportunities for companies (see Co-Production case study: Little Dot Studios page 37).

As the sector's core business models and revenue streams are further disrupted, this hunger for innovation will only grow. Immersive technologies interconnecting with AI, and the deployment of Games Engines in a range of new context, will enable new ways to not only reach and engage audiences, but also introduce novelty into the production practices of more traditional screen industries content. Indeed, one of our key achievements has been the facilitation of knowledge exchange amongst different production sectors as well as academia and industry.

[continued on next page]

Secondly, StoryFutures Academy has a significant role to play in enabling international trade for our growing immersive sector. The UK's immersive production sector has already gained a healthy share of the growing global market, estimated to be worth £130billion by 2023¹ with over 1,250 specialist immersive companies, and over 500 immersive technology projects identified since 2018 in the UK (either ongoing, open or completed) worth £220 million.

The impact of the Covid-19 pandemic has not substantively dimmed that appetite, with IDC projecting that whilst worldwide AR/VR spend will decline in 2020 compared to the pre-Covid-19 forecast scenario, they still expect AR/VR spend to reach \$10.7 billion. Over 22% of companies operating in the UK economy are focused on Media and Arts, making the sub-sector a key player in the 13,000 jobs currently engaged with immersive technologies<sup>2</sup>.

The UK's creative immersive sector has reached a point of maturity such that many companies are export-ready, with the UK government's investment in the sector across the Audiences of the Future and Creative Industries Clusters' Programme making us a world-leader. Our Immersive Exchange programme with Arts Council England and three leading Canadian institutions including the Canada Media Fund, will support and realise that potential in 2020-21, but there are growing markets across Australasia, South America and Asia that offer further international trade routes for the sector.

Finally, StoryFutures Academy has developed a sustainable model for lifelong learning and upskilling. This model builds a virtuous circle of training and innovation by providing paid support for professional level training, including hands-on learning on live immersive projects, which enables risk-taking and cross-sector innovation to flourish. It then 'banks' the time of these professionals in commitments to 'time back' to teach future cohorts of learners - building a deep reservoir of over 100 hours of training time from talent that will see our industries flourish for years to come.

As the UK navigates the challenges of Brexit and Covid-19, StoryFutures Academy's model for lifelong learning for our world-leading sectors can play a significant role in retaining our competitive edge by upskilling our current industry professionals to tackle the challenges of digital disruption, and pass this knowledge on to the next generation of talent emerging from our Universities, Colleges and Schools.

The success of our second year is a fantastic platform to build from. We look forward to the final year of our current funding and beyond.

**Professor James Bennett** 

Co-Director, StoryFutures Academy

Dr Jon Wardle

Co-Director, StoryFutures Academy

<sup>1</sup> PwC. (2019). Seeing is believing: How VR and AR will transform business and the economy. Available at: <a href="https://www.pwc.com/gx/en/industries/technology/publications/economic-impact-of-vr-ar.html">https://www.pwc.com/gx/en/industries/technology/publications/economic-impact-of-vr-ar.html</a>,

<sup>2</sup> Immerse UK. (2019). Immersive Economy in the UK Report, 'media and arts' sub-sector, p. 23. Available at: <a href="https://www.immerseuk.org/resources/immersive-economy-report-2019/">https://www.immerseuk.org/resources/immersive-economy-report-2019/</a>

### **About**

StoryFutures Academy is the UK's National Centre for Immersive Storytelling run by the National Film and Television School and Royal Holloway, University of London. Funded as part of UK Research and Innovation's Audience of the Future industrial strategy challenge fund, the Academy provides cutting-edge creative training and research programmes to ensure the UK creative workforce is the most skilled in the world in the use of VR, AR and MR.

#### StoryFutures Academy has four workstreams:

### Workstream 1

Placements on immersive productions for professionals to acquire experience on set, including intensive bootcamp training sessions.

#### Workstream 2

Collaborative Co-production to co-fund and commission immersive projects. These include: Challenge and Talent-led large scale co-productions which upskill companies and talent as well as tackle scalable R&D challenges; Kickstart funding projects which support entry-level projects for established talent; Production Booster Funding to support advanced innovation projects.

#### Workstream 3

Experimental R&D production Labs, which include: Introductory Labs - an entry point for talent to get started with immersive; Experimental Labs - introductory courses to key technical areas of immersive; Writers Rooms - hands on training for writers and content creators.

#### Workstream 4

Developmental Training to build training capacity across the UK to enable the development of a national skills pipeline for immersive production.

### **Covid-19 Statement**

2020 has been both an enormously successful but hugely challenging year for the programme. Our activities, national reach, productions and demand for our support has grown at the same time as Covid-19 has severely restricted our ways of working. StoryFutures Academy has had to adapt to the rapidly changing needs of the industry, as well as our own team and wider organisations.

Specific pandemic-related challenges for the programme include:

- Delays to projects in production as companies we are partnering with have adapted to the changing situation. This has particularly affected development and co-production projects such as the Production Booster projects, as well as companies' ability to take on placements.
- 2. Delays to the release of completed projects and audience testing, due to the lack of location-based events. This has included delaying the release of the BBC3 Oddly Satisfying VR project, and a pivot for the Kickstart project Violence which was initially due to be featured at Tribeca, and had to be adapted for online delivery and testing as part of the Cannes-Tribeca VR exhibition see page 27).
- Significantly reduced ability to offer in-person events, impacting our regional delivery plans and Introductory Labs programme. This includes the cancellation of the 2020 BFI Film Academy.

The main impact on delivery has been a delay to certain key activities, as well as spend, that led to a slowdown in some of our financial expenditure in Quarter 1 (see Finance Section).

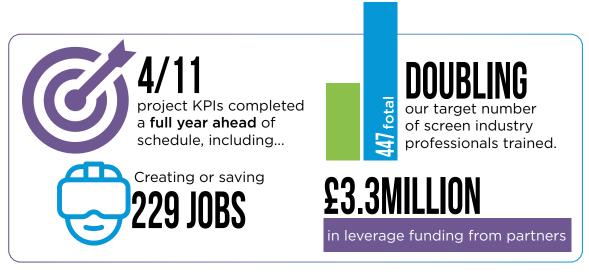
Despite these challenges, StoryFutures Academy has adapted quickly and ensured that £459,300 of StoryFutures Academy funding has flowed to companies or been made available through new competitions since lockdown commenced in March 2020. This, in turn, has unlocked £397,700 in partnership co-funding supported by a further £200k+ of partner staff-time. Since lockdown, we have innovated in our delivery to ensure national engagement, including:

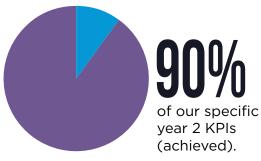
- Using 'Storytelling boxes' for Writers Rooms to create a connection between the physical and the virtual, allowing all participants to share a physical set of props and the excitement of unboxing to build creative collaborations.
- Training to You: Fundamentally, we've taken our training offering, including headsets and 'storytelling boxes' used in Experimental Labs, to participants rather than expecting them to travel to us. Headsets have been delivered to Bootcamp and Lab participants across the UK to enable them to view content in advance of shared teaching and discussion sessions.
- 3. Creating new online resources including our Masterclass archive, immersive audio stories and podcast series of audio lessons to be released Autumn 2020.
- 4. Launching an in-headset audience testing survey for gathering user testing data remotely.
- 5. Pivoting delivery of the inaugural UK-Canada Immersive Exchange to a remote-first collaborative programme.

The pandemic will undoubtedly continue to impact our work and that of the sector. We will continue to plan and offer all of our work remotely until the end of 2020, keeping a review on PHE advice and adhering to our host institutions' policies.

# Section 1 Achievements

For the second year, StoryFutures Academy are delighted to report that we are meeting and in many cases exceeding all of our KPI targets. Significant highlights include:







The launch of the sector's first Skills Report. **Skills for Immersive Experience Creation:** Barriers to Growth in the UK's Immersive sector.



The commission and early stage development of VR production Laika by Oscar Winner Asif Kapadia.

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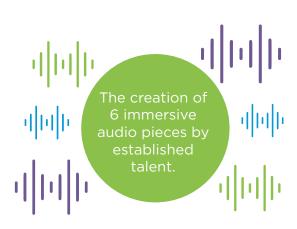
The selection of
Kickstart VR project
Violence by Shola Amoo
for Tribeca Film
Festival.

### InGAME

The launch of our first Game Lab and Commission, in partnership with the InGAME Cluster.



The launch of the first ever international immersive co-production programme: **UK-Canada Immersive Exchange**, with Canada Media Fund, Canada Arts Council and Arts Council England.





### **Summary**

Beneficiaries

1022

"I loved the progression through the experiences from passive and unrecognised in the world to active and totally recognised in the world."

- Intro Lab participant, 20 February 2020

**Professionals trained** 

447

"I felt the organisers were informed and passionate about what they were discussing. — Intro Lab participant, 20 February 2020

**Jobs** 

229

"I'm now animating with Unreal which I'm loving."

- Ed Tracy, CEO, Too Tall TV

**Co-productions** 

18

"StoryFutures Academy is brilliant. It gets VR technology knowledge accessible to professionals from different backgrounds. The impact of this work will be soon visible within the industry in the UK." – Tier 2 Unity Lab participant 12, 13 February 2020

**Industry leverage** 

£3.3m

"My only concern, if any, might be the end of the governmental support that funds it. It needs to stay!"

- Francesca Alta, Tier 2 Unity Lab, FTS, 12/13 February 2020)

**Placements** 

13

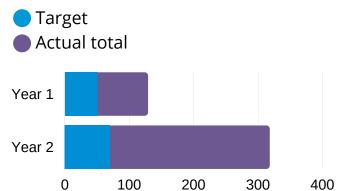
"I loved the variety of people in the workshop to network with."

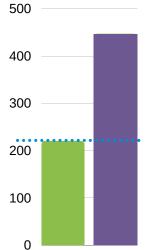
— Intro Lab participant, 20 February 2020

### **KPI Stats**

# 1. Skills

### **Core screen talent development**





**Project Target** Stretch Goal:

220

Accumulative total (Year 1 + 2):

447 (+227)

Challenges

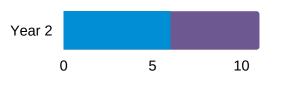
Varied cohort

### Mitigation

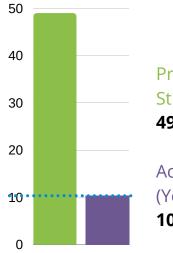
### 2. Skills

### **New skills programmes**

Target Actual total



\*(Year 1 target: 0, total: 0)



**Project Target** Stretch Goal:

49

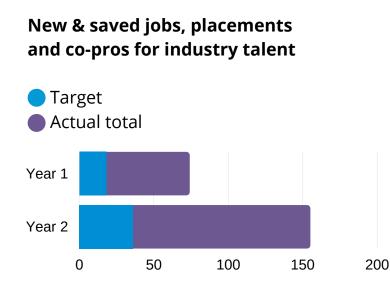
Accumulative total (Year 1 + 2):

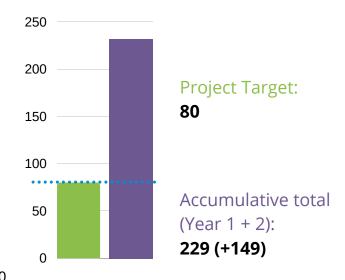
10 (-39)

### Mitigation

15

### 3+7. Growth



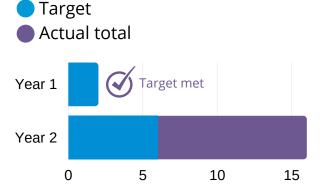


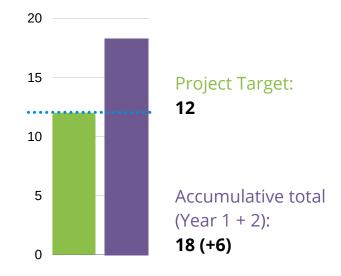
### Mitigation

Combined KPI 3 & 7 as our spend focuses on training. The Business Information Survey gives us much more detail of the team directly affected by placements/co-pro/devt investment.

### 4. Productivity

### **Co-productions**





### **Challenges**

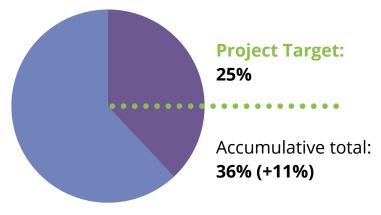
Yr 2 Co-productions: BBC3, Laika, Coventry, Canada, Game commission Devt Funding: 6 x Kickstart and 5 x Production Boosters. length of time required for process, contracting and production.

20

### 5. Growth

## Co-productions to reach Regional Beneficiaries



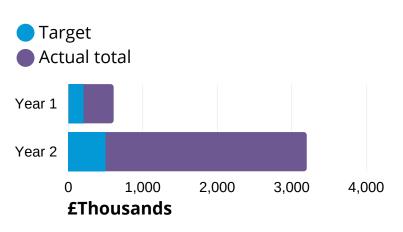


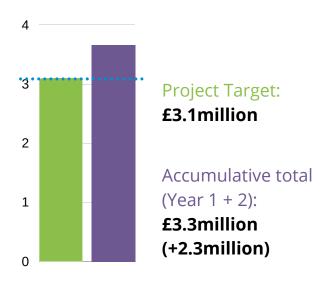
### Details

2 x Kickstarts, 3 x Production Boosters and 1 x Challenge Co-production.

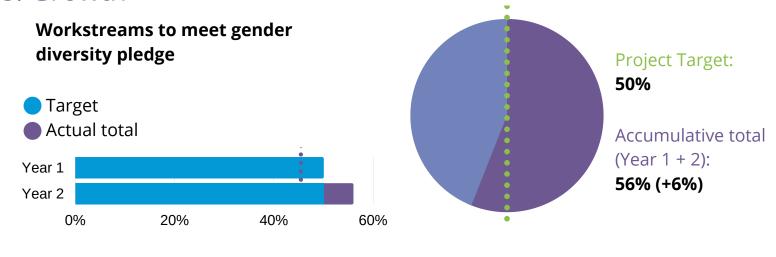
### 6. Growth

### Leverage from industry partners

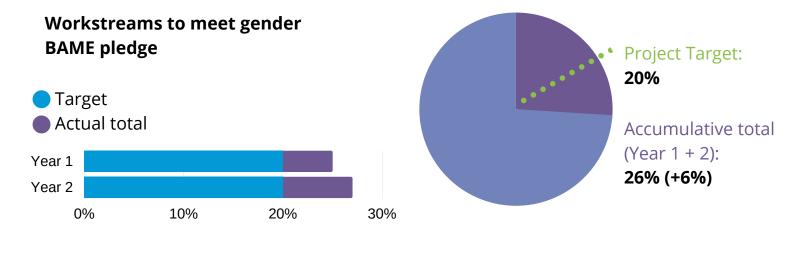




### 8. Growth



### 9. Growth

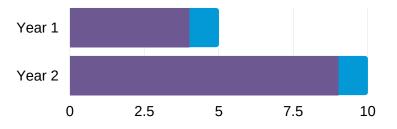


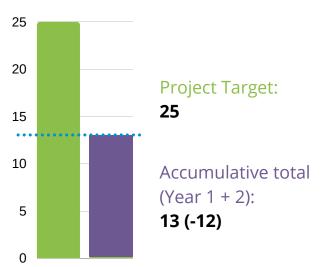
### 10. Collaboration

### **Industry placements**

Target

Actual total





### **Challenges**

Covid-19 restrictions caused a delay in several industry placements.

### Mitigation

Redefined the 40:60 model to 20:80 to support and encourage work placements in the cash-strapped creative industries.

### 11. Collaboration

### **Delivery of NCIS workstreams outside of London**

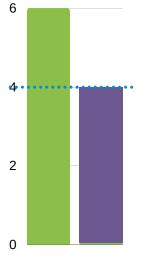
2

3

Target
Actual total

Year 1

1



Project Target:

6

Accumulative total (Year 1 + 2):

4 (-2)

### Challenges

0

Year 2

Covid-19 lock-down delayed several physical regional events, which have since been delivered on-line, using new models of delivery.

4

### **Impact and Engagement**

StoryFutures Academy's core remit is to engage and upskill screen industries professionals and companies, ensuring that their participation reflects the diversity of British talent, which we explore in the case studies below.

Here we detail how we address our short and medium term impact plans:

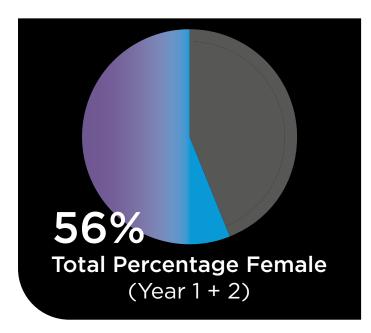
- Innovation in products and services: BBC3's #OddlySatisfying demonstrates innovation in audience insight by targeting youth audiences' mental wellbeing in a fun and entertaining experience that attempts to get users into a psychological state of 'flow', measured by heart rate and survey.
- 2. Better understanding of skills gaps and training needs: Our skills report was a comprehensive review of over 100 industry participants that has led to the first sector analysis (see case study below).
- StoryFutures
  National Centre for Immersive S

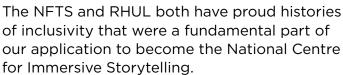
  CATA

- 3. New skills programmes: Our Train the Trainer programme will introduce and enhance 8 universities' degree-level programmes nationwide.
- 4. Evidence and best practice on innovation in storytelling: Each of our projects produces a detailed learning log and our virtuous circle of training means that over 100 hours of knowledge, equivalent to 3 full taught units of teaching time, from industry professionals will be disseminated to students across the UK between 2020 and 2023.
- 5. New experiences for UK and international audiences: Over 500 people experienced 'Violence' by Shola Amoo and Nell Whiteley online, whilst all 6 Production Booster projects and BBC3's 'Oddly Satisfying' will be released to larger audiences later in 2020/21.
- 6. Greater Diversity in immersive screen sector: Whilst baseline measures of the immersive industry are unavailable, our overall female (56%) and BAME (36%)

"Across all its work,
StoryFutures Academy has
demonstrated the value of
cross-sector approaches
to sharing knowledge and
generating investment,
both of which are vital to
driving growth in this new
area."

Pete Johnson

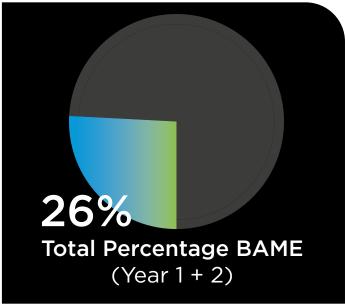




Our strategy at the outset of our programme was to state our commitment to a 50% female and 20% BAME participation target across our workstreams. Harnessing the power of our Alumni network to make our call, spearheaded by Sir Lenny Henry, we have ensured that our approach to supporting established talent has visibly placed women, black and Asian participants at the forefront of our work, including ensuring that recognisable talent such as Georgina Campbell, Asif Kapadia, Sarah Gavron and Shola Amoo were early beneficiaries of our Introductory Labs.

In turn, Georgina, Shola and Asif have gone on to make their first immersive productions with StoryFutures Academy - enabling us to continue to use talent as a clarion call to nurture talent that represents the diversity of the UK across our work.

Our approach thus moves beyond monitoring and reporting statistics, to ensuring our commitment is showcased and provides a road map for diverse talent to follow for their own careers, regardless of gender or ethnicity.



Our team also reflects this commitment, with 56% of the core team female and 12% BAME. In a visual industry, we believe the visibility of our commitment has been instrumental: with 344 of our total 610 applications to our programmes received from women (64%) and 182 applications from creative professionals, who recognise themselves as part of the BAME community (28%). Recognising such levels of applications, year on year we have worked to increase our BAME participation, up to 27% in 2019-20 (up from 25% 2018-19).

#### Specific highlights include:

- BFI Network Introductory Lab: 46% BAME participants (03/01/20)
- 2. Primetime Introductory Lab: 100% female industry professionals (24/01/20)
- 3. Immersive Sound Writers Room: 43% BAME participants (23-24/06/20)



StoryFutures Academy's 'Skills for Immersive Experience Creation: Barriers to Growth in the UK economy' report was a first of its kind for industry, mapping out the current skills landscape in terms of strengths, gaps and the steps required to build a successful immersive skills pipeline.

It was greeted by the then Minister for Universities, Science, Research & Innovation as an 'important report that will help make the UK a world leader in immersive' and welcomed by Sir Peter Bazalgette as 'pinpointing what UK plc needs to do to make sure we're developing the necessary skills to dominate the immersive market'.

The report's launch was attended by 136 industry professionals and academics, reported in major industry news outlets including <u>Broadcast</u> (Image: Broadcast now<sup>3</sup>), FE News and Times Higher Education.

The Skills Report was the foundation of our Train the Trainer initiative, designed to build an immersive skills pipeline across the UK that will realise over 10 degree programmes at universities by 2021 (see Section 6).

<sup>3</sup> Broadcastnow link <a href="https://www.broadcastnow.co.uk/tech/report-reveals-major-skills-shortage-in-immersive-production/5146660.article">https://www.broadcastnow.co.uk/tech/report-reveals-major-skills-shortage-in-immersive-production/5146660.article</a>



The second year of the programme has seen a significant focus on increasing activities that both take place and benefit those in regions across the UK, outside of London. To date, 39% of attendees to Experimental Labs, Writers Rooms and Bootcamps have been from outside the M25/London, and approximately 38% of project funds awarded or committed have been to those with work being carried out regionally across the UK.

This has been made possible with a variety of partnerships with different organisations across the UK, including:

- TRC Media partnership to run placements and bootcamps in Scotland.
- Creative England Bootcamps and placements partnership in Manchester and Plymouth.

- 3. **InGAME Cluster partnership** for the Immersive Game Lab and Commission Initiative.
- Partnership with Coventry City of Culture and West Midland Combined Authority's Create Central to deliver the Positive Realities programme accelerating the adoption of immersive production by businesses across the region.
- 5. Established a national training pipeline with over 10 HEI partners in our Train the Trainer programme, including 79% of all participants coming from regions beyond London (see page 34), as well as leveraging the NFTS national bases in Leeds and Scotland to deliver regional events and training.

# Workstream 1 - On set training and Bootcamps

Workstream 1 provides professionals with hands on training on immersive productions to acquire experience and new skills on set. StoryFutures Academy training includes an initial intensive training bootcamp covering topics such as game engines for creatives, 360 filming practice, audience behaviour insights and immersive sound design.

Although we fell just short of our year 2 placements KPI, we nevertheless increased the number of placements by over 200% - with 9 new placements completed or in progress by the end of 2019-20, bringing the total to 13 placements. Crucially, these productions allow not only established talent to enter the immersive production sector, but also enable existing immersive specialists to take risks on different approaches to product development brought about by the knowledge transfer between sectors.

"Grace has brought with her a wealth of experience in terms of what we could be doing and what's happening in the industry that we wouldn't have been aware of any other way.... having somebody like Grace on board has given us a competitive edge in terms of being able to identify opportunities we didn't know were there."

- Richard Stegman, Senior Producer, Surround Vision

The result of such fusions is innovation in story form for immersive, including Peaky Blinders VR (Maze Theory), Climate Changers (Surround Vision) and the support of wider jobs on productions enabled by StoryFutures funding.

In so doing, the placement model supports a lifelong learning skills agenda, launching second (and even third) careers for participants who have found new job roles in the immersive sector that value their experience and reward their re-skilling creatively and financially.

"I was toying with [immersive] to see if I wanted to move away from theatre. And I knew within ten minutes of starting at To Play For that this was for me!

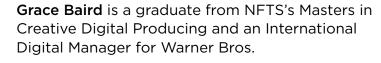
— Writer Rhianna Dearden, Placement at To Play For (that turned into a job!)

Two of the seven completed placements (6 remain in progress) have led to permanent jobs with placement companies, whilst five placements were extended to long-term jobs funded entirely by companies themselves because of the value of working with cross-sector talent.

### A journey into immersive with Grace Baird

### **Case Study**





### This is her journey into immersive with StoryFutures Academy.

Grace attends a StoryFutures Academy Bootcamp

Exploring a toolbox for creative professionals, interested in working in immersive.



Grace is offered paid work by session host, NEXUS studios on an interactive web-based art experience (4 weeks extended to 6). She leaves digital TV to work in immersive content creation.



Her work on Climate Changers directly impacted the project's story, based on the audience feedback she had gathered.

During the placement, she also took part in a 360 shoot in central London and experienced the core workflows in the dynamic environment of working in immersive.

Impressed by Grace's work, Surround Vision extended Grace's position for the duration of the project.

#### **Kickstart funding: Secured**

Grace also applied and secured £10k Kickstart funding for the immersive project 'Nudge' where she was the Digital Producer.

Grace describes 'Nudge' as a two-player narrative game for the Oculus Quest. Embodying opposing characters, players experience the same story from different perspectives and together must collaboratively solve puzzles to progress the narrative'.





### TRC Media Bootcamp

### **Case Study**

Our first, and highly successful, regional Bootcamp produced 3 placements with companies from Glasgow and surrounding regions. StoryFutures Academy's partnership with TRC Media saw the creation of <u>Cross-Creative Immersive Programme</u> to develop Scottish talent and business innovation.

TRC Media recruited eleven Scottish and one Northern Irish creative industry professionals who were eager to acquire new immersive storytelling skills. StoryFutures Academy provided them with an intensive deep dive into the world of immersive storytelling, including insights from 3 leading Scottish immersive production companies committed to taking talent on our placement programme.

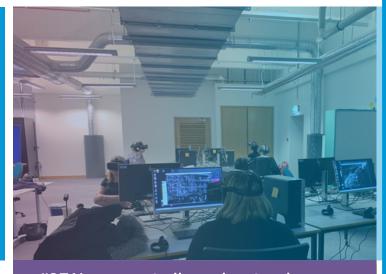
The bootcamp led to the following on-set training placements

- Declan Dineen (TV and Radio Writer) is working at Glasgow based Iso Design, who build large scale interactive and immersive media projects.
- 2. Ian McGinley (Short Story Writer) is working at Bafta award winning digital studio Blazing Griffin.
- 3. Soluis, immersive visualisation specialists are in the short-listing phase to select the participant who will join them.

"The two-day Bootcamp has both inspired me, and assured me of my desire to develop work for the growing Immersive 360/VR/ AR sector"

- Duncan Cowles, BAFTA winning documentary filmmaker, Relative Films, Edinburgh

With the support of our hosts, InGAME, the bootcamp offered these producers, directors and writers a chance to don headsets and critically review some of the best XR work around, as well as to get hands-on creating 'dirty' prototypes using simple props and tools. Importantly, it enabled them to explore how best to use their much needed and transferable skills in immersive production.



"SFA's support allowed us to place our first 'Writer-in Residence' Declan Dineen and fill a much needed gap to have access to an experienced fiction-based creative to assist us in the development of interactive narratives. Declan is directly shaping our responses to a range of creative commissions from apps and immersive sound installations to large scale media exhibits. Writers who understand the demands of interactive work are few and far between - as one of SFAs graduates Declan has been able to extend his skills from radio to the new emergent forms of visitor experience."

- Damien Smith, Partner, Iso Design

# Workstream 2 - Collaborative Co-production

Our co-production work has accelerated rapidly since the end of year one, with 16 projects commissioned in year two and a cumulative total of 18 co-productions.

Co-productions represent a vital intervention in supporting innovation, promoting R&D collaboration and de-risking investment in training to enable companies to exploit new markets made possible through immersive technologies. Across our co-production work, our projects have supported on-the-job learning and development of 75 screen industries talent and created/supported 113 paid job opportunities. These projects provide a mixture of lab-based and hands-on learning for new and intermediate individuals and companies to the immersive landscape, launching careers, business plans and new products into the immersive landscape.

### **Challenge and Talent-Led Co-productions**

Challenge-led and Talent-led large scale coproductions that work with leading companies and talent to tackle scalable challenges in developing immersive work for audiences, including BBC3 and Director Asif Kapadia (up to £200,000 co-financed).

All our co-production work also serves as a valuable learning resource for future students who are interested in entering the immersive sector, with recipients contracted to give 'time back' to future cohorts of StoryFutures Academy to host seminars on their work, teach classes at NFTS or Royal Holloway or deliver masterclasses for wider knowledge sharing. This virtuous circle enables innovation and risk taking, developing lifelong-learners with a mission to share their knowledge with the next generation and build a talent pipeline to make the UK a world leader in immersive.



"I love the story of Laika because it is simple, extraordinary, unique and epic. From the moment I first read Nick Abadzis' fantastic graphic novel, I've wanted to find a way to bring it to the screen and animated VR is the perfect medium to adapt his beautiful work. In my opinion, VR works best when it is rooted in something real and my ambition is for viewers to believe they are really there with Laika, on Earth during training and finally in space. I hope this film encourages a wider audience, young and old, to experience a new form of cinema and technology through the telling of Laika's momentous journey."

Asif Kapadia





StoryFutures Academy is working with the BFI London Film Festival to present virtual reality commission Laika, the story of the Soviet dog that became Earth's first voyager into space, to be directed by BAFTA and Oscar winning director Asif Kapadia, in collaboration with award winning animation studio Passion Pictures. After he attended an Experimental Lab in year one, StoryFutures Academy has been working closely with Asif to support him through the on-the-job learning process during the early development of the work. Asif will discuss the work in progress at LFF 2020, with the final project to be completed in 2021. The piece has secured funding from the BFI Film Fund and Film4, totalling £220k of leverage so far.



#### **#OddlySatisfying**

(BBC3, LittleDotStudios) StoryFutures Academy partnered with BBC3 to create the youth channel's first ever immersive experience. The project enabled both BBC and established TV Indie LittleDotStudios to start a journey into immersive storytelling production that has huge value for both (see R&D case studies section 7).



#### **UK-Canada Immersive Exchange**

StoryFutures Academy has partnered with Arts Council England, the Canada Media Fund, The Canadian Film Centre's Media Lab (CFC Media Lab) and Canada Council for the Arts on a new immersive talent development and co-production fund for UK and Canadian creatives. This is the first international exchange programme dedicated to immersive storytelling between the UK and Canada. Beginning in November 2020, the exchange programme will comprise a series of workshops and training events that culminate in an opportunity to pitch for co-production financing, with a total co-production fund of £300,000 (CAD \$510,000) on offer. A total of 24 creatives will be selected to participate, comprising six 'Creative Leads' and six 'Creative Producers' from each country.

The partnership represents a significant post-Brexit opportunity for the UK's creative industries, opening up new trade opportunities for the immersive sector. Currently 62.3% of companies are working in immersive export, but their focus has predominantly been on Europe - with 63.5% of those companies selling to Europe, whilst the USA represents the second most common market (45.3%).<sup>4</sup> The immersive sector is maturing to the point where 37% of companies identify themselves as either an established small and medium enterprise (SME: 20.8%) or a scale-up (12%). StoryFutures Academy's approach has leveraged over £600,000 co-investment in the programme from partners, including over £450,000 from Canadian partners who will provide a route to international collaboration, export and trade. A total of 6 final products and prototypes will emerge from the programme, launching in late 2021.

<sup>4</sup> Immerse UK. (2019). Immersive Economy in the UK Report, 'media and arts' sub-sector, p. 5. Available at: <a href="https://www.immerseuk.org/resources/immersive-economy-report-2019/">https://www.immerseuk.org/resources/immersive-economy-report-2019/</a>



#### **Immersive Game Lab and Commission**

StoryFutures Academy partnered with <a href="IngAME">IngAME</a> (Innovation for Games and Media Enterprise), which supports the Dundee Games Cluster, on an exciting new £80,000 Game Lab training workshop and commission. The project budget includes £30,000 development awards for writers and games companies to begin working together in new ways, with one partnership ultimately winning a £50,000 commission.

Immersive Game Lab is aimed at supporting the development of the next generation of immersive, narrative-led games in the UK by helping 12 established writers from across the UK learn the skills of writing for immersive games. Led by research in interactive writing form via our Writers Room, the writers will collaborate with PunchDrunk and local games companies, Biome and Pocket Sized Hands to develop models of immersive storytelling that fuse practice from games, theatre, television and film to produce innovative new forms of immersive gaming. After the workshop and a paid development period, one project will be commissioned as a prototype that will come to fruition in 2020-21.

# Positive Realities XR for Youth Wellbeing, Coventry UK City of Culture in 2021 StoryFutures National Centre for Immersive Storytelling

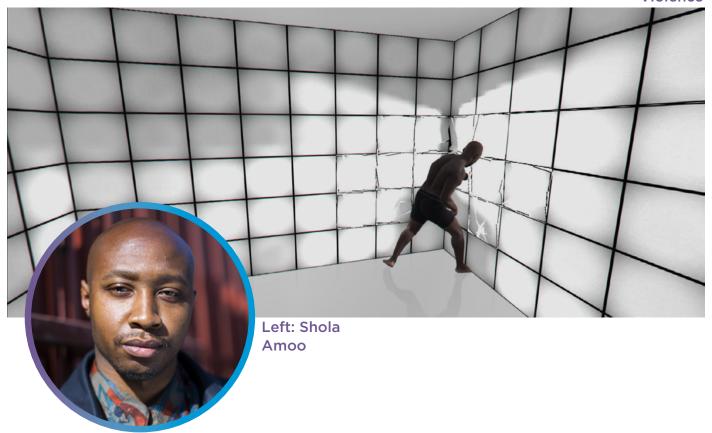
Positive Realities: Coventry City of Culture and Create Central In July we announced our £120,000 Positive Realities coproduction with Coventry City of Culture Trust and West Midland Combined Authority's Create Central, which aims to support the region's creative industries. This project combines cutting edge R&D on co-creation and the potential for immersive storytelling to address the emotional wellbeing of youth cultures at risk of disenfranchisement from education and employment in the region with an upskilling opportunity for regional creative businesses.

Working with Coventry's Positive Youth Foundation and building on StoryFutures Academy's BBC3 experience as well as StoryFutures immersive mental health fellowships with NESTA, Positive Realities will work with a cohort of at risk adolescents to develop an immersive prototype that can benefit their self-confidence. By fusing proven creative practitioners with StoryFutures Academy training and research programmes, we hope to deliver a project with both commercial and social value for an audience that is currently underserved by most forms of immersive production.

In October six regional SME's will attend a two-day training workshop, before working with Positive Youth Foundation stakeholders to develop proposals for a pilot experience at the start of Coventry, UK City of Culture. One project will be selected for delivery of a pilot that will be developed in collaboration with StoryFutures Academy researchers, Coventry City of Culture Trust, and a cohort of adolescents from Positive Youth Foundation

### **Nurturing talent**

Image: Violence



Kickstart funding is designed to support early-stage project research and development and the creation of immersive proof of concepts across AR, VR, and MR platforms. This opportunity is for professionals who have participated in NCIS training programmes and are looking to take their next steps into immersive production (up to £10,000 per project).

Through Kickstart we have awarded a total of £65,000 to seven creatives to make their first forays into the world of immersive production. These teams are well established in the screen industries as directors, producers, writers or composers but had never made an immersive experience before. These projects are supported by a StoryFutures Academy producer, providing practical support in planning immersive productions and facilitating networks of contacts, as well as access to audience insight researchers to discuss what and how their prototypes will be tested with audiences.

The Kickstart cohort spans virtual reality, immersive audio and augmented reality. They include 'Violence' (see case study); a virtual reality trailer for 'Fireworks'- an ambitious VR drama by Academy Award winning VFX specialist Paul Franklin and producer Annalise Davies; and an augmented audio project, 'Echoes of Crystal Palace' that recreates moments in the iconic building's history.

These prototypes will help the teams secure further finance in order to make full versions of their experiences and that they will go on to work on other immersive projects. Supported by StoryFutures Academy's Kickstart funding, research and training programmes, Shola Amoo's 'Violence' premiered at the Tribeca Film Festival as part of 2020 Cannes XR Virtual.

'Violence' "recontextualises the idea of violence, by exploring it through the lens of state oppression against marginalised and subaltern groups", says Shola, examining ideas of race, bias, empathy and control. A ground-breaking piece of user interaction research displays first-hand the power of immersive narrative to influence and subvert audience perception, in often surprising ways. Addressing the question of whether it is ever tolerable for oppressed groups to use violent forms of protest, the project solicited nearly 500 responses at the Tribeca Film Festival. It found that VR could alter peoples' opinion on the right of oppressed groups to use confrontational forms of protest, with more people recognising that it may 'sometimes be ok for oppressed groups to use violent forms of protest' after viewing the production (59%) than before it (39%).

Coming from a background directing for TV and cinema, StoryFutures Academy was instrumental in enabling Shola to make the move into immersive filmmaking.

'I attended a StoryFutures Academy's Intro Lab and that was very important for me, providing my first virtual reality (VR) training experience.'

It was also a launchpad into a multi-skilled collaborative environment that spanned research and cross sector knowledge sharing, with Shola pairing up with experienced immersive producer Nell Whitley from Marshmallow Laser Feast. Nell explains. 'I'm a producer, not a technical person, and so the piece came from Shola exploring his ideas and knowing the potential of the tools that were available, with me contributing what I knew about the industry and bringing others to the table.'

The collaboration also included access to StoryFutures Academy's audience insight research team, providing a feedback system that directly integrates with VR headsets to deliver bespoke psychological insights. Through the R&D collaboration, the team developed an approach to audience insight that was designed to test the way in which immersive storytelling could act as a tool for shifting attitudes and emotions towards important social topics. Immersion was key to the results:

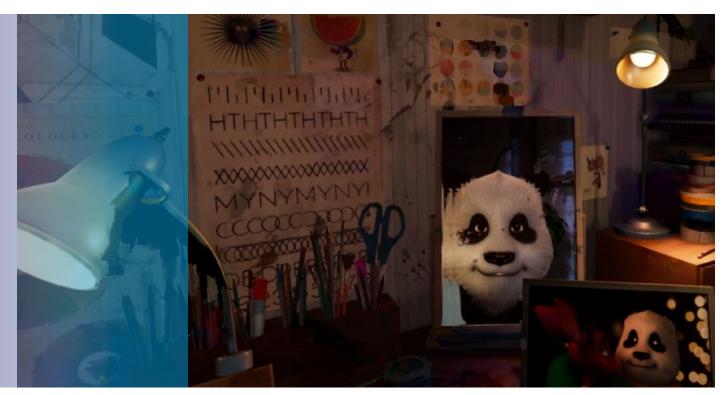
'The more someone imagined themselves in the character's situation, the more likely they were to agree that it is sometimes ok to use violent forms of protest. So, one thought is that black people would sympathise more with the black character than the white audience - but actually that wasn't the case.'

— Dr Andy Woods, Senior Research Fellow, StoryFutures

StoryFutures Academy's research showed that 70% of white participants responded positively as opposed to 59% of the black audience. And despite the film's focus – a black man trying to escape from a white room – black participants proclaimed themselves least likely to imagine themselves in the character's situation.

The findings provide Shola and his team with important evidence base to suggest how impactful this form of storytelling can be on audiences. As Whitlely reflects, 'StoryFutures Academy's involvement has been instrumental ... getting behind it and understanding the value in the research in particular. We are really excited about the results and are keen to explore this more.'

### Production Booster Promoting Innovation



'Glimpse', starring Golden Globe-winning Taron Egerton and Lucy Boynton

Production Booster Funding supports advanced projects that already have substantial project funding and which offer significant learning opportunities that can be fed back into NCIS programme (up to £20,000 per project).

We selected five immersive companies to be recipients of £20,000 each via the Production Booster fund, aimed at larger scale coproduction projects. The recipients include Bristol based SME Anagram who are making an ambitious VR experience called 'Goliath' which explores psychosis; East Midlands immersive agency NSC Creative who made 'Fragments' which explores memories and grief for 6 different platforms, including Magic Leap and an audio only experience for Covid safe trials; Mr Kite who are making animated

VR feature, 'Glimpse', starring Golden Globewinning Taron Egerton and Lucy Boynton; and ScanLAB Projects with their project 'Eternal Return' working with artists Lundahl & Seitl.

Production Booster projects receive support from a StoryFutures Academy producer and access to the audience insight research team to hone in on specific audience measurements that can demonstrate the project's innovation and provide a calling card for future investment in the companies themselves.

### Workstream 3 - Experimental Labs and Writers Rooms



### **Experimental Labs**

Experimental Labs are a crucial point of entry for UK creatives to engage with the potential of immersive storytelling, acting as a gateway to not only the landscape of AR, VR and MR but also to the opportunities available through the wider StoryFutures Academy workstream.

In year two, Experimental Labs were split into two models in order to better accommodate the varying needs of different parts of the industry. We now offer a one-day Introductory Lab, and a set of two-day 'Tier 2' Labs which focus on particular skills or areas of interest within immersive production, such as game engines, or image capture (for a definition of these technologies see our 'Skills for Immersive Experience Creation').

A total of 235 industry professionals attended Experimental Labs at StoryFutures Academy in year two, compared with our original yearly target of 30. A further 278 students at the NFTS and Royal Holloway also undertook training in immersive storytelling, ranging from DoPs, producers and screenwriters at the NFTS through to computer science, psychology, media and electronic engineering students at Royal Holloway.

"I really enjoyed the workshop, building a world using Unity was thrilling and frustrating in equal measure. However, I'm excited about the possibilities that have opened up ... and building on the skills I've gained"

- Sade Adeniran, Participant in Experimental Lab on Game Engine Unity

#### **Writers Rooms**

Writers Rooms form a specific work package within our Experimental Labs activities that fuse training with creative practice research (see Section 7). Almost 250 people applied for the five StoryFutures Academy Writers Rooms held in 2019-20, with training offered to 39:

- Writing for AI with To Play For:
   receiving almost 100 applicants, the
   two-day training initiative introduced 12
   professional writers from film, theatre
   and television to the Charisma.ai
   platform for artificial intelligence driven
   characters. To Play For hired 3 writers
   on our placements model, with one new
   product initiated at the Writers Room
   going into production.
- 2. Immersive Theatre & Technologies: 50 theatre writers submitted to take part in a Writers Room themed around immersive theatre, with the final 12 selected, including 75% representation of women. The workshop paired theatre writers with creative technologists to explore world-building in VR, drawing on creative leadership from PunchDrunk to push writers and technologists to think about creating worlds for audiences and performers to inhabit. Creative XR Writers Room: As part of a collaboration with Digital Catapult and Arts Council England, StoryFutures Academy ran a Writers Room with PunchDrunk for 20 projects on the Creative XR accelerator programme. Conquering the tyranny and boredom of video conferencing with an immersive storytelling box sent to each participant, the team created an interface between the physical and virtual that built a network of collaboration across the cohort. The project opened up new ways of thinking about storytelling to participants.

"A brilliantly intense couple of days. Superbly run... we got 100% of what we'd hoped for out of the time there."

- Guy Gadney, CEO, To Play For
- 3. Creative XR Storytelling Strand: StoryFutures Academy also ran a dedicated workshop to look at repeatable models and formats in VR and AR. Five productions dedicated to our 'storytelling strand' (see Section 4: co-productions), the project promoted cross sector learning from film, television and immersive to consider how the creative process is linked to business models of formats and returning narrative arcs established in TV and film. The business imperative of creative practice was augmented by an additional training day on rights and formatting as well as providing the five projects with ongoing mentoring support on creative and business innovation.

Exploring the new opportunities created by the Covid-19 nationwide lockdown, we approached a diverse group of content creators who all work with sound in different ways, taking advantage of the fact that many were now available and keen to expand their horizons. We curated a two-day Writers Room for established talent to explore the theme of Life after Lockdown, including actors Colin Morgan (Merlin) and BAFTA winner Georgina Campbell; word and graphic artist, Inua Ellams; award-winning novelist Nadifa Mohamed; award-winning television comedian Jayde Adams; and musicians Rae Morris and Ben Garrett (Fryars). 43% of participants defined themselves as having a BAME background.

"When I come up with a story idea I'll look beyond film or TV and consider whether it would be better executed as a game." — Writers Room Participant



Left: Neumann head, participant photo

As part of our 'training to you' initiative, participants were sent binaural microphone earpieces, a recording device and a ;Neumann head; in advance of the workshop to enable binaural recording, listening materials that demonstrated the potential of immersive audio and some exercises.

The Writers Room combined storytelling and binaural audio research to introduce the participants to creative and technical aspects of immersive sound. It also featured a masterclass in immersive audio from award winning Sound Designer Gareth Fry. Over the following 4 weeks the participants were supported by StoryFutures Academy creative technologist researchers and Head of Writers Room, Adam Ganz, to realise 5-minute audio pieces. Final pieces were presented to Chris Pike, Head of Audio, BBC R&D, to discuss onward journeys for the skills and pieces developed during the workshop. All pieces are available on the StoryFutures Academy website with an accompanying short 'how to' guide for future learners.

The participants' enthusiasm for the immersive medium was perhaps best demonstrated by one writer's work eventually spanning 22 minutes, whilst others described the course as an inspiring and timely experience: "I can't

wait to incorporate it into my work. A really useful skill whilst the live performance world deliberates how we make audiences feel connected with social distancing measures in place" (Jayde Adams)

"It was really fun and I definitely learnt a lot during the process."

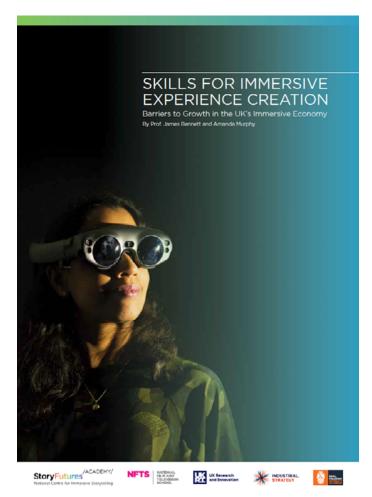
— Georgina Campbell, Bafta Award winner

### Workstream 4 - Developmental

The developmental workstream is aimed at building capacity in the UK's universities to train a next generation of immersive innovators. The workstream's primary focus is on developing a research base about the strengths, weaknesses and gaps in skills for immersive experience creation and the national Train the Trainer scheme, Train the Trainer programme, which enables researchers and teachers across UK higher education to receive funding for projects that build a pipeline of skills and talent at undergraduate and postgraduate level (up to £17,000). A subsidiary part of our efforts on workstream 4 is to embed immersive skills development in courses at both the National Film & Television School and Royal Holloway, University of London.

Launched by Sir Peter Bazalgette in January 2020, StoryFutures Academy's Skills for Immersive Experience Creation identified key skills strengths and gaps that presented barriers to growth in the UK's immersive economy.

The report was received by the then Minister for Education, Chris Skidmore, as an important intervention that will help make the UK a world leader in immersive. Drawing on research from over 100 companies and 20 interviewees, the report identified and described key skills and roles required for immersive production, placed these in the context of companies' business development and growth plans and identified that gaps and relevant training needs to address these. Perhaps most importantly, the study revealed that skills were not simply STEM or technical in nature, but were also creative: 51% of those who identified skills as a barrier to growth believed that creative and managerial skills were crucially missing.



6 Key findings include:

### The skills gap is critical

65% of companies identify a lack of skills as a significant barrier to their individual growth as a business.

### It is technical and creative

Whilst 80% of those who identified skills as a barrier to growth highlighted a lack of technical roles within their own company and the wider talent pool as a barrier to growth, over half (51%) highlighted creative and managerial roles as a similar barrier.

### A lack of experience

73% of those working in immersive have worked on less than 5 projects. The pace of change and emergent nature of business models, which places a reliance on freelancers, makes it difficult to predict, scope and build up experience: a lack of experience is particularly acute in senior leadership roles.

### Skilled use of real-time game engines is a sector-wide gap

Understanding the content creation and workflow processes of Real Time Game Engines is widely considered to be <u>the</u> single-most important skill for successful production. However, it is also in short supply: 52% of respondents identify proficiency with Unity (28%) or Unreal (24%) as a gap in their teams.

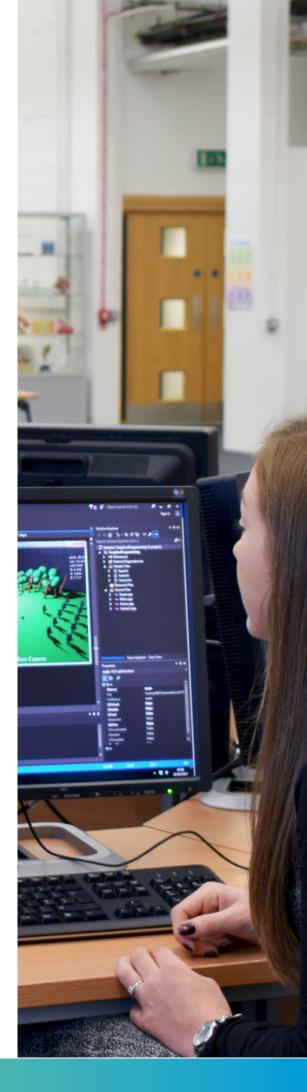
### A broken skills pipeline

44% of respondents were worried about the lack of graduates with relevant skills to keep up with demand. Competition for graduates is fierce amongst not only immersive experience producers but also more traditional engineering disciplines like automotive.

### Lack of professional training

With training not in the culture of most creative sector companies and resources tight, funding and an infrastructure for training is critical.

The research project led directly to the Train the Trainer initiative detailed below as well as enabling more targetted training from the National Centre, addressing key skills such as photogrammetry, virtual production business development and volumetric capture. But its impact across the higher education sector and beyond was much wider than the 8 universities included in the formal Train the Trainer programme.



### Train the Trainer: Building a skills pipeline

Train the Trainer is a research and training initiative to enable UK higher education to address the skills pipeline to increase the numbers of trainers and courses able to teach immersive storytelling creative and technical tools and techniques.

The programme aims to enable educators to lead a project that allows them (and their team) to interrogate a range of emergent challenges in immersive experience creation, and to create teaching materials and learning logs that will support future skills development for undergraduate and postgraduate students.

5 research and teaching projects joined live projects at Royal Holloway and the NFTS, spanning the breadth of the UK and a range of disciplines from drama to video games, cinematography to screenwriting, computer science to history and specialist immersive courses. The projects address emerging challenges in immersive experience production from virtual production, AR and performance, immersive scriptwriting tools to skills and templates for immersive workflow.



**Abertay University** - Practical Application of Virtual Production Techniques in Education for the Film and Entertainment Industry.



**Bath Spa University** - Immersive Promotion: Exploring how to communicate the 'value' of an immersive experience



**Falmouth University** - Outside Influence: Exploring how to mix theatre practice and immersive technologies to create a 'co-present' experience to different audiences.



**UCL** - What and Who Makes an Immersive Production Work.



**University of Sussex** - Past Presence: How to Design and Teach New Techniques for Immersive Storytelling Historical Object Biographies in Augmented Reality.

# R&D Initiatives - Story form experimentation & audience insight innovation

The National Centre for Immersive Storytelling is housed within the Creative Cluster StoryFutures, which focuses on R&D in next generation storytelling across story form, business model and audience insight. Our work draws on those research strengths, with a particular focus on:

- Story form via our writers room, led by Professor Adam Ganz, in which professional writers are exposed to the methodologies and approaches of interactive writing, world-building and spatial storytelling. This research looks at creative writing practice across theatre, audio, film, television and immersive environments to build fused approaches to storytelling for AR, VR and MR technologies.
- 2. Audience Insight, which brings together psychology, ethnography and electronic engineering to help creatives understand immersive audience behaviours and the opportunities for technologies to be adapted to address or target these. All projects funded via StoryFutures Academy are provided with one-to-one access to researchers, who are able to develop audience insight plans or assist with R&D technology solutions (see Writers Room case study).



"What I've seen from my involvement with StoryFutures Academy is the array of potential applications for technology not just in the film industry but working in collaboration with other sectors such as health - talking about that kind of cross-sector approach - mental health and wellbeing have always been powerfully linked to arts and storytelling."

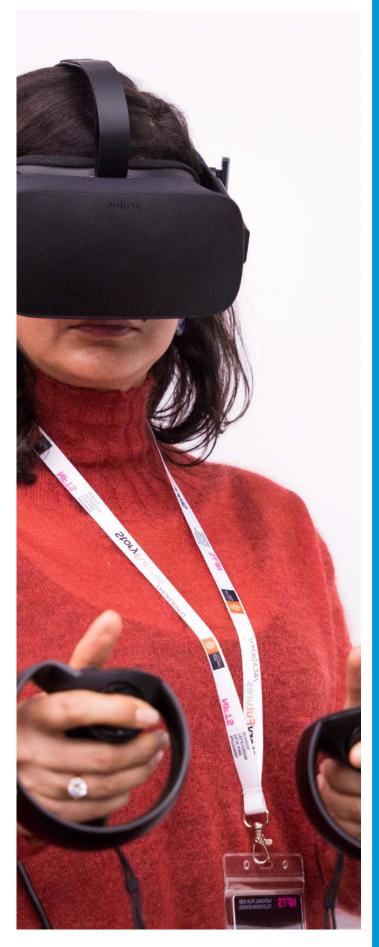
- Ben Roberts, CEO, BFI

Our audience insight team began working on an in-headset system for capturing user feedback for virtual reality experiences in early 2020.

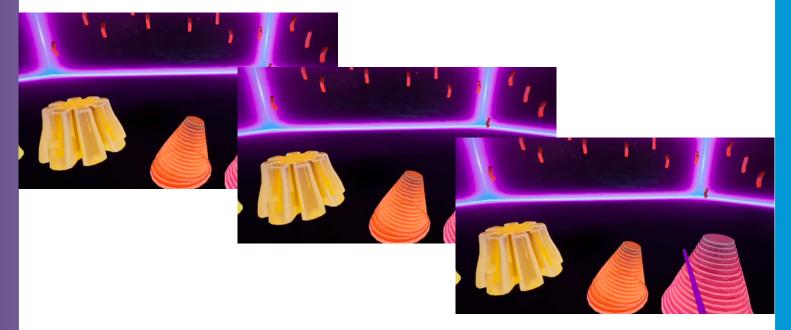
The tool enables simple survey questions to be answered as well as capture of small audio recordings where users can share qualitative thoughts on the projects they have experienced. The innovation of this project was to rethink the concept of surveys contextualised in VR. To this end, we built a specific survey experience in Unity, the technology that alongside Unreal makes it possible to develop VR-based software, that is integrated with other experiences without leaving the VR world.

The survey is customised according to the target responses one would like to gather users' feedback from, thus removing - or at least minimising - the reality and perception bias users would have likely experienced with non-VR surveys.

The need for such a tool was accelerated by Covid-19, which reduced any opportunity for in-person testing. Created in just two weeks, StoryFutures' researchers worked with 'Violence' project team Nell Whitley, Shola Amoo and All Seeing Eye to integrate the in-headset survey into the experience. StoryFutures Academy was able to reach nearly 500 audience members of the Tribeca online VR festival and produce some astonishing results about the impact VR can have on perceptions of race, protest and violence.



### Designing for #OddlySatisfying audience 'wind down'



In May 2020, Little Dot Studios delivered their first VR project #OddlySatisfying, commissioned as an R&D and training collaboration between StoryFutures Academy and BBC Three. We partnered with the BBC's youth channel in order to deliver a new form of "wind down" experience for 18-25 year olds aimed at producing an innovative entertainment format that would enable viewers to escape from the stress and pressures of the modern world. The project aimed to translate proven TV content creators' ability to produce content that addressed youth audiences successfully to an immersive environment.

StoryFutures Academy audience insight R&D team worked with the BBC's audience department to help inform a creative brief that could lead to an immersive experience designed to drive measurable change in users' emotional states. Over a two day workshop, TV Production companies with credits that include The Rap Game UK, 60 Minute Makeover, and The Repair Shop underwent a training course that introduced them to the world of VR and AR and state of the art audience research about how youth audiences are using VR and AR as well as the ways in which immersive technologies could target specific user emotions.

The aim was to upskill companies and provide them with the opportunity to put their new skills to the test with a £100,000 commission on offer to develop an immersive experience that responded to the creative brief.

Little Dot Studios emerged from the workshop with a compelling VR experience idea inspired by the internet meme #OddlySatisying that was selected for production by BBC3 and StoryFutures Academy. Working closely with the audience insight team, interactions were designed to encourage users to get into a state of 'flow', which has been shown can actively alter the emotional mind-set of the user.

Drawing on creative technology researchers working closely with psychology and ethnographic researchers, StoryFutures Academy developed an accompanying ECG heart rate monitor for Apple Watch that that leverages the HealthKit framework to collect vitals such as heart rate. This information is then sent over via RESTful APIs to a backend server. The ultimate goal is to perform a data-driven analysis to measure the index of stress or symptoms before, during and after the experience. Whilst lockdown has prevent the planned location based trials of #OddlySatisfying for audience testing, the R&D and training experience has driven huge value for not only Little Dot Studios, but also BBC3.



2020-21 promises to be an even bigger year for the National Centre, culminating in a national showcase of the best immersive work supported by not only StoryFutures Academy but also those of the Audiences of the Future and Creative Industries Cluster Programme. By the end of our final year we expect to have reached well over 1,500 beneficiaries, secured over £3m of co-investment in immersive innovation and supported over 200 jobs. It promises to be an exciting year.

Funding: 2020-21 sees the end of our current Audiences of the Future grant. A major focus will be on securing new support for the National Centre to continue and extend its work into new areas of immersive - including the integration of Games Engines into media production and the creative application of immersive to other sectors (see overleaf).

R&D: We will accelerate our audience insight work - including drawing on work packages within StoryFutures' £900,000 award from EM3 LEP to create an immersive audience test bed - to develop more granular and valuable insights on audience behaviours for our partners. We will also focus our business innovation R&D on co-creation as part of Coventry City of Culture and on international trade, linked to activities of the Canada Immersive Exchange alongside StoryFutures' own StoryFutures China project.

Writers Rooms: Our Creative XR projects will come to fruition in December 2020, whilst we start the year with an exciting new national collaboration with the Imperial War Museum and 8 regional partners to provide an immersive sound journey for audiences visiting the 'Second World War and Holocaust Partnership Programme' exhibition in Summer 2021.

Increased National Engagement: 2020-21 will launch with a Bootcamp in Manchester with Creative England, a cross-sector writers room with InGAME in Dundee, an international coproduction opportunity for 24 UK creatives supported by 7 Creative Industries Clusters' Partners across the UK and a project with Coventry City of Culture that is about both levelling up creative industries in the region and engaging youth audiences in the city's festival.

Online Training Materials: 2020-21 will see the release of a series of online resources that enable lifelong learners and new entrants alike to benefit from the National Centre's work. Commencing with a podcast audio guide to key immersive tools, technologies, workflows, business models and creative approaches to be released in Autumn 2020, online course materials will follow in partnership with FutureLearn in 2021 and a series of immersive audio experiences accompanied by creative and technical research and insight that open up the possibilities of immersive storytelling to a wider audience.

Tier 2 training: (such as on Spatial Sound) as well as a package of workshops to support the UK-Canada Immersive Exchange. Finally, a new set of Labs covering Virtual Production and the fundamentals of real-time production are currently in development, due for delivery in the second half of Year 3.

Games: Gaming is the primary driver of VR revenue in the UK, representing 53% of all VR spending in 2018, with esports the fastest growing area where revenue is expected to reach £48 million by 2022.<sup>5</sup> In 2021 our inaugural immersive gaming prototype commission will be completed and presented to an industry audience.

The virtuous circle: With over a dozen live productions taking place in 2020-21, the final year of our project will build further training capacity for the National Centre by developing learning logs, case studies and time from seasoned industry professionals to give back to future learners this year and beyond. This will include an acceleration of our placement programmes with a huge cohort of learners from StoryFutures Academy programmes hungry for hands-on learning opportunities that we will enable from November 2021.

Immerse UK report, Ibid.



### Looking forward

Beyond the end of the current grant award for StoryFutures Academy, which ends August 2021, the National Centre for Immersive Storytelling has a significant role to play in the story of continued recovery and growth of our creative industries through its unique fusion of innovation, research and training. There are five inter-linked areas that StoryFutures Academy could address if an extension beyond its original term were granted or additional funding secured.

Building on the achievements and learnings of the programme so far, StoryFutures Academy sees five opportunity areas worthy of continued support and expansion. Whilst Challenge 1 remains a continuation of our core remit, Challenges 2-5 represent new opportunities to both expand the role of SFA.

Challenge	Description	
1. Immersive Skills Pipeline	Our core challenge and remit remains the development of professional level talent to take up the opportunities afforded by immersive technologies to tell stories and build worlds. This area of work represents a continuation and refinement of SFA's existing programme of work with an additional focus on Worldbuilding Challenge as a way of bringing these workstreams together. Crucial to this work is the ability of StoryFutures Academy to plug both ends of the skills gap - upskilling current industry professionals and using their experience and time back commitments to build the skills pipeline at degree and entry level.	
2. Virtual and Real-time Production for the Creative Industries	An additional, expanded focus on uses of immersive and real-time technologies within a variety of production processes is key for keeping the UK's leading creative industries at the forefront of industry innovation. This will make use of existing methodologies including Labs and Placements, as well as newly developed interventions.	
3. Export and Inward Investment	As the immersive industry in the UK matures, SFA will help secure its status as truly world-leading by navigating post-Brexit international markets to enable routes to export and generating inward investment. Based on the first-of-its-kind UK-Canadian immersive talent development and co-production accelerator and StoryFutures China, collectively leveraging £1m+ in overseas investment, StoryFutures Academy will build bridges to enable British immersive production to do business globally.	
4. Innovation in Distribution	High quality immersive content and experiences created by our world-leading storytellers need greater support to reach audiences at scale at the same time as 'levelling up' agendas necessitate making innovation and growth accessible across the UK. Challenge 4 looks to develop our training and R&D approaches to 5G, Machine Learning and Digital Signage to think outside of headsets and put experiences in front of huge audiences. Post Covid-19 this research strand includes a focus on creating frictionless immersive experiences that use gesture and facial recognition to build consumer and citizen confidence in new experiences and traditional locations such as retail, airports, cultural institutions and transport.	
5. Creative Application of Immersive in Other Sectors	Challenge 5 applies the methodologies and innovations from both StoryFutures Academy programmes and creative industries practice to other sectors that are harnessing the power of immersive technologies - including healthcare, robotics, retail, town	

cross-sector innovation

planning, climate change - to bring about fused business models, interdisciplinary research and innovation that enables multiple sectors to grow. Challenge 5 will be intimately linked to (1) by

applying the worldbuilding approach to these other sectors enabling

We believe an extension of StoryFutures
Academy should also speak to the levelling up
concern articulated in the BEIS R&D Roadmap.
Whilst our regional reach goals have been
surpassed in our first two years, we would be
committed to incorporating further partners
from the nations and regions to continue
to ensure growth and societal benefit of
immersive innovation is available across
the UK. Successful collaborations with the
InGAME cluster at Abertay point to important
steps forward in this direction.

The StoryFutures Academy team is already working towards the goals set out below, we welcome new partners and supporters in helping us achieve this goal.

As Sir Peter Bazalgette has argued:

"The British have a demonstrable genius for content... We don't make much of the globe's hardware, but we're the creators of much of the software that runs on it. So, when a new category [Immersive] emerges we should make absolutely sure we lead it."

The opportunity to do so is clear.

<sup>&</sup>lt;sup>6</sup> StoryFutures Academy's 'Skills for Immersive Experience Creation: Barriers to Growth in the UK economy' 2020