

## CREATIVITY AND THE FUTURE OF WORK

Those who started secondary school this year will graduate in 2024. **What skills will they need to succeed in their careers?**

Our future economy will be built on creativity and technology. With artificial intelligence taking over routine tasks, there will be immense opportunities for people who combine creative, technical and social skills – skills that are resilient to future automation.<sup>1</sup>

Breakthrough tech has opened up new markets for many creative entrepreneurs working within and beyond the creative industries. The advent of 3D printers mean architects are now able to produce models in their front rooms. Virtual reality headsets allow dancers to perform live to truly global audiences.

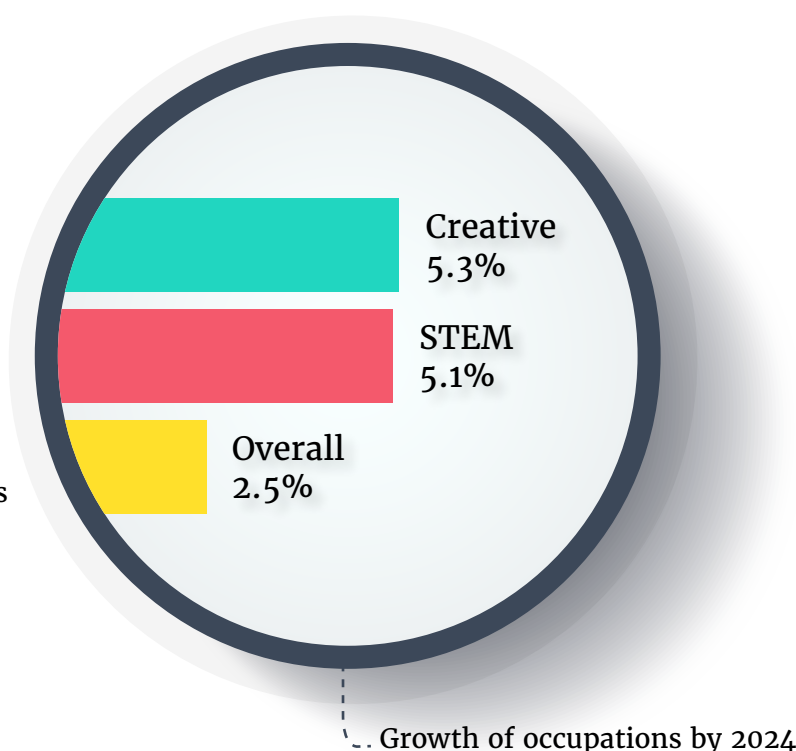
Creativity is also essential to addressing big societal challenges – designers are already working with engineers and scientists to mitigate global warming by designing user-friendly and low-emission transport, for example.

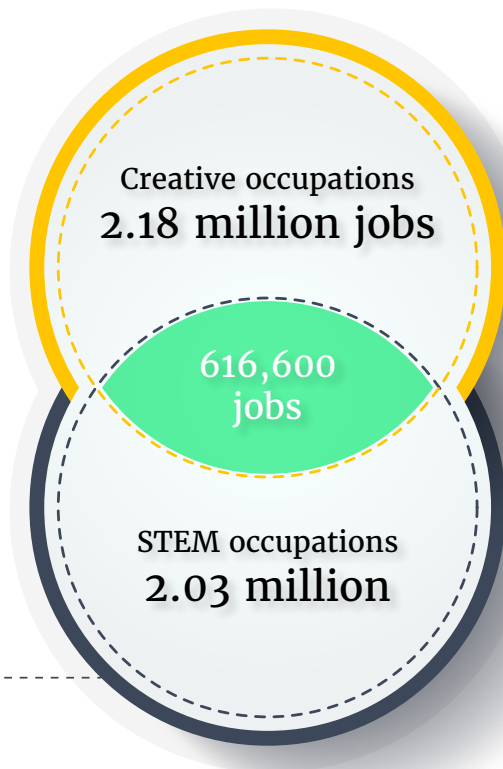
These jobs demand both creative and technical skills, and the future of work will increasingly rely on those who have them.

**UK labour market projections show that the rate of growth for both creative and STEM (science, technology, engineering and mathematics) occupations will be more than double the average job growth across the whole UK economy.<sup>2</sup>**

For those graduating from secondary school in 2024, based on workforce projections used by Government in its industrial strategy,<sup>3</sup> forecasts suggest that creative occupations will grow by 5.3% over the next six years. That is double the projected job growth across the UK economy and an additional 119,495 creative jobs by 2024.

But that is not all. Nesta's analysis suggests that with proper investment, the UK could create as many as 1 million new creative jobs by 2030.<sup>4</sup>





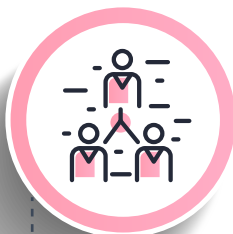
Employment of creative and STEM occupations by 2024<sup>6</sup>

## Examples of creative and STEM occupations<sup>5</sup>

- **Creative Occupations**
  - Artists
  - Product and clothing designers
  - Advertising and public relations directors
  - Photographers, AV and broadcasting equipment operators
- **Overlap**
  - Web design and development professionals
  - Programmers and software development professionals
  - IT business analysts, architects and systems designers
  - Information technology and telecommunication directors
- **STEM Occupations**
  - Design and development engineers
  - Civil engineers
  - IT specialist managers
  - Mechanical engineers

## High Demand Skills

The future of the UK labour market is uncertain: it will be influenced by factors such as urbanisation, an ageing population, globalisation and the emerging green economy. However, Nesta's research with Pearson predicts that **the following skills will be in especially high demand by 2030:**<sup>7</sup>



### Interpersonal

- Collaboration
- Communication
- Social perceptiveness



### Cognitive

- Originality
- Fluency of ideas
- Active learning



### Systems skills

- Judgement
- Decision making

Ofsted evidence has shown that creative subjects are effective at teaching and developing these skills at the primary and secondary level – skills that are also the defining features of many creative occupations.<sup>8</sup>

## Challenge To Government

The UK's education and skills system is predicated on employment models of the past rather than the workforce of the future. Access to creative and technical learning is in jeopardy:

- In 2017, entries for GCSEs in creative subjects fell by 47,000. Entry to GCSE Design and Technology fell by 18,800, accounting for 40% of the overall drop.
- Current entry rates to creative subjects at Key Stage 4 have fallen to the lowest in a decade.<sup>9</sup>

The full range of creative careers – from the creative entrepreneur who has set up their own business to the designer working alongside engineers in other industries – is also not widely known by young people, teachers, carers and parents. Neither is the information and guidance clear on how to pursue these lines of work.

**Government and industry must take a strategic approach to rectify these challenges** – one that assesses the whole skills pipeline, from playground to pension. As a first step:

**1. Government should back an industry-led Creative Careers initiative, to include:**

a Creative Careers Campaign to showcase the richness and diversity of creative careers; opportunities to increase the interaction between creative businesses and young people; and materials for teachers, pupils, parents and carers to disseminate through schools and make available online.

**2. Government should ensure that its technical education and apprenticeship schemes are fit for purpose:**

the Apprenticeship Levy and forthcoming T levels must be shaped to meet current skills needs and prepare for future demand. Government must ensure that such schemes are tailored to the training needs of creative freelancers and small creative businesses.

**3. Ofsted should limit ‘outstanding’ to schools that warrant it:**

a school must teach creative subjects to be eligible for an ‘outstanding’ rating. The Government’s upcoming Curriculum Fund should be resourced to help the delivery of high-quality materials for creative and technical subjects.

More information available at [www.creativeindustriesfederation.com](http://www.creativeindustriesfederation.com)

For any queries, contact Luise Yang, Research and Policy Officer, at [luise@creativeindustriesfederation.com](mailto:luise@creativeindustriesfederation.com)

## Credits

**Written by** Hasan Bakhshi and Luise Yang.

**Edited by** Eliza Easton and Caroline Julian.

**Designed by** Gilad Visotsky.

## Endnotes

1 Bakhshi, Frey and Osborne. “Creativity vs robots”. Nesta, April 2015.

2 These estimates are derived from the workforce projections at the 4-digit SOC level available from “Working futures 2014 – 2024, UKCES evidence report 100”. UKCES, April 2016. The estimates use DCMS classification of creative occupations and STEM occupational classification from Bakhshi, Davis, Freeman and Higgs. “The geography of the UK’s creative and high-tech economy”. Nesta, January 2015. Thank you to Mark Spilsbury for his assistance in producing the estimates.

3 See page 97 of “Industry strategy: building a Britain fit for the future”. Department for Business, Energy & Industrial Strategy, November 2017.

4 Bakhshi and Windsor. “The creativity economy and the future of employment”. Nesta, April 2015. See also Bazalgette. “Independent Review of the Creative Industries”, September 2017.

5 For definitions of creative occupations, STEM occupations and the overlapping occupations, see Bakhshi, Davies, Freeman and Higgs. “The geography of the UK’s creative and high-tech economy”. Nesta, January 2015.

6 See footnote 2.

7 Bakhshi, Downing, Osborne and Schneider. “The future of skills: Employment in 2030.” Nesta, September 2017.

8 “Making a mark: Art, craft and design education 2008–11”. Ofsted, March 2012. At GCSE level, creative subjects are Art and Design, Dance, Design and Technology, Drama, Media/Film/TV Studies, Music and Performing/Expressive Arts

9 GCSEs – Joint Council for Qualifications. [www.jcq.org.uk/examination-results/gcse](http://www.jcq.org.uk/examination-results/gcse).