

Creative Industries Policy & Evidence Centre

Led by **nesta**

Insights for policymakers

Graduate motivations and the economic returns of creative higher education inside and outside the Creative Industries

This research demonstrates the value of creative higher education by establishing a clear link between studying a creative subject at university and gaining meaningful graduate employment in creative work. This problematises current policy discourse's reliance on salary data as an indicator of Higher Education's value for money and suggests that disruptions to the creative talent pipeline would likely damage the sustainability of the UK's fast growing creative industries and other sectors which increasingly rely on creative work.

The creative industries have experienced a glorious decade punctuated by a challenging year. Over the last 10 years, the sector has [grown at a rate more than twice that of the total UK](#) economy and [in 2018 contributed £111.7bn](#), accounting for 5.8% of total UK GVA. This performance is mirrored in employment growth, with [1 in every 16 jobs](#) being in the creative industries and employment having grown at roughly three times the national average over the past decade. These headline figures represent a startling success story built upon the backs of highly creative and highly skilled workers, and UK education's capacity to nurture them. The fact that [64.2% of those working in the creative industries holds a degree](#), nearly double the 36.5% graduate employment rate across the economy as a whole, evidences the importance of higher education to the sector. Moreover, with the [4th industrial revolution](#) in full swing, [creative skills](#) are set to be in high demand in the economy more generally with the number of [creative jobs](#) predicted to [increase dramatically](#) as AI and automation reduce the need for routine labour.

Yet despite the fundamental importance of highly skilled creative workers to the creative industries' ability to generate extraordinary growth, UK higher education's provision of training in creative subjects is currently being placed under threat. The recommendations of the [Augar Review](#), that subjects which fail to provide 'value for money' should receive less government subsidy, has worried practitioners, recipients and beneficiaries of creative education since its publication in 2019. This has been compounded by recent announcements from the government that [university bailouts could be contingent on the dropping of 'low value' courses](#) which could on some measures place creative education squarely in the firing line. This is because, according to a [recent report from the Institute for Fiscal Studies \(IFS\)](#), commissioned by the Department for Education, lifetime earnings for those who studied a creative arts and design degree are no better than for those who didn't go to university at all, meaning that these courses could be seen as offering low value for money, both for the graduates taking these courses and for the tax payer.

However, there are many other ways to [assess value](#) – even economic value – which are not fully captured through salary data. If higher education is adequately providing graduates with the skills they require to attain employment in their chosen career, this would represent good value for graduates. Moreover, when [almost half of creative businesses report skills gaps in their workforce](#), and it is [specialist creative skills that are in highest demand](#), it is reasonable to consider that creative graduates may be providing tangible fiscal value to the economy through their labour in this high-growth sector.

This insights briefing aims to shed some light on the economic value of creative higher education, to both graduates and the creative industries. It is based on a forthcoming report for the PEC by Martha Bloom, which utilises data from the Higher Education Statistics Agency (HESA) to assess graduate employment outcomes, including self-reported 'basic pay' for the primary job of all graduates in employment or working self-employed. The data used is the Destination of Leavers from Higher Education Longitudinal Survey (DLHE Long), which differs slightly from the newer [Graduate Outcomes](#) survey first used in 2018, in that the DLHE Long survey is conducted roughly three and a half years after graduation, whereas the Graduate Outcomes survey is conducted just over a year after graduation.

The dataset used in this report pertains to the final year the DLHE Long was used (2017) and relates to a single cohort of graduates. Consequently, the report assesses outcomes at a further point from graduation than the Graduate Outcomes survey, but is unable to speak to lifetime earnings. Unlike the IFS study that has the temporal advantage of assessing lifetime earnings for graduates across the economy by using Longitudinal Education Outcomes (LEO) data, the HESA data used in this report has the substantive advantage of allowing us to link information about degree subject to employment in specific industry sectors and in specific occupations. As such, while we only get a snapshot of graduate outcomes, the data used in this report offers a more direct link between university course and employment in relative industries than is possible using the LEO data. We also take a more purposive stance towards subject categorisation than the IFS, by considering all subjects which align to the creative industries as a 'creative subject', rather than the narrow definition of arts and design that has been previously used. By including subjects such as architecture, video games design and film production in our definition of a creative subject we get a more accurate and holistic understanding of the relationship between creative education and future employment. Moreover, as the data used in this study is based on self-reports, notwithstanding survey biases, we also get a picture of graduate motivations for taking up these roles, providing novel insight into the relationship between creative education and work.

Both the insights briefing and the report are not intended to refute the consistent and wide-ranging evidence that creative graduates, on average, earn less than non-creative graduates. Rather the purpose is to explore why this might be the case, paint a more detailed picture of the relationship between creative higher education and employment, and offer some alternative perspectives on value for money. In doing so, the briefing problematises the idea that earnings data provides an adequate metric of value and demonstrates that if, as Secretary of State for Education Gavin Williamson suggests, "[the purpose of education is to give people the skills they need to get a good and meaningful job](#)", then creative education is providing 'good value for money'.

The remainder of the briefing answers a series of important questions around creative graduate employment in the UK, starting with some simple figures around employment prospects.

What are creative graduates' employment prospects? Three and a half years after graduation, the vast majority of creative graduates (88.8%) report their main activity as in employment, with 6.3% in further study, 2.7% unemployed and 2.2% doing something else. This is roughly similar to the prospects for non-creative graduates (87.8% employed, 9.3% in further study, 2.1% unemployed and 1.8% other). Moreover, we find that 65.7% of creative graduates are employed in occupations which fall within the (contested) 'graduate level jobs' definition, a higher proportion than, for example, law (61.1%), biology (61.8%) and psychology graduates (64.8%).

However, when we look at the type of employment graduates are in, we find that creative and non-creative graduates are in very different forms of work. In particular, we find that only 64.7% of creative graduates are in full-time employment compared with 78.4% of non-creative graduates.

Graduate employment type

	Full-time	Part-time	Self-employed	Voluntary/ Internship	Not in employment	Total
Creative graduates	64.7%	9.7%	13.6%	0.8%	11.2%	100%
Non-creative graduates	78.4%	5.3%	3.7%	0.4%	12.2%	100%

The flipside is that we see a far higher proportion of creative graduates engaged in entrepreneurial activity; self-employed, freelance or running their own business – 13.6% of creative graduates compared with just 3.7% of non-creative graduates. This disparity in the type of employment graduates are engaged in is an important element in explaining how creative graduate career pathways differ from their non-creative counterparts. For example, it begins to explain part of why creative graduates' salaries are relatively low overall. On average, self-employed graduates in our data earn £4,290 a year less than full-time graduates, meaning that the disparity in proportions of self-employed creative vs non-creative graduates alone accounts for around 5% of the gap in salary in our sample. If creative graduates are more often working as freelancers, or self-employed as musicians, artists or designers, we also know that these jobs are often precarious with no guarantee of fixed income. Similarly, if many are running their own creative businesses, creative start-ups can take many years to become profitable. But are creative graduates actually working in the creative industries, or are they all working in pubs and cafes whilst waiting for their 'big break'?

Where are creative graduates working? We do in fact find a strong and consistent link between creative education and employment in the creative industries. 37% of creative graduates are working in the creative industries three and a half years after graduation, and when we also consider those working in creative jobs outside of the creative industries, we find 52% of creative graduates are in some kind of creative work (either working in the creative industries or working in creative jobs outside of the creative industries). This means that although the majority of creative graduates in our sample are working outside the creative industries, a majority are working in what is known as the creative economy – i.e. any occupation in the creative industries or a creative occupation in any industry. The figures for creative graduates are striking when compared with

non-creative graduates of whom just 9% work in the creative industries, and 14% in the wider creative economy. Moreover, whilst creative graduates account for only 17% of the graduate population, 46% of graduates employed in the creative industries have a creative degree. This figure is even higher in certain sub-sectors. For example, 82% of graduates working in design, 78% in music, performing and visual arts and 75% in architecture have a creative degree.

The relationship between degree subject and work becomes even more stark when we look at occupations. The top 5 jobs for creative graduates (i.e. those that the highest proportion of creative graduates work in) are all in creative occupations, and the highest proportion of workers in each creative occupation are those with a degree in a subject which aligns with that occupation (for example 71% of graduates working in music, performing and visual arts occupations have a degree in a related subject). This demonstrates a strong match between creative graduates' subject choices and their future employment, indicating the skills they develop at university are highly relevant and applicable to their chosen career.

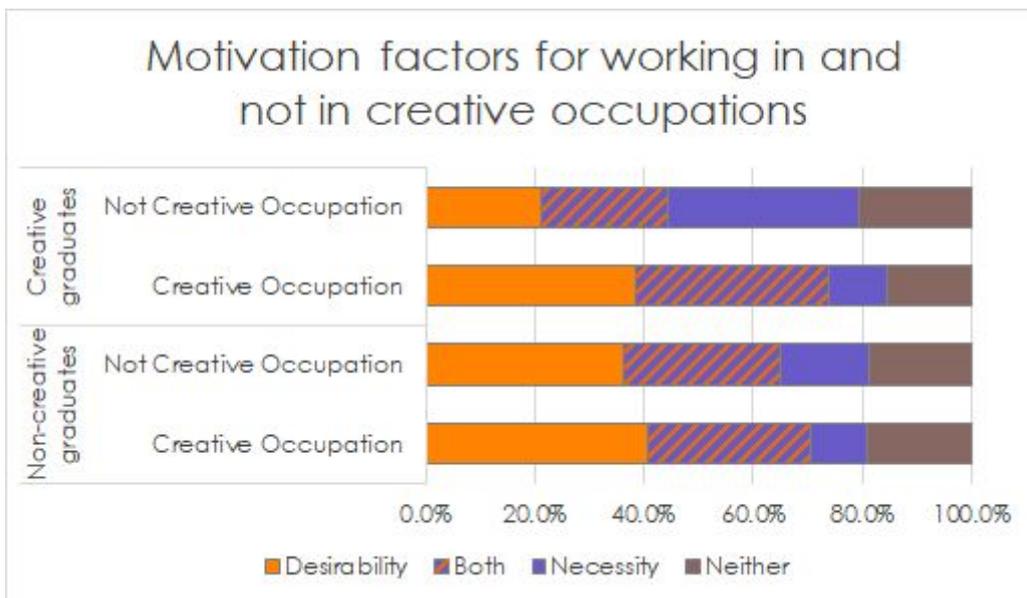
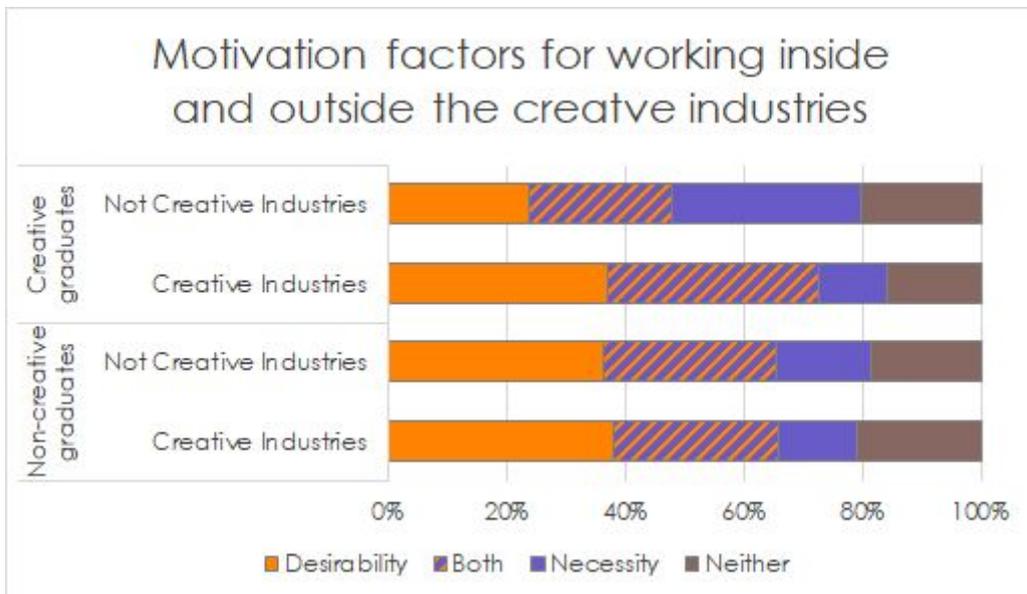
We also look at the types of roles creative and non-creative graduates perform within the creative economy – whether they are in specialist roles (creative occupations in the creative industries), embedded roles (creative occupations outside the creative industries), or support roles (non-creative occupations within the creative industries). We find that of those working in the creative economy, creative graduates are far more likely to be in specialist roles (54.1%) than non-creative graduates (33.8%), further evidencing the importance of advanced creative skills gained through higher education.

That creative graduates are performing different roles to non-creative graduates is seen also in the significance of freelance work. We find that 28.1% of creative graduates working in the creative industries are freelancers or running their own business, compared with just 8.5% of non-creative graduates working in the creative industries and 4.6% of creative graduates working outside the creative industries.

'Good and meaningful jobs' The results so far tell us that creative graduates are gaining employment in roles which specifically match their skillset. But to what extent are these the types of jobs that graduates actually want? To begin to answer this question, we look at DHLE Long survey responses relating to the motivations graduates have for taking their job. In particular, we focus on two main motivation factors: what we can think of as *desirability* – taking a job because it is exactly the type of job the graduate wants or it fits into their career plans – and *necessity* – taking a job in order to earn a living or to pay off debts. We find that the majority of creative graduates working in the creative industries are motivated to take up their roles, at least in part, because of desirability factors (73%). This is higher than the proportion of non-creative graduates taking any job for this reason (66%) and non-creative graduates taking jobs inside or outside the creative industries for this reason (also both 66%). It is also much higher than for creative graduates not working in the creative industries (48%). These statistically significant differences are important, because they tell us that not only are creative graduates finding work in sectors in which they have the right skills, but when in these roles they are also more likely to have taken work they desire.

However, we also see that a higher proportion of creative graduates in roles outside the creative industries are taking these jobs out of necessity and not desirability compared with non-creative graduates (32% compared to 16%). This suggests that whereas non-creative graduates express similar levels of desirability when working inside or outside the creative industries, creative graduates

are viewing only creative work as befitting their interests, and non-creative work as, broadly, something to do out of economic necessity.



What about earnings? Looking at earnings three and a half years after graduation, the report reveals some surprising findings. Whilst studying a creative subject is, on average, associated with lower earnings when compared with all non-creative subjects, for many specific non-creative subjects, this is not the case. When we control for a range of demographic, attainment and work-related characteristics (including whether someone is self-employed), we find that there is no statistically significant difference in the effect on earnings between studying a creative subject and studying a variety of other subjects, including biology, languages, and psychology. What this highlights is that differences in lifetime earnings documented in the IFS study may be less a direct result of subject choice, but rather one of career pathway. If recent biology graduates are earning similar levels to recent creative graduates, then perhaps any differences in long-term earnings are more a function

of difference in the types of careers these graduates pursue, than a function of subject choice per se.

Consistent with this, we also find that motivation factors explain more of the variation in graduate earnings than whether graduates took a creative degree or not. In simple econometric models we use to investigate economic returns, demographic, attainment and work-related characteristics explain around 25.7% of the variation in salary. When we add motivation factors to the model, this increases to 28.1%. In contrast, adding the creative/non-creative subject distinction to the model only increases its explanatory power to 26.7%. So, subject choice explains less of the variation in salary than motivation factors, and motivation factors explain less of the variation than demographic, attainment and work-related characteristics. It is worth pointing out however, that econometric models such as these are beset with endogeneity biases and the explanatory power of even our most comprehensive models are still relatively low, meaning that there are many other things which effect salary beyond what is captured in the data we use.

When we control for our motivation factors in analysis of earnings outcomes, we find that the negative association with studying a creative degree decreases by approximately £300 a year. However, this should not be taken as a simple argument that creative graduates accept lower earnings in exchange for intrinsic motivation: in fact, we find that across subject choice, *desirability* motivation factors correlate with higher earnings and *necessity* motivation factors correlate with lower earnings. Remember that non-creative graduates are just as likely to want to work outside the creative industries as inside them, whereas creative graduates are generally only taking roles outside the creative industries out of necessity. It is the disparity in motivations of creative and non-creative graduates working *outside* the creative industries which could therefore help explain the difference in overall earnings. Put simply: part of the reason creative graduates' earnings are low may be because when working in roles outside of the creative industries, creative graduates are more likely to have taken that role purely out of economic necessity – a motivation profile which correlates with lower earnings.

All this implies that when comparisons are made between creative and non-creative graduates without reference to differences in career pathways and motivation, it is likely that difference in earnings will conflate differences in the remuneration practices of the sectors graduates choose to work in and differences in motivation, rather than indicating the 'added value' that different higher education courses confer alone.

And what about earnings for those working in the creative industries in particular? If we look at raw averages, creative graduates working in the creative industries earn more than creative graduates working outside the creative industries. This relationship holds true even when controlling for factors relating to demography, attainment and type of employment (including whether a graduate is working freelance). This seems intuitive, suggesting that creative graduates are more highly valued by creative businesses. However, we also find that the gap between creative and non-creative graduates is larger in the creative industries than outside the creative industries. For those working outside the creative industries, having a creative degree as opposed to a non-creative degree has a negative association with income of approximately £3,000 a year, yet for those working in the creative industries, the negative effect is larger, at £3,500 a year. And when we also take into account motivation factors, this disparity gets even bigger; having a creative degree negatively affects income for creative graduates by approximately £2,400 outside the creative industries, compared to £3,600 inside the creative industries. This means that whilst creative graduates might be being paid more within the creative industries than outside, the creative industries are

disproportionately remunerating non-creative graduates relative to creative graduates when compared with other sectors.

Crucially, this finding does not necessarily mean that there is, in aggregate, an over supply of creative graduates or an under demand for creative work – remember that creative graduates are just as likely to be in employment as non-creative graduates and that creative businesses are routinely reporting skills gaps in their workforce. Rather, it may indicate that motivation factors are skewing what might otherwise operate in equilibrium. If creative graduates were just as happy to work in non-creative sectors, then the creative industries would have to compete more with non-creative sectors to secure the talent they need, just as they do for non-creative graduates. This suggests that the desires of creative graduates to work in the creative industries, both in creative and non-creative occupations, means that the creative industries are not having to use pay to attract and retain creative graduates in quite the same manner as they do non-creative graduates. The issue, therefore, may not be that there are too many creative graduates, relative to creative jobs, but simply that pay cannot be seen as an accurate indicator of market forces, when individuals are not using pay as the primary basis on which to make their career choices.

So what does all this tell us about the value of creative education to graduates and to the economy? First of all, the results tell us that large numbers of creative graduates are gaining employment in jobs that appear to match their skills profile and that they are largely choosing these jobs because they are exactly the type of work they want to do. This is strong evidence that creative higher education is providing significant value to graduates in supplying them with the skills they need to gain employment in their chosen career, regardless of the association with salary. Second, that a disproportionately high number of graduates working in the creative industries specifically have a creative degree demonstrates the value of creative higher education to this high growth sector, providing further evidence of the necessity of advanced creative skills for employment in creative work. Moreover, the differences in employment type and motivation profiles we have seen between creative and non-creative graduates, suggests that creative graduates have different motivations and different career pathways to non-creative graduates, demonstrating that restricting comparisons between different graduate groups to earnings overlooks many other contributing factors.

These findings suggest that using salary data alone as the measure of value for money misses much of the nuance of creative work and creative workers. The research demonstrates that creative education is proving highly successful at equipping graduates with the skills needed to embark on their chosen careers in the creative industries, a sector whose recent record of [growth](#) and [resistance to automation](#) suggests it will be vital to the UK's post-Covid economic recovery. If the recommendations of the Augar review are acted upon by the government, then not only may creative graduates lose out by being financially disadvantaged or inhibited from studying the subjects they desire, but the creative industries will struggle to maintain the pipeline of new talent that has thus far supported its growth. While other issues may, understandably, present more obvious concerns at this most difficult of times, it is reasonable to consider that potential disruption to the talent pipeline presents a material and difficult-to-reverse threat to the creative industries ability to 'bounce back' from Covid-19 and resume its remarkable growth over the coming decades.

This barrier to future growth can be challenged by the creative industries, and their representative bodies, making conscious and public efforts to improve the pay of creative graduates where their skills justify, assuring policy makers of the economic returns to creative higher education and that past salary figures do not provide a reasonable prediction of future exchequer revenue. Creative

educators and careers services could also do more to promote the range of appropriate jobs available to creative graduates outside the creative industries. Moreover, in assessing the economic returns of different subjects to the taxpayer, the government should look to assess a broader range of exchequer revenues by linking subject choice to the size and future employment opportunities in different sectors of the economy. By doing so, the creative industries, the higher education sector and the government can help nurture the next generation of creative talent and maintain the strong pipeline that is so critical to the long-term survival and future flourishing of the sector and the wider economy.

Authors: **Martha Bloom and Hasan Bakhshi**

The full report by Martha Bloom on which this insights briefing is based will be published later this month. Early findings reported in this briefing are still a work in progress and final statistics may vary slightly from what has been reported here. All figures quoted are based on analysis of data from the Higher Education Statistics Agency. Proportions quoted are of all UK and EU students who graduated with an undergraduate degree from a UK university in 2013 and were under the age of 25 at the time of graduation. The data used in the report was originally used in the author's doctoral thesis which was funded by the R&D Management Association (RADMA). Sources: HESA Student Record 2012/13; HESA DLHE Record 2012/13; HESA DLHE Long Record 2012/13. Copyright Higher Education Statistics Agency Limited. Neither the Higher Education Statistics Agency Limited nor HESA Services Limited can accept responsibility for any inferences or conclusions derived by third parties from data or other information supplied by HESA Services.

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