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State of the Nations  
research series

# HIGHER EDUCATION AND THE ARTS AND CULTURE SECTORS

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Dr Mark Taylor and Dr Ruoxi Wang

April 2025

**Creative Industries  
Policy and  
Evidence Centre**

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The Creative Industries Policy and Evidence Centre (Creative PEC) works to support the growth of the UK's creative industries through the production of independent and authoritative evidence and policy advice. Led by Newcastle University, with the Royal Society of Arts and funded by the Arts and Humanities Research Council, Creative PEC comprises a core consortium of Newcastle University, Work Advance, the University of Sussex and the University of Sheffield.

For more details visit [www.pec.ac.uk](http://www.pec.ac.uk) and [@creativepec](https://www.instagram.com/creativepec) on social media.

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Creative PEC's 'State of the Nations' series analyses the latest data across four thematic areas to inform the development of policies relating to the creative industries. Their scope is the whole of the United Kingdom, and wherever possible data is presented for all the nations and regions. Regular reports on each area will be published annually over the five years of the Arts and Humanities Research Council (AHRC) funding. The themes and corresponding Research Partners are:

- R&D, Innovation and Clusters (University of Sussex)
- Internationalisation (Newcastle University)
- Arts, Culture and Heritage Sectors (University of Sheffield)
- Education, Skills and Talent (Work Advance)

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## Disclaimer

The views expressed in this report are solely those of the authors. If you have any questions about this report, please contact Dr Mark Taylor at [m.r.taylor@sheffield.ac.uk](mailto:m.r.taylor@sheffield.ac.uk)

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# HIGHER EDUCATION AND THE ARTS AND CULTURE SECTORS

State of  
the Nations  
research  
series

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# Foreword

**In Creative PEC's State of the Nations series, we've made the arts, culture and heritage sectors one of our four priority areas. This is because organisations in these sectors tend to have multifaceted value propositions, straddling sociocultural and economic, public and commercial, which has profound implications for their operations, including the motivations and conditions of their workforce. This is naturally of interest to policymakers.**

In this report, we consider the important role that higher education (HE) plays in supplying the talent needs of the arts and culture sectors. Building on Creative PEC's previous research, the report provides fresh quantitative analysis of earnings of arts and culture graduates, including those in self-employed work, and novel findings on the self-reported job quality of graduates.

Based on a comprehensive analysis of Graduate Outcomes survey data, it shows in what senses the environment remains challenging for arts and culture graduates, but also highlights the

importance of considering multiple dimensions of graduate destinations, in contrast to the restricted focus on graduate earnings shown by UK policymakers in recent years.

More generally, the time is right for fresh thinking on what data is needed to enable a more holistic assessment of HE and its contributions to the creative economy, one which recognises the distinctive features of creative labour markets. We need to move beyond the reductive and defensive debates of recent years. In coming months, Creative PEC intends to stimulate this fresh thinking. Watch this space!

**Professor Hasan Bakhshi, Director,  
Creative PEC**

# Executive summary

**Graduate destinations are currently a subject of intense interest across a range of academic, media and public policy areas. In relation to the arts, culture and heritage (ACH) sectors, a range of voices has suggested that recent public policy rhetoric has not recognised the value of degrees.**

These discussions and debates take place against growing interest in the quality of work available in ACH sectors. Skills, careers and rates of pay are vitally important in assessing whether these sub-sectors of the creative economy are providing 'good' work (Carey et al., 2023).

The UK's ACH sectors are currently facing severe challenges. While new funding has recently become available for particular projects and areas, this has come in the context of much greater long-term decline in government support. The impact of the Covid-19 pandemic, with questions about audiences' willingness to return to live events to the same extent as before, remains significant. And trends across the wider economy, such as large increases in energy costs, have affected venue-based organisations in the ACH sectors particularly strongly.

Higher education (HE) is also facing severe financial challenges. For undergraduate home students, notwithstanding the small increase in the maximum tuition fee for students in England for the academic year 2025/26, fees have been frozen since 2017. In some universities, numbers of international postgraduate students rose substantially from 2017 to 2024. However, in the 2024/25 academic year, these numbers

fell significantly, pushing large numbers of universities into financial deficit. Arts and culture subjects have been hit particularly hard, also reflecting longer-term declines in the UK of student entries into arts and culture subjects in secondary education, including at General Certificate of Secondary Education (GCSE) and A level. Over the period our data covers (2017/18 to 2020/21), 9.5% of all students were registered on arts and culture degrees.

Our new analysis examines what has happened to the most recent cohorts of graduates from a range of undergraduate degree programmes associated with arts and culture. We do not focus on heritage in this report, as very few undergraduates are in specialist heritage-related programmes. Using Graduate Outcomes survey data from the Higher Education Statistics Agency (HESA) for the period 2017/18 to 2020/21, we offer a perspective on the arts and culture sectors, analysing the degrees feeding most strongly into those sectors. To do so, we examine graduate destinations, earnings and self-assessed job quality fifteen months after graduation. Building on existing research, our contributions presented in this report not only refresh existing analysis of earnings with more up-to-date data, but also include findings on self-employed people and – for the first time – self-assessed job quality among creative graduates.

Our analysis is only part of the broader story of how arts and culture graduates fare after graduation. HESA's Graduate Outcomes survey provides information about graduates fifteen months after they complete their programmes. It does not explain their longer-term outcomes, nor does it consider outcomes outside of their earnings, industries, occupations and self-assessed job quality. As mentioned, the data provides only a partial picture that is limited to the period immediately following graduation. Indeed, some of these graduates – paid relatively poorly fifteen months after graduation – will go on to much higher-paid work. Many questions remain unanswered and will require better data for further analysis.

It is important to underline that this report focuses particularly on those subjects most closely aligned with arts and culture, and, in terms of destinations, with arts and culture occupations and industries, as opposed to *all* creative subjects, occupations and industries. This is not a report about creative HE in general.

Our findings on self-assessed job quality offer significant new insights on the match between degrees and graduate outcomes in arts and culture. Holding other factors equal, we find that:

- Arts and culture graduates are *more* likely than other graduates to use what they learned during their study when in work.
- Arts and culture graduates are *slightly* less likely to state that their current work fits with their future plans and that their work is meaningful and important to them. However, this was not the case for those arts and culture graduates working in arts and culture occupations.

The analysis shows the importance of considering multiple dimensions of graduate destinations in addition to the focus often placed on earnings.

Indeed, our findings on earnings, which update existing findings, show a challenging picture for arts and culture graduates when they finish their undergraduate studies and enter the labour market.

- These graduates are in competition for limited employment opportunities in arts and culture sectors.
- Arts and culture sectors do not offer high pay for entry-level positions.
- On average, arts and culture graduates employed outside of arts and culture receive lower pay than other graduates.

While this picture varies between arts and culture subjects, the overall direction is similar across all of them.



## Arts and culture subjects and graduate jobs

There is a complex relationship between studying arts and culture subjects at university and working in an arts and culture industry or occupation. Overall, a moderate proportion of arts and culture graduates went into arts and culture industries (10%) and occupations (9%). Media production (23%) and music technology (20%) were among the degree subjects with the highest proportion of graduates entering arts and culture occupations. Not only that, but these graduates were most likely to enter work in media and music, which are economically important segments within the UK's creative industries.

By contrast, around 1% of students who did not study arts and culture subjects were working

in an arts and culture industry or occupation fifteen months after graduation.

We also find that graduates of most arts and culture programmes were more likely to be in employment, and less likely to be in further study, than most other subjects.

This employment was more likely to be in part-time work, as opposed to full-time work, compared to the picture for graduates from the social sciences and from science, technology, engineering and mathematics (STEM) programmes. Rates of part-time work were especially high in art, music and drama, where less than 50% of graduates were in full-time work.

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## Arts and culture subjects and graduate earnings

All arts and culture subjects were associated with lower earnings, on average, fifteen months after graduation when compared with STEM subjects, the social sciences, combined programmes and humanities. For six out of the eleven categories of arts and culture subjects in our analysis, the average earnings fifteen months after graduation was less than £20,000 per year. This can be contrasted with the average among all graduates of around £24,700.

The explanation for low wages was related to the demographics of who does arts and culture courses as well as *where* they study, the labour markets and industries they enter and the type of work they do.

Arts and culture students were much more likely than all other students to be in arts and culture occupations and industries fifteen months after graduation: around 9% to 10%, compared with 1% of all other students. Arts and culture graduates working in arts and

culture industries had similar earnings to their peers working in those same industries who did not study arts and culture subjects.

This suggests it is the low wages and employment structures of the arts and culture sectors, not the subjects studied by people working in them, causing lower earnings. This finding presents an opportunity for arts and culture across both wider HE and the sectors to work together to improve conditions.

Where arts and culture graduates work outside of arts and culture industries, they were less likely to be working in managerial and professional occupations, and had lower earnings. This finding is perhaps the most interesting from our analysis of earnings. Around half of this difference persists when we adjust for other factors such as student demographics and university type, suggesting, again, that this is not an issue limited to having studied arts and culture subjects.



## Arts and culture subjects and self-assessed job quality

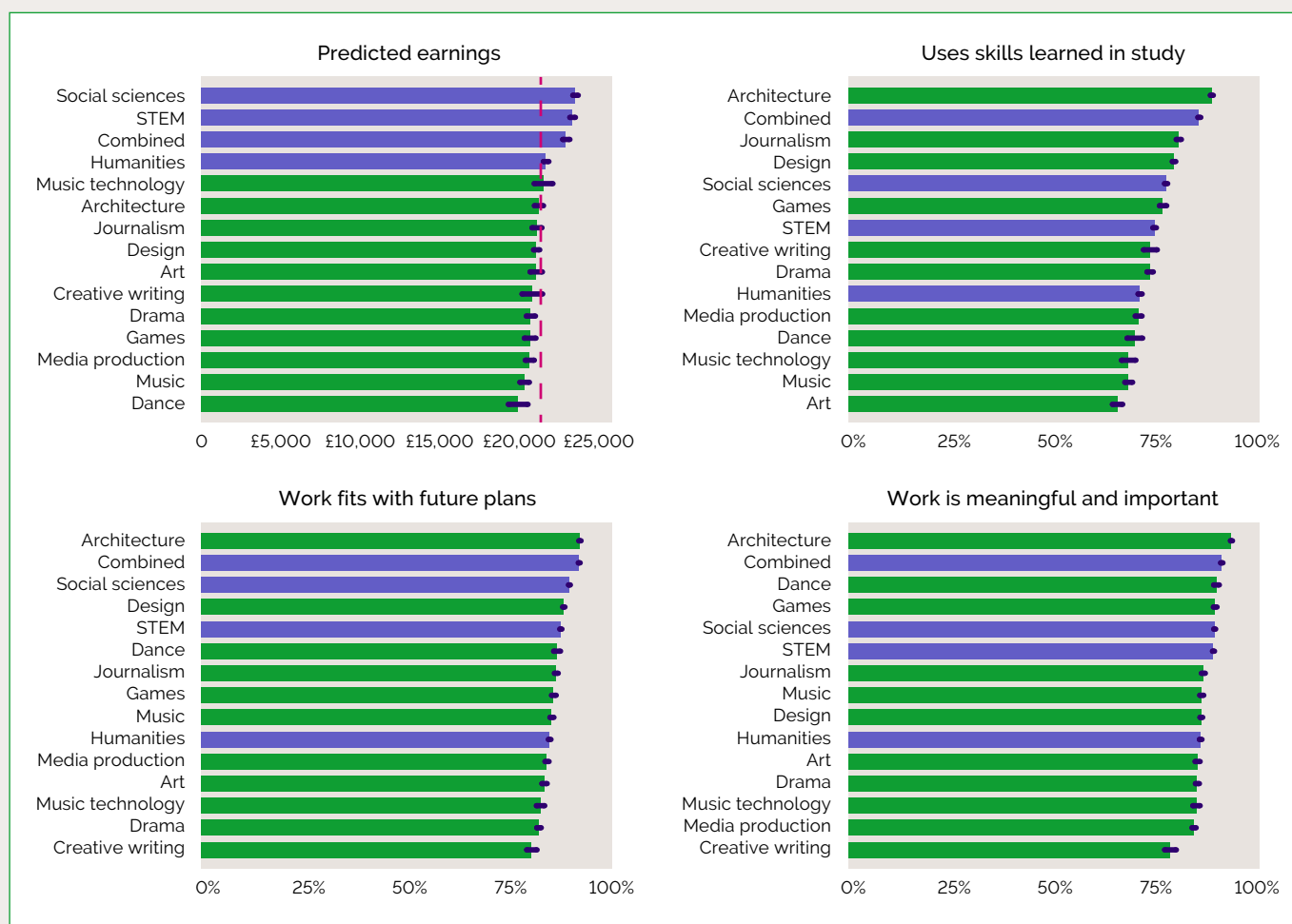
Graduate Outcomes survey data allows us to look at job quality through the lens of graduates. Unlike the findings on earnings, the differences in self-assessed job quality between arts and culture graduates and other graduates paint a more mixed picture. In most cases, arts and culture graduates had similar self-assessed job quality to graduates of other subjects. This was most striking for architecture graduates.

As with earnings, this is partly driven by the demographics of arts and culture graduates. Once we take other factors into account, such as student demographics and university type, differences become even smaller. When it comes to the question of whether graduates use what they learned in their current work, after taking these other factors into account,

arts and culture graduates are relatively more likely to assert that their study has been useful in their current roles, although with some differences between subjects.

In relation to whether people's current work fits with their future plans, and whether their work is meaningful and important, arts and culture graduates are similarly likely to agree as other graduates. Differences between arts and culture subjects are small: more than 75% of arts and culture graduates of every subject are predicted to agree with these different statements.

The scale of these differences can be seen in the figure showing the differences between subjects after we made these demographic and other adjustments in our analysis.



This figure shows that while arts and culture graduates' (shown in green) predicted earnings are lower than for graduates of other subjects (shown in purple), there is greater

variety in relation to their self-assessed job quality. In the case of whether their work is meaningful and important to them, the differences are very small.

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## Implications

Debates over the value of arts and culture courses are gathering intensity as a result of the funding crisis in UK universities. These debates are taking place as the government assesses the future of arts and culture funding in England and develops a new industrial strategy for the creative industries, of which the ACH sectors are a crucial part.

Our analysis of data from the Graduate Outcomes survey demonstrates the need for tailored and specific interventions and the need to avoid sweeping generalisations about both arts and culture HE and the arts and culture sectors graduate labour market. Arts and culture students are highly motivated by their subjects and by the prospect of careers in the related sectors. Their skills are valued by those sectors, and the sectors offer graduates a close fit with their future plans and sense of doing high-quality, 'good' work. Policy should start from here, recognising the demand for arts and culture courses and students' motivations. Denying opportunities to those highly motivated, skilled students because industry wages are lower than in other sectors will not be an effective approach to the challenges discussed in this report.

The analysis presented in this report can only go as far as the Graduate Outcomes survey data allows, and we are cautious about the inferences that can be made based on activity fifteen months after graduation. For this reason, we think a high priority should be a fresh discussion on what data is needed to provide a more rounded account of arts and culture HE and its importance to the UK's arts and culture sector. This should recognise the nature of creative work over the whole life course and key features of arts and culture labour markets, such as the importance of self-employment and flexible work arrangements.

Low pay in the arts and culture sectors, irrespective of postgraduate study or type of subject studied, is not sustainable. Low pay is inseparable from more general issues such as inequalities and poor working practices in some parts of the arts and culture sectors. In turn, these are shaped by the policy environment, including the arts and culture funding system and measures to expand opportunities in what are a dynamic and, if properly supported, growing part of the UK's creative industries.

# 1 Background

## 1.1. Why higher education and arts and culture?

There has been a significant amount of research into arts and culture programmes in higher education (HE) in the UK in recent years.

This research has taken multiple focuses, including research on students' motivation for studying creative subjects (UCAS, 2020), the social and demographic picture of creative cohorts (Holt-White et al., 2024), the contributions that arts and culture graduates make (Wicklow and Gamble, 2024) and arts and culture graduates' earnings (Belfield et al., 2018a). The Creative Industries Policy and Evidence Centre (Creative PEC) has itself made a major intervention into the field (Bloom, 2020). This report builds on that literature while also incorporating a broader programme of research into skills needs within creative industries (e.g. Giles et al., 2025).

Analysis of arts and culture HE programmes is particularly relevant to the arts and culture sub-sectors. The literature often refers to the

term 'creative', and while this is potentially indicative of the entire range of degrees relevant to creative industries – which includes industries such as advertising and marketing as well as IT, software and computer services – its operationalisation in recent reports has been narrower than that. For example, a recent report on 'the value of creative graduates' (Wicklow and Gamble, 2024) analyses graduates from programmes in two large categories: media, journalism and communications; and design and creative and performing arts. Other reports particularly highlight creative arts and design. This report builds on this framework, addressing subjects within HE that are closely aligned with arts and culture. We are, therefore, not including the entire creative industries.

## 1.2. How do we define arts and culture in HE in the UK?

Our approach to defining arts and culture in HE builds on a long tradition of academic analysis, drawing in particular on the work of Comunian (e.g. Comunian et al., 2011). Various terms have been applied to what has become settled, in recent academic analysis, under the category labelled 'arts and culture HE'.

Some of the first interventions in this space (e.g. Comunian et al., 2010, 2011; Faggian et al., 2013), which referred to 'bohemian' graduates, covered the creative subjects of study in HE that correspond to arts and culture 'destinations' in the labour market. These researchers also introduced broad groupings of graduates – creative arts and design graduates, creative media graduates, other creative graduates – based on the type of course studied, as well as looking at specific courses within these categories.

This initial work has been adapted in several more recent studies (e.g. Comunian et al., 2023). The analysis in this report follows that existing approach, and this offers several advantages. It allows for the analysis of an aggregate category that is well established in the existing research.

This means that, although there are technical notes for caution and various important caveats, the current analysis can be in dialogue with, and build on, the existing research. However, as our approach is based on a large dataset, we also highlight differences within the category – for example, showing differences between art, music and drama, which are at the heart of arts, culture and heritage. Also we refer specifically to 'arts and culture' to avoid any ambiguity with a more expansive definition of 'creative HE'.

The focus of this literature has been on undergraduate home students – that is, students from the UK studying for their first degree. We are also focusing on undergraduate home students, again for comparability.

## 1.3. Arts and culture programmes in UK HE

Over 150,000 undergraduate students are enrolled on arts and culture programmes in HE every year in the UK. A diverse range of institutions offers arts and culture courses, from those seen as traditionally ancient and elite to former art schools and 'post-92' institutions to conservatoires specialising in specific art forms.

The range of institutions is matched by the range of arts and culture courses on offer. Indeed, even courses in the same art form or arts and culture discipline can be different according to the institution in which they are taught. Some of this variation reflects practices and traditions within those institutions, some reflects staff research interests, some is related to facilities and location, and some reflects the changing nature of cohorts of arts and culture practitioners year on year.

Each institution across the country has its own history. Yet within the diversity of arts and culture higher education institutions (HEIs) and courses, there are notable patterns and clusters. The provision of art courses is dominated by post-92 institutions, reflecting both the traditions of art schools in many British cities and the subsequent transformations of the sector in the early 1990s; drama courses are offered in a much higher proportion of Russell Group institutions compared to art, and there are numerous conservatoires for drama; music has much more of a blend of different institutional types (Holt-

White et al., 2024). Delivery reflects this diversity too. Media studies, for example, has a history of both applied and more theoretically informed departments, each of which emphasises its own understanding of that broad subject area.

In many ways, this diversity of provision is a great strength of arts and culture HE in the UK. At the same time, the rich diversity in the landscape of provision is not matched by the diversity of the student intake.

## 1.4. Who studies arts and culture subjects in UK HE?

Taken as a whole, arts and culture HE students have a demographic profile that is distinctive compared with all HE students. Arts and culture students are much more likely to be women, although this reflects a broader trend across both the humanities and increasingly all of HE. In the aggregate, the class origins of arts and culture students are similar to that of all students. They are slightly more likely to be White than all students too (Holt-White et al., 2024).

However, the aggregate demographics of arts and culture students conceals very distinctive inequalities. Holt-White et al. (2024) show there are substantial differences depending on type of course and type of institution.

In particular, there is a close relationship between class inequalities and type of institution. Oxbridge and the Russell Group universities have higher proportions of students from middle-class backgrounds compared to other institutions. In part, this is driven by the mix of subjects on offer, particularly drama and music. At the same time, these subjects at post-92 institutions are also subject to class and racial inequalities (Holt-White et al., 2024).

The profile of students taking arts and culture subjects in UK HE is entangled with the profile of those who take arts and culture subjects in their post-16 education. In their overview of subject choice in England from 2004 to 2022, Scott et al. (2024) show that students who take arts subjects are more likely to be female and significantly more likely to be White, consistent

with Holt-White et al.'s (2024) findings in relation to the demographics of arts and culture HE. The education systems in the four nations of the UK contribute to the strong relationship between subject choice at post-16 and in HE, as several degree programmes require certain subjects to have been studied at the post-16 stage. This is also reinforced by the large share of arts and culture students who report having strong preferences about which subject to study, well in advance of the university application process (UCAS, 2020).

Importantly for our research on arts and culture HE, Scott et al. (2024) also note changes in the rate of students taking arts subjects at the post-16 level as well as changes in the combinations in which these subjects are taken. Between 2004 and 2022, the percentage of students taking any arts subject decreased from 41% to 24%, while the percentage of students taking arts subjects exclusively decreased from 5% to 4%. The consequence of this is that there are significantly fewer students taking arts subjects in combination with other subjects.



## 1.5. Existing research on UK arts and culture graduate destinations

**What happens to arts and culture graduates after they finish their courses has generated significant public interest. Much of this has been driven by a narrow concern over their earnings as graduates. At the same time, there is an extensive literature demonstrating both the positive economic and social contribution of arts and culture graduates and the significant levels of satisfaction they derive from their studies.**

The key report addressing the graduate outcomes of creative students, including those from arts and culture programmes, is by Bloom (2020). This report uses the Destination of Leavers from Higher Education survey, which collected data from graduates at two points: at six months and at three and a half years after graduation. The report includes findings about arts and culture graduates' earnings, their working patterns, whether they were in a 'graduate job', whether they were employed in arts and culture industries and occupations, and their motivations for their current activity (at the time of the survey). We revisit this report throughout this section.

The specific focus on arts and culture graduates' earnings has been driven by analysis of the Longitudinal Educational Outcomes (LEO) dataset provided by the Institute for Fiscal Studies (IFS). Across a series of reports (Belfield et al., 2018a, 2018b; Britton et al., 2020; Britton et al., 2022), analyses suggest positive earnings returns from HE for most students from most institutions. However, arts and culture subjects show relatively low levels of early career and projected lifetime earnings. This finding has been prominently discussed in relation to the funding system for HE (Belfield et al., 2019). Here, concerns have been raised that low earnings for arts and culture graduates translate into high levels of loan write-offs and thus high levels of subsidy per student.

The IFS work has done much to add nuance to the policy debate by showing the influence of key demographic characteristics, such as ethnicity, gender and social class, on graduate outcomes (Britton et al., 2021a; Britton et al., 2021b). However, the impact of this work has led to questions (e.g. Leunig, 2024) over financial support for arts and culture degrees.

Bloom (2020) reinforces the message from the IFS that creative graduates earn less than graduates of other subjects. However, she also draws attention to the fact that creative graduates who end up working in either the creative industries or in a creative occupation earn more than creative graduates working in other industries. Bloom (2020) also shows that creative graduates are highly motivated to undertake creative work and are aware that incomes in the creative sectors are often low, with relatively poor early-career labour conditions. This matches research from the Universities and Colleges Admissions Service (UCAS, 2020) suggesting that prospective creative students, before they enter HE, are least likely to cite career prospects as a motivator for choice of degree. It also speaks directly to policy research (British Academy, 2024; Wicklow and Gamble, 2024) that has taken a broad view of creative courses and the importance of creative graduates to the economy and wider society.

Beyond the above, a range of research has questioned the focus on incomes as an appropriate metric for assessing the value of HE. Low pay and uncertainty regarding career success are well-known problems in creative labour markets (summarised in Brook et al., 2020a). Away from the focus on incomes, Comunian et al. (2021) have argued for recognition of the broader contribution of creative graduates to the economy as a whole. Scott Brook and colleagues (2020c) and de Bernard et al. (2024) illustrate this broader value by showing the importance of education as a destination for creative graduates and the role of HE in sustaining creative careers. Creative graduates in Europe, as with humanities graduates more generally, also make positive social contributions in terms of volunteering and according to a variety of citizenship and civic engagement metrics (Comunian et al., 2023). The assessment of arts and culture programmes in HE must not be limited to the economic returns for individual graduates, and to the Treasury in relation to student loan repayments and contributions via tax.

There is clearly a gap between the policy concern over graduate outcomes as measured by income and the demand and motivation for creative courses. What this debate suggests is the need for both a more detailed picture of graduate destinations (e.g. building on the work of Comunian et al., 2023) and a less polarised set of discourses.

A crucial further way to understand graduate outcomes for arts and culture students is to look at job quality. This summary has shown the well-established fact that graduates from arts and culture programmes tend to be lower-paid than graduates of other programmes, but this does not mean that these graduates are

any less satisfied in their work; indeed, arts and culture graduates working in creative industries and creative jobs seem to be doing well. The research on the fit between arts and culture graduates and arts and culture careers sits alongside a significant programme of research addressing the question of whether graduates end up in 'graduate jobs'. This concept has been measured in various ways: whether roles are managerial or professional (Universities UK, 2015), the alignment of roles with the Regulated Qualifications Framework (Xu, 2023) and the specific skills required for jobs (Elias and Purcell, 2013).

In addition to job quality measured through graduate jobs, the Higher Education Statistics Authority (HESA) is undertaking work to measure job quality through what it describes as 'graduate voice'. This is measured according to whether work is meaningful, whether skills are being used and whether the person's activity fits with their future plans (Nethwani, 2022), and this approach is receiving increasing attention in HE policy (Kernohan, 2023).

This focus on job quality has been a major priority for Creative PEC (Carey et al., 2023) in relation to creative industries more generally. The relevance of good work in arts and culture is not limited to those working in arts and culture jobs; rather, it is relevant for the outcomes of all arts and culture graduates, regardless of their eventual destinations.

The Creative PEC analysis of working conditions across the creative industries identified a huge range of positives, including high levels of job satisfaction, autonomy and control over work. At the same time, there are challenges associated with pay and workforce inequalities, and examples of poor workplace culture and conditions (Carey et al., 2023).

Arts and culture jobs reflect these broader trends in the creative sectors. Jobs are fulfilling and offer creative expression, with workers passionately committed to their roles. However, they can be low-paid with long working hours and little substantive input into the shape and direction of institutions and industry sub-sectors. The high level of freelance working accentuates both the positive and negative characteristics of creative labour. Moreover, for many arts and culture graduates, many desirable career trajectories involve publicly funded institutions – for example, many graduates of music programmes who are aiming to become professional instrumental musicians in orchestras are supported by the national Arts Councils. In an environment where public subsidy for these institutions has declined, the pay and conditions in these sectors, as well as the declining number of available roles, is particularly relevant.

Policy has shown huge interest in work quality. The Department for Culture, Media and Sport recently announced a new taskforce to support plans for supporting and growing the sector, Arts Council England (2024) recently published research on freelancers in the sector, and the British Film Institute launched a programme to support better working practices.

The policy and research interest in job quality sets an important agenda for thinking about outcomes for graduates from HE arts and culture programmes. While wages are an important component of understanding outcomes, they offer an incomplete picture unless they sit alongside measures that understand whether those outcomes are meaningful, fit career plans and goals, and use the skills in which graduates have been trained. This builds on the analysis in Bloom (2020) addressing graduates' motivations for their current activity. Such a reframing of graduate premiums away from focusing exclusively on earnings, with the introduction of job quality as a measure, is particularly important

in a context where the differences in earnings between graduates and non-graduates has reduced, partly as a consequence of higher earnings among non-graduates due to the increase in the minimum wage (Willetts, 2025).

Bringing these concerns together, we can see a number of disconnections. There is a disconnection between the students' motivation for studying arts and culture subjects and the policy concerns about the earnings of arts and culture graduates, as opposed to the wider value of these programmes. There is a disconnection between the focus on the earnings of arts and culture graduates and the broader questions of job quality. There are disconnections between the attention paid to subjects grouped under the 'creative arts and design' category and the attention given to the broader set of arts and culture subjects in HE and to the arts and culture jobs to which students on these programmes tend to aspire. Finally, there is debate over what drives arts and culture graduates' earnings – whether it is the nature of the subjects or the demographic composition of the programmes.

These disconnections motivate our investigation of graduate outcomes. We aim to disentangle the extent to which differences in graduate earnings can be accounted for by the students' specific subjects of study and how much this is driven by other factors, including students' prior attainment, their demographics and the specific occupations and industries they enter. In doing so, we take advantage of existing data sources on graduate outcomes, while also acknowledging their limitations, which include challenges in the precise measurement of earnings data and the amount of time after graduation at which this measurement takes place. These limitations lead us to call for a new research agenda on suitable data infrastructure for the measurement of graduate outcomes.

## 2 Data and methods

### 2.1. Data

**This report uses data derived from a tailored dataset provided by Jisc (formerly the Joint Information Systems Committee). This dataset brings together data from three main sources.**

The first source is students' qualifications prior to starting HE, covering the type of qualifications, the subjects of the qualifications and the grades awarded. These are covered in more detail in the sub-section titled 'Prior qualifications'.

The second source is student records within HE, including data submitted through UCAS and from the students' study in HE. This includes their subject of study and the institution at which they were registered, as well as demographic information including their gender and ethnic group. These are covered in more detail in the sub-sections titled 'Demographics' and 'HEIs and subjects'.

The third source is the Graduate Outcomes survey, in which students are surveyed fifteen months after the conclusion of their programme. This includes data about where graduates are living, reflections on their study and several other important factors. Here, we focus on their activity, such as whether they are in employment or in further study; for those graduates who are in work, we focus on their industries, their occupations and their earnings, as well as three key questions about their activity. These are covered in more detail in the sub-section titled 'Graduate outcomes'.

These three sources, taken together, allow us to build an analysis that incorporates students' demographics, their qualifications prior to starting HE, the institutions at which they have studied and the subjects of their programmes, and their graduate outcomes, measured on multiple dimensions.

There is some attrition between these different data sources, meaning that not every graduate is included in our analysis. The details of this attrition are included in the online supplementary materials.

The debate in this area has drawn heavily on analysis that uses the LEO dataset (e.g. Belfield et al., 2018a, 2018b; Britton et al., 2020; Britton et al., 2022). LEO links data from a range of sources, including: the National Pupil Database, which provides data on attainment through school; HESA, which provides data from university; and the Department for Work and Pensions (DWP) and His Majesty's Revenue and Customs (HMRC), which provide detailed earnings data. It also allows for long-term analysis – for example, Britton et al., (2022) drew on earnings data based on when respondents are aged around 30. By contrast, our dataset is limited to a snapshot fifteen months after graduation, and as it is based on survey data, this is affected by non-response. Crucially, as the survey data is reliant on individuals reporting their own earnings, as opposed to data being derived from DWP and HMRC, this introduces inaccuracies.

Datasets such as LEO do not include information about graduates' specific occupations, nor about self-employed people. In the analysis of earnings for arts and culture graduates, these are crucial. The match between arts and culture subjects and arts and culture occupations, as opposed to only arts and culture industries, allows for analysis of the percentages of these graduates who end up in this kind of work. Rates of self-employment among people working in arts and culture occupations are much higher than for the overall working population, so the omission from LEO of data on self-employed people is likely to bias estimates.

Analysis of LEO data focuses on graduate earnings, as opposed to broader measures of graduate *outcomes*. In a context where understanding of broader graduate outcomes, such as job quality, is needed to support a wider interpretation of arts and culture in HE, this is another shortcoming. This is not to criticise the LEO data, but rather to highlight in what contexts it can (and cannot) be used.

The Graduate Outcomes survey addresses each of these points. It includes data on occupations, rather than only on industries, it includes data on earnings, occupations and industries for self-employed people, and, crucially, it captures not only earnings but also measures of job quality from the perspective of the graduate.

The Graduate Outcomes survey has its own issues. While it contains information about whether respondents are working full or part time, it does not include data on hours; this means we cannot distinguish between part-time workers working, for example, ten hours a week and twenty-five hours a week. Measures of income for self-employed people have accuracy and precision issues. Further, a survey taking place fifteen months after graduation does not capture graduates' full career trajectories. We see our analysis of the Graduate Outcomes survey as contributing to a broader research agenda that draws on different data sources,

each with their own strengths and weaknesses, and we repeat our call for data that effectively captures all dimensions of graduate destinations.

In the remainder of this section, we explain each of the variables we use in detail.

## Prior qualifications

The landscape of post-16 qualifications in the UK is complicated. Education is devolved, with the qualification landscape in Scotland differing significantly from that in England, Wales and Northern Ireland. The international nature of HE in the UK means that students arrive with qualifications of a wide range of types.

However, international differences are not the key source of complication in the post-16 qualification landscape. A succession of different policy interventions has led to an environment with a very diverse set of options available to students. This includes a mix of more vocationally oriented qualifications, the most common of which in our data is the suite of qualifications associated with the Business and Technology Education Council, known as BTECs, and more traditional academically oriented qualifications, the most common of which in our data is the Advanced Level General Certificates of Education, known as A levels. Our dataset includes 814 different qualification types across 1,710 different subject titles.

Our approach involves working with two key variables: UCAS Tariff points and subject mix. Given the complicated range of qualification types, use of UCAS Tariff points usefully provides a harmonised set of numeric values associated with different qualification types and grades. For example, a grade A at A level is associated with 48 points, so a student who passes three A levels at A grade receives a total of 144 UCAS Tariff points. A student who passes a BTEC Extended Diploma with DDD (Distinction, Distinction, Distinction) also receives a total of 144 UCAS Tariff points.<sup>1</sup>

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1. To capture the effects in the coefficients more clearly, we rescale the total Tariff points variable by dividing by 100 in our regression models.

We limit our use of this variable in a few ways. First, we do not include Advanced Subsidiary (AS) levels in our calculation of UCAS Tariff points. This largely reflects the time period our data covers. Prior to 2016, students studying A levels would have a set of assessments – often a mix of coursework and exams – at the end of the first year of the two-year A level programme, for which they would be awarded AS levels. Subsequently, students would often discontinue studying one of their subjects, continuing with the remaining subjects in the second year. Since then, some students have taken a mix of AS and A levels. The temporal range we cover means that the fairest comparison is to include only A levels.

Second, we do not include Scottish Highers where a student has also taken Advanced Highers. The Highers and Advanced Highers system has similarities with the AS and A Level system, with students taking a larger number of subjects in the year after they turn 16, and a smaller number of subjects in the year after they turn 17. However, it is possible for students to progress to university immediately after Highers. Including the UCAS points for both Highers and Advanced Highers would inflate the total UCAS Tariff points for students taking both qualifications. Accordingly, students are allocated the total points for Advanced Highers if they have taken both sets of qualifications, and the total points for Highers if they have only undertaken qualifications at this level.

Third, if a student has taken multiple BTEC triple awards, we introduce a maximum score, or 'ceiling', they can be allocated. These qualifications are full-time programmes, so the majority of students taking a BTEC triple award take exactly one award. If students are classified

as holding multiple BTEC triple awards, we allocate them the UCAS Tariff points associated with their highest set of grades.

We also classify the subjects of study for students' prior qualifications. Specifically, we classify these qualifications based on whether they include arts and culture subjects. We include our full mapping between individual subjects and subject areas in the online supplementary materials. In brief, this includes the same set of subjects we use for arts and culture subjects in HE, set out in the sub-section titled 'HEIs and subjects': architecture, art, creative writing, dance, design, drama, games, media production, music and music technology.

We classify students into three groups: non-arts and culture, subject mix, and exclusively arts and culture. For example, a student who takes A levels in German, history and mathematics has not taken any subjects we classify here as arts and culture subjects, and so is classified into the first group. A student who takes A levels in German, history and music has a mix of arts and culture and non-arts and culture subjects, so is in the second group. Finally, a student who takes A levels in art, drama and music has exclusively taken subjects we classify here as arts and culture subjects, and so is classified into the third group. Note that several students take qualifications in only one subject – this is particularly the case for students studying BTEC Diplomas. This means that most of the students classified as 'exclusively arts and culture' have taken a single qualification, such as a BTEC Diploma in Performing Arts, rather than taking multiple arts and culture qualifications separately, such as A levels in Art, Drama and Music.



## Demographics

We use five variables relating to students' demographics, each of which is associated with subject choice, post-16 attainment, graduate outcomes or some mix of the three.

The first variable we use is **sex**. HESA recommends that data on students' sex is collected by HEIs every year, using the question 'What is your sex?' The response categories for the sex variable are male, female and other, though note that the 'other' category has been inconsistently applied over time and includes cases where the student has refused to answer the question.

The second variable we use is **ethnicity**. As with sex, HESA recommends that data on ethnicity is collected by HEIs every year. The recommended question for HEIs in England, Wales and Northern Ireland is 'What is your ethnicity or ethnic group?'; in Scotland, it is 'What is your ethnic group or background?' Students are presented with several different options. In our data, these options are grouped into five categories: White, Asian, Black, mixed, and other.

The third variable we use is **disability**. As with sex and ethnicity, HESA recommends that data on disability is collected by HEIs every year. The recommended question is 'Do you have an impairment, health condition, or learning difference that has a substantial impact on your ability to carry out day-to-day activities and has lasted, or is expected to last, at least twelve months?' As this variable is based on students' self-assessment, it does not follow that a student who does not select 'yes' is in fact not disabled, particularly for those students who refuse to answer the question.

The fourth variable we use is **state school marker**. For those students for whom data about their previous education provider is available – in most cases, this will be the school or college at which they completed their post-16 education – this variable classifies whether the provider was a state school or a private or independent school. A third category, 'other', covers students for whom this data is missing. This primarily addresses students who previously studied outside of the UK.

The fifth variable we use is **National Statistics Socio-Economic Classification** (NS-SEC). When applying to study in HE, one of the questions in the UCAS form is about the occupation of the primary income earner in the household. Responses to this question are classified based on NS-SEC categories. These vary from NS-SEC I, which includes occupations such as doctors and lawyers, to NS-SEC VIII, which represents people who are long-term unemployed or who have never worked. In our analysis, we hold NS-SEC I and II as distinct, and we group together NS-SEC III to V and NS-SEC VI to VIII.

In addition to the five student-level demographic variables, we use a variable at area level:

### **Participation of Local Areas (POLAR) quintile.**

Areas are ranked according to the percentages of people aged 18 or 19 who start university, and then the areas are grouped into five quintiles, with Quintile 1 having the fewest people progressing to university and Quintile 5 having the most. Details can be found in HESA (2021). In England and Wales, the areas in question are Middle Super Output Areas, which have an average population of around 7,800; in Scotland, they are Intermediate Zones, which have an average population of around 4,285; in Northern Ireland, they are the Super Output Areas, which have an average population of around 2,000.

## HEIs and subjects

Our third set of variables relate to the programmes students are registered on, providing information about the university they are studying at and the subject of the qualification.

We group HEIs into five categories:

- **Oxbridge.** This category comprises the two oldest HEIs in the UK, Oxford and Cambridge, whose graduates have the highest average earnings of any institutions outside of London for men and women<sup>2</sup> (Belfield et al., 2019). Both Oxbridge institutions deliver some arts and culture programmes: Oxford offers Fine Art, Cambridge offers Architecture as well as an Education programme that includes Drama, and both offer Music.
- **Russell Group.** This is an association of twenty-four research-intensive HEIs. They are predominant among the HEIs attended by higher-earning graduates. (Note that while both Oxford and Cambridge are members of the Russell Group, we categorise them separately in our analysis.) HEIs in the Russell Group vary in their delivery of arts and culture programmes. For example, Imperial College London and LSE are specialists in sciences and social sciences, respectively, and only a tiny fraction of their graduates studied on arts and culture programmes. By contrast, the University of Leeds offers single honours arts and culture programmes, including drama and art, while also incorporating arts and culture subjects into broader programmes, such as architectural engineering and computer science programmes with games engineering.
- **Pre-92.** This category includes all other universities that held university status prior to 1992, when institutions that had previously been classified as polytechnics became universities as a consequence of the Further and Higher Education Act. As with other categories, there is heterogeneity within this category with respect to delivery of arts and culture programmes.
- **Post-92.** This category includes the thirty-five HEIs that were polytechnics prior to 1992, as well as institutions that have become universities subsequently. This is a large and heterogeneous group. HEIs in this category have the largest shares of students from working-class backgrounds and from ethnic minorities, both among arts and culture students and more generally.
- **Specialist.** This category comprises institutions with a particular focus on arts and culture programmes, including art colleges, drama schools and conservatoires. The age of these institutions varies considerably – for example, the Royal Academy of Music was founded in 1822 while Leeds Arts University gained university status in 2017.

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2. For men, LSE (London School of Economics and Political Science) graduates have higher average earnings than graduates from Oxford and Cambridge, while for women this is also the case for Imperial College London.

Our definition of arts and culture programmes builds on our use of arts, culture and heritage (ACH) industries and occupations in our previous report on audiences and workforces (McAndrew et al., 2024). We break arts and culture subjects into the following categories, consistent with Holt-White et al. (2024):

- Architecture
- Art
- Creative writing
- Design (including fashion and textiles)
- Drama
- Games
- Journalism
- Media production (including film production and photography)
- Music
- Music technology

These cover the programmes addressed in the 'creative arts and design' category, but also include other programmes relevant to arts and culture that are not classified into that group. These are architecture, games (otherwise grouped with computer science) and journalism (otherwise grouped with mass communication and documentation).

This classification builds on the definition of 'bohemian graduates' originally set out in Comunian et al. (2011). The crucial distinction is that our classification is more restrictive. As it is based on arts and culture, as opposed to the wider creative industries, it excludes advertising, marketing and public relations. Crafts and design are combined, as the number of students taking crafts programmes are very small. Finally, subjects classified as part of Comunian et al.'s 'film and television' category that take the

cultural product as the object of study to be analysed, such as media studies, are excluded, prioritising instead programmes that include creative practice. It also omits any programmes relating to heritage, as opposed to arts and culture. This is because the numbers of students taking heritage programmes at undergraduate level – for example, undergraduate degrees in museum studies – are very small. A full mapping of individual subjects to these groups can be found in the online supplementary materials.

While this classification is more restrictive than that in Comunian et al. (2011), any classification involves the inclusion of some categories and the exclusion of others. Here, we wish to explain the inclusion of two subject groups in particular: games and journalism. However, we also note that our analysis consistently highlights individual subjects within arts and culture, or – where the category is grouped together – we include robustness checks where each subject is removed in turn, to ensure that findings are consistent across these. We explain this approach in more detail in Section 2.2.

Games, in particular, is not well aligned with either Standard Industrial Classification (SIC) or Standard Occupational Classification (SOC) codes (we revisit this issue in the 'Graduate outcomes' sub-section), and for some audiences, it may not seem part of the arts and culture category. However, a large share of students on games programmes are in fact studying 'games art'. Games programmes more broadly are often grouped with other arts and culture subjects within HE institutions themselves, reinforcing this relationship in university contexts. For example, the Game Design programme at the University of Hull is part of the Faculty of Arts, Cultures and Education, and the equivalent at Ulster University is in part of Belfast School of Art.<sup>3</sup>

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3. Further, games have the legal status of art in several jurisdictions: it is recognised as 'a form of artistic expression' by the Ministry of Culture in France, and games are eligible for arts funding from the National Endowment for the Arts in the US.

Similarly, journalism is housed with other arts and culture subjects in several HE institutions – for example, the Faculty of Arts, Humanities and Cultures at Leeds. We have classified occupations in journalism as ACH occupations (McAndrew et al., 2024), as part of a broader journalism category that also includes authors.

In addition to distinguishing between programmes within the arts and culture subjects category, we distinguish between programmes outside this definition, since graduates with different subject backgrounds tend to have very different earnings. Specifically, we distinguish between graduates from the humanities; social sciences; science, technology, engineering and mathematics (STEM); and combined studies, a category mostly made up of education but also comprising other joint programmes that do not include arts and culture subjects. Each of these categories is heterogeneous, containing as much – if not more – variation as the arts and culture subjects we analyse.

Several students study on programmes including more than one subject. Our data is structured such that these students appear once per subject they study, with an accompanying variable for the fraction of their overall credits taken up by each subject. A student studying music on its own appears once, with a value of 1; a student studying music and drama equally appears twice, with a value of 0.5 in each case; a student studying music and drama at a 60:40 ratio appears twice, with a value of 0.6 and 0.4, respectively.

## Graduate outcomes

The Graduate Outcomes survey includes several different questions about graduates' current activity. In our analysis, we focus on several variables.

The first variable we focus on is **activity**. After questions about what they were doing in the survey week in relation to work, study and other activities, graduates are classified according to one of the following:

- Full-time work
- Part-time work
- Unknown pattern of work
- Voluntary or unpaid work
- Employment and further study
- Full-time further study
- Part-time further study
- Unemployed and due to start work
- Unemployed and due to start further study
- Unemployed
- Other, including travel, caring for someone or retired

For simplicity and because of small numbers in some categories, we group some of these activities together – for example, the different patterns of unemployment are grouped together. While we report graduate activity for the entire sample in our descriptive analysis, our analysis of graduate earnings is limited to those in work. Self-employed people are included in the 'employment' categories.

We use three measures of **self-reported job quality**: whether people's work fits with their future plans, whether people's work is meaningful and important to them and whether people's work uses the skills they learned during their studies. In all three cases, respondents are presented with a statement and asked to rate their level of agreement or disagreement on a five-point scale.

Our next key variable is **earnings**. Those graduates who are in paid work for an employer, or self-employed/freelance, were asked for their annual earnings. Outliers were removed (e.g. for those reporting full-time work, if earnings were reported as below the minimum wage at thirty hours a week, this was treated as an outlier, taken to be a deliberately conservative estimate). Our data is based on earnings bands of £5,000 – for example, £25,000 to £30,000 – and for our analysis, we used the midpoint of the earnings bands – in this case, £27,500. Additionally, we applied a log transformation to earnings in our regression models.<sup>4</sup>

In order to better understand people's work, we address **industry**. Graduates in work were asked about the kind of work they do and the kind of industry their employer is in, or for self-employed people and freelancers, the kind of industry they are in. Responses to these questions were

classified according to SIC 2007. For our analysis, we grouped together most SIC codes into a small set of industry types, the first three of which host a large number of professional and managerial graduate destinations, which is why they were highlighted as distinct:

- Professional, scientific and technical industries
- Information and communication industries
- Financial and real estate industries
- Other industries

We then treated ACH industries separately, allowing us to identify the relationships between arts and culture graduates and ACH industries. These are:

- Arts
- Film, TV and music
- Radio
- Photography
- Crafts
- Museums and galleries
- Library and archives
- Cultural education
- Operation of historical sites and similar visitor attractions

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4. A log transformation is applied to earnings to reduce the influence of extreme values and to help meet the assumptions of the regression model, such as normality of residuals.

Not all ACH industries are included in this classification due to the level of detail that is available in relation to each of the industries. This leads to a mismatch between our definition of arts and culture subjects and our definition of ACH industries, due to the different classification schemes involved and, again, due to the very small numbers of students taking undergraduate programmes in subjects directly aligned with heritage. This is particularly relevant in the case of games. While there is a SIC code at the level of available detail associated with games publishing, there is not an equivalent for games development.

Adding further context to people's work is the variable for **occupation**. This data was collected in a similar way to the data for the industry variable, with the difference being that occupation related to the specific work done by the individual, rather than by the organisation. As with industry, there is not a perfect alignment between arts and culture subjects in HE and corresponding occupations due to the different coding schemes. We do not use the terminology of 'graduate jobs', reflecting the fact that it has been operationalised in different ways; instead, we distinguish between: arts and culture jobs (using the same categories as our earlier report, McAndrew et al., 2024), three sets of managerial and professional jobs (in STEM, health and education), all other managerial and professional jobs, and all other jobs.

The final variable we use in this section is **region**. There are significant differences in earnings among graduates in different regions of the UK, with London having by far the highest average graduate incomes. These differences persist net of the HEIs at which students have studied. Within the UK, our measure of region is at International Territorial Level 1. We also include a category for graduates working outside the UK.



## 2.2. Methods

Our analysis involved three main stages.

First, we carried out a descriptive analysis of overall distributions for each of the variables presented above as well as the key relationships between them.

Second, we built a series of models to predict graduate outcomes in terms of job quality and, in line with past research, earnings.

We estimated models predicting both earnings and self-assessed job quality in a consistent way, as follows:

- In **Model 1**, we started with a simple ordinary least squares regression (earnings) or logistic regression (self-rated job quality) in which we assessed the relationship between graduate earnings, whether or not a student has studied an arts and culture subject in HE, their subject mix prior to entering HE and the total Tariff points attained prior to entering HE.
- In **Model 2**, we introduced a set of control variables. This included all the demographic variables described above: sex, ethnicity, disability, state school marker, POLAR quintile, NS-SEC origin. These factors were important to account for socioeconomic disparities in graduate outcomes, as discussed by Crawford et al. (2016) and de Schepper et al. (2023). In addition, university type (Green et al., 2018), a set of graduate outcome variables (whether the work uses skills developed on the degree programme and whether the qualification is required for the job), and fixed effects for industry, occupation and location were included in our model as controls, as supported by previous literature (Vignoles et al., 2011; Eliasson and Westerlund, 2023).

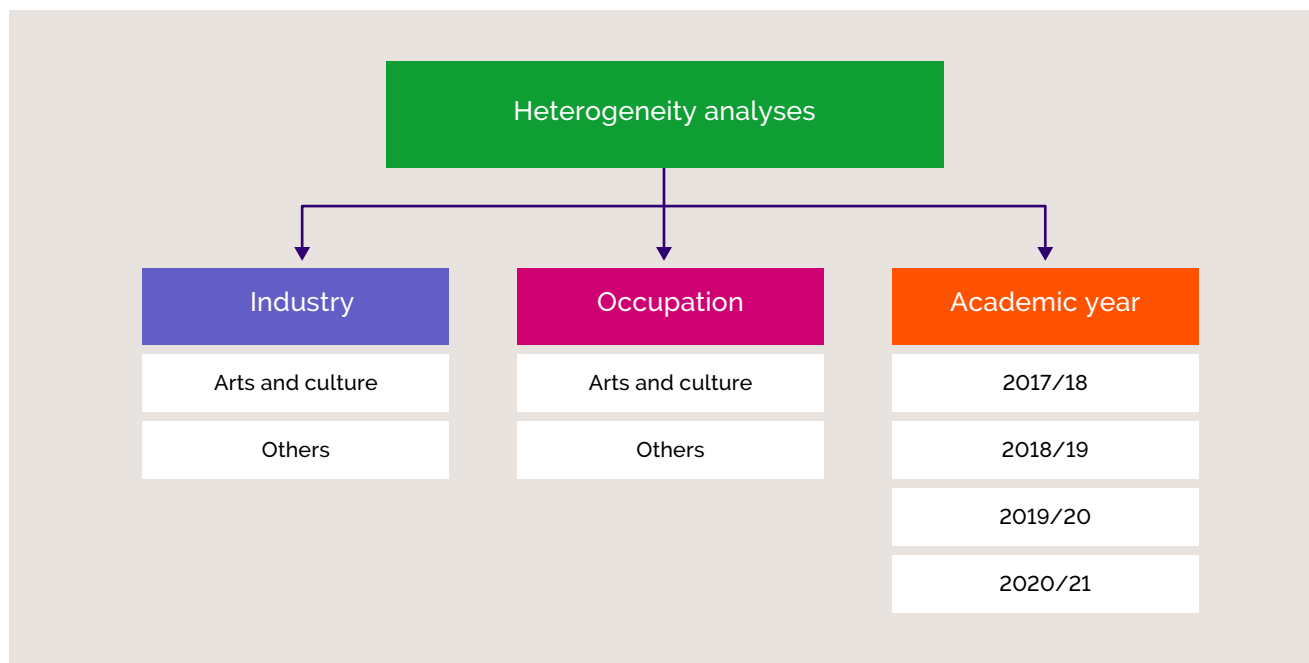
- In **Model 3**, we developed benchmark Model 2 further by distinguishing between specific arts and culture subjects and other subjects, while keeping the other variables the same. This model aligned with Comunian et al. (2011) and Faggian et al. (2013) in distinguishing between specific arts and culture subjects. This distinction helped us to capture the varied education returns across different arts and culture subjects.

This set of models allowed us to estimate the extent to which differences in graduate earnings and in self-assessed job quality between arts and culture subjects can be accounted for by students' prior qualifications (Model 1), their demographics and the kinds of jobs they get (Model 2), and the specific arts and culture programmes that they have studied on (Model 3).

Finally, we conducted subgroup analyses to explore how the effects of studying arts and culture subjects vary across different groups

of graduates. We illustrate our approach to subgroup analysis in Figure 2.1.

**Figure 2.1. Approach to subgroup analysis**



- First, we analysed the differences between arts and culture graduates working in ACH industries and those employed in other sectors. By splitting the sample this way, we could compare how studying arts and culture subjects affects earnings and job quality across these two distinct groups.
- We then investigated occupational differences. We separated arts and culture graduates into those working in arts and culture occupations and those in other types of jobs to evaluate how arts and culture studies influences graduates' outcomes across different career paths.

- Last, we focused on the effects of studying arts and culture subjects across different academic cohorts, based on the year in which students graduated.

This set of models helped us further explore how the effects of selecting arts and culture subjects on graduates' earnings and self-assessed job quality vary based on industry, occupation and academic cohort.

# 3 Evidence on graduate outcomes

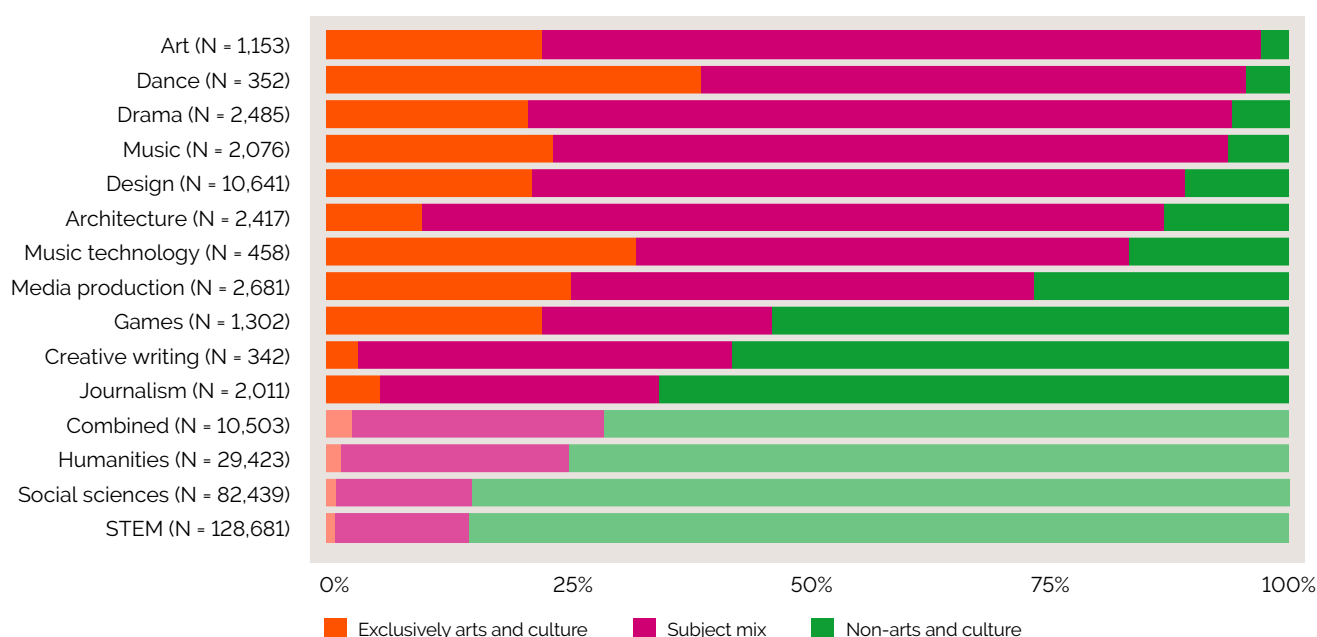
## 3.1. Descriptive analysis

We start this section by highlighting some key data on the composition of arts and culture programmes in HE in the UK, before moving on to detail the destinations of the graduates from these programmes. We show the relationship between prior subject mix and subject studied in HE, then the relationship between prior attainment, measured through UCAS Tariff points, and the subject studied in HE.

Figure 3.1 shows that, for eight out of the eleven arts and culture subjects studied in HE, a clear majority of students had previously studied arts and culture subjects. This was most pronounced for art, where 97% of students had previously studied arts and culture subjects, of whom 22%

studied arts and culture subjects exclusively. In addition, among the graduates who studied dance, drama, and music in HE, 90% or more had previously studied arts and culture subjects; the figure was 70% or more for design, architecture, music technology and media production.

**Figure 3.1. Post-16 education by subject studied in HE (recent graduates, 2017/2018 to 2020/2021)**



Source: Authors' analysis of a tailored dataset provided by Jisc

Notes: 'Exclusively arts and culture' indicates graduates who studied only arts and culture subjects in post-16 education. 'Subject mix' refers to graduates who studied a combination of arts and culture and non-arts and culture subjects in post-16 education. The 'non-arts and culture' category is for graduates who did not study any arts and culture subjects.

At the other extreme, 28% of students on non-specific combined programmes had previously studied arts and culture subjects, and the share was 25% for humanities and 15% for both social sciences and STEM subjects.

While art was the subject with the largest share of students who had previously studied arts and culture subjects, dance and music technology were the subjects with the largest share of students who had studied arts and culture subjects exclusively, at 39% and 32%, respectively. Very small percentages of students registered on programmes other than arts and culture subjects had this prior subject mix: for humanities the share was 1.5%, while for social sciences and STEM subjects, it was less than 1%.

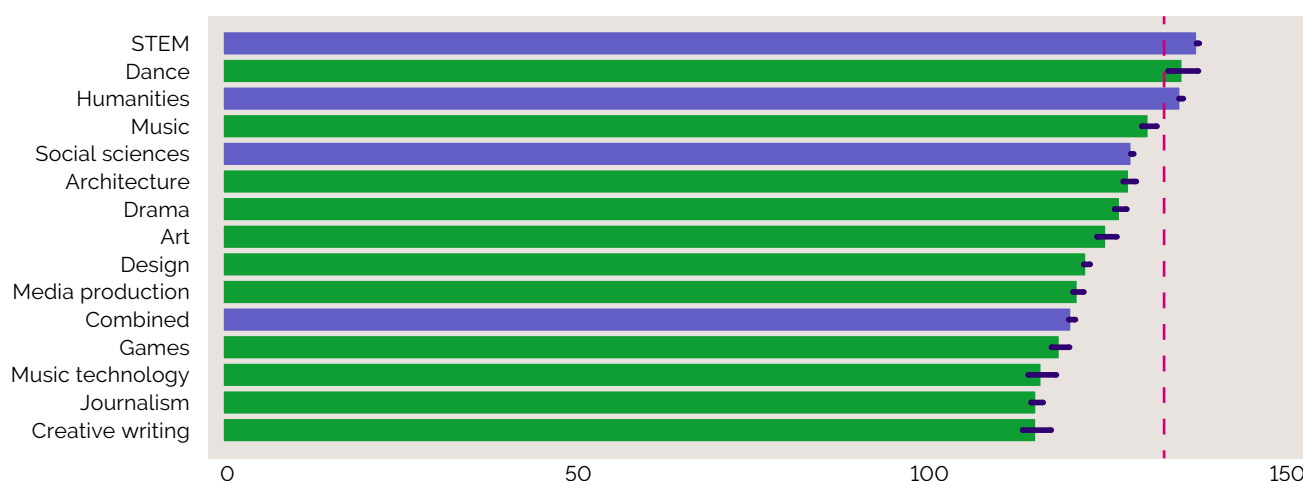
This range is not in itself surprising. Students with long-term ambitions towards studying arts and culture subjects are likely to choose those subjects at post-16 education, scaffolding towards HE. Several arts and culture programmes, such as music and art, require prior study of that same subject; others, such as design and architecture, may not mandate these prior qualifications, but students with goals to study in these areas are likely to choose them in school.

Figure 3.2 shows that students on the majority of arts and culture subjects in HE had fewer UCAS Tariff points, on average, than students studying on other programmes. This was most pronounced for journalism and creative writing, where the average was 113 points. At the other extreme, students studying dance – a subject with relatively few students in HE compared with other arts and culture subjects – enter HE with more UCAS Tariff points on average than students studying humanities or social sciences, and are behind only those students who are studying STEM subjects.

There was significant variation between arts and culture subjects. While dance was the only subject with a higher-than-average UCAS Tariff point score – and this difference was (just) statistically significant, music, architecture, drama and art were only moderately (albeit statistically significantly) behind, at between 123 and 129 points, compared with the average across all programmes of 130.

This distribution of UCAS Tariff points by subject of study indicates that we might expect any differences in earnings among graduates of arts and culture programmes to be partly explained by attainment prior to entering HE.

**Figure 3.2. Average UCAS Tariff points by subject studied in HE (recent graduates, 2017/2018 to 2020/2021)**



Source: Authors' analysis of a tailored dataset provided by Jisc

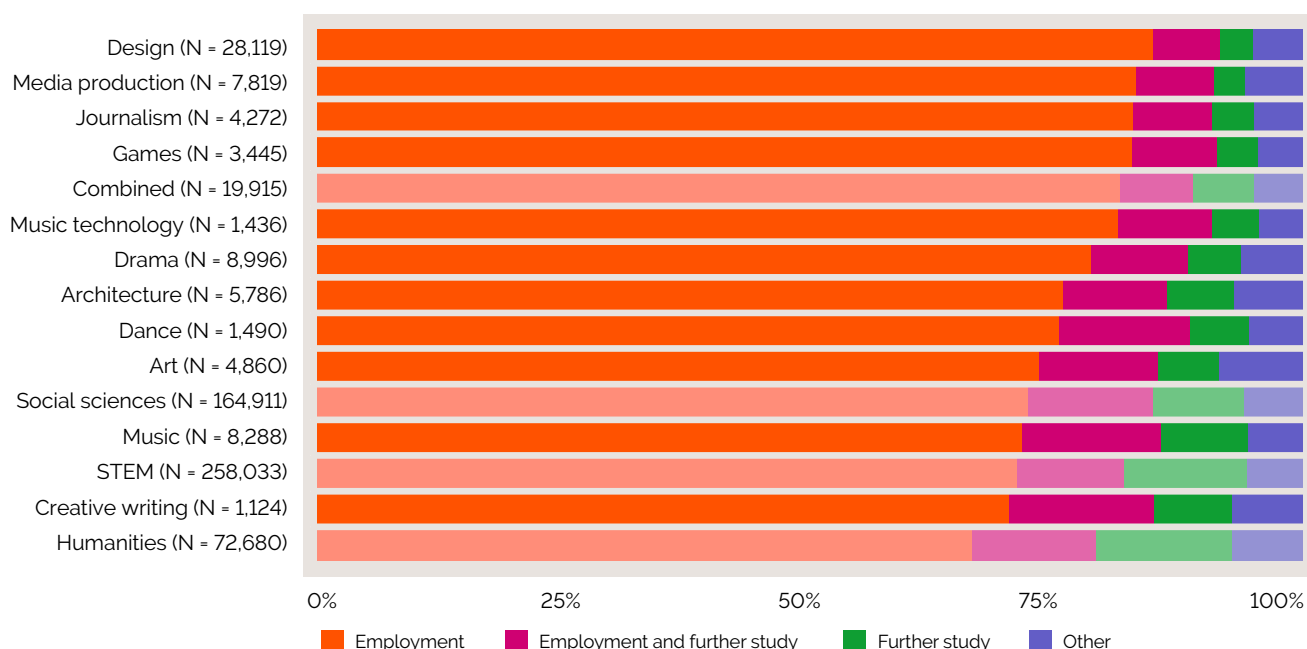
Note: The dashed line shows the average for all subjects.

These figures have provided some important context for the analysis of destinations of arts and culture graduates. We now move to describing the relationships between subjects studied in HE and the different measures of graduate outcomes.

We start by describing graduates' activity at the time of the survey – that is, whether they were in work, in further study or doing something else, and if they were in work, whether this was full time or part time. We then introduce results on graduates' earnings, which we supplement with contextual data on the geographical distribution of arts and culture graduates and graduates of other subjects. Finally, we introduce further detail on the outcomes of graduates in work, looking beyond their earnings to consider their occupations and industries as well as three measures of their self-assessed job quality.

Figure 3.3 shows the activities of recent graduates by their subject of study in HE. Graduates of most arts and culture programmes were more likely to be in employment, and less likely to be in further study, than graduates in most other subjects. Design graduates were the most likely to be in employment, at 85%; with graduates who are also in further study also incorporated, the figure for this group was 92%. Music and creative writing were the arts and culture subjects whose graduates were least likely to be exclusively in employment fifteen months after graduation, at 72% and 70%, respectively. In both cases, moderate fractions (14% and 15%, respectively) were combining employment and further study. Overall, graduates of all the different arts and culture subjects were less likely to be exclusively in further study than graduates from the social sciences, STEM subjects or, with the highest share at 14%, the humanities.

**Figure 3.3. Activity by subject studied in HE (recent graduates, 2017/2018 to 2020/2021)**



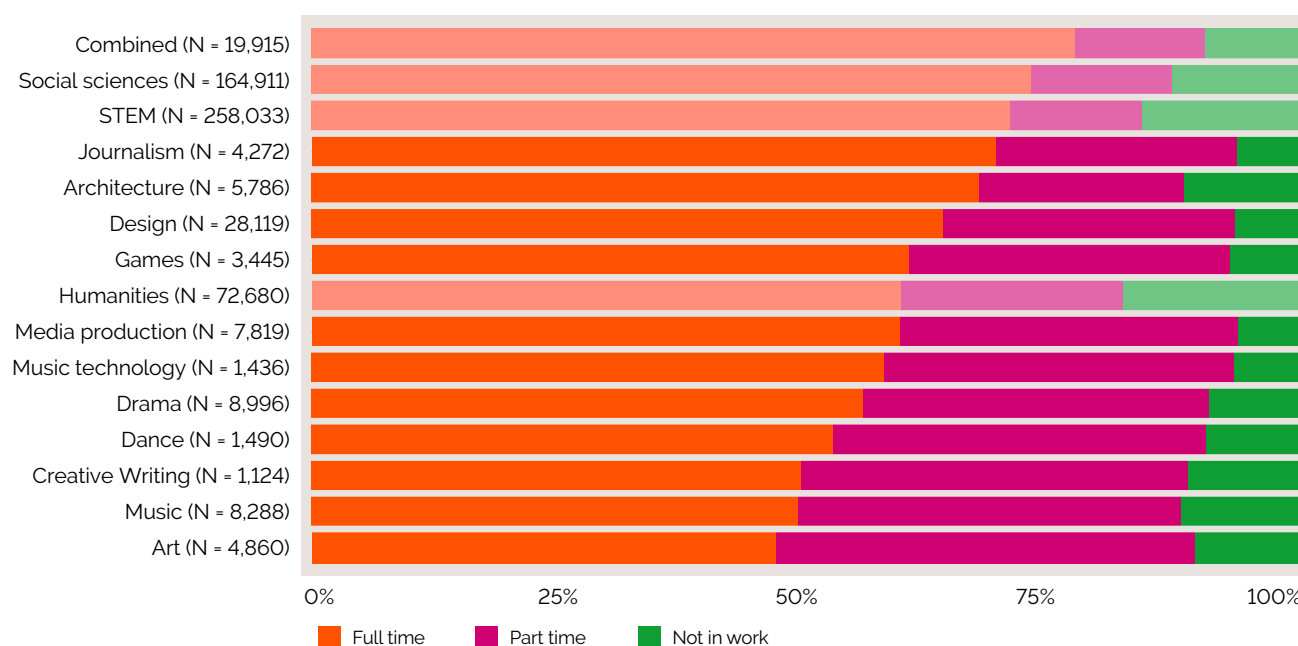
Source: Authors' analysis of a tailored dataset provided by Jisc

Note: The chart is based on the sample of graduates who reported their activity at the time of the survey.

For those recent graduates who were either in or seeking work at the time of the survey, Figure 3.4 shows whether they were in full- or part-time employment or not in work, by subject studied in HE. The percentages of arts and culture graduates who were seeking work but not in work at the time of the survey was lower than for graduates of humanities, STEM subjects and social sciences, for whom the shares were 18%, 16% and 13%, respectively. The largest percentage for arts and culture subjects was for music, at 12%.

Graduates of arts and culture subjects were significantly more likely to be working part time, as opposed to full time, than graduates of combined programmes, social sciences and STEM subjects. Graduates of journalism, architecture, design and games programmes were more likely to be in full-time work than humanities graduates, but this was not the case for graduates of all other arts and culture subjects. This was most striking for art graduates, 47% of whom were working full time and 42% part time. Similar, but less pronounced, patterns can be seen for music and creative writing, where fewer than 50% of recent graduates were in full-time work.

**Figure 3.4. Employment by subject studied in HE (recent graduates, 2017/2018 to 2020/2021)**



Source: Authors' analysis of a tailored dataset provided by Jisc

Figure 3.5 shows the mean earnings of recent graduates based on their subject of study in HE. It shows that all arts and culture subjects were associated with lower average earnings fifteen months after graduation compared with STEM subjects, social sciences, combined

programmes and humanities. It is important to note that these mean earnings do not distinguish between graduates' different working hours and, as shown above, arts and culture graduates were more likely to work part time than other graduates.



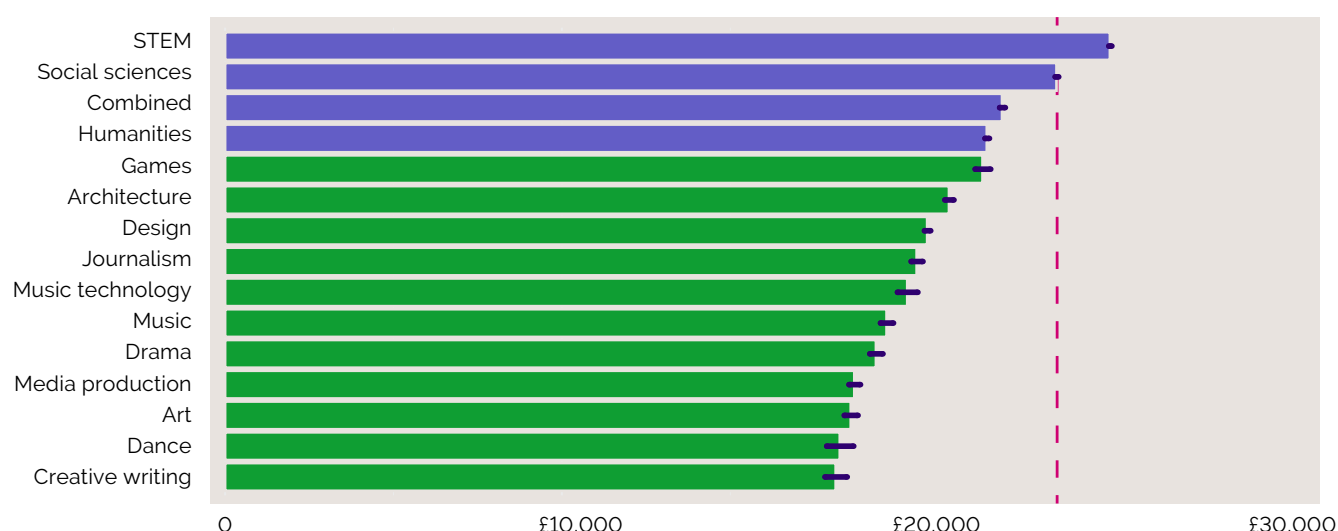
In the case of games, the average was only slightly lower than that for the humanities. However, for six out of the eleven categories of arts and culture subjects, the likelihood of earning less than £20,000 per year fifteen months after graduation was statistically significant. This can be contrasted with the average among all graduates of around £24,700.

Three of the arts and culture subjects associated with higher earnings – games, architecture, and journalism – are not included in the broad category of ‘creative arts and design’ subjects, which have received particular attention for the relatively low earnings of graduates. By contrast, the subjects associated with the lowest earnings – creative writing, dance, art and media production – are in this group.

This evidence is therefore consistent with previous research on the incomes of graduates of creative arts and design programmes, while adding additional detail on the differences within this category and within the category of arts and culture subjects more broadly.

We should note that our focus on differences within the category of arts and culture subjects means that we do not account for differences within the STEM, humanities, social sciences and combined programmes categories. Evidence from these other subject groups (such as de Vries, 2014) suggests that the variation within them is significant, much as it is for arts and culture subjects. For this reason, we should not simply conclude that graduates of all arts and culture subjects have lower earnings, on average, than graduates of all other subjects.

**Figure 3.5. Mean earnings by subject studied in HE (recent graduates, 2017/2018 to 2020/2021)**



Source: Authors' analysis of a tailored dataset provided by Jisc

Notes: The dashed line shows the average for all recent graduates.

Figure 3.6 shows arts and culture graduates in work as a percentage of all graduates in work by region of the UK. The largest differences were between Northern Ireland and Scotland on one hand and the rest of the UK on the other. In Northern Ireland, 5.0% of recent graduates in work were from arts and culture subjects, while in Scotland the share was 6.0%; in each of the regions of England and in Wales, the share was

at least 8.0%. The largest share was found in the East Midlands, with 10.3% of graduates in work having studied arts and culture subjects, closely followed by the North West, with 10.0%. In London, where graduate earnings are generally at their highest, it was 8.8%, which was among the lower percentages, but not the lowest, in England. This reflects the high concentration of graduates in London overall.

**Figure 3.6. Graduates of arts and culture programmes' in work as a percentage of all graduates in work by region (2017/2018 to 2020/2021)**

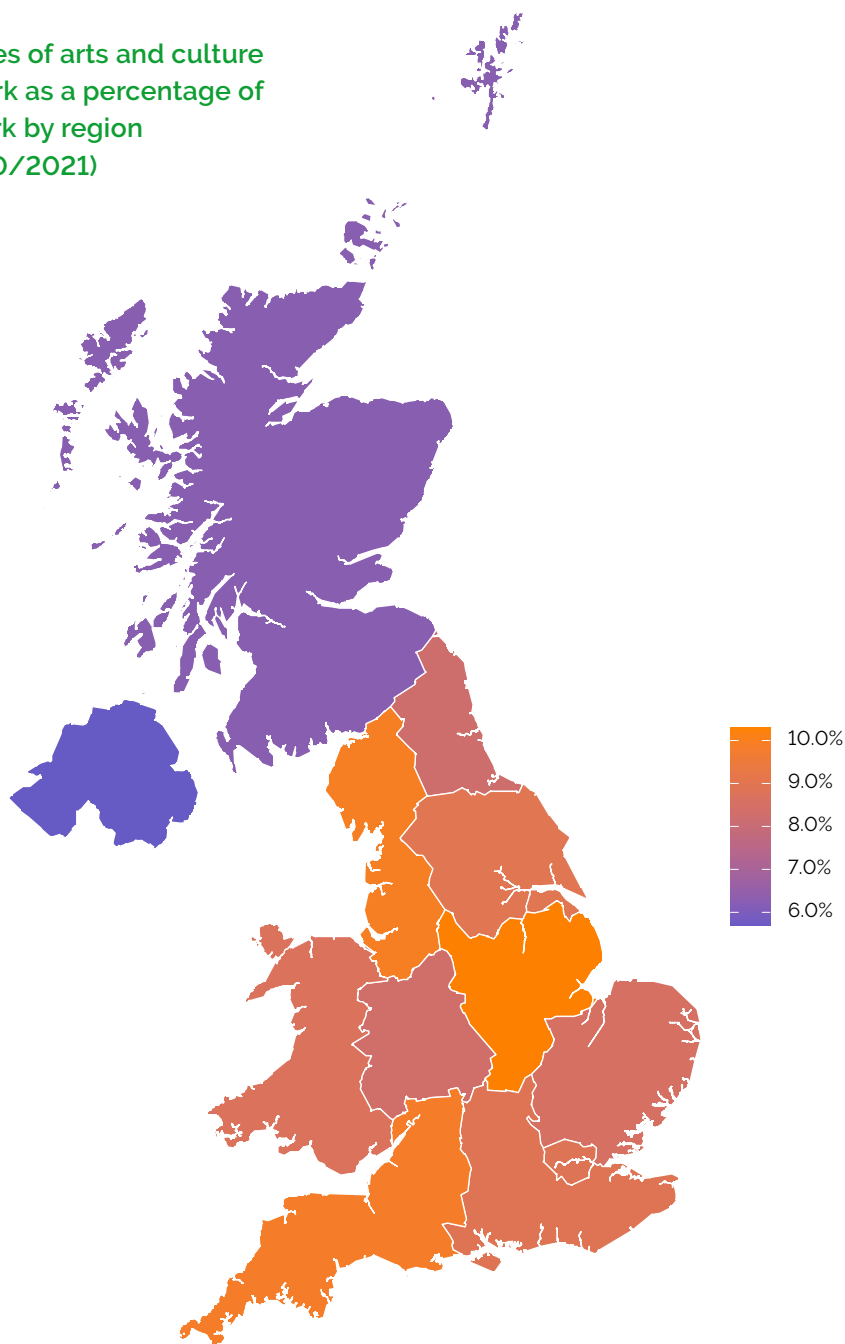
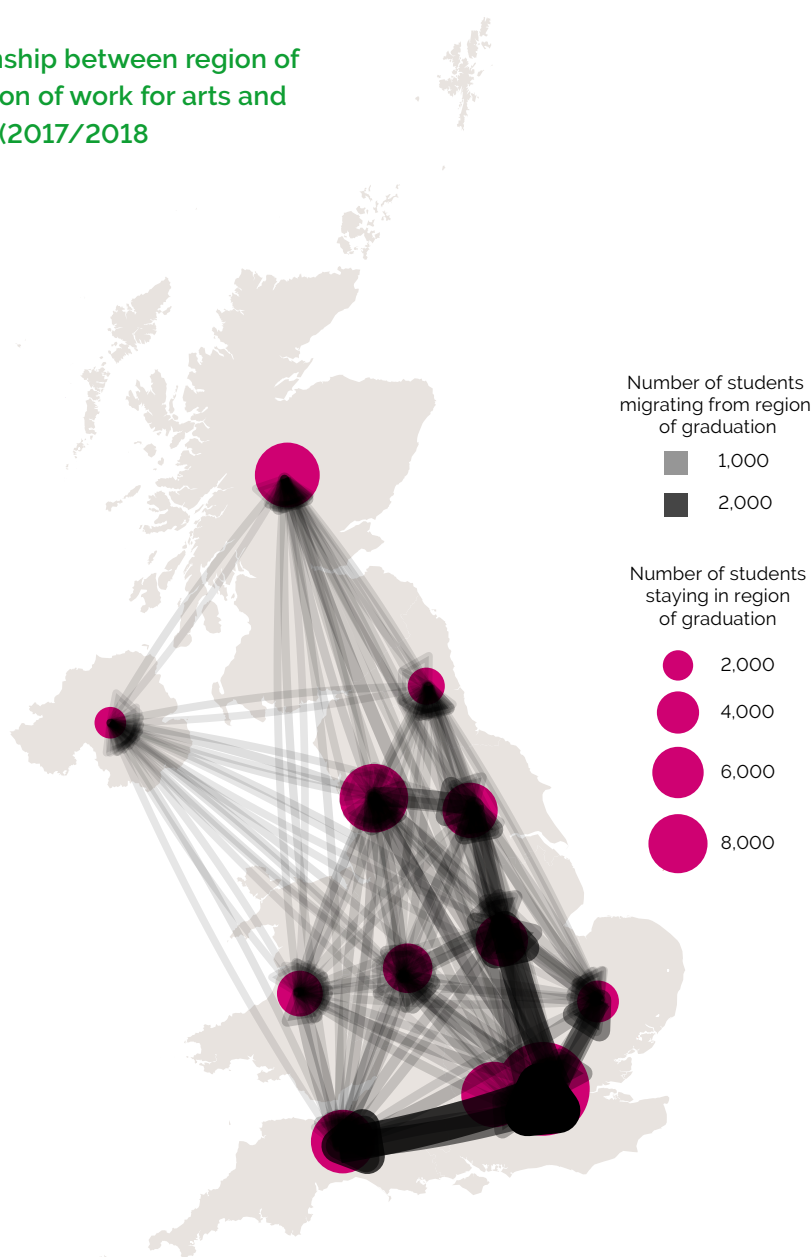


Figure 3.7 adds context to these results by showing the migration of arts and culture graduates between the regions where they had studied and the regions where they worked at the time of the survey. Given the regional differences in incomes, it may be that graduates from different regions are more, or less, likely to end up in higher-earning parts of the country: in this way there is a pathway through which graduates from certain parts of the country end up earning less than others.

Figure 3.7 shows that large shares of arts and culture graduates were working in the same region where they had graduated fifteen months earlier. However, it also shows that the most common option for graduates from most regions, other than staying in the same region, was moving to London. This was most pronounced for regions closest to London – the South East, and the East of England – but this was also strong for the East Midlands and the South West.

**Figure 3.7. Relationship between region of university and region of work for arts and culture graduates (2017/2018 to 2020/2021)**



Source: Authors' analysis of a tailored dataset provided by Jisc.

Note: The connecting lines (links) represent flows from region of study to region of work, with line thickness and opacity indicating the volume of graduates moving between regions.

Table 3.1 adds some additional detail to Figure 3.7. Arts and culture graduates from most English regions outside of London were less likely to work in the region where they graduated than arts and culture graduates from Northern Ireland, Scotland and Wales; the exception was the North West, with 63% of arts and culture graduates staying in the region, similar to the share in Wales of 62%. Meanwhile, 31% of arts and culture graduates

from the East of England and the South East moved to London, while 15% or less arts and culture graduates from the North East, North West, Yorkshire and the Humber, and the West Midlands did so, and 9% or less from Northern Ireland, Scotland and Wales did so. Given the concentration of higher-paid work in London, we would expect arts and culture graduates who stayed or moved there to have higher salaries, on average.

**Table 3.1. Percentage of arts and culture graduates from each region of the UK whose work fifteen months later was either in the same region as their university or in London**

	Same region	London
North East	54	15
North West	63	10
Yorkshire and the Humber	47	14
East Midlands	35	22
West Midlands	49	13
East of England	46	31
London	71 <sup>a</sup>	
South East	44	31
South West	42	23
Northern Ireland	92	3
Scotland	83	8
Wales	62	9

Source: Authors' analysis of a tailored dataset provided by Jisc

Note: <sup>a</sup> The percentage refers to those who studied in London and are working in London.

Figure 3.8 shows that graduates of arts and culture programmes were more likely to go on to work in ACH industries than graduates of other subjects. However, there were no subjects where a majority of graduates went on to these industries. The subject with the

largest proportion of graduates working in ACH industries fifteen months after graduation was media production, at 25%; this was followed by drama and music technology, both at 16%.

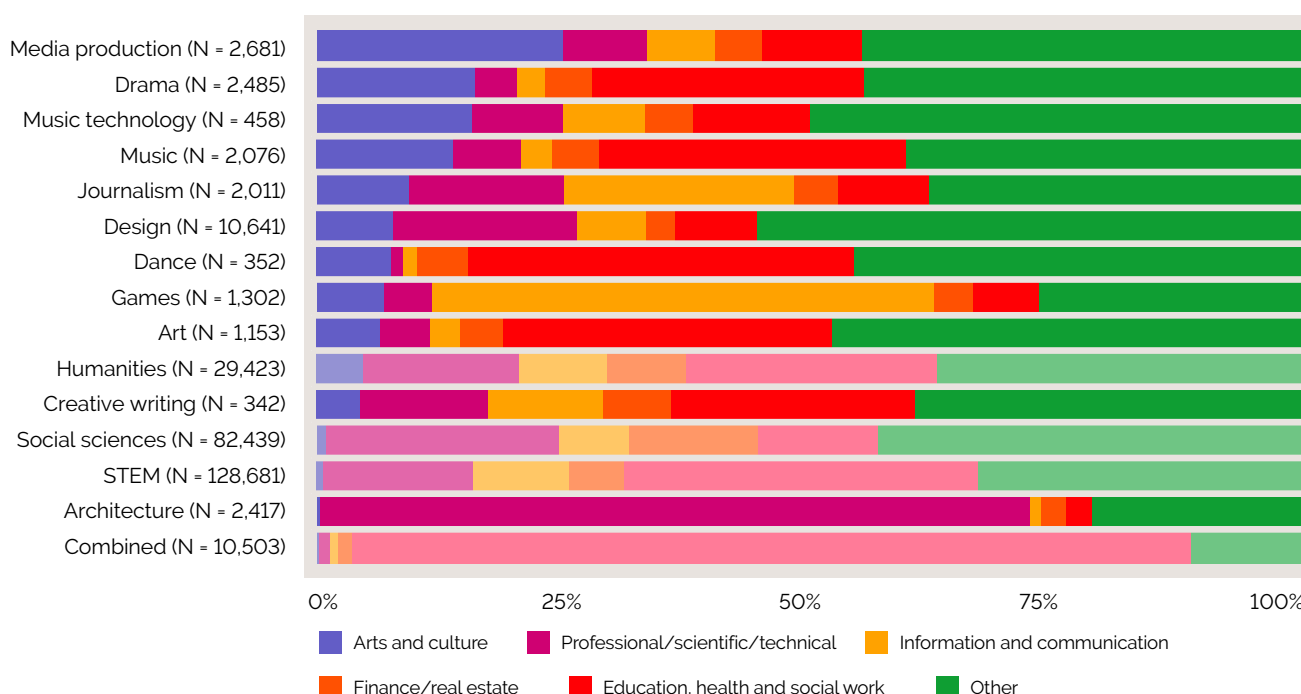
In some cases, the alignment between arts and culture subjects and ACH industries was relatively poor due to the ways that industry sectors are organised. This was most significant in the cases of games and architecture. While some organisations in games are classified with an industrial code associated with ACH activity, the lack of a four-digit code associated with games development, as opposed to games production, means they are grouped with the IT sector. In the case of games graduates, by far the largest destination was the information and communication category.

The situation was similar for architecture, where almost no graduates were working in ACH industries fifteen months after graduating, but a large majority were working in professional, scientific and technical industries. It is likely that

several of these graduates were on a path into architecture or a related profession.

Not only were graduates of most arts and culture subjects more likely to end up in core arts and culture industries than graduates of other subjects, but also they were, for most subjects, more likely to be working in industries that are not associated with professional activity. This was true of 55% of design graduates, 50% of music technology graduates and 48% of art graduates. The equivalent shares for social sciences, humanities and STEM subjects were 43%, 37% and 33%, respectively. However, for some arts and culture subjects, the percentages were even lower, particularly games and architecture with 27% and 21%, respectively.

**Figure 3.8. Industry of employment by subject studied in HE (recent graduates, 2017/2018 to 2020/2021)**



Source: Authors' analysis of a tailored dataset provided by Jisc

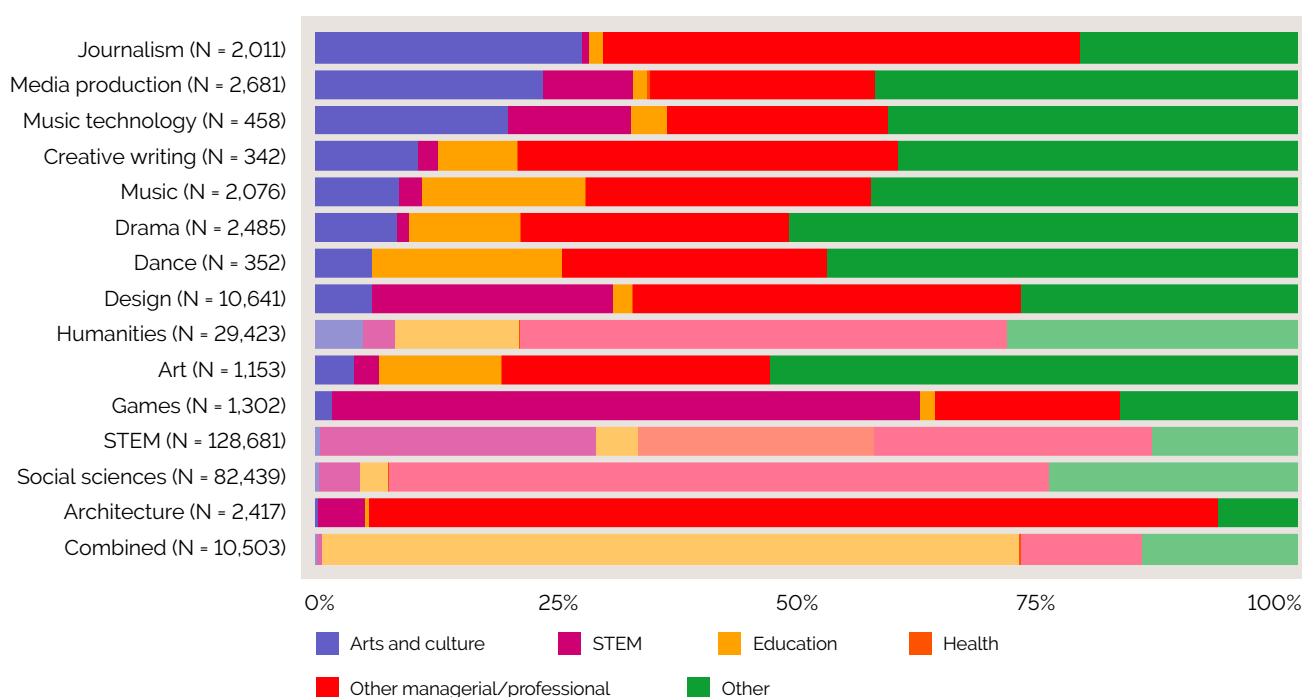
Figure 3.9 shows the percentages for occupation, rather than industry. As with industry, graduates of arts and culture subjects were significantly more likely to be working in arts and culture occupations than graduates of other subjects. This was most pronounced for graduates of journalism (27%), media production (23%) and music technology (20%); there was then a large decrease to the next subject, creative writing (10%). Graduates of art, games and architecture were less likely to be working in arts and culture occupations than humanities graduates, although in the case of games, due to the way that occupational codes are organised, this does not capture graduates working in game development occupations. The large percentage of games graduates working in STEM occupations likely reflects this.

Although Figure 3.8 showed that the percentages of graduates from arts and culture programmes working in industries that are not associated with professional activity were similar to those for graduates of other subjects, Figure 3.9 shows that, for most arts and culture

subjects, the share of graduates working outside of managerial and professional occupations was higher than that for graduates of other subjects. For the humanities, social sciences and STEM subjects, the shares were 30%, 25% and 15% respectively. For art and drama, the shares exceeded 50%. The share was between 40% and 50 % for a further five arts and culture subjects: creative writing, dance, media production, music and music technology.

Overall, Figure 3.9 shows that, while the percentages of arts and culture graduates going on to work in ACH occupations were higher than for graduates in other subjects, the share never exceed 27% and in many cases was below 10%. All but two arts and culture subjects had a majority of their graduates in managerial and professional occupations; however, for the other arts and culture subjects, the percentages who were in managerial and professional occupations were generally lower than was the case for graduates of other subjects.

**Figure 3.9. Occupation of employment by subject studied in HE (recent graduates, 2017/2018 to 2020/2021)**

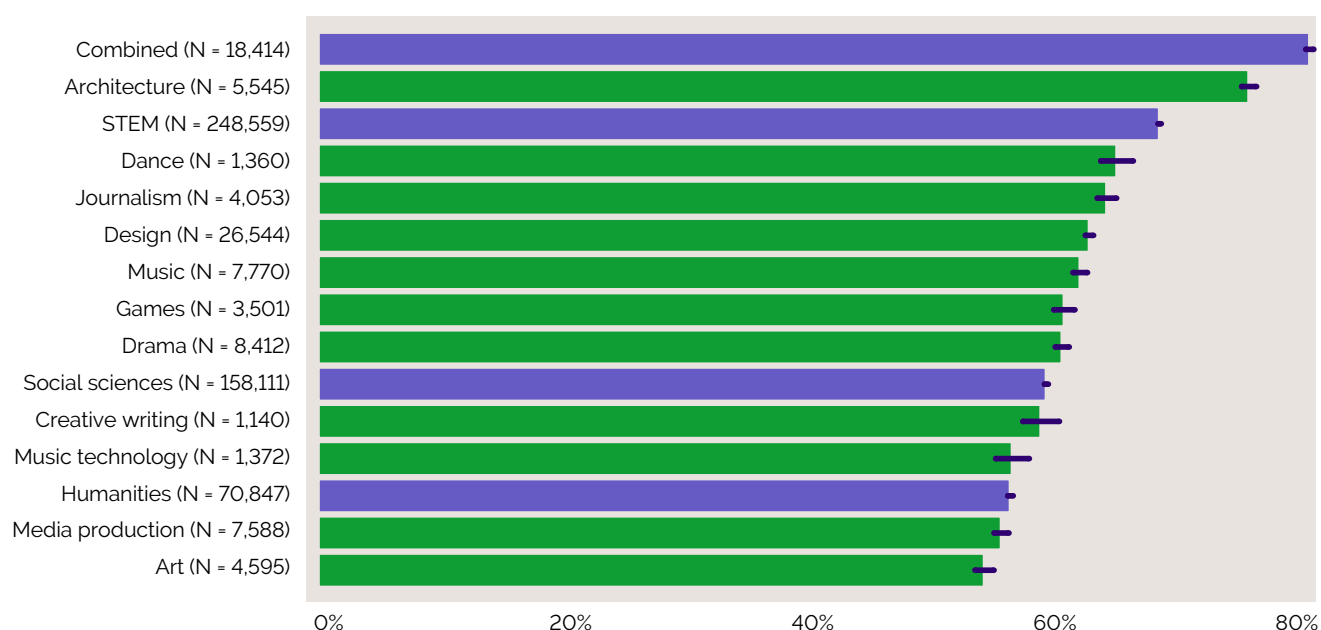


We conclude this section by showing how three measures of job quality vary by subject of study in HE. As with the previous results, the figures summarise data for those graduates who are in work, thus excluding people who are, for example, in further study.

Figure 3.10 shows the percentages of people agreeing that they were using what they learned during their studies in their current (at the time of the survey) work. Graduates of most arts and culture subjects were likely to respond positively to this question; architecture graduates were the second most likely of all the subjects analysed to respond positively, behind only graduates of combined

programmes, most of whom were education graduates. While STEM graduates were more likely to agree than graduates from the remaining arts and culture programmes (i.e. aside from architecture), graduates from most arts and culture subjects were more likely to agree than graduates from social sciences or humanities programmes. The exceptions were graduates of media production programmes and, in particular, art. Once again, it is important to emphasise that categories such as STEM are very large, containing a wide variety of different subjects, likely with major differences on this measure.

**Figure 3.10. Agreement with the statement 'I am using what I learned during my studies in my current work' by subject studied in HE (recent graduates, 2017/2018 to 2020/2021)**



Source: Authors' analysis of a tailored dataset provided by Jisc

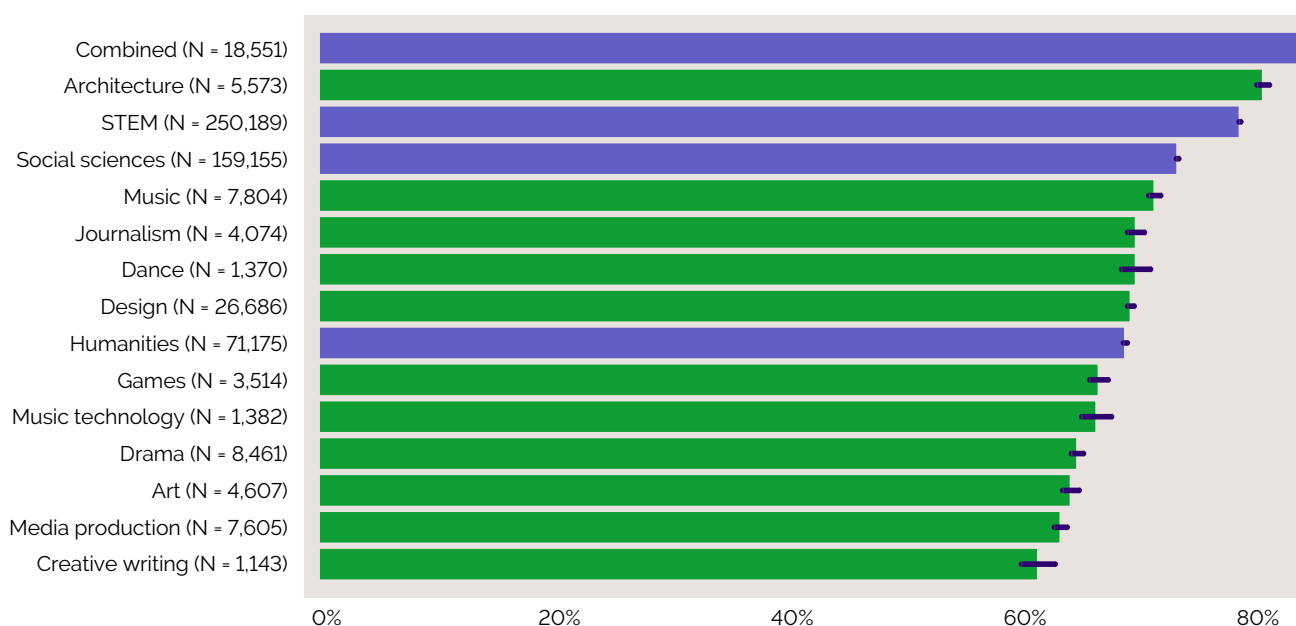


The results shown in Figure 3.10 are encouraging in relation to arts and culture graduates. While most were not working in arts and culture occupations and industries, as shown in figures 3.8 and 3.9, a majority of graduates in work from all the arts and culture subjects ended up using what they had learned in their studies.

Figure 3.11 shows the percentage of graduates from different subjects who agreed that their current work fits with their future plans. As with the previous statement, architecture graduates were particularly likely to agree, falling once again between graduates of combined programmes at the top and graduates of STEM programmes in third place.

Aside from architecture graduates, those from other arts and culture subjects were less likely to agree with this statement than students on combined programmes, STEM programmes and social sciences programmes. This partly reflects the high overall percentage of respondents agreeing, around 77%. Graduates of media production and art were once again among the least likely to respond positively, though this time, creative writing graduates were the least positive of all the subject groups. In the case of media production, this was particularly striking given the fairly high percentages of these graduates working in arts and culture industries and occupations. The average rating by humanities graduates was close to the average for all the subject groups.

**Figure 3.11. Agreement with the statement 'My current work fits with my future plans' by subject studied in HE (recent graduates, 2017/2018 to 2020/2021)**



Source: Authors' analysis of a tailored dataset provided by Jisc

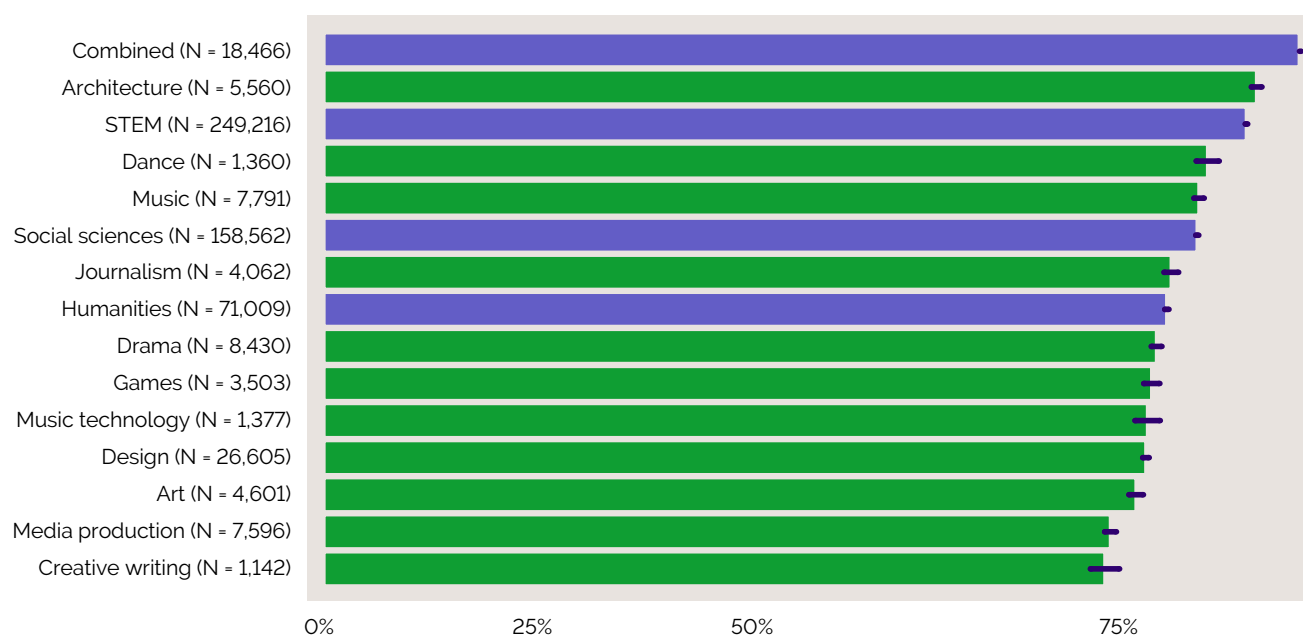
Finally in this section, Figure 3.12 shows the percentages of respondents who agreed with the statement that their current work is meaningful and important to them. This question elicited the highest levels of agreement overall, with an average of 85%.

As with the previous two statements, architecture graduates were the most likely of all arts and culture graduates to agree, again falling between graduates of combined programmes and STEM graduates. Graduates

of dance, music, and journalism also had relatively high agreement, all higher than humanities graduates.

However, graduates of several disciplines were less likely to agree that their current work is meaningful and important to them. As with the statement on current work fitting with future plans, graduates of art, media production and creative writing were the least likely to agree with this statement; for the latter two groups, agreement was below 75%.

**Figure 3.12. Agreement with the statement 'My current work is meaningful and important to me' by subject studied in HE (recent graduates, 2017/2018 to 2020/2021)**



Source: Authors' analysis of a tailored dataset provided by Jisc

When we consider figures 3.10 to 3.12 together, we see a mixed picture in relation to job quality for arts and culture graduates. Bearing in mind that the sample was smaller than for the other questions, in all three cases, a majority of graduates from all of these subjects agreed with the statement in question. Arts and culture graduates were generally more likely to agree that they are using what they learned in their

studies in their current work than graduates of other subjects. However, for the other two statements, graduates of most arts and culture subjects had lower agreement than graduates of other subjects. The picture was least encouraging for art and for media production, with graduates' level of agreement in the bottom three subject groups for all three statements.

Figures 3.1 to 3.12 provide a large amount of information on graduates from arts and culture subjects. They were more likely to come to HE with previous qualifications in arts and culture subjects, and particularly so having exclusively studied arts and culture subjects, relative to their peers studying other subjects. They were no more likely to be working in London than graduates of other subjects, with graduates from outside London and the South East least likely to be working in London. While they were more likely to be working in arts and culture occupations and industries, they were also less likely to be working in managerial and professional occupations. Their earnings were lower than graduates of other programmes,

while the picture of their self-reported job quality varies significantly between different arts and culture subjects.

In the next section, we consider all these factors together. We aim to better understand how certain factors explain the differences in arts and culture graduates' outcomes, specifically their earnings and their self-assessed job quality. We develop a series of models that incorporate different factors at different stages and for different groups, to understand the extent to which the differences in outcomes can be explained by subject choice in HE specifically, compared with other factors.

## 3.2. Modelling results

Having established the variations in earnings and self-assessed job quality between graduates of different arts and culture subjects, and graduates of other subjects, we now move on to analyse different factors together, examining the empirical models introduced in Section 2.2. This approach allows us to estimate the differences between the earnings and self-assessed job quality of arts and culture graduates, and of graduates of other subjects, net of other important characteristics that are known to also relate to incomes. Further details of the empirical results can be found in the online supplementary materials.

We start with graduate earnings. Specifically, we analysed the relationship between income fifteen months after graduation and various factors, including subject mix at post-16 education, subject of study in HE, demographics and institutional type. We first fit regressions based only on the UCAS Tariff points received by students prior to entering HE, their subject mix prior to entering HE, and whether or not they studied an arts and culture subject in HE. Estimates for these regressions are labelled 'Model 1', and presented in the 'Subject choice and graduate earnings' sub-section.

Next, we took into account a large number of other factors, including demographics, university type, and occupation and industry types, to determine how much of the differences identified can be explained by these other factors. Estimates for these regressions are labelled 'Model 2', and this is also presented in the 'Subject choice and graduate earnings' sub-section.

These models allowed us to compare the sizes of the effects when we only consider subject choice, both at post-16 education and in HE, and UCAS Tariff points against the sizes of the effects of those same variables when taking other characteristics into account. Full specifications for these models can be found in the online supplementary materials.

We also tested whether the differences are robust to the definition of arts and culture subjects by refitting the regression and removing one category within 'arts and culture subjects' each time – for example, by changing the variable so that art is not included. These results are included in the online supplementary materials with games highlighted: all results were similar.

Finally, we extended this model by distinguishing between different arts and culture subjects, assessing differences between them. These results are found in the 'Differences in graduate earnings between arts and culture subjects' sub-section.

We also assessed Model 2 by splitting the sample in two ways. We first compared results from different years, assessing whether any differences were consistent across graduate cohorts. This is particularly relevant as our dataset includes both graduates whose data was collected prior to the Covid-19 pandemic and those whose data was collected during the pandemic, which may lead to important differences. Second, we compared results between graduates who ended up working in arts and culture jobs and those who did not. These results are shown in the 'Variations in arts and culture graduates' earnings' sub-section.

We then repeated this process with each of our three measures of self-assessed job quality. Once again, we included three models in each case: the first one included UCAS Tariff points, prior subject mix and whether a graduate studied an arts and culture subject; the second added a set of other factors; and the third distinguished between different arts and culture subjects, while also splitting the sample by academic year, occupation and industry.

We present results through predicted values based on the regressions – that is, we hold all other factors constant, and show the predicted values for our key characteristics. This is in order to make visible the practical significance of any differences that we see; as the sample size is very large, the majority of coefficients are statistically significant, but in many cases do not accompany large differences in the parameters of interest. Full regression results can be found in the online supplementary materials.

## Modelling results: graduate earnings

### Subject choice and graduate earnings

Consistent with previous research, we find major differences in earnings between graduates of arts and culture subjects and other subjects. This is the case both in Model 1 – where only UCAS Tariff points, subject mix at post-16 education, and arts and culture HE are taken into account – and Model 2 – where we take other variables into account. However, around one third of the difference in the earnings between graduates of arts and culture subjects, and of other subjects, can be explained by these other factors, such as the fact that graduates of arts and culture programmes are more likely to be women and more likely to have graduated from post-92 universities. The full set of results for this analysis can be found in the online supplementary materials.

Figure 3.13 indicates the magnitude of these differences, by showing the predicted earnings for graduates who are similar to each other aside from their subject of study in HE – one

studied an arts and culture subject and the other studied a different subject. In the left-hand panel, we show the results based on Model 1, where the only differences are accounted for by subject mix prior to HE, UCAS Tariff points, and subject of study in HE. The right-hand panel shows results based on Model 2, in which the differences incorporate other factors. We hold all other factors constant. However, in some cases, the factors that we are holding constant are significantly associated with self-assessed job quality – for example, whether people are in managerial or professional jobs. It is for this reason that the numbers are, on average, higher in Model 2.

Figure 3.13 shows that the average earnings for an arts and culture graduate with an average set of Tariff points who had taken a mix of arts and culture and other subjects prior to university are around £19,500 per year, while for someone with similar characteristics who did not study an arts and culture subject, the figure is around £22,500, a difference of around £3,000 per year. These findings do not take into account the occupation or industry of these graduates.

**Figure 3.13. Predicted earnings by subject studied in HE**



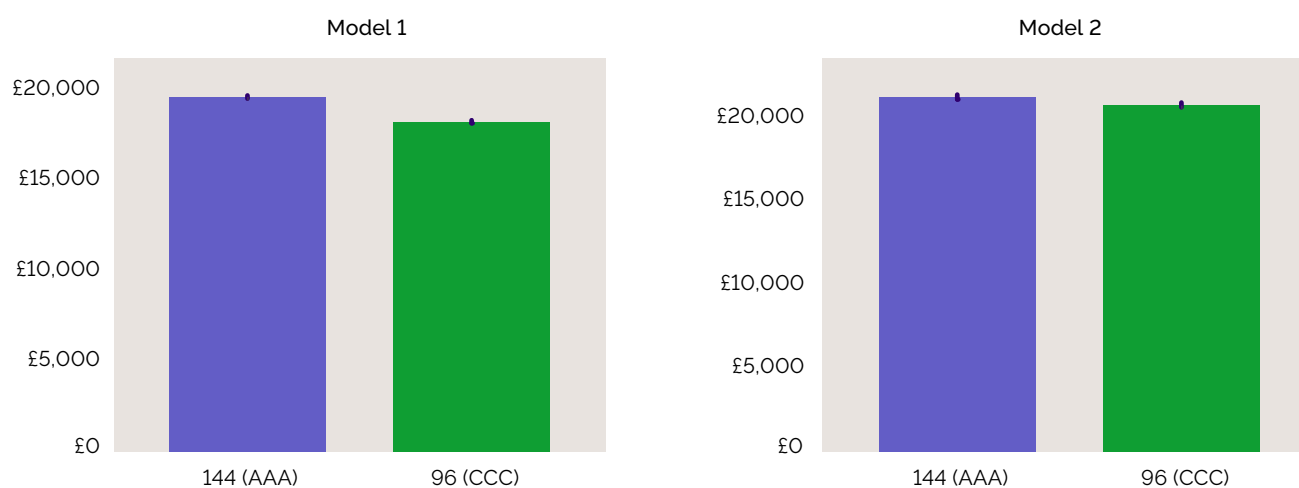
Source: Authors' analysis of a tailored dataset provided by Jisc

However, once we take other factors into account, comparing graduates who also are female, White, from a state-funded school or college, from POLAR quintile 5, from a household where the main income earner was in a managerial or professional occupation, have no reported disability, are using their skills and qualifications in their work, are in the North West, and are working in a professional, scientific or technical industry in a managerial or professional occupation, and graduated in academic year 2020/21, the difference decreases significantly. In that case, the arts and culture graduate receives income of around £21,000, with their peer who studied a different subject receiving an income of around £23,000, a difference of around £2,000. This demonstrates the scale of the difference. The differences in income received by graduates of arts and culture programmes and other programmes are substantial but not enormous; around a third of them can be explained by other factors.

The scale of this difference can be compared with the equivalent for students with different Tariff points on entering university, shown in Figure 3.14.

This figure shows that, in Model 1, for students entering HE with Tariff points equivalent to AAA (three A grades) at A level, who have studied arts and culture subjects, the expected income is around £20,000. The equivalent for students entering HE with Tariff points equivalent to CCC (three C grades) is around £18,000. Once we take other factors into account through Model 2, the equivalent figures are around £21,000 and £20,000, respectively, a difference of around £1,000 or 5%. However, we should note that there is a strong relationship between Tariff points received and the types of universities attended by students, with lower scores, on average, for students in the post-92 sector. As university type is one of the variables accounted for in Model 2, this goes some way to explaining the much smaller difference.

**Figure 3.14. Predicted earnings by UCAS Tariff points**



Source: Authors' analysis of a tailored dataset provided by Jisc

### Differences in graduate earnings between arts and culture subjects

Figure 3.13 shows that there are differences between the predicted earnings for graduates of arts and culture subjects and graduates of other subjects. These differences may, at least in part, be explained by factors other than the subjects studied themselves, such as by the makeup of the student body studying these subjects. It may also be that the category of arts and culture subjects includes significant variation, as indicated by Figure 3.5. For this reason, we extended the analysis from models 1 and 2 by analysing arts and culture subjects separately. Figure 3.15 shows the predicted earnings associated with different arts and culture subject areas, based on an extension of Model 2. It takes humanities as the reference category, based on the finding in Figure 3.5 that graduates in this area receive higher earnings, on average, than arts and culture graduates, but lower earnings than graduates of other subjects.

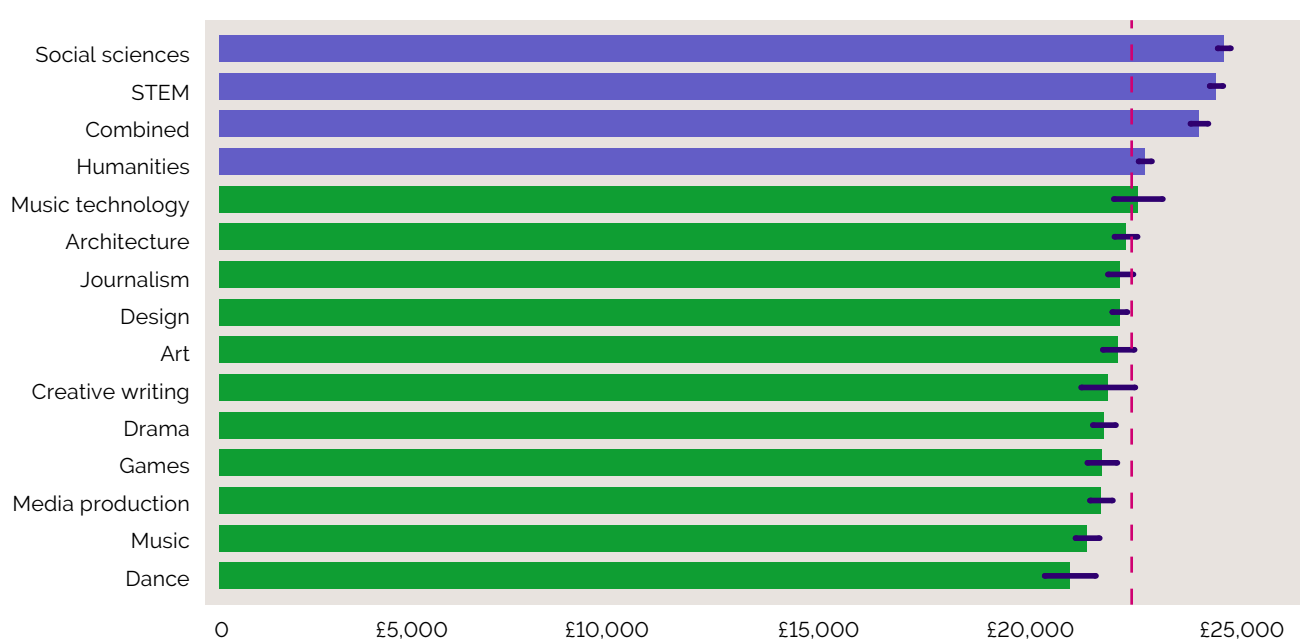
Our model reinforces the finding that graduates of social sciences, STEM subjects, and combined programmes receive the highest average

earnings, with those differences persisting net of the other variables in the model.

While graduates in the majority of arts and culture subjects receive lower earnings, on average, than graduates from humanities, incorporating other factors in our estimates introduces some nuance to the story. While music technology graduates have lower earnings, on average, than graduates of several other arts and culture subjects, once we take other factors into account, their predicted earnings are in fact the highest of all arts and culture subjects. By contrast, games graduates may be the highest-paid, on average, of all arts and culture graduates, but once other variables are taken into account, their predicted earnings penalty is similar to that of art graduates.

These differences are shown in Figure 3.15. This shows that, holding other variables constant, predicted earnings for arts and culture graduates range from around £21,700 for music technology graduates to around £20,000 for dance graduates. By comparison, holding the same variables constant, social sciences graduates have predicted earnings of around £23,700.

**Figure 3.15. Predicted earnings by subject studied in HE**



Source: Authors' analysis of a tailored dataset provided by Jisc



### Variations in arts and culture graduates' earnings

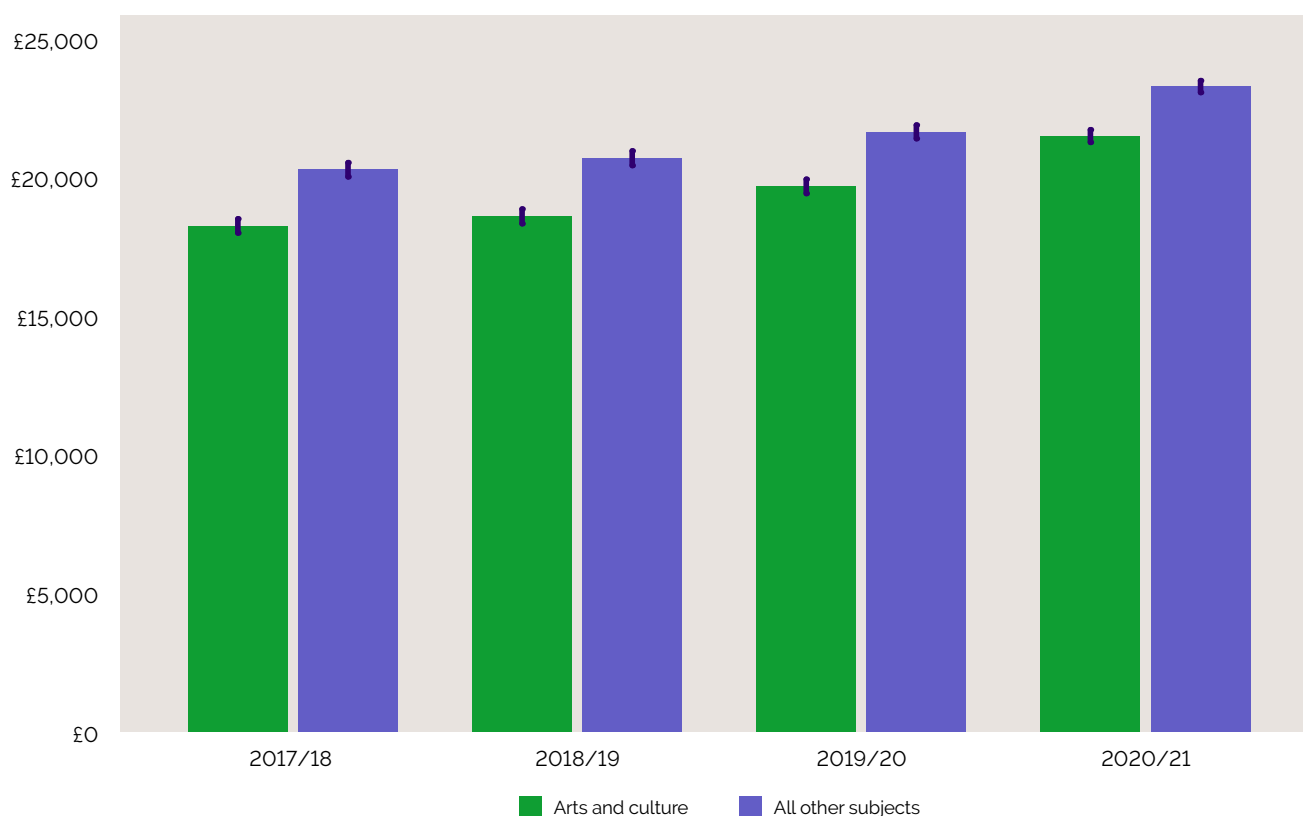
So far, we have demonstrated differences in earnings between arts and culture graduates and other graduates, and highlighted differences within each of these categories. We have also shown that around a third of this difference in earnings can be explained by other factors. Next, we look at whether this relationship was similar across all the years in the dataset, and for graduates working inside and outside of arts and culture industries and occupations.

We start with differences for cohorts from different academic years. While there are no statistically significant differences between the academic years 2017-2018 to 2019-2020, the difference in earnings between arts and culture graduates and other graduates is statistically

significantly smaller for the 2020-2021 cohort than the 2017-2018 and 2018-2019 cohorts. There is no difference for the 2019-2020 cohort.

The scale of these differences by year can be seen in Figure 3.16. Predicted earnings are significantly higher in 2020/21 for graduates of arts and culture subjects and of other subjects, rising from around £18,000 and £20,000, respectively, for the first cohort to around £21,000 and £23,000, respectively, for the final cohort. In the case of the 2020-2021 cohort, this accompanies the shock to the labour market caused by the Covid-19 pandemic. However, the size of the difference in predicted earnings between arts and culture graduates and other graduates remain fairly consistent over the period, in spite of the changes to the arts and culture industries in which some of these graduates were working.

**Figure 3.16. Predicted earnings by arts and culture subjects versus other subjects studied in HE and survey year**



Source: Authors' analysis of a tailored dataset provided by Jisc

Next, we look at the impact of the industry and occupation that an arts and culture graduate enters. This is motivated by the results in figures 3.8 and 3.9, which showed that, compared to other graduates, arts and culture graduates were both more likely to work in ACH occupations and industries, but also less likely to work in managerial and professional occupations more generally. For this reason, we fit models separately for graduates who are working in arts and culture occupations and graduates who are not.

Arts and culture graduates have lower predicted earnings than other graduates irrespective of what industry they work in. However, for arts and culture graduates working in ACH industries, compared with their peers working in those same industries who studied different subjects, the differences are small, at 3.1% less than all other graduates. By contrast, for those arts and culture graduates who do not go on to work in ACH industries, the difference is much larger, at 10.5% less than all other graduates.

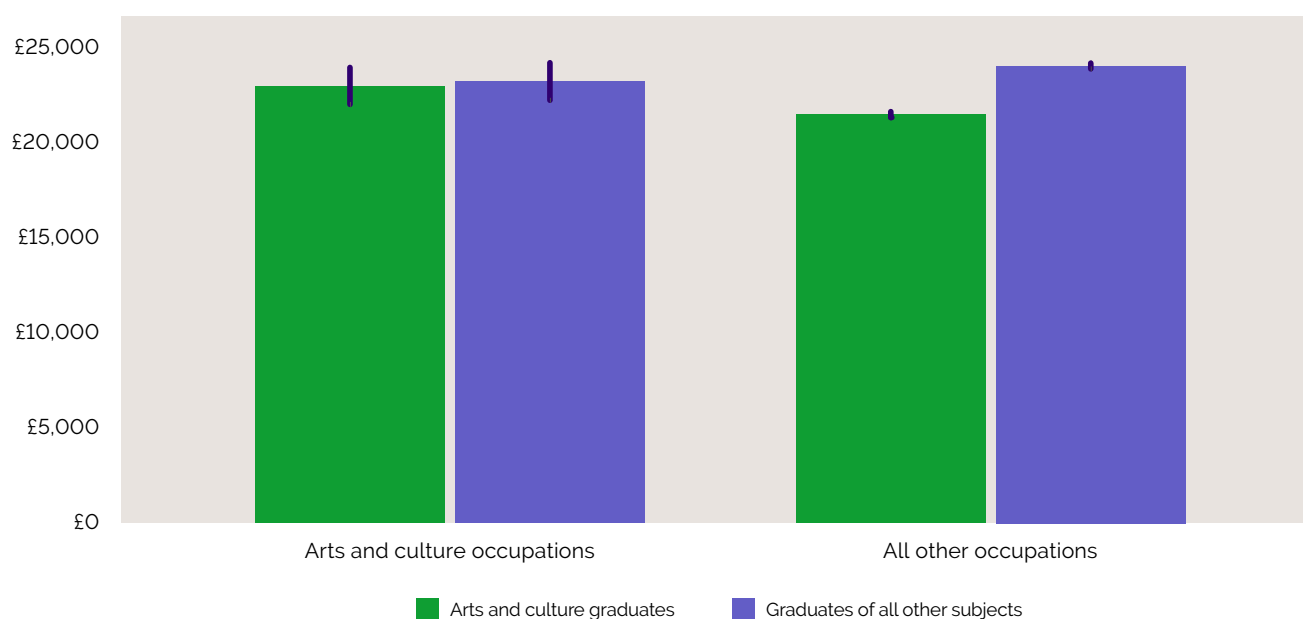
For occupations, we do not observe any statistically significant differences among people working in arts and culture occupations

based on whether or not they are arts and culture graduates. However, there is a very large difference for those graduates working in other occupations: we estimate that arts and culture graduates working outside of arts and culture occupations are paid 11.8% less than all other graduates in those same occupations.

The difference between arts and culture occupations and other occupations is statistically significant. This finding is important in several ways. It reinforces the problem of all graduates – irrespective of their subject in HE – facing low pay in the arts and culture sectors. This is in a context where, as figures 3.8 and 3.9 demonstrated, the vast majority of arts and culture graduates do not end up in an ACH industry or occupation.

We illustrate the scale of the difference in Figure 3.17. Again, based on holding all other factors constant, the earnings of arts and culture graduates working in arts and culture occupations are around £23,000; the same is true for graduates of other subjects. By contrast, the equivalent figures in all other occupations are around £21,500 and £24,000.

**Figure 3.17. Predicted earnings by subject studied in HE and occupation**



Source: Authors' analysis of a tailored dataset provided by Jisc

## Modelling results: self-assessed job quality

### Subject choice and self-assessed job quality

This section introduces analysis of self-assessed job quality across three measures: whether people's current work fits with their future plans, whether people's current work is meaningful and important to them, and whether people are using what they learned in their studies in their work.

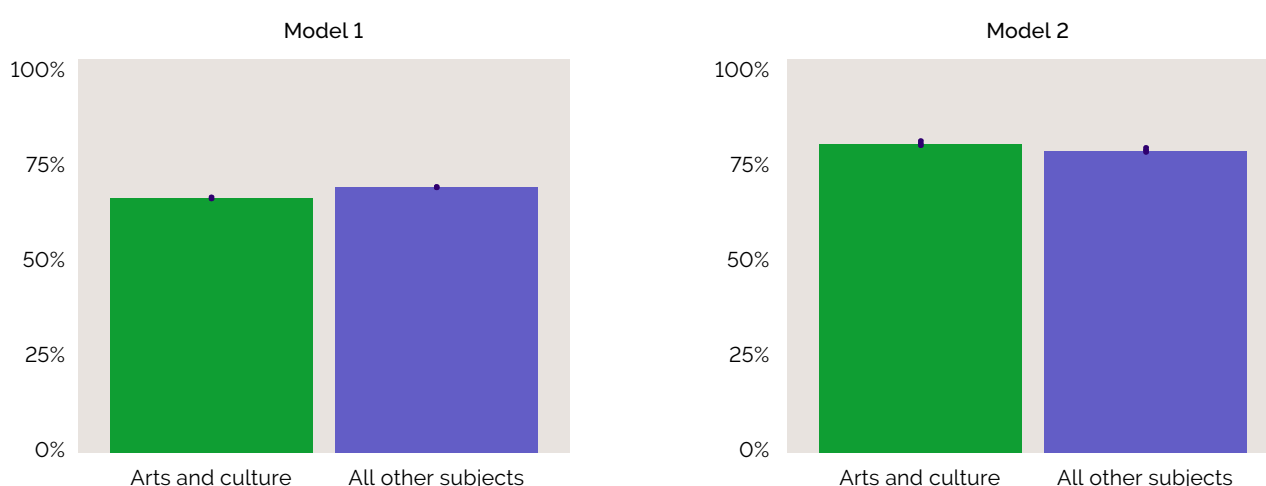
As for the modelling results for graduate earnings, our first step was to estimate differences between people who studied arts and culture subjects in HE and people who studied other subjects, initially only controlling for UCAS Tariff points and subject mix prior to HE; once again, we refer to these results as Model 1. We then extended this through the introduction of additional controls, and then distinguished between each of our categories within the arts and culture subjects group, referred to as Model 2.

Figures 3.18 to 3.20 illustrate the differences between arts and culture graduates and all other

graduates on the basis of the first model (in the left-hand panel) and then on the basis of the second model (in the right-hand panel), in which several other variables have been taken into account. As in the earlier models on graduate earnings, these adjustments involve holding certain factors constant, resulting in higher overall predicted values in the right-hand panels. For this reason, we focus particularly on the scale of the differences.

We start with whether people use what they learned in their study in their current work (Figure 3.18). In the first model, where the only additional variables are prior subject mix and UCAS Tariff points, arts and culture graduates are less likely to agree with this statement: when we hold all other variables constant, the percentages are 65% and 68%. However, once we incorporate control variables into the model, such as gender and university type, the levels of agreement reverse; with these adjustments made, arts and culture graduates are in fact more likely to agree with the statement, with predicted values of 78% compared with 77%.

**Figure 3.18. Predicted probability of agreeing with the statement 'I am using what I learned during my studies in my current work' with other variables held constant, by subject studied in HE**



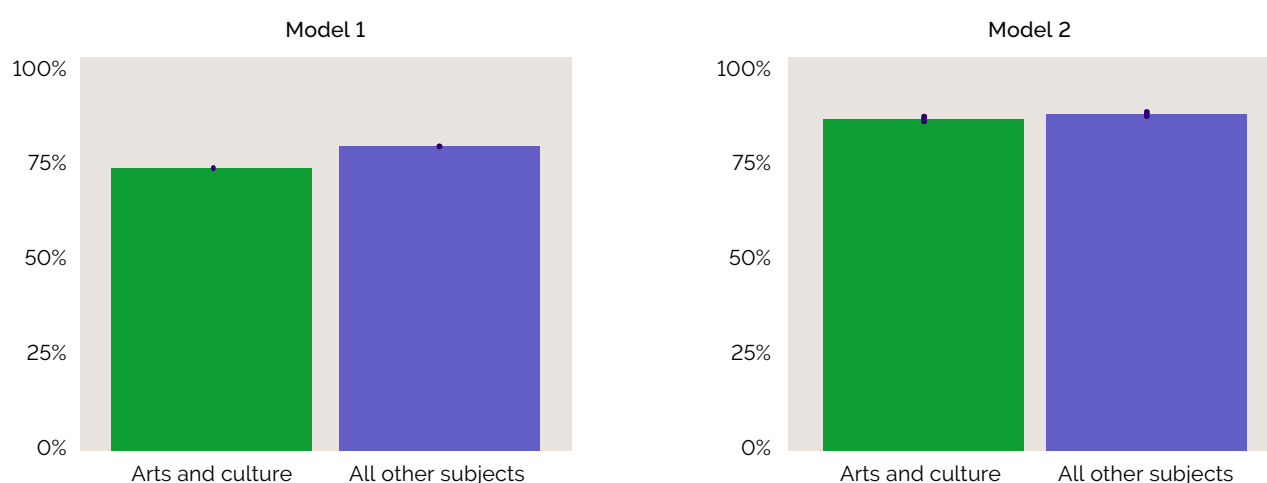
Source: Authors' analysis of a tailored dataset provided by Jisc

In both cases, these differences are statistically significant. This suggests that the differences shown in Figure 3.10 are primarily a consequence of the student body of arts and culture programmes, rather than the programmes themselves. However, it is important to highlight that while these differences are statistically significant, the percentage point differences are not large: self-assessed job quality measured in this way is similarly high for these two groups.

As we move to whether people's work fits with their future plans (Figure 3.19), we see larger differences in the initial model, where arts and

culture graduates are significantly less likely to agree with this statement. Holding the other variables constant, this corresponds to 75% and 80%. This difference becomes far smaller once other variables are taken into account, with a difference of just two percentage points: 87% and 89%. However, this difference does not change direction in the way that it does for the previous variable. While arts and culture graduates are still less likely to agree with this statement about their job quality, the differences are very small once we take other factors into account.

**Figure 3.19. Predicted probability of agreeing with the statement 'My current work fits with my future plans' with other variables held constant, by subject studied in HE**

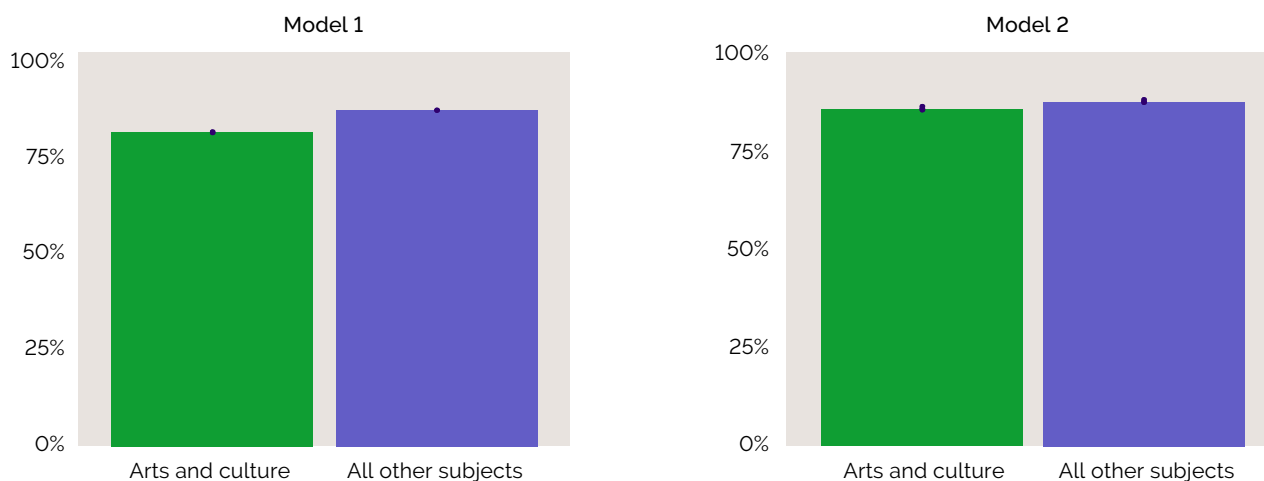


Source: Authors' analysis of a tailored dataset provided by Jisc

Our final variable in this set is whether people's work is meaningful and important to them (Figure 3.20). It is in this case that the differences are the largest, with arts and culture graduates significantly less likely to agree with the statement: 81% and 87%. However, as with the previous item, these differences become much smaller once other variables are taken into account: 87% and 89%. While the larger

differences between arts and culture graduates and other graduates are very important here, we should also note that this is the question that has the greatest degree of agreement overall, and the smaller percentage of agreement among arts and culture graduates nonetheless reflects positive responses to questions about job quality among most of them, even adjusting for several other characteristics.

**Figure 3.20. Predicted probability of agreeing with the statement 'My current work is meaningful and important to me' with other variables held constant, by subject studied in HE**



Source: Authors' analysis of a tailored dataset provided by Jisc

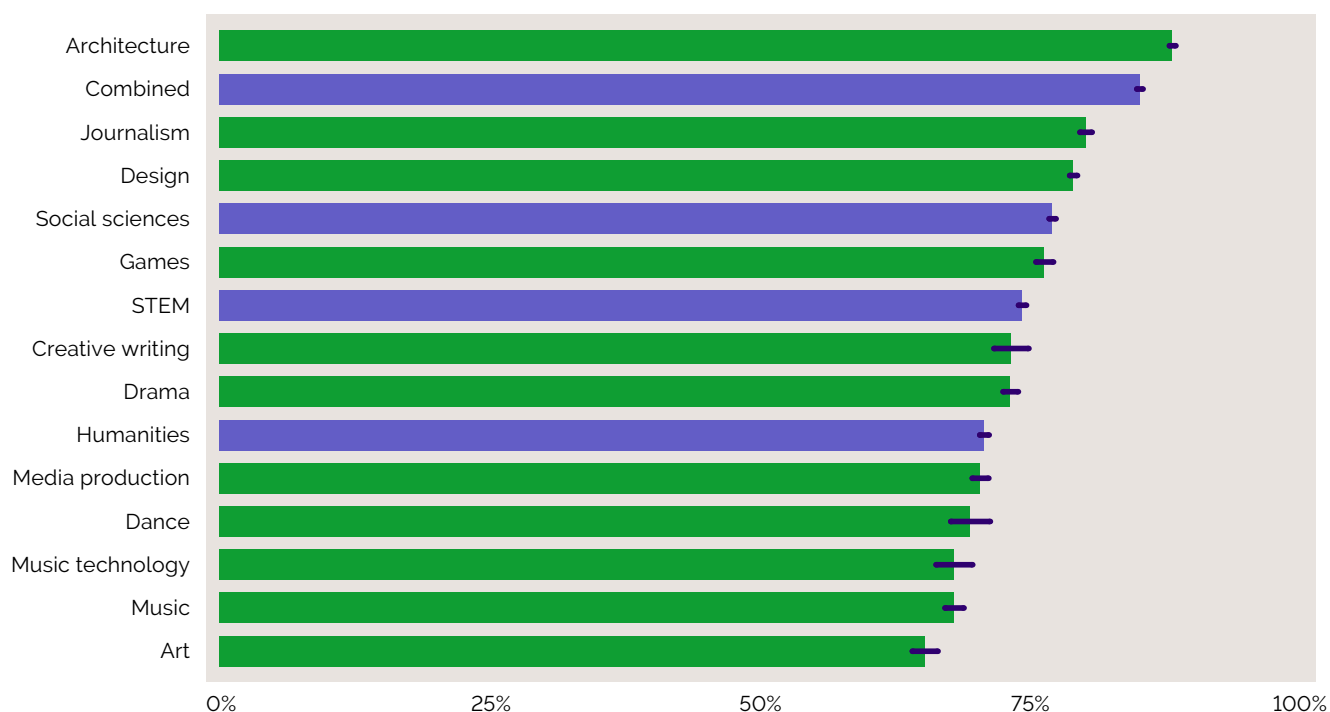
### Differences in self-assessed job quality between arts and culture subjects

We have established that the story with respect to self-assessed job quality among graduates of arts and culture programmes is mixed. Differences are broadly small, with arts and culture graduates being slightly more likely to say they are using what they learned in their study, slightly less likely to say their work fits with their future plans, and moderately less likely to say their work is meaningful and important to them. However, we saw in the results for differences in graduate earnings that earnings among graduates vary moderately in different arts and culture subjects, and there might be similar patterns for self-assessed job quality. We address that here by extending the analysis in the previous sub-section.

Figures 3.21 to 3.23 show the predicted probabilities of responding 'yes' to each of three statements, holding all other variables constant.

As in the previous section, we start with whether graduates are using what they learned in their study in their current work, shown in Figure 3.21. Adjusting for other variables, architecture graduates are by far the most likely to agree with this statement, at 88%. In Figure 3.10 they were behind only graduates of combined programmes, most of whom studied education, but the model adjustments described above show that the differences we can ascribe to individual subjects results in an even greater difference for these architecture graduates.

**Figure 3.21. Predicted probability of agreeing with the statement 'I am using what I learned during my studies in my current work' with other variables held constant, by detailed subject studied in HE**

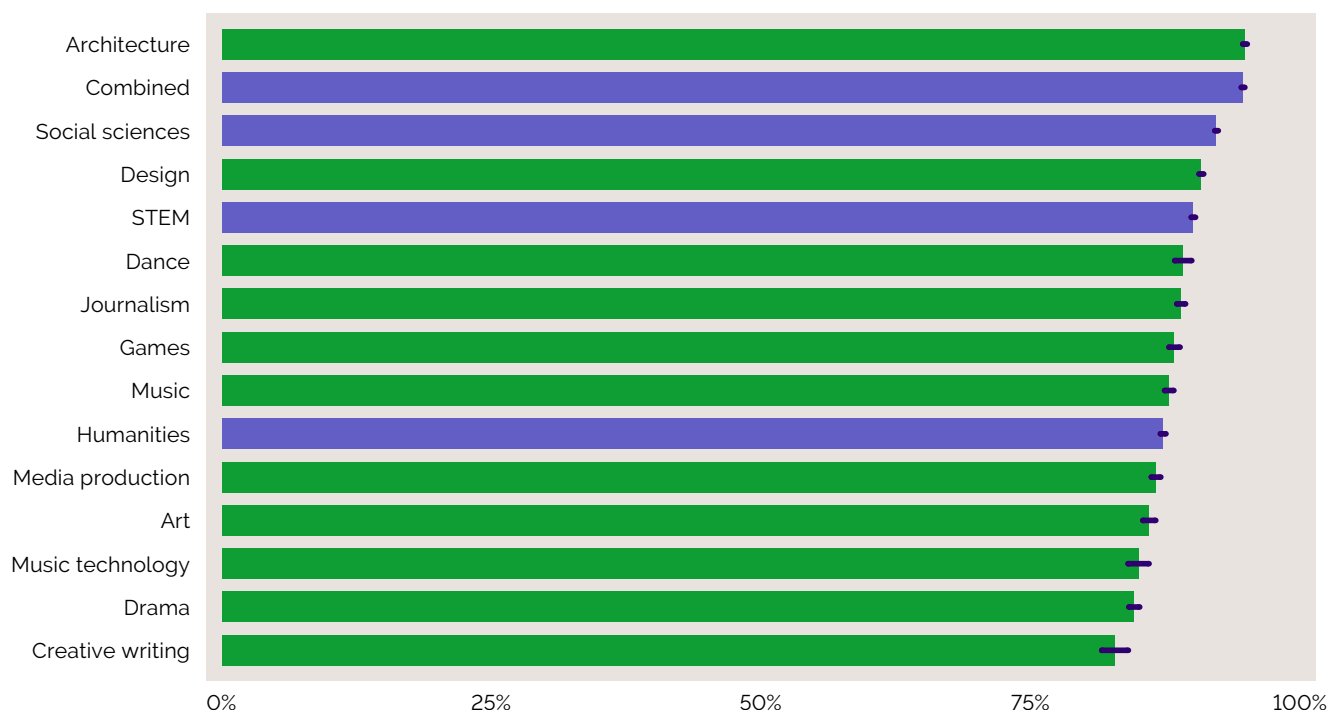


Source: Authors' analysis of a tailored dataset provided by Jisc

Graduates of journalism (80%) and design (79%) are statistically more likely to agree with this statement than humanities (71%), STEM (74%) and social sciences (77%) graduates. Differences are also statistically significant relative to humanities for games (76%) and drama (73%), while for creative writing, dance, media production and music technology, the percentages are not statistically significantly different from humanities. However, for art (65%) and music (68%) the percentages are statistically significantly lower. To reiterate, these differences are accounted for when other variables are included in the model: for example, while the raw percentages show that music graduates are more likely than humanities graduates to agree with this statement (as shown in Figure 3.10), the predicted probability suggests that this is partly a reflection of the composition of music programmes.

We next move to whether people's work fits with their future plans (Figure 3.22). In this case, architecture students are once again very likely to agree (92%). There is no other arts and culture discipline where the figures are statistically significantly greater than for social sciences (89%) and STEM (87%), but the predicted agreement for design (88%) is statistically significantly greater than for humanities (85%). Most arts and culture subjects are not statistically significantly different from humanities, including art, dance, games, journalism, media production, music and music technology. However, the figures for drama (82%) and creative writing (80%) are significantly lower, while very high in absolute terms. Overall, arts and culture graduates seem similar to graduates of other subjects on this measure of self-assessed job quality, although we should remain alert to the exceptions.

**Figure 3.22. Predicted probability of agreeing with the statement 'My current work fits with my future plans' with other variables held constant, by detailed subject studied in HE**



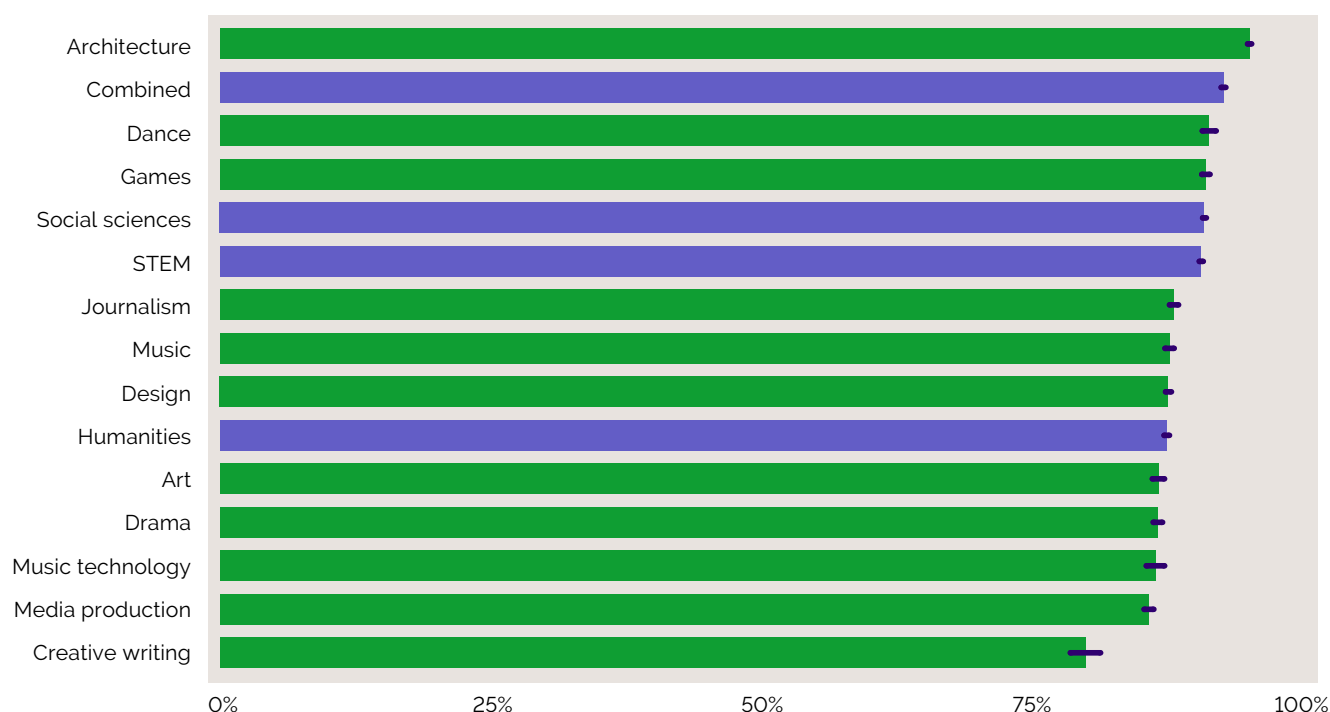
Source: Authors' analysis of a tailored dataset provided by Jisc

Our final measure of self-assessed job quality is whether people's work is meaningful and important to them, with results shown in Figure 3.23. In the previous sub-section, we showed that arts and culture graduates are less likely to agree with this statement than other graduates. Here, we see this varies significantly by individual discipline. Architecture graduates are once again by far the most likely to agree with the

statement (93%), while figures are also very encouraging in relation to dance graduates (89%). Some disciplines show similar probability of agreement to humanities (86%): art (85%), design (86%) journalism (86%), music (86%), and music technology (85%). Others, however, are statistically significantly lower, particularly creative writing (78%),



**Figure 3.23. Predicted probability of agreeing with the statement 'My current work is meaningful and important to me' with other variables held constant, by subject studied in HE**



Source: Authors' analysis of a tailored dataset provided by Jisc

When we consider these figures together, we once again see a mixed picture in terms of the self-assessed job quality for arts and culture graduates. In the case of architecture, graduates score highly on all three measures. For many subjects, the figures are consistently similar to those for other disciplines. Several subjects have lower percentages of people agreeing with statements about job quality relative to subjects outside our arts and culture category, and in the case of the question about whether people's work is meaningful and important to them, some of these differences are large. However, there are no subjects where these differences are significant and negative across all three questions.

### Variations in arts and culture graduates' self-assessed job quality

We saw in the sub-section 'Variations in arts and culture graduates' earnings' that arts and culture graduates working in arts and culture occupations had similar earnings to other graduates working in those same occupations; it was arts and culture graduates working outside of arts and culture occupations who saw were earnings differences compared to other graduates.

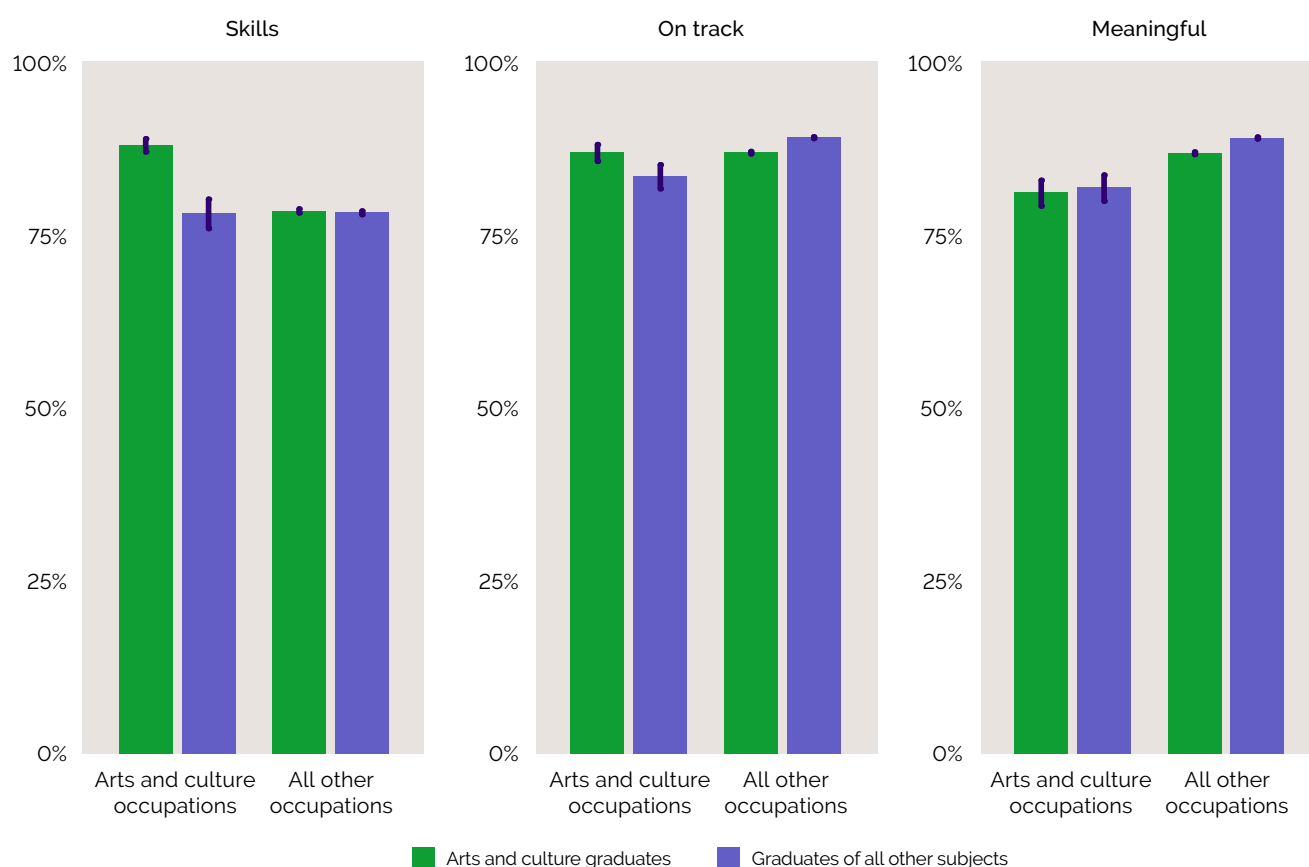
However, our analysis of self-assessed job quality has shown a more mixed picture. It may be that some of the mixed picture is, again, driven by the types of occupations that arts and culture graduates work in, with those in arts and culture jobs more likely to assess their job quality positively.

For this reason, in Figure 3.24, we reproduce our previous sets of models split between those people working and arts and culture occupations, and those working in other occupations. Once again this figure reports predicted probabilities holding all other factors equal, and full model results can be found in the online supplementary materials.

Figure 3.24 shows a significant difference in whether graduates describe themselves as using what they learned in their studies in their

work (the left-hand panel). Holding other factors constant, around 78% of graduates respond positively to this question. The exception is arts and culture graduates working in arts and culture roles, where the figure is fully ten percentage points higher, at 88%. Notably, this means that arts and culture graduates working outside of arts and culture jobs are similarly likely as graduates of other subjects to state they are using what they learned in their studies in their current role.

**Figure 3.24. Predicted self-reported job quality by arts and culture subjects and occupation**



Source: Authors' analysis of a tailored dataset provided by Jisc

The differences in terms of whether arts and culture graduates consider their work to fit with their future plans are smaller (see the middle panel). Recalling Figure 3.19, arts and culture graduates are less likely to agree with this statement overall. However, in arts and culture occupations, the difference between arts and culture graduates and other graduates is small and not statistically significant. Among graduates working in other jobs, the predicted probability for graduates of arts and culture subjects to agree is statistically significantly lower, but the practical difference is very small, at 87% compared with 89%.

Finally, we come to whether people's work is meaningful and important to them (the right-hand panel). This was the statement with the largest differences between arts and culture graduates and other graduates in earlier sections (see figures 3.20 and 3.23). However, we can see from the results in Figure 3.24 that this difference is of a similar magnitude whether

people are working in arts and culture jobs or in other jobs, with 81% compared with 82% for people working in arts and culture jobs, and 87% compared with 89% for people working in other jobs. These results also highlight the fact that people working in arts and culture jobs are significantly less likely to describe their work as meaningful and important to them.

These results reinforce the mixed picture with respect to self-assessed job quality for arts and culture graduates. Arts and culture graduates working in arts and culture jobs are much more likely to be using what they learned in their studies, while those working in other jobs are no less likely to be doing so than graduates of other programmes. For the other two measures of self-assessed job quality – the statement that work fits with future plans and the statement that work is meaningful – arts and culture graduates are less likely to agree, but only by a very small margin, irrespective of whether they are working in an arts and culture job.

## 4 Conclusion

**Our analysis has generated important new insights on the relationship between HE and arts and culture sectors. Just as the existing academic literature has demonstrated a range of inequalities in creative HE (e.g. Wreyford, 2023; Holt-White et al., 2024), the analysis adds considerable depth to our understanding of how those inequalities operate.**

There are three key insights from the analysis. First, the relationship between studying an arts and culture degree and entering the arts and culture sectors is complex. Although larger proportions of arts and culture graduates enter the arts and culture sectors compared with graduates of any other type of subject, the proportions for individual subjects, such as art or drama, are still low.

Second, pay is a challenge for arts and culture graduates. They face lower pay than other graduates when they enter all industries and occupations outside of the arts and culture sectors. This pay differential does not apply for those arts and culture graduates working in ACH industries or ACH occupations.

Third, the challenge of pay for arts and culture graduates does not impact the way these graduates assess the quality of their jobs and their careers.

The headline around earnings reinforces existing research into arts and culture graduates' destinations, and this is accompanied by significant challenges for policymakers as well as creative sector employers and HE institutions. However, the findings around self-assessed job quality add nuance to the picture, with broadly positive results for those graduates working in arts and culture occupations, though neutral results on some dimensions of self-assessed job quality.

We must note the limitations of our analysis. HESA's Graduate Outcomes data gives information on earnings fifteen months after graduation. Our analysis does not tell the complete story of arts and culture graduates. It does not explain their longer-term outcomes, nor does it consider outcomes outside of their earnings, industries and occupations, and self-assessed job quality. Some of these graduates – paid relatively poorly fifteen months after graduation – will go on to much higher-paid work and roles from which they derive enormous satisfaction. These findings emphasise the importance of data collection that is longer term and which includes self-employed people, while also covering a broader range of measures of job quality.

There is no one single explanation for our findings. There are several contributing factors. These start before the graduates enter HE, continue through their choice of institution and subject, and compound with their choice of industry and occupation. These factors are also grounded in demographic inequalities present at each of these education and career stages.

The opportunity from these findings is grounded in the strong relationship between arts and culture graduates' perceptions of their skills and careers if they enter ACH jobs. There is a chance to transform both demographic inequalities in the workforce and graduate dissatisfaction if there are more opportunities in ACH roles. Expanding these sectors, as part of a broader industrial strategy for the creative sector, is central to the government's current thinking.

This is thrown into stark relief by the fate of arts and culture graduates working in arts and culture occupations. They have similar earnings to their peers who did not study arts and culture subjects. This suggests it is not the arts and culture subject that is impacting earnings after graduation. Rather, it points to labour market conditions.

A significant finding is that around 50% of the difference in earnings between arts and culture graduates and graduates of other subjects is due to student demographics and university type. The other 50% results from the low earnings received by the arts and culture graduates who do not go on to arts and culture occupations.

Our research has also highlighted nuanced evidence on the earnings of arts and culture graduates fifteen months after graduation and provided findings on dimensions of arts and culture graduates' work beyond the undue focus on earnings. We have shown that a large fraction of the difference in earnings can be explained by factors other than graduates' choice of subjects. The same is true for aspects of self-assessed job quality. This is most striking in the case of whether graduates agree that they use what they learned in their studies in their current work: while simple averages show that arts and culture graduates are less likely to agree that they do, once we take other factors into account, this pattern reverses, with arts and culture graduates working in arts and culture jobs being particularly likely to agree with this statement.

More generally, the difference between arts and culture graduates and other graduates in their self-assessed job quality, once we take these other factors into account, are generally small. This reinforces the long-standing finding that creative students in HE are strongly motivated by their subject of study and the desire to pursue a career in related sub-sectors.

This combination of factors means policy interventions will need to be tailored to the various elements our analysis has identified. As a starting point, interventions must work with students' motivation and demand. As numerous studies have shown, there are huge diversity and inequality issues associated with entry to creative HE courses (Comunian et al., 2023). This is most acute at the most prestigious institutions (Holt-White et al., 2024). It is essential that these inequalities are not compounded by their experience at university. Moreover, given that the majority of arts and culture graduates do not go on to arts and culture occupations, HE institutions must do their part to widen participation and transform their relationship with the creative sector. Those institutions whose activity in this area is more mature should be celebrated and emulated.

We consider our findings, which address the time point fifteen months after graduation, worthy of consideration. For graduates in arts and culture subjects, the experience of low pay and failure to transition into arts and culture occupations in these key months following graduation may well combine to close off the possibility of a career in the arts and culture sectors later on. This may lead to important mismatches and inequalities persisting for the long term – inhibiting both access to high-quality roles in the ACH sectors and to fulfilling and rewarding roles beyond. However, the findings around self-assessed job quality are more encouraging. They suggest that some of the challenges associated with arts and culture subjects are not peculiar to those sectors, and reinforce the importance of a well-functioning labour market for all.

As a consequence of the limitations of the data available to us, our findings do not capture every dimension of arts and culture graduate destinations. We reiterate our call for a rethink of data infrastructure around graduate destinations, not just for arts and culture graduates but more broadly, allowing a longer-term holistic account.

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# Data statement

This report uses data derived from a tailored dataset provided by Jisc (enquiry number 281902). Rounding and suppression has been applied according to the Higher

Education Statistics Agency standard rounding methodology. More details can be found at <https://www.hesa.ac.uk/about/regulation/data-protection/rounding-and-suppression-anonymise-statistics>

# Glossary

**A levels** (Advanced Level General Certificates of Education) are subject-based qualifications in the English, Welsh and Northern Irish education systems. Students can normally study three or more A levels over two years. A levels are usually assessed by a series of examinations. Most students who take A levels start their courses after completing their General Certificates of Secondary Education (GCSEs) at the age of 16.

**Arts and culture subjects** are disciplines that focus on artistic expression, imagination and innovation. In this report, we break arts and culture subjects into the following categories: architecture, art, creative writing, dance, design, drama, games, media production, music and music technology. We recognise that definitions vary and that other analysts include some additional subjects and exclude others. The full mapping of individual programme codes to these categories of arts and culture subjects can be found in the online supplementary materials.

**Arts, culture and heritage (ACH) occupations** refer to occupations that focus on preserving, promoting, creating and interpreting artistic, cultural and historical works and sites. Our definition of ACH occupations is based on the Standard Occupational Classification 2010. The set of occupations we classify as ACH occupations can be found in the online supplementary materials.

**AS (Advanced Subsidiary) levels** are subject-based qualifications in the English, Welsh and Northern Irish education systems. AS levels are usually assessed by a series of examinations. Prior to 2016, they were the first part of the A level qualification, which is usually studied over two years; since then, they have existed as standalone qualifications, equivalent to half an A level. AS levels are usually taken in the year following General Certificates of Secondary Education (GCSEs).

**BTEC Diplomas** are vocational qualifications associated with the Business and Technology Education Council and offered by Pearson in the UK. It is designed to provide students with practical, skills-based education that prepares them for specific career paths or higher education, such as university courses or apprenticeships.

**Creative industries** refers to industries that have creativity at their core. Definitions of creative industries vary in different countries.

The **National Statistics Socio-Economic Classification (NS-SEC)** measures the employment relations and conditions of occupations. It has been rebased on Standard Occupational Classification (SOC) 2010. It is a system used in the UK to classify individuals based on their occupation and employment status, providing a measure of social position or class. Our use of NS-SEC is based on the classification of the highest income earner in the household at the point of application to university, where available. It distinguishes four groups: NS-SEC I, higher managerial and professional occupations; NS-SEC II, lower managerial and professional occupations; NS-SEC III to NS-SEC V, intermediate occupations; and NS-SEC VI to NS-SEC VIII, semi-routine and routine occupations and those who have never worked or are long-term unemployed.

**Participation of Local Areas (POLAR)** is a classification system used in the UK to measure the level of participation in higher education across different geographic areas. Quintile 1 contains the 20% of Middle Super Output Areas with the lowest percentage of young people proceeding to university, while Quintile 5 contains the areas with the highest percentage.

**Post-16 education** refers to the stage of education that students engage in after the age of 16. In England, Wales and Northern Ireland, this is the stage that follows completion of General Certificates of Secondary Education (GCSEs), while in Scotland this is the stage that follows the completion of Standard Grades.

**Post-92 institutions** include all higher education institutions (HEIs) that have gained university status since 1992. This includes the thirty-five HEIs that were polytechnics prior to 1992, as well as a large number of universities established subsequently. The full list of post-92 institutions can be found in the online supplementary materials.

**Pre-92 institutions** include all universities that held university status prior to 1992. Our operationalisation of pre-92 institutions excludes the twenty-four universities in the Russell Group. The full list of pre-92 institutions can be found in the online supplementary materials.

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**The Russell Group** is an association of twenty-four research-intensive higher education institutions (HEIs). These are predominant among the HEIs with the highest-earning graduates. The full list of Russell Group HEIs can be found in the online supplementary materials.

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**Scottish Advanced Highers** are qualifications in the Scottish education system that students can take after completing their Highers.

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**Scottish Highers** are subject-based qualifications in Scotland, typically taken by students aged 16 to 18. Most students take between four and six Higher subjects.

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**Specialist institutions** comprise institutions with a particular focus on arts and culture programmes, including art colleges, drama schools and conservatoires. The full list of specialist institutions can be found in the online supplementary materials.

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**Standard Industrial Classification (SIC)** is a system used in classifying business establishments and other statistical units by the type of economic activity in which they are engaged. It is structured by sections, divisions, and groups and classes.

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**Standard Occupation Classification (SOC)** is a common classification of occupational information based on the type of work performed in the UK. The SOC system organises occupations into a hierarchy of four levels, from the broadest major groups to specific unit groups.

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**STEM subjects** refer to the academic disciplines of science, technology, engineering and mathematics.

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**UCAS (Universities and Colleges Admissions Service) Tariff points** translate students' qualifications and grades into a numerical value. Many qualifications (but not all) have a UCAS Tariff value, which varies based on the scale of the qualification and the grade students achieved. This numerical value is used by UCAS to assess whether students meet their entry requirements for a particular course.

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