



# Disconnected: Career aspirations and jobs in the UK

Education  
and Employers

# Disconnected: Career aspirations and jobs in the UK

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## Summary

A major new report reveals a disconnect between young people's career aspirations and jobs in the UK, whether current vacancies or projected demand. This report is based on an international survey of over 8,500 people aged 14-18. There were over 7,000 responses from young people in the UK and this report focuses on their responses.

### Key findings:

- The sectors that young people aspire to work in differ greatly from the jobs available. There is a disconnect between aspiration and opportunity;
- The majority of young people are certain about their job choices – but there is a three-fold disconnect or worse between aspirations and demand in almost half of the UK economy;
- For instance, five times as many young people want to work in art, culture, entertainment and sport as there are jobs available. Over half of those respondents do not report an interest in any other sector;
- Young people are confident in their choices and the disconnect is strikingly similar at age 17/18 as at age 14/15, with similar patterns to the jobs to which children aspire at age 7/8. Such certainty and consistency of young peoples' career choices throughout their teenage years suggests that this disconnect from available jobs, and the frustrations and wasted energy it produces, will require significant effort to resolve;
- Many young people report only limited careers support from their schools and colleges, but those who are benefitting from careers activities and multiple career influences in secondary education have aspirations that are – in aggregate – better connected to the labour market;
- Effective careers support reduces the disconnection between aspirations and jobs. Extending best practice could change the lives of 100,000 school leavers per year.

Extending and improving careers activities in secondary schools and colleges alone could reduce the disconnect by up to a fifth (equivalent to around 100,000-125,000 young people leaving school each year). Schools and colleges cannot solve this disconnect alone; employers must also play an engaged role, both by bringing their insights into schools and by ensuring the opportunities they offer future workers are attractive and inspiring.

Improved career support in secondary school and the expansion of career-related learning in primary schools has the potential to drive considerable benefits to the economy via reduced skills shortages and better alignment, along with the many other benefits of enhanced provision. Research has established a positive relationship between young people's engagement with the world of work and their GCSE attainment.<sup>1</sup> Young people with links to employers are likely to earn more and are less likely to be NEET (Not in Education, Employment or Training).<sup>2</sup> And careers related learning in primary schools plays a key role in getting children excited about learning as well as tackling ingrained stereotypes and narrow aspirations they often have.<sup>3 4</sup>

This report is timed to be launched alongside new analysis of PISA data by the OECD, also published on the 22<sup>nd</sup> January 2020 in partnership with Education and Employers. The launch of “*Dream Jobs? Teenagers’ Career Aspirations and the Future of Work*”, will take place at the secondary school in Davos during the World Economic Forum (WEF). The students at the school have all been asked to write about their views on the future of the world, the issues that matter to them and their own career aspirations. A number of WEF delegates will visit the school and talk to the students about views and aspirations – the first time the WEF event has been used as a direct catalyst for supporting career events at local schools.

## Recommendations

Our findings suggest that a concerted effort is required to tackle this aspiration-reality disconnect, building on the recent progress made in careers education and the greater emphasis placed on careers by the Government and the ambitions of its Careers Strategy. The latest “*State of the Nation*” report from the Careers and Enterprise Company shows that careers education is improving in England.<sup>5</sup> But, as this report shows, much more needs to be done to ensure that all young people get access to high quality, independent impartial careers advice and guidance so they can understand the opportunities available to them, regardless of their background.

Good practice must be extended and intensified. Young people’s aspirations and planned pathways to their desired jobs need to be engaged with and, if necessary, constructively challenged. It should be supported by better and more accessible projections of labour market demand - showing likely levels of competition in particular jobs and sectors. Our results suggest starting in secondary education is too late.

From age 7 we need to ensure that children get to meet a range of people from different backgrounds and doing different jobs. People who can help bring learning to life, show them how the subjects they are studying are relevant to their futures. We need to stop children ruling out options because they believe, implicitly or explicitly, that their future career choices are limited by their gender, ethnicity or socio-economic background. This is not about providing “careers advice” in primary schools but breaking down barriers, broadening horizons and raising aspirations, giving children a wide range of experiences of the world including the world of work.<sup>6</sup> It is about opening doors, showing children the vast range of possibilities open to them and helping to keep their options open for as long as possible. We need to ensure that every young person has the equality of opportunity to express their talents and lead full and meaningful lives.

Our findings suggest that a concerted effort is required by all sides to tackle this severe aspiration-reality disconnect - a three-fold disconnect or worse between aspirations and demand in almost half of the economy. Education can have a transformative impact, but it is important to recognise the role of employers as well in tackling limited aspirations to work in their sectors: not just in explaining the opportunities to students, but ensuring those opportunities are attractive, with appropriate conditions, remuneration and progression, as well as support for fulfilling and flexible careers.

This report calls for a significant expansion of career related learning in primary schools, more support for careers guidance in secondary schools, better labour market information for young people and better use of that information, as well as more help for parents and more engagement by employers.

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## Introduction

The *Your Voice* survey received responses from some 7,000 young people in the UK aged 14-18, as part of a broader global survey. It asked them about their career aspirations, who had influenced them, what help and support they had received, and the issues that mattered most to them. The interim findings are reported here, weighted by age and gender to improve the representativeness of the results. The survey was conducted by Education and Employers in partnership with OECD Education and Skills, TES Global, ASCL and NAHT and supported by a range of organisations including WorldSkills, Careers and Enterprise Company, PiXL, CareerMap and Speakers for Schools. It builds on and provides new data and insights in addition to previous work undertaken by Education and Employers which looked at how young people's aspirations have almost nothing in common with the jobs available.<sup>7 8</sup> This report focuses on career aspiration. It does not seek to assess the suitability of the curriculum or qualifications.

The narrowness of young people's career aspirations echoes new analysis of the Programme for International Student Assessment (PISA) data by the OECD entitled "*Dream Jobs? Teenagers' Career Aspirations and the Future of Work*". The analysis of 500,000 15 year olds from 41 countries shows that the career expectations of young people have changed little over the last 20 years and, if anything, have become more concentrated in fewer occupations.

This report explores the disconnect between aspiration and available jobs. The first section addresses the confidence young people have in their choices. The differences and similarities by age come next, then young people's views of the support received from schools and colleges, followed by insights from the dataset about what measures can improve the disconnect. A further section suggests why this research matters before the results are broken down by geography and by gender. The final chapter explains the methodologies used through the work.

## Disconnected: The jobs young people want aren't there

Young people aged 14-18 were asked which of 21 sectors they wanted to work in, so that the results (weighted by age and gender) could be compared with current and projected future demand in the UK. The results show that there is a disconnect between the sectors that young people want to work in and the availability or number of jobs in that sector.

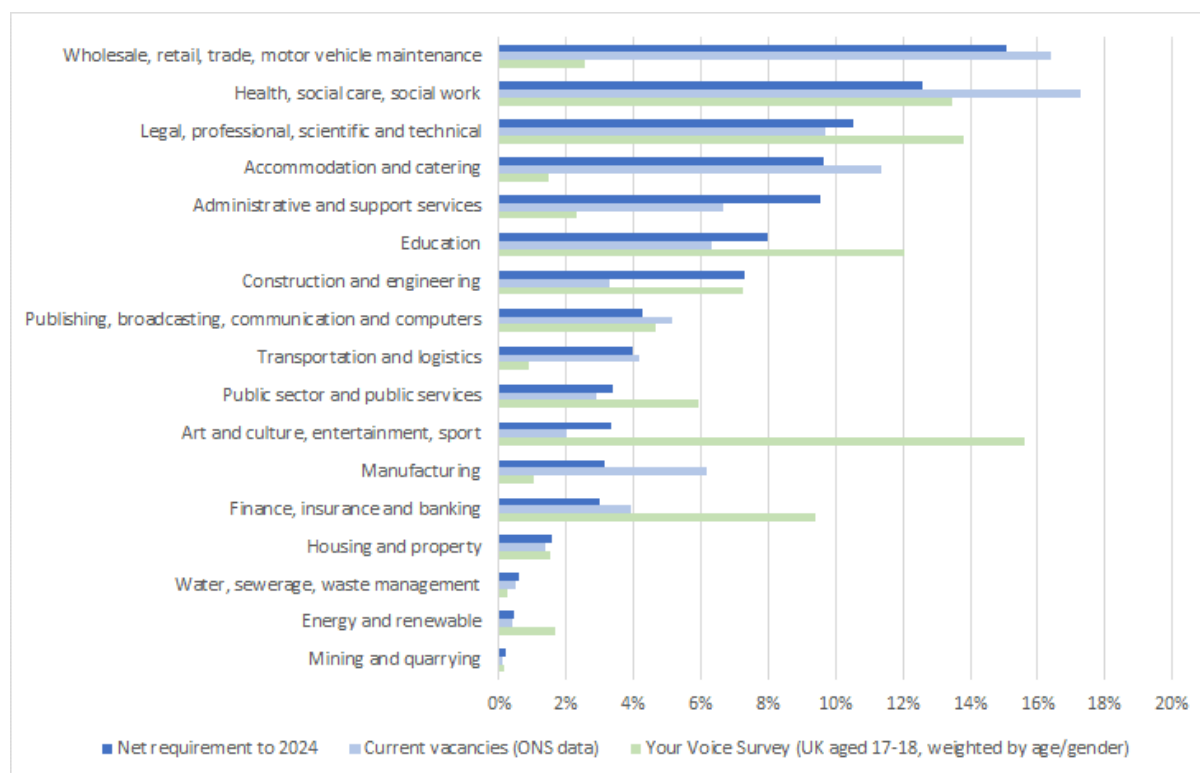
Young people were presented with the simplified sectors from the standard industrial classification categories (SIC), which combines a large number of roles and jobs into single sectors. This simple approach helps to keep the survey manageable, but means we rely on young people's individual interpretations of what a sector incorporates, rather than making precise distinctions among, for instance, occupations vs. industries and roles vs. functions. As a result, it is more appropriate to focus on the major overall patterns of aspirations and demand, rather than to focus on small differences for individual sectors.

Current vacancies are December 2019 data from the ONS. Projected future demand is based on the net requirements analysis to 2024 by the UKCES for the Government.<sup>9</sup> The methodology is explained further in the methodology chapter.

By age 17 or 18, schools and colleges have typically had a large amount of time to support pathway decision making and young people are already making choices that define their futures. Graph 1 focuses on the 934 young people aged 17 or 18 who were able to identify at least one sector of interest (as 87% were able to) and contrasts their interests against labour market demand. Where

young people are interested in working in more than one sector, their interest is equally divided among those sectors.

Graph 1: UK current and future vacancies contrasted with young people's desired jobs aged 17-18



\* Please see methodology chapter for the margin of error (at a 95% confidence interval) for young people's sectoral aspirations. Sectors listed account for 97% of net requirements to 2024.

The greatest excess of aspirations relative to projected job requirements is in art and culture, entertainment and sport, where five times as many 17 and 18 year olds want to work (15.6%) compared to the projected demand in the economy (3.3%). More worryingly, for 51% of these UK respondents, this was the only sector in which they expressed an interest; a further 26% were only willing to consider one or two other sectors. The excess supply points towards a likely future shortage of places, stiff competition, and possible downward pressure on wages and conditions in these sectors.

The greatest shortfall of interest, as a ratio, lies in accommodation and catering which needs almost seven times as many students (9.7% of the economy) as are expressing an interest (1.5%). Wholesale and retail trade similarly sees a very large shortfall – 2.6% expressing interest against 15.1% required. Narrow perceptions may be part of this explanation, with young people not realising the diversity of roles and opportunities available in the sector. Nonetheless, while narrow perceptions persist, such sectors are likely to face difficulties in recruitment – as they often report today – and will have to draw on staff with little prior interest in the sector, requiring more support to get up to speed, perhaps feeling more dissatisfied at work and being less productive.

Table 1 summarises the shortfall or excess by sector and shows that almost half of the economy faces an excess of aspirations at least three times higher than demand, or an excess of demand at least three times higher than aspirations.

Table 1: Sectors with large shortfalls or excesses in aspirations

Sector with a major shortfall of aspirations	Ratio of demand to aspirations	Proportion of net requirement to 2024
Accommodation and catering	6.6x	9.7%
Wholesale, retail, trade, motor vehicle maintenance	5.9x	15.1%
Transportation and logistics	4.6x	4.0%
Administrative and support services	4.2x	9.6%
Manufacturing	3.1x	3.1%
<b>Sector with a major excess of aspirations</b>		
Sector with a major excess of aspirations	Ratio of aspirations to demand	Proportion of net requirement to 2024
Art and culture, entertainment, sport	4.7x	3.3%
Energy and renewables	3.9x	0.4%
Finance, insurance and banking	3.1x	3.0%

8.3% of UK 17 and 18 year olds responded that they “didn’t know” which sector they might wish to work in. The majority of these also didn’t identify any indicative sector of interest and so are excluded from Graph 1. This finding points towards some possible flexibility in the labour market, but far less than would be required to make up the shortfall in all the under-served sectors, even if they were ultimately persuaded into them.

The massive disconnect between aspirations and reality is not confined to this study – the phenomenon has been identified consistently in multiple studies. For instance, the *Your Voice* survey confirms previous work such as *Drawing the Future*<sup>10</sup> and *Nothing In Common*<sup>11</sup> that show a discrepancy between aspirations and available jobs, and reinforces findings in the OECD report *Dream Jobs?*<sup>12</sup>

## Too much confidence, too few alternatives

Aspiring to work in a highly competitive sector is not in itself problematic, at least not on an individual-by-individual basis. The British economy needs a large number of people in, for instance, entertainment, energy and finance. Some of those young people aspiring to those sectors will succeed and go on to have fulfilling and productive careers – we all rely on them doing so.

The problem is when young people entertain too few alternatives, being over-confident of their future success, over-certain in their preferences or insufficiently informed about the scale of competition and average likelihood of success in their chosen area. An aspiring footballer or singer, for example, with the right potential should be encouraged to pursue their dream – but also to spend time understanding alternative careers and being ready with alternative plans.

The *Your Voice* survey raises significant concerns about the breadth of options young people are considering. Among the 87% of 18 year olds who feel able to select at least one sector they are interested in, the majority (68%) only identify a single sector of interest, and a further 25% only identify two or three sectors (see Table 2).

Table 2: Number of sectors (out of 21) in which young people expressed interest by age

Number of sectors young people selected	14	15	16	17	18	All ages
0	22%	17%	16%	13%	13%	16%
1	44%	49%	49%	55%	59%	51%
2	18%	18%	19%	19%	14%	18%
3	9%	10%	8%	7%	8%	8%
4	4%	3%	4%	4%	3%	4%
5+	4%	3%	3%	2%	3%	3%
Sample size (unweighted)	2823	1601	1148	758	513	6645

Over time, young people feel more able to identify at least one sector they are interested in, up from 78% at age 14 to 87% at age 18. Some of this uncertainty reflects not knowing how a particular job interest relates to an overall industrial sector. For instance, 95% of UK respondents provided some specific detail when asked a free text question about the job they might like to have at age 30.

More generally, young people have a firm idea about the career they wish to pursue – with 76% being either fairly or completely certain (78% among 17-18 year olds) – and the majority (58%) fairly or very confident they will be able to achieve it.

Despite this confidence, responses to the question “What steps will you need to take to get to your ideal job?” reveal wide variation in level of detail and consideration described by different young people. A qualitative review of responses across the UK suggests that few young people have, or are willing to describe, a detailed knowledge of the pathway(s) necessary to get to the job they want.

Many responses mention only hard work, good grades or going to university. One atypical answer is from Sarah<sup>1</sup>, 15, from Kings Lynn, who wants to be a physiotherapist. To give such a detailed answer is highly unusual compared to our other survey respondents, especially given her age. It is worth reproducing in full:

*“I will do the best I can in GCSEs by passing or getting better than a pass. Then I have applied for the extended diploma of sports science to a level three at the College of West Anglia. This is then a 3-4 day course so on my spare days I have away from college I hope to get a part-time job so I can earn money to both save for a future at a university and also pay for snowboarding sessions so that I can achieve my BASI to become a snowboard instructor. After my college course I then hope to get into a university with my college diploma which has enough UCAS point to qualify as 3 A-levels however if in the future I decide I am wanting to go to Loughborough I will also need to do an A-level. But I have not looked properly into which university it is that I would like to go to just that the course I take at college will allow for me to go into physiotherapy in university.”*

## Disconnect by age

The survey reveals a concerningly similar picture at age 14/15 as age 17/18 (see Graph 2). The certainty and consistency of young peoples’ career choices throughout their teenage years suggests

<sup>1</sup> All names are altered to protect the original identity.



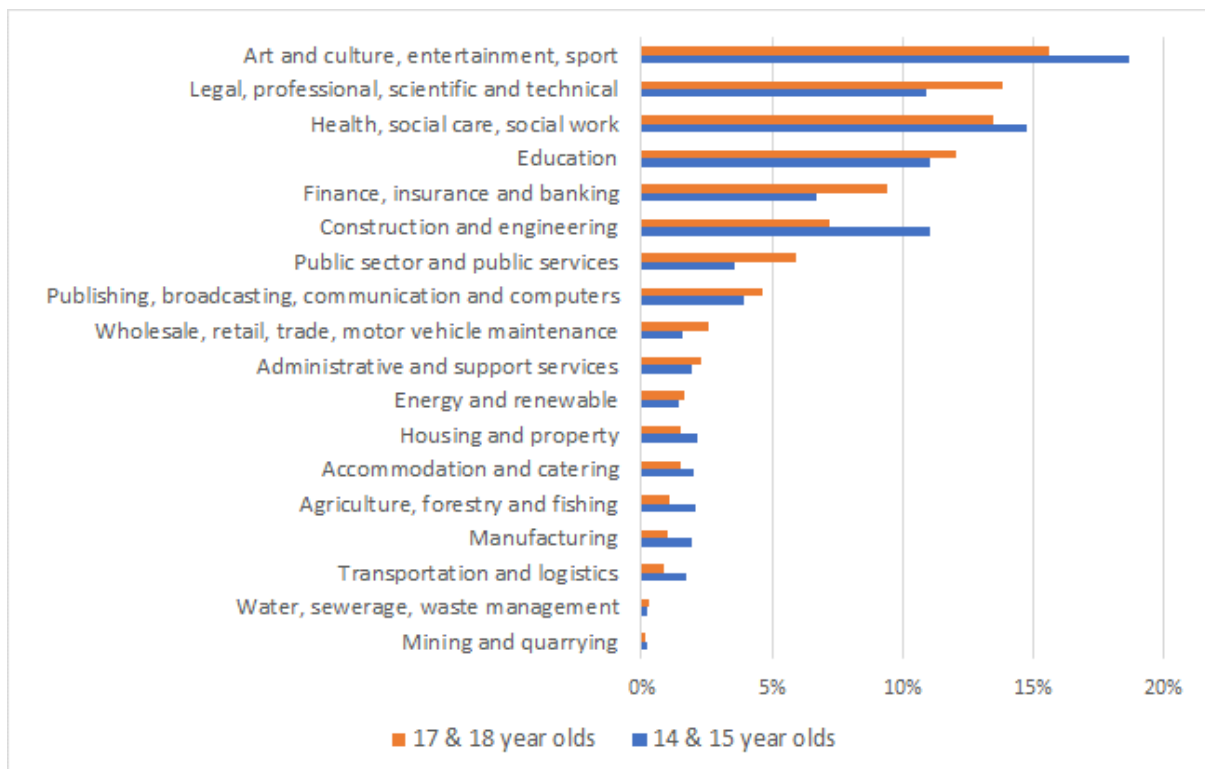
that this disconnect, and the frustrations and wasted energy it too often leads to, will require significant effort to resolve.

In some sectors, the level of disconnect moderates slightly among older respondents. For instance, slightly fewer want to work in art, culture, entertainment and sport at age 17/18 (15.6% compared with 18.7%). Slightly more are considering retail and wholesale trade, 2.6% as opposed to 1.6%.

However, in other sectors the disconnect has worsened. For instance, 9.4% want to work in finance, insurance and banking, compared to 6.7% at age 14-15: but such jobs are still only projected to make up 3.0% of demand for new workers.

Overall, absolute levels of disconnect are similar at age 14/15 as age 17/18. One way of measuring aggregate disconnection, as described in the methodology chapter is to add up the absolute differences in percentage points between aspirations and availability for each sector to create an index. By this measure, the disconnection index is 65% pts for both age ranges.

Graph 2: Sectoral aspirations in the UK, students aged 14/15 compared to those aged 17/18



### Careers aspirations are set early

Education and Employers previously published the results of a large scale survey of primary age students, *Drawing the Future*, which is drawn on in table 3 below. Comparing the top 99% of all jobs aspired to by 7 and 8 year olds, we see similar patterns in several key areas.

Table 3: Top sectoral preferences among the top 99% of dream jobs of 7 and 8 year olds (UK; n=5,092) compared to 17 and 18 year olds

Sectoral preferences	Aged 17/18	Age 7/8
Art and culture, entertainment, sport	16%	44%
Health, social care, social work	13%	16%
Education	12%	13%

Public sector and public services	6%	10%
Construction and engineering	7%	3%
Legal, professional, scientific and technical	14%	3%
Transportation and logistics	1%	3%
Wholesale, retail, trade, motor vehicle maintenance	3%	2%
Administrative and support services	2%	2%
Accommodation and catering	1%	2%
Agriculture, forestry and fishing	1%	1%
Housing and property	1%	0%
Finance, insurance and banking	9%	0%
Publishing, broadcasting, communication and computers	5%	0%
Energy and renewable	2%	0%
Manufacturing	1%	0%

The broad picture is similar. The top four sectors aged 7 and 8 are also three out of the top four sectors aged 17 and 18 – only public sector and public services has dropped out and it remains a popular choice. The sectors with little or no interest aged 7 and 8 have mostly made only small gains by age 17 and 18, often accounting for those sectors facing the most serious shortfalls in student aspiration relative to demand.

There are also some important differences. Over the ten years of growing up, there has been a significant reallocation of interests out of art, culture, entertainment and sports towards a more diverse range of sectors that is a better fit to economic needs, including construction and engineering. Despite this shift, art, culture, entertainment and sport remains very popular, likely due to exposure through TV and social media.

But other sectors, such as finance, insurance and banking or (to a lesser extent) the legal, professional, scientific and technical sector, have over-corrected over the same period. More young people now aspire to jobs in those sectors than exist. And some sectors have lost interest to the detriment of economic needs, such as transportation and logistics or accommodation and catering.

Some of these patterns are not surprising. Age 7 and 8 is a time when fantasy, imagination, inspiration and variety might fairly and rightly be prioritised over labour market alignment. By contrast, many of the 17 or 18 years olds will shortly enter the labour market so could be expected to have more realistic expectations of their future. Contrasting the data reveals a missed opportunity to do more to help young children find inspiration in a broader range of sectors that represents a more balanced fit to economic needs.

## Support from schools and colleges

Many young people recall limited support from their schools and colleges for their career decision making. Only around half of UK young people in the survey felt that their school or college had spent enough time helping them to understand future career pathways and options (47% overall, 53% among just 17-18 year olds; see Table 4).

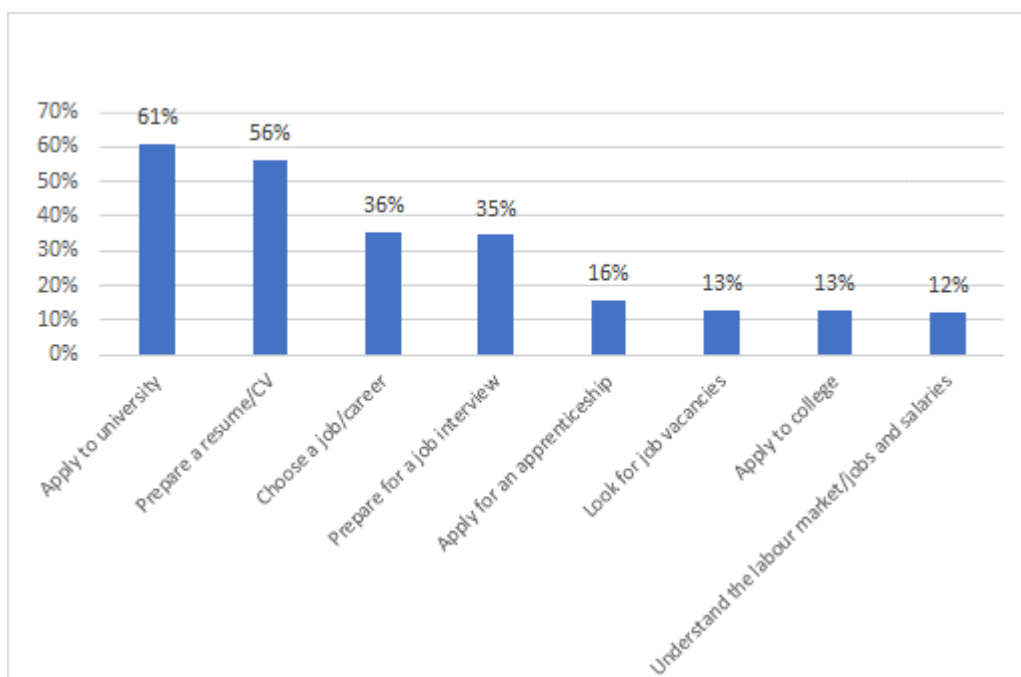
*Table 4: Do you think your school/college has spent enough time helping you to understand future career options and pathways? (unweighted n=6645)*

Response	Weighted results
Not at all	9%

Not really	26%
Don't know	17%
Yes, somewhat	36%
Yes, definitely	11%
<b>Total</b>	<b>100%</b>

In terms of specific activities, the majority of young people aged 17 and 18 report help with university applications and their CV, but only 12% have been helped to understand the labour market and salaries (see Graph 3).

Graph 3: Reported access to school/college support with careers activities (age 17/18)



Very few 17 and 18 year olds describe careers advisers as an influence on their career choice (10%) and similarly few say they have heard a visiting speaker (11%; “someone coming into your school or college who does that job”). With other research identifying the social and economic benefits of improved careers provision and engaging with employers, this data reinforces the missed opportunity of providing these activities at sufficient scale, quality, personalisation and integration into the curriculum to drive impact.<sup>13</sup>

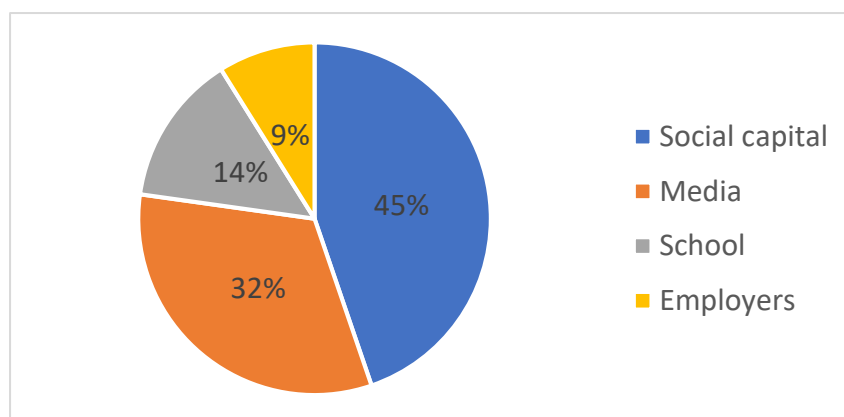
## What can improve the disconnect?

The *Your Voice* survey asked young people how they felt about the usefulness of their education overall, as well as a series of specific activities and influences on their career preferences which schools and colleges have the opportunity to mediate. Across all these activities, there is tantalising evidence that secondary schools and colleges can mitigate the scale of aggregate disconnect, building on prior research in this area that shows the impact of careers-related activities on individual young people.<sup>14</sup>

## Exposing young people to more sources of career influence

Other research has suggested that young people’s career choices are mostly influenced by those around them.<sup>15</sup> Overall, respondents in our survey similarly reported that parents, wider family and connections were the greatest influences on their aspirations. In graph 4 below, social capital is comprised of parent(s)/guardian(s), other member of family (e.g. sister/uncle/grandparent), friends of family, neighbours and friends (for more details on these categories please see methodology chapter).

Graph 4: Frequency of influences on job aspiration (UK respondents)



Rupa, 15, from Huddersfield reported she has “a variety of career ambitions”, but that her “main career ambition is to become a web developer” because she has “been recommended this career by a relative”.

It is not only family that influences young people. Personal experience can inspire aspirations too, such as Rachel, 16, from Wimborne. She wants to be a “educational psychologist or a child counsellor” due to her own experience. Rashid from Walsall, 14, wants to be a mechanical engineer because he enjoys fixing his bike. The key point here is that aspirations come from exposure to that job – as the American activist for children’s rights, Marian Wright Edelman, has said: “You can’t be what you can’t see.”

Stereotypes are a powerful break on aspirations – and often only reveal themselves most clearly when they are being overcome. Jane wants to be “an English teacher in Literature and Language... I found out that my teacher had ADHD like myself! I used to think that I would never be able to have the concentration or patience for anything like standing in front of a class, but that day I thought to myself, ‘If she can do it, so can I’.”

Among the groups of young people who report more sources of influence on their career pathway decisions, aggregate disconnect is lower (see Table 5). Since the proportion of young people who report being influenced by school-level activities remains low, this suggests there is potential for more to be done. For instance, only 10% describe a careers adviser as a source of influence and only 11% mention hearing a visiting speaker.

Table 5: Disconnection index by number of sources of influence on career decision

Number of sources of influence	Sample size (unweighted)	Overall disconnection index
1	2207	106%pts
2	1127	86%pts
3	750	82%pts

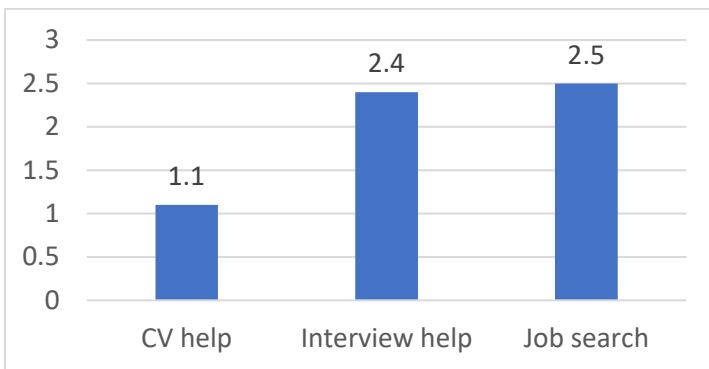
4	381	75%pts
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\* From 5+ sources of influences reported, the sample size drops below 200 and the analysis becomes less reliable.

### Careers support

Other small-scale good practice activities carried out by schools may, even in isolation, be able to have a modest impact on reducing the disconnect, noting that the full benefit of careers support is only expected to be realised in holistic programmes, such as laid out in the Gatsby Benchmarks. For instance, aggregate disconnect was slightly lower among groups of young people that reported help with practical tasks like CVs, interviews and job search from their schools and colleges for certain careers-related activities (see Graph 5). These effect sizes remain small and a larger, structured survey could be designed to elicit them more exactly.

*Graph 5: Reduction in disconnection index among young people reporting careers support compared to those not reporting it [%pt]*



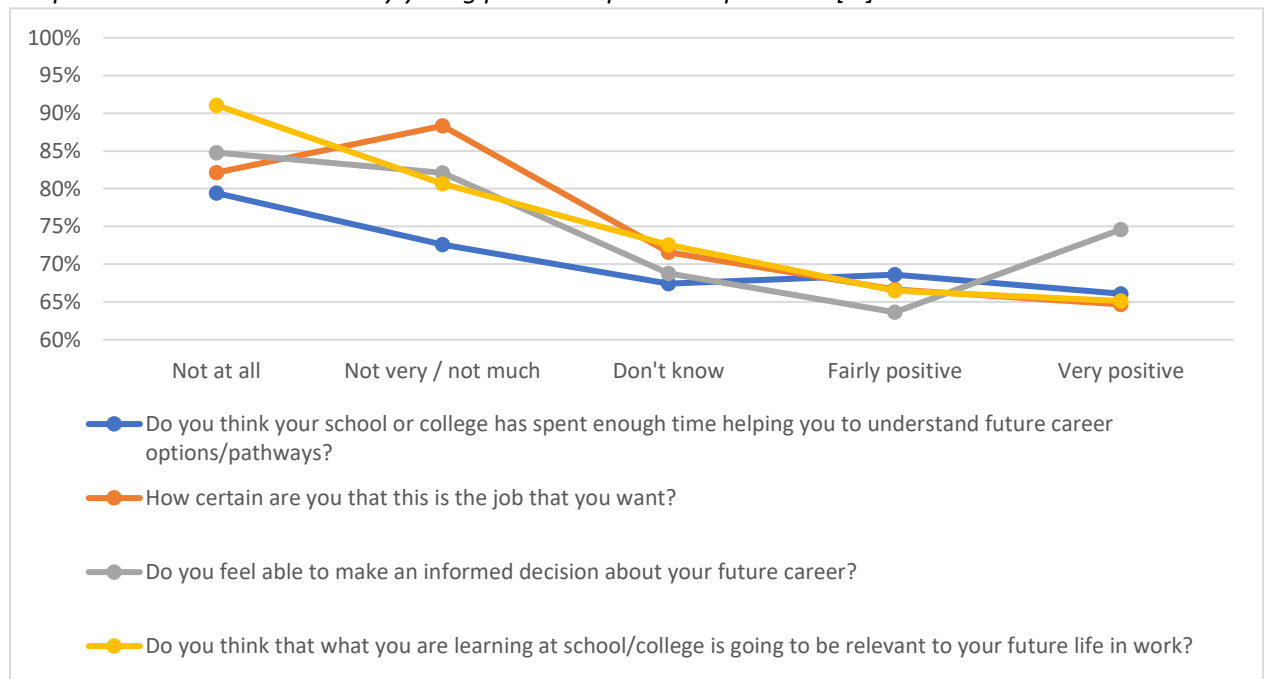
No aggregate benefit was seen in this sample among those reporting help with more complex tasks like job choice or labour market information, suggesting that much more work would be needed to make these activities effective at reducing the disconnect at an aggregate level. For instance, navigating labour market information (LMI) can be very difficult. Despite significant improvements in recent years, such as the development of “LMI For All” and the services that run off it, it is not straightforward to understand labour market projections, the difference between supply and demand, and the likely implications for the level of competition and success rate for different pathway choices. Schools need far more support if they are to do this properly.

Those reporting help with university applications have more disconnected aspirations as a group than those reporting help with college or apprenticeship applications. This may reflect the fact that helping with university applications is often a tactical process – the choice of course has been made, the goal is to help identify where to apply and craft a personal statement that maximises the chance of success. This is understandable and will often reflect what the young person wants from careers support at that time. The additional disconnect may also point towards the potentially slightly more narrow range of aspirations among some of those pursuing a higher education path without fully exploring their ambitions, alternatives and pathway options, in some cases continuing education serves to postpone tough choices. However, it is possible to imagine shifting this approach to incorporate deeper support to young people, provided the time is made available for it. From a disconnect perspective, the implications are not to stop helping young people with university applications, but to combine the provision of such tactical support with appropriate, credible and robust discussions of the future plans, being willing to challenge assumptions around the likely levels of future competition and available jobs where necessary.

## Quality and relevance of education

The aggregate disconnect is markedly lower where schools and colleges succeed in helping young people feel informed and confident in the relevance of their learning. They then feel more certain in their choice of job and more positive about the level of support they have received from their school or college (see Graph 6).

Graph 6: Disconnection index by young person response to questions [%]



Young people who can say with confidence that their school or college has spent enough time helping them to understand future career options have a disconnection index of 66%pts, far lower than the 79%pts among those who are certain their school or college has not. The picture is even clearer among those who feel their learning is relevant to their future life in work – an index of 65%pts among those who are very positive, compared to 91%pts among those who are very negative.

What happens in schools and colleges, including careers support and future-focused education, and how young people feel about those activities, has the power to make a significant difference to the severe structural disconnect between young people's aspirations and the projected needs of the economy.

## Potential overall impact

Focusing on activities within a broadly-defined domain of careers education and support during secondary education, there is potential to reduce the disconnect by up to a fifth, the equivalent of around 100,000-125,000 young people graduating from secondary education each year.

The key driver is introducing young people to enough sources of advice and labour market insight, such that the 60% who currently report only one or two sources of influence report more like three or four, reducing aggregate disconnect among themselves by up to ~15-25% pts (i.e. 10%-15% of the overall disconnect). Providing specific careers support activities may help with a further ~3-6%pts among the two thirds who report no help with interview preparation and the 87% who report no help with job search (i.e. a further 3%-5% of the overall disconnect). As described above it should

also be possible to direct existing careers activities in ways that help more directly with informed pathway decision making, which would on average further reduce the disconnect.

It is important to recognise that these approximate indications of scale are based on associations within this sample data. Future research that draws on an experimental or quasi-experimental design might reveal that the actual impact of such activities is lower (reflecting overlap between activities or background factors that confound the reported associations) or higher (reflecting the potential for high quality and holistic careers provision to have impacts beyond those captured here, i.e. number of sources of influence and tactical careers support on specific topics). For instance, good career support can also help young people make an informed decision about their future career and identify the points of relevance in their work, contributing to the significant relationships described in Graph 6 and further improving the disconnect.

To make greater progress we would want to look both to primary education, to shape the patterns of aspiration leading up to age 7/8 and how those initial instincts are informed over the following years, and to the structure of education during secondary school. The strongest relationship identified in this study is the proportion of young people who feel what they learn at school/college is relevant to their future life in work (see Graph 6). For some young people, this may require reform to curriculum, pedagogy and activities while in education, as well as helping them see the connection between what they are learning and future potential.

## Why the aspiration-demand disconnect matters

The labour markets of the UK and other developed countries are changing.<sup>16</sup> Developments in technology, AI and the rise of a knowledge economy plus globalisation and demographic change is altering the demand for and supply of jobs and skills.<sup>17 18</sup>

Further, as the United Kingdom leaves the European Union, the country's capacity to draw on immigration to meet skills needs will likely be reduced and the labour market may be forced to adapt to meet the new circumstances. This change will be more acute in areas adversely affected by changes in the UK's trading position as a consequence of leaving the EU single market.<sup>19</sup>

The survey shows that most people in the UK are influenced in their career aspirations by social and cultural capital.<sup>20</sup> Parents, family and friends are the greatest influences on the jobs to which young people aspire because it is hard to aspire to a job without knowing it exists. Several survey respondents reflect this, wanting to be teachers for example. Direct personal experiences and life challenges are also a motivation for some. For example, Ralph, 14, from London feels inspired to be a dermatologist because he has eczema.

The skills mix of the future is likely to be different from those to which young people currently aspire.<sup>21</sup> The value that employers place on academic qualifications is decreasing relative to wider skills and competences such as problem solving and communication.<sup>22</sup> Many survey respondents think that just going to university is enough to get them the jobs that they want. Mary, 15, from Bradford exemplifies the reliance on university *"I ...need to get a good Scholarship from a brilliant University. Which will guarantee me to get a job in a fantastic hospital."*

Labour market outcomes for those with lower levels of education have worsened in recent years, for example being more negatively impacted by immigration,<sup>23</sup> or changes in how well workers' education is 'matched' to their job for which there is a "wage penalty associated with overeducation".<sup>24</sup> Men are more likely to be poorly matched and to suffer a worse wage penalty.<sup>25</sup> Overeducation is costly to firms, individuals and the wider economy.<sup>26</sup>

## Call to action

Our findings suggest that a concerted effort is required to tackle this severe aspiration-reality disconnect - a three-fold disconnect or worse between aspirations and demand in almost half of the economy. For many young people, this will lead to disappointment and frustration, as labour market realities force them to change plans at the last minute. For many employers, this reveals one cause of their difficulties in recruitment and the chronic skills shortages in some sectors, and the extra need to train and motivate young people who had never intended to work in their area.

### Primary school through Key Stage 3

Even with the best efforts of existing good practice, this analysis suggests that adjustments to education during the 14-18 phase alone will not be sufficient to tackle the majority of the aspiration-reality disconnect.

Career aspirations are often set by age 8. This sets the bounds for later aspirations which can be seen in the disconnected aspirations at 18. The high level of confidence that these aspirations will be met shows that interventions must begin early to overcome something so deeply ingrained.

**Career related learning is needed in primary schools through to Key Stage 3, tackling stereotypes and aspirational disconnect nearer to their source.**

### 7-11 Education

From age 7 we need to ensure that children get to meet a range of people from different backgrounds and doing different jobs. People who can help bring learning to life, show them how the subjects they are studying are relevant to their futures. We need to stop children ruling out options because they believe that their future career choices are limited by their gender, ethnicity or socio-economic background. It's not about providing "careers advice" in primary schools but instead focussing on broadening horizons and raising aspirations, giving children a wide range of experiences of the world including the world of work.<sup>27</sup> It is about opening doors, showing children the vast range of possibilities open to them and helping to keep their options open for as long as possible.

### 12-18 Education

This analysis reinforces that existing good practice can make a material difference to better aligning aggregate aspirations with reality: providing more and different types of career influence for young people, including visits from employer volunteers; shaping provision and inspiring young people such that they feel their learning is relevant; ensuring young people feel sufficient time is being spent helping them understand future options; and providing core careers support, particularly in CVs, interview help and job search, and in ensuring that careers activities are fully leveraged as opportunities to help young people understand likely future job availability and levels of competition, as well as providing tactical support with immediate questions.

Within the well-understood parameters of good practice, the potential that appears to be least exploited at the moment lies in four areas:

- **More meaningful employer encounters:** Only 11% report hearing visiting speakers who influenced their career choice. Yet diverse types of career influence show a positive link to reduced aggregate disconnect. It's important to give employer encounters the best chance of a 'lightbulb moment' with young people – this is partly about volume (you don't know what you don't know until you see it) and partly about linking encounters explicitly into pathway reflection, iterative research and decision-making. What makes employer engagement special is that it draws upon resources and experiences linked to the world of



work which cannot be easily replicated in the classroom. It offers young people something new and different from what they can normally expect. When young people interact with workplaces (and the people who work in them), they gain access to two primary things:

- access to information about the working world and how it relates to their own decisions about education; and
- opportunity to apply knowledge and skills developed in classrooms in real-world settings. It is in this difference that meaning is found.<sup>28 29</sup>

- **More support for careers education:** Only 10% of young people describe a careers adviser as an influence on their career aspiration. With dramatic disconnects between aggregate aspirations and reality, this suggests that careers advisers and the surrounding careers education have a bigger job to do. In order to do so they need to be appropriately trained and properly resourced, with adequate access to young people to discuss options, challenge assumptions and appreciate the difficulty involved in different paths. Careers discussions can also be integrated more into the day-to-day life of the school or college, whether it's empowering and tracking conversations with tutors, classroom staff or other staff around the school – making sure no young people get missed and everyone gets a chance to engage with an adult they've built a natural relationship with.
- **Improved help understanding the labour market:** Only 12% of young people said they had had help understanding the labour market, the lowest uptake of eight practical support activities asked about. LMI data is easier to access than before, but typically focuses on current salaries/vacancies and remains distant and alien to many young people compared to present-day demands. More advanced and more personalised LMI, drawing out projected demand and supply for specific jobs – with credible accounting for the uncertainties involved in the analysis and the different levels of success under different pathways given a young person's starting point – could help young people understand the likely levels of competition. They may still choose to progress along a high risk route, but they will do so knowingly, and while being supported to develop back-up plans.
- **Deeper partnerships with parents:** 35% of young people report their parents as a career influence – the single most commonly cited source of influence. In addition to layering on new sources of influence to help young people build a rounded picture, schools and colleges might engage more directly with parents. For instance, running workshops and information sessions to help them understand pathways, labour market options and projected levels of competition; providing joint careers advice sessions where the young person and their parent(s) attend and discuss together; empowering parents with techniques to find good LMI and access other sources of insight to help them help their children and so on.

There may also be ways to relate young people's priorities to job market pathways in more novel ways. For instance, climate change was highlighted as one of the top three issues for 31% of young people, but this concern was not reflected in an overall desire to work in the energy and renewables sector. Fewer than five percent of respondents expressed an interest in working in this sector and over 60% of those also listed other sectors they were interested in as well.

Education can have a transformative impact, but it is important to recognise the role of employers as well in tackling limited aspirations to work in their sectors: not just in explaining the opportunities to students, but ensuring those opportunities are attractive, with appropriate conditions, remuneration and progression, as well as support for fulfilling and flexible careers.

This call to action should be considered part of enriching and fulfilling the education mission, rather than reducing it. Education is far more than simply preparing young people for a job, but the process of education is about exposure, pathways and choices along a learning journey – there simply isn't enough time in a lifetime to learn everything – whether that learning is for self, society or salary. And young people may make pathway choices that involve considerable time and money without a clear view of the possible endpoints, their preferred ambitions and their back-up plans – and may feel frustrated, even betrayed when finally entering the job market. Anyone in education should be worried at such an outcome but – as this research reveals – also feel empowered to make a significant impact to the chronic disconnect in our UK labour market. Indeed, careers education is showing impressive improvements across England - the onus on us all is to sustain and extend this good work.

## Breakdown by gender and geography

This research shows significant differences by gender and region. For instance, as found in other studies, there is much greater male interest in manufacturing and much greater female interest in health and social care. Students in the South West of England are particularly interested in art, culture, entertainment & sport, and students in London are little interested in manufacturing.

Despite these differences by individual sector, the overall effect tends to balance out – the aggregate picture for boys is similarly disconnected from the national requirements as it is for girls, and there are only small differences in the aggregate picture by region. This suggests that the disconnect between individual student aspirations and the needs of the economy cannot just be tackled by working with a single gender or prioritising specific regions.

### Gender

There are significant gender differences in some sectors. Across all respondents who wanted to work in manufacturing, only one percent were female, though the difference with males is only three percentage points.

Proportion of UK respondents who want to work in manufacturing	
Female	1%
Male	4%
<b>Grand Total</b>	<b>3%</b>

Differences by gender reflect the findings of the previous work *Drawing the Future* which shows how both the different jobs that each gender wants, but how committed males are to being sportsmen. Over one third want to be a sportsman, with the second ranked social media/gamer having less than ten percent of responses.<sup>30</sup>

Aspirations expressed by primary age children according to gender, ranked					
Rank	Top jobs chosen by girls	%	Rank	Top jobs chosen by Boys	%
1	Teacher/Lecturer	19%	1	Sportsman/woman	34%
2	Vet	11%	2	Social Media and Gaming	9%
3	Sportsman/woman	9%	3	Police	8%

Health is one of the few areas where there is largely alignment between aspirations and vacancies. Around twenty percent of respondents want to work in human health, but there is a significant gender difference. For those who want to work in health, the difference between the genders is nearly twenty-two percentage points.

<b>Proportion of UK respondents who want to work in health, social care, social work</b>	
Female	29%
Male	7%
<b>Grand Total</b>	<b>18%</b>

There is little overall difference by gender in terms of disconnect – the excess female interest in health, social care and social work is balanced out, for instance, by the excess male interest in finance, insurance and banking. Overall girls are slightly more disconnected with respect to the overall national picture than boys, with a disconnection index of 88% rather than 86%.

A similar scale of disconnect can be seen between those whose parents have experience of studying in higher education (82%) and those who do not (79%) - those whose parents have a more privileged educational background have, as a group, slightly more disconnected aspirations, perhaps pointing towards a slightly narrower field of acceptable occupations (art, culture, entertainment and sport is even more popular than usual among those whose parents have HE experience). Nonetheless, these are modest effects and should be considered indicative only until replicated on larger, structured surveys.

## Geography

Different regions of England show different patterns of sector preferences (see selected sectors in the table below). The data have been aggregated to ensure we have at least 250 qualifying respondents in each category (there were insufficient respondents from Wales, Scotland and N. Ireland for a regional analysis).

<b>Regional breakdown for job preferences, selected sectors</b>			
<b>Region</b>	<b>Sample size (unweighted)</b>	<b>Manufacturing</b>	<b>Art, culture, entertainment and sport</b>
Yorkshire & the Humber	365	1.4%	12.7%
London	891	0.4%	14.0%
North East	1,045	1.8%	16.9%
North West	955	2.1%	16.8%
South East & East of England	868	1.1%	18.7%
South West	649	2.1%	20.7%
East & West Midlands	265	0.7%	13.8%

We can analyse the overall difference between regional alignment by comparing the distribution of sector preferences in each region against overall national demand. This only provides an indicative picture, as not all young people will be willing or able to participate in the national job market and there are important regional differences in job requirements.

The disconnection index by region is presented below and shows there is little overall difference by region – excess regional preferences for some sectors (such as the South West excess preference for art, culture, media and sport) are generally balanced out by a less disconnected set of aggregate preferences in some other sector. London is slightly more disconnected overall than the North West or South West, but this difference is modest given the overall variation in the data.

Disconnection index by England region	
Region	Overall disconnection index
Yorkshire & the Humber	83%
London	85%
North East	82%
North West	80%
South East & East of England	83%
South West	80%
East & West Midlands	82%

## Methodology

To help teachers and policy makers understand jobs and aspirations, Education and Employers has undertaken an international survey. The survey was conducted in partnership with OECD Education and Skills, TES Global, ASCL and NAHT and supported by a range of organisations including WorldSkills, Careers and Enterprise Company, PiXL, CareerMap and Speakers for Schools

From over 8,500 responses between November 2019 and January 2020 across the world we have built up an image of the jobs to which young people aspire, why they want them, what has influenced their choice and what skills they think are important.

The full report with international data will be published in the summer, including a selection of letters from young people explaining the careers they are interested in, why they are interested and the issues that matter most to them.

These findings result from the Your Voice survey of young people aged 14-18 from many different countries. The survey, and follow-up letters, complements existing research in this area such as the OECD's PISA survey. PISA questions young people on several aspects of their career aspirations. Your Voice invites them to tell their stories. It asks them what they want to be, why and how they want to get there.

The survey was online and promoted among our networks - a convenience sample open to all those interested - so results should be interpreted indicatively. The interim findings reported here focus on the approximately 7,000 UK respondents, weighted equally by age and gender to improve the representativeness of the results. Respondents who do not provide an age or gender are excluded from the weighted results due to the lack of an appropriate population reference, resulting in a core unweighted sample size of 6,645.

Data on current vacancies by sector are produced by the Office for National Statistics. The sector names have been adapted to be more accessible for the survey respondents. The projected future vacancies come from the UK Commission for Employment and Skills 'UKCES labour market projections for the UK: 2014 to 2024'.<sup>31</sup>

The overwhelming majority of survey respondents aged 17 or 18 (87%) expressed an interest in at least one sector, as opposed to indicating "Don't Know" or leaving the question blank (such respondents are excluded from the Disconnect analysis in Graph 1 and subsequent related analyses). Among those who expressed an interest in a sector, 94% of their sectoral preferences can be mapped to the ONS and UKCES analysis on economic requirements.

Where young people are interested in working in more than one sector, their interest is equally divided among those sectors, so as to better compare against an aggregate level of jobs demand. For

instance, if a person's response is weighted at 1.4 and they expressed an interest in two sectors, each sector will be allocated 0.7 to reflect that person's level of interest.

The 95% confidence interval for the point estimate is captured in the table below.

Sector	Point estimate (weighted UK respondents)	95% confidence interval	
		Lower bound	Upper bound
Accommodation and catering	1.5%	0.7%	2.2%
Administrative and support services	2.3%	1.4%	3.1%
Agriculture, forestry and fishing	1.1%	0.4%	1.7%
Art and culture, entertainment, sport	15.6%	13.3%	17.9%
Construction and engineering	7.2%	5.5%	8.9%
Education	12.0%	9.9%	14.2%
Energy and renewable	1.7%	0.9%	2.4%
Finance, insurance and banking	9.4%	7.6%	11.3%
Housing and property	1.5%	0.9%	2.1%
Health, social care, social work	13.5%	11.3%	15.6%
Legal, professional, scientific and technical	13.8%	11.6%	16.0%
Manufacturing	1.0%	0.2%	1.8%
Mining and quarrying	0.2%	0.0%	0.4%
Public sector and public services	5.9%	4.5%	7.4%
Publishing, broadcasting, communication and computers	4.6%	3.3%	6.0%
Transportation and logistics	0.9%	0.3%	1.4%
Water, sewerage, waste management	0.3%	0.0%	0.5%
Wholesale, retail, trade, motor vehicle maintenance	2.6%	1.4%	3.7%

\* Note that the point estimates do not sum to 100% as a small number of sectors in which young people expressed an interest do not map directly to the ONS or UKCES sector categories (Working for a membership organisation; working for someone at their home; international body/non-profit). Agriculture, forestry and fishing is excluded from the ONS vacancy data (highly seasonal vacancies) and so is not included in Graph 1.

In graph 4, the groupings are comprised as follows:

Social capital:

- Parent(s)/guardian(s)
- Other member of family (e.g. sister/uncle/grandparent)
- Friends of family
- Neighbours
- Your friends

Media:

- TV/films
- Social media
- Books/newspapers

School:

- Teacher
- Careers advisor

Employers:

- An employer
- Someone coming into your school or college who does that job

The disconnection index is calculated by adding up the absolute differences for each individual sector between the aspirations of students in a particular subgroup and the net requirement for jobs through to 2024. In most cases, a similar picture emerges if we add up the squared differences rather than the absolute differences.

To enhance the sample size and our ability to conduct comparative subgroup analysis, the full age range from 14 to 18 is included for the calculation of subgroup disconnection indices. This results in a total number of UK respondents qualifying for the disconnection index calculations of 5,431, or slightly fewer where there are missing responses to the operational variable. As with the main analysis in Graph 1, the small proportion of respondents who do not know what sector they want to work in or who leave the question unanswered are excluded from the analysis.

## Conclusion

The career aspirations of UK young people, in aggregate, are disconnected from the jobs available, both currently and predicted in the future. This disconnection is costly to young people, to employers and to the economy. The result is the skills gaps too often seen across UK sectors. But there is a solution. Rolling out current best practice has the potential to improve the lives of over 100,000 young people leaving secondary education each year. Simple improvements such as having more careers talks by employers in schools can help, provided enough talks are done with sufficient impact that young people gain relevant insights which influence their career decisions. While many young people reported having limited careers support, those who did enjoy careers activities and more numerous career influences have aspirations better connected, in aggregate, to the labour market.

The problem goes far deeper than just those young people nearing the end of secondary school or college. Aspirations and stereotypes are set early and are easily visible as young as 7. Work to inspire children in primary school, opening their eyes and minds, should be done systematically to ensure that no young person feels that a job isn't for them because of their background or how they look. That is how the disconnect between what young people want to do and what will be available for them to do will start to be closed.

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<sup>1</sup> Elnaz Kashfepakdel, Chris Percy and Jordan Rehill, *Motivated to Achieve* (2019) <<https://www.educationandemployers.org/wp-content/uploads/2019/06/Motivated-to-Achieve-Final-Full-report-Embargo-6th-June-1.pdf>> [accessed 17 January 2020].

<sup>2</sup> Education and Employers, 'Key Findings from Our Research', n.d. <<https://www.educationandemployers.org/research-main/key-findings-from-our-research/>> [accessed 17 January 2020].

<sup>3</sup> Elnaz Kashfepakdel, Jordan Rehill and Deirdre Hughes, 'What Works? Career-Related Learning in Primary Schools', 2018.

<sup>4</sup> Deirdre Hughes and others, *Careers Education: International Literature Review* (2016) <<https://www.educationandemployers.org/research/careers-education-international-literature-review/>> [accessed 16 January 2020].

<sup>5</sup> Careers & Enterprise Company, 'State of the Nation 2019', 2019 <[https://www.careersandenterprise.co.uk/sites/default/files/uploaded/state\\_of\\_the\\_nation\\_2019\\_digital.pdf](https://www.careersandenterprise.co.uk/sites/default/files/uploaded/state_of_the_nation_2019_digital.pdf)> [accessed 14 January 2020].

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- <sup>6</sup> Nick Chambers, 'Starting Early – the Importance of Career-Related Learning in Primary School', 2018 <<https://www.educationandemployers.org/career-related-primary/>> [accessed 15 January 2020].
- <sup>7</sup> Anthony Mann and others, *Nothing in Common: The Career Aspirations of Young Britons Mapped against Projected Labour Market Demand (2010-2020)*, 2013 <[https://www.educationandemployers.org/wp-content/uploads/2014/06/nothing\\_in\\_common\\_final.pdf](https://www.educationandemployers.org/wp-content/uploads/2014/06/nothing_in_common_final.pdf)>.
- <sup>8</sup> OECD, *PISA 2018 Results (Volume II): Where All Students Can Succeed*, PISA (2019) <<https://www.oecd-ilibrary.org/docserver/b5fd1b8f-en.pdf?expires=1576680289&id=id&acname=guest&checksum=591EE1497C44864EF239312449E785F4>>.
- <sup>9</sup> Office for National Statistics, 'VACS02: Vacancies by Industry' <<https://www.ons.gov.uk/employmentandlabourmarket/peoplenotinwork/unemployment/datasets/vacanciesbyindustryvacs02>> [accessed 18 December 2019].
- <sup>10</sup> Nick Chambers and others, 'Drawing the Future – Education and Employers', 2018 <<https://www.educationandemployers.org/research/drawing-the-future/>> [accessed 9 January 2020].
- <sup>11</sup> Mann and others, *Nothing in Common: The Career Aspirations of Young Britons Mapped against Projected Labour Market Demand (2010-2020) Education and Employers*.
- <sup>12</sup> OECD, 2020 (forthcoming). *Dream Jobs? Teenagers' Career Aspirations and the Future of Work*
- <sup>13</sup> Hughes and others, *Careers Education*.
- <sup>14</sup> Anthony Mann, Prue Huddleston and Elnaz Kashefpakdel, 'Socialised Social Capital? The Capacity of Schools to Use Careers Provision to Compensate for Social Capital Deficiencies among Teenagers', in *Essays on Employer Engagement* (London, 2018) <<https://www.educationandemployers.org/research/socialised-social-capital/>>.
- <sup>15</sup> OECD, *PISA 2018 Results (Volume II): Where All Students Can Succeed*, PISA. P123
- <sup>16</sup> UKCES, 'The Labour Market Story- Skills for the Future', 2014 <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/344441/The\\_Labour\\_Market\\_Story\\_-\\_Skills\\_for\\_the\\_Future.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/344441/The_Labour_Market_Story_-_Skills_for_the_Future.pdf)> [accessed 10 January 2020].
- <sup>17</sup> OECD, *OECD Employment Outlook 2019: The Future of Work*, OECD Employment Outlook (2019) <[https://www.oecd-ilibrary.org/employment/oecd-employment-outlook-2019\\_9ee00155-en](https://www.oecd-ilibrary.org/employment/oecd-employment-outlook-2019_9ee00155-en)> [accessed 18 December 2019].
- <sup>18</sup> Philippe Schneider and Hasan Bakhshi, 'The Future of Skills: Employment in 2030', *Nesta*, 2017 <<https://www.nesta.org.uk/report/the-future-of-skills-employment-in-2030/>> [accessed 10 January 2020].
- <sup>19</sup> Kitty Stewart, 'Who Will Suffer Most from Brexit? Effects by Region, Sector, Skill Level and Income Group', *British Politics and Policy at LSE*, 2019 <<https://blogs.lse.ac.uk/politicsandpolicy/who-will-suffer-most-from-brexit/>> [accessed 10 January 2020].
- <sup>20</sup> Chambers and others, 'Drawing the Future – Education and Employers'.
- <sup>21</sup> Industrial Strategy Council, 'UK Skills Mismatch 2030 - Research Paper.Pdf', 2019 <<https://industrialstrategycouncil.org/sites/default/files/UK%20Skills%20Mismatch%202030%20-%20Research%20Paper.pdf>> [accessed 14 January 2020].
- <sup>22</sup> Dr Elnaz Kashefpakdel, Olly Newton and Janet Clark, *Joint Dialogue* (2018), Education and Employers, Edge and NEU <<https://www.educationandemployers.org/wp-content/uploads/2018/11/Joint-Dialogue-FINAL-REPORT-2019.pdf>>.
- <sup>23</sup> Bank of England, 'The Impact of Immigration on Occupational Wages: Evidence from Britain', 2015 <<http://www.bankofengland.co.uk/working-paper/2015/the-impact-of-immigration-on-occupational-wages-evidence-from-britain>> [accessed 10 January 2020].
- <sup>24</sup> Office for National Statistics, 'Overeducation and Hourly Wages in the UK Labour Market; 2006 to 2017' <<https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/compendium/economicreview/april2019/overeducationandhourlywagesintheuklabourmarket2006to2017>> [accessed 10 January 2020].
- <sup>25</sup> Office for National Statistics, 'Analysis of the UK Labour Market - Estimates of Skills Mismatch Using Measures of over and under Education', 2016 <<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/analysisoftheuklabourmarketestimatesofskillsmismatchusingmeasuresofoverandundereducation/2015>> [accessed 10 January 2020].
- <sup>26</sup> Seamus McGuinness, 'Overeducation in the Labour Market', *Journal of Economic Surveys*, 20/3 (2006), 387–418.
- <sup>27</sup> Chambers, 'Starting Early – the Importance of Career-Related Learning in Primary School'.
- <sup>28</sup> Education and Employers, 'What Is a Meaningful Encounter With- the World of Work?', 2019 <<https://www.educationandemployers.org/wp-content/uploads/2019/09/What-is-a-Meaningful-Encounter-with-the-world-of-work-final-1.pdf>> [accessed 16 January 2020].

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<sup>29</sup> Kashefpakdel, Rehill and Hughes, 'What Works? Career-Related Learning in Primary Schools'.

<sup>30</sup> Chambers and others, 'Drawing the Future – Education and Employers'.

<sup>31</sup> UK Commission for Employment and Skills, 'UKCES Labour Market Projections for the UK: 2014 to 2024', *GOV.UK*, 2016 <<https://www.gov.uk/government/publications/ukces-labour-market-projections-for-the-uk-2014-to-2024>> [accessed 8 January 2020].



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