WHERE NEXT?

WHAT INFLUENCES THE CHOICES SCHOOL LEAVERS MAKE?
CONTENTS

FOREWORD FROM UCAS ................................................................. 3
FOREWORD FROM THE NUS .......................................................... 4
EXECUTIVE SUMMARY ................................................................. 5
RECOMMENDATIONS ........................................................................ 6

SECTION ONE – UNPACKING STUDENT CHOICE: HOW DO STUDENTS DECIDE ON THEIR DEGREE? . . 8
AN INTRODUCTION TO STUDENT CHOICE .................................................... 8
STUDENTS START THINKING ABOUT HE AT PRIMARY SCHOOL, WITH DISADVANTAGED STUDENTS LATER THAN THEIR PEERS ................................................. 9
HE SUBJECT CHOICE FOLLOWS LATER (BUT BEFORE CHOICE OF UNIVERSITY OR COLLEGE) .. 10
MEDICINE STUDENTS ARE THE FIRST TO CONSIDER HE, AND BUSINESS STUDENTS ARE LAST TO DECIDE ................................................................. 10
INDIVIDUAL MOTIVATIONS FOR HE SUBJECT CHOICE ARE VARIED, AND DISADVANTAGED APPLICANTS ARE MORE LIKELY TO BE MOTIVATED BY CAREER PROSPECTS ................................................................. 11
SUBJECT CHOICE IN HE: STUDENTS SAY THE INFLUENCE OF THEIR PARENTS OR CARERS IS MINIMAL, BUT MANY IN FACT DO FOLLOW SIMILAR PATHWAYS .. 12
SUBJECT CHOICE IN SCHOOL: ENJOYMENT IS THE KEY MOTIVATOR, WHILST THE INFLUENCE OF PARENTS AND CARERS FADES WITH AGE ......................................................... 12

SECTION TWO – THE PATHWAY TO HE SUBJECT CHOICE ................................................................. 15
QUALIFICATIONS TAKEN IN SCHOOL AFFECT HE SUBJECT CHOICE ................................................................. 15
SOME HE SUBJECTS REQUIRE MORE FORETHOUGHT THAN OTHERS ......................................................... 15
POST-16 CHOICES STRONGLY INFLUENCE STUDENTS’ FUTURES ......................................................... 17
POST-16 CHOICES CAN INFLUENCE ACCESS TO HIGHER TARIFF PROVIDERS ......................................................... 18
SUBJECT CHOICE AT GCSE/NATIONAL 5 CAN BE LIMITING, BUT ATTAINMENT IS MORE LIKELY TO NARROW OPTIONS ......................................................... 19

SECTION THREE – WHAT NEXT FOR STUDENT CHOICE? ................................................................. 21
INFORMATION AND ADVICE: EARLIER, BROADER, AND PERSONALISED ................................................................. 21
KNOWING WHAT IS IMPORTANT TO THE INDIVIDUAL IS THE KEY TO PERSONALISATION ................................................................. 24

APPENDIX A – RESEARCH METHODS ........................................................................ 26
APPENDIX B – CAREERS EDUCATION AROUND THE UK ................................................................. 28
Every year, UCAS supports around 700,000 students globally to apply to UK higher education (HE). Each of these students will have faced a myriad of decisions to reach that point, and will face many more as they progress through HE and onwards into their career. Choice is central to our charitable objects, as we seek to ensure that all students, regardless of background, are supported in making informed and aspirational decisions.

This report shares new and unparalleled insight into what drives and enables student choice – we thank every one of the 27,000 individuals who took the time to share their experiences and help us understand the following: When do students make decisions about their onward journey? What does the decision-making process look like? What are the influencing factors? How can decisions about subjects and qualifications taken in schools influence later options? How can we ensure that students make the right decisions based on what is important to them?

It is UCAS’ view, and our ultimate goal, that all young people should have an equal opportunity to access high-quality, personalised, timely support to navigate their journey. That support should cover all options on an equal footing, and not only at the key decision points identified in this report, but right from the start – at primary school and all the way through to graduation. At each stage, students should be aware of the impact of their choices, and how it may influence their future pathway. As this report illustrates, with so much choice – and more around the corner – this is no easy task.

We are ready to respond to the challenge through the UCAS Hub, which launched in 2019 – our approach to personalised information and advice. Each student has their own dashboard which they can customise and tailor to their needs. It is also the place to find dedicated live sessions, and information and advice about technical education and apprenticeships – making it the go-to place for those exploring their options after school.

But much more needs to be done, and we would like to see – and support – a solid commitment spanning the primary, secondary, and post-secondary education sectors, to tackle the challenge of providing the right information and advice to every individual.
The marketised system of education promotes choice and personalisation for all prospective students, enhancing opportunities for different pathways which are wide ranging and expansive. However, the promotion of choice only goes as far as the traditional routes in HE, while lots of further education (FE) courses or development and training opportunities are passed by.

The importance of early engagement for students to navigate these pathways is high – now, during times of turmoil and changing economic environments, more than ever. It is crucial that students are aware of all their options and able to make informed decisions to set the course of their lives, with the time and space to consider their choices in advance.

From an early age, gynaecology was my chosen career pathway but, due to lack of information and advice at GCSE level, my aspirations and goals changed drastically. Further down the line, after retaking my GCSEs at Bradford College, there was more noticeable support and resources to aid me in choosing next steps towards my future – but only regarding the most basic routes. Throughout my own experiences, I have regularly noticed a lack of information and advice for apprenticeships, HND and HNC courses. It was only because I chose to put my energy into doing proper research and weighing up all the options, that I became aware of the many different choices available – if I hadn’t investigated further, I simply would’ve had no idea about the range of opportunities out there for students.

At the National Union of Students, we recognise that the current system predominantly promotes and encourages the mainstream routes into education, i.e. via GCSEs/National 5s, A levels and Highers into traditional undergraduate degrees, but this leaves no room to boost student interest in other educational pathways. We know that a third of students do not receive information and advice about apprenticeships from their school. Information, particularly regarding FE routes, is difficult to find online – even within institutions themselves, most students must rely on independent research or word of mouth to find different opportunities. But the responsibility shouldn’t be on the student to go digging for this knowledge, it should be freely available and easily accessible to all.

Choosing the right post-16 qualifications and subjects is vital to ensure student satisfaction, enthusiasm, course involvement, engagement, and career progression. Therefore, students need to be able to explore information, advice and guidance on all possible avenues before they make their decisions. Students already struggle with the societal and institutional pressures to have their futures mapped out from a very young age, so forcing them to make decisions without adequate knowledge only serves to create more confusion and regret further down the line.

Improvements must be made to enhance early engagement, in order to give students the opportunity to fully consider the best path for them, whether that is a vocational course, an apprenticeship, or an academic degree.

Students deserve to know what they’re signing up for, and any decisions concerning their futures should not be rushed into or driven by pressure.
The UK education system and post-secondary education market has choice at its core. Students can choose from over 50 GCSE and A level subjects in England, Northern Ireland, and Wales, and 70 Higher and Advanced Higher subjects in Scotland – which sit alongside more than 12,000 funded vocational qualifications at 16-19. Thereafter, students can explore over 35,000 undergraduate courses and a growing range of technical education and apprenticeship opportunities, and it is increasingly common for people to change career pathway several times during their working life.

Choice is endless, but how do students make these choices, and how does this differ by pathway? To what extent do the choices students make in school affect their next steps? And how should we support students in making informed and aspirational decisions?

Our analysis has identified:

‣ **The age at which students start thinking about HE varies**: One in three applicants report first thinking about HE at primary school. Disadvantaged students are more likely to consider HE later, which can limit their choices, especially for more selective subjects and higher tariff providers. This suggests that careers information, advice and guidance (CIAG) should be embedded within primary education.

‣ **Students choose their degree subject before they think about the university or college they want to attend**: 83% of students told us they decided on their degree subject before their university or college. This highlights the role of subject-specific outreach.

‣ **Decisions are most influenced by enjoyment, but employability is increasingly important post-COVID**: 99% of students report making choices at school based on their enjoyment of a subject, and this is also the primary driver of degree choice. Over 50% report that high graduate employment rates have become more important to them since the start of the pandemic. Understanding what is important to individuals will help improve support for their decision-making.

‣ **Some HE subjects require more forethought than others**: One in five students report they could not study an HE subject that interested them because they did not have the relevant subjects for entry – with medicine the most commonly cited. Students should be made aware of how choices made in school can affect later options.

‣ **Post-16 choices strongly influence students’ futures**: 49% of English 18 year olds with post-16 vocational qualifications enter HE, but are significantly less likely to attend higher tariff providers than those with general qualifications (entry rate of 3% vs. 27%). As the roll-out of T Levels accelerates, it is vital that students know where all pathways lead when making choices in school.

‣ **There is a need for earlier, broader, and personalised careers information, advice and guidance (CIAG)**: Two in five students believe more information and advice would have led to them making better choices, and almost one in three students report not receiving any information about apprenticeships from their school.

This report will focus on the choices made by university and college students aged 18 and 19 in the UK – at school, into HE, and beyond. The survey populations used means that analysis is restricted to those who apply to and are accepted into HE - future UCAS ‘Where Next’ reports will explore the journey of those who follow alternative pathways. The recommendations accompanying this report are designed to propose practical steps that, taken together, will ensure students are able to understand the full range of options available now, and in the future.
## RECOMMENDATIONS

<table>
<thead>
<tr>
<th>REF.</th>
<th>WHAT</th>
<th>WHO</th>
<th>WHEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ensure the range of available information sources, including the Teaching Excellence Framework (TEF), National Student Survey (NSS), UCAS Tariff points, the UCAS Hub, the proposed ‘start to success’ measure, are joined-up and effectively communicated to students in a personalised way. As part of this, consideration should be given to the importance of UK-wide comparability and parity of information provision across all routes, including technical education and apprenticeships.</td>
<td>UCAS will work with relevant stakeholders including policymakers, regulators, information and advice providers, universities and colleges, training providers, and schools.</td>
<td>2021 onwards</td>
</tr>
<tr>
<td>2</td>
<td>To deliver the ambition set out by UK governments in their careers strategies and support the wider levelling-up agenda, CIAG should be embedded within the curriculum in primary schools and early secondary years. To include:  ▶ statutory requirements for CIAG within primary education to include the full range of pathways and careers  ▶ age-appropriate Gatsby Benchmarks to raise aspirations from an early age  ▶ The Careers &amp; Enterprise Company (CEC) to extend their Primary Platform initiative  ▶ universities and colleges, working with UCAS and partners, to undertake more targeted outreach work within primary schools and early secondary years with a focus on ‘fixed’ yet lesser-known subject areas</td>
<td>Policymakers, schools, Gatsby Foundation, CEC, universities and colleges, and UCAS.</td>
<td>By 2025</td>
</tr>
<tr>
<td>3</td>
<td>UCAS to review the range of qualification information it provides, including the UCAS Tariff and Qualification Information Profiles, to ensure it remains fit for purpose in the context of upcoming reforms to post-secondary education.</td>
<td>UCAS</td>
<td>2022</td>
</tr>
<tr>
<td></td>
<td>Action</td>
<td>Details</td>
<td>Responsible Parties</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| 4 | UCAS, working with partners, to support the delivery of the **Baker Clause** via digital means, providing comprehensive information, advice, and content tools to help students make informed and aspirational choices, including: | • reliable, comprehensive, and personalised information and advice about the broad range of post-secondary options in a single location  
• a data-based tool supporting pupils’ understanding of how qualification and subject choices at GCSE/National 5 and post-16 may affect their post-secondary options  
• enabling peer-to-peer support allowing students to share experiences with one another | UCAS, CEC, National Careers Service, and partners including subject matter experts. | 2022/23 |
| 5 | Ofsted and school inspectorates across the UK to place more emphasis on the monitoring of CIAG in schools. This should span technical education and apprenticeships (e.g. upholding of the **Baker Clause** in England), and include how primary schools equip children to progress. | | Ofsted, Care Inspectorate Wales (CIW), Education Scotland, The Education and Training Inspectorate (ETI). | Ongoing |
| 6 | Continue to expand and support, UCAS’ ambition of being the go-to place for all post-secondary education, including apprenticeships, to ensure students can consider and connect to all options fairly. | | UCAS, National Apprenticeship Service (NAS), and partners. | By 2025 |
| 7 | Universities, colleges, and training providers to put personalisation at the heart of the student experience, including: | • providing clarity in entry requirements across all school qualifications and subjects including new provision (e.g. T Levels)  
• working with UCAS to continue the development of tools to support further transparency in pathways for students and advisers  
• building awareness of less linear pathways into post-secondary education, including HE bridging provision, foundation year programmes, and higher technical education qualifications  
• ensuring subject-specific outreach, marketing, and recruitment includes priority groups | Universities and colleges, education and training providers, HELOA, and UCAS. | Ongoing |
In this section, we explain how students typically decide on their degree. We discuss the ‘when’ – the age at which applicants first think about higher education and how this varies by subject, and the ‘why’ – motivating factors and key influencers.

- One in three applicants report first thinking about HE at primary school, with advantaged students 1.4 times more likely to do this than their disadvantaged peers.
- Medicine students are the first to think about their choice of HE subject – around three out of five do so prior to starting GCSE/National 5.
- One in four students say their parents or carers were their biggest help in determining their choice of degree course, and many follow similar pathways – however, parental influence wanes as students near adulthood.

An introduction to student choice

The UK education system and HE market has choice at its core. Students can choose from over 50 GCSE and A level subjects in England, Northern Ireland, and Wales, and 70 Higher and Advanced Higher subjects in Scotland – which sit alongside more than 12,000 funded vocational qualifications at 16-19. Thereafter, students can explore over 35,000 undergraduate courses and a growing range of technical education and apprenticeship opportunities, and it is increasingly common for people to change career pathway.

Overall, trends in demand for HE are stable over time. UCAS’ most recent HE admissions data (for the 2020 cycle) shows a 1% increase in UK applicants aged 18 and 19 since 2019 and, as explored in our report, What happened to the COVID cohort?, participation among disadvantaged students has continued to rise. Additionally, the five most popular subject areas for the last decade have been consistent: biological sciences, business and administration studies, subjects allied to medicine, social studies, and creative arts and design.

However, the arrival of COVID had an immediate impact on applicant behaviour in 2020, and this continues to unfold as we move into the 2021 cycle. Data from the January 2021 deadline shows an additional 4,400 18 and 19 year old UK applicants to nursing courses (+25% on 2020) – aka ‘the Chris Whitty effect’. This is reflected in our survey data: 8% of students told us the pandemic had prompted them to apply for a subject leading to the medical profession, and 6% chose a course leading to a different key worker profession. Overall, 30% of students said the pandemic had influenced their choice of subject in some way – a clear illustration of how external events can, and do, affect student choice.

When we ask students about their personal experiences of choosing their degree, it is apparent that decision-making is unique to the individual; with motivations ranging from the consciously rational to the unexplainable, and from logical to emotive. Each person’s decision-making process differs in how long it can take. Some choices are made over a prolonged period, others are made more quickly. There is ‘no clear yardstick’ by which students commonly weigh up the various factors that determine what and/or where to study in HE – or even whether HE is the right option at all.

“I’M NOT REALLY SURE WHY, IT JUST HIT ME ONE DAY”
History applicant

“IT’S MY DREAM CAREER”
Fine art applicant

“PROCESS OF ELIMINATION”
Medicine applicant
Students start thinking about HE at primary school, with disadvantaged students later than their peers

The point at which young people start to consider HE also varies widely between individuals. Our survey analysis found that more than three in four students first realised HE was an option for them before they started post-16 education, and one in three first realised this when they were still at primary school9.

Disadvantaged students tend to consider the prospect of HE later than their more advantaged peers, with 27% from POLAR4 Q1 (the most disadvantaged group) realising this in primary school, compared to 39% of those from Q5 (the most advantaged group) – reaffirming the findings of UCAS’ 2016 Student Lens report and the 2019 Founders4Schools report, which emphasises the role of primary schools in shaping and broadening aspirations.

This demonstrates the need to embed CIAG within primary schools and early secondary years to support the wider levelling-up agenda, and raise aspirations from an early age (see Recommendation 2).

As part of this, Ofsted and equivalent school inspectorates across the UK should place more emphasis on CIAG in primary and early secondary education (see Recommendation 5).

Case study:
THE NORTH EAST LOCAL ENTERPRISE PARTNERSHIP (LEP) AND EY FOUNDATION

Working together with 70 primary schools, the North East LEP and EY Foundation are delivering the Gatsby Career Benchmarks: Primary Pilot. The pilot is designed to sow the seeds of ambition from an early age by supporting schools to use an adapted set of Good Career Guidance Benchmarks as a framework to strategically develop an age-appropriate careers programme. This will enable the schools to help broaden pupils’ horizons, raise their aspirations and support them to develop the knowledge, skills and understanding to be successful in the next stage of their education and beyond, regardless of their starting point.

More information: www.northeastambition.co.uk/career-benchmarks-primary-pilot

Case study:
PRIMARY FUTURES

Mindful that children begin to form stereotypes about occupations, careers, and HE at an early age, Primary Futures connects primary schools (free of charge) to people from a wide range of jobs and diverse backgrounds – from apprentices to CEOs, archaeologists to zoologists – to challenge and break down restrictive preconceptions. The project helps young people understand the link between what they are learning at school and the world of work – and how their achievement at school can lead to a satisfying, fulfilling career.

More information: primaryfutures.org

Case study:
GATSBY BENCHMARKING PILOT – WALES

After 2017 proposals to adopt the Gatsby Benchmarks in Wales, Welsh Government funded a pilot, supported by a strategic steering group, in secondary schools in the Rhondda Cynon Taf (RCT) local authority area from 2019. The pilot has also included a number of primary schools. The interim evaluation considered the implementation, impact, and value of the Benchmarks, and made a series of recommendations. The Welsh Government has awarded a contract to develop a new Quality Award for high-quality careers guidance in schools and settings, and a process for rolling this award out across Wales. The successful bidder will work with Careers Wales.

**HE subject choice follows later (but before choice of university or college)**

Although some pupils start thinking about HE in primary school, most consider the subject they’d like to study at university or college much later, with only 54% feeling ‘certain’ about their degree choice when they choose their post-16 subjects. Scottish students are slightly more likely to be ‘certain’ about the degree subject they want to study when choosing their post 16 qualifications: 60% compared to 53% in England, 57% in Wales, and 55% in Northern Ireland. However, this could be related to the younger age at which some Scottish students enter HE, with 15% aged 17 or under, compared to fewer than 1% from the other UK nations.

Students usually consider their degree subjects before they consider the university or college they want to attend. Overall, 83% of students told us they chose their degree subject before they thought about where they would study it. Figure 1, the typical student decision-making process, highlights the order in which these choices are usually made.

**Figure 1: The typical student decision-making process**

Although the above steps hold true for most students (and is similar for advantaged (POLAR4 Q5) and disadvantaged (Q1) student) there are some notable exceptions. For example, students who live at home are 35% more likely to think about their choice of university or college before their degree subject. Similarly, UK students accepted to universities or colleges in Northern Ireland are more likely to think about the university or college first: 30% compared to 17% of all accepted UK students.

**Medicine students are the first to consider HE, and business students are last to decide**

Our analysis also finds the point at which students started thinking about their choice of HE subject varies between degree programmes: 58% of pre-clinical medicine students had thought about their preferred degree subject before starting GCSE/National 5, compared to only 18% of business studies students and 20% of economics students – see Figure 2. This shows that the doctors, teachers, and nurses of tomorrow are planning their careers well in advance, but those preparing for less linear careers tend to do so later in their journey. This provides a basis for universities and colleges, working with UCAS and partners, to undertake more targeted outreach work within primary schools and early secondary years to broaden their awareness of pathways (see Recommendation 2).

**Case study:**

**THE ROYAL ECONOMICS SOCIETY – DISCOVER ECONOMICS OUTREACH PROGRAMME**

This programme aims to broaden the appeal of economics and specifically attract more women, state school and further education college students, and ethnic minorities – all of whom are under-represented in this subject area. It is also designed to appeal to students who do not have the opportunity to study this subject at school, and provides diverse role models to change students’ perceptions.

More information: [www.discovereconomics.co.uk](http://www.discovereconomics.co.uk)
Individual motivations for HE subject choice are varied, and disadvantaged applicants are more likely to be motivated by career prospects

When we explore students’ personal motivations for choosing their degree subjects, there is further variation. When asked at the beginning of the 2021 cycle, the following four factors were most commonly cited by UK applicants aged 18 or 19:

- It is the subject I enjoy most (74%).
- It will give me good career prospects after graduation (54%).
- I needed to study this subject to pursue a specific career (46%).
- It is the subject I am best at (39%).

These findings mirror those in the Department for Education’s 2017 research, which found that ‘personal enjoyment of or interest in a specific subject was the principal motivating factor behind choice of subject’.

As seen above, careers are also a key factor, and this is especially true for disadvantaged applicants. 52% of POLAR4 Q1 students report choosing their degree subject to pursue a specific career, compared to 40% of those from Q5. Additionally, a joint UCAS and YouthSight survey of post-16 pupils in 2020 found that COVID has heightened the importance of employability for today’s students – over 50% said high graduate employment rates had become more important to them since the pandemic.

The factors motivating students to choose different degree subjects vary in importance. For example, where school qualifications in corresponding subjects are not widely taken, it is less likely that a student’s ability and enjoyment of that subject will influence their choice of degree subject. Table 1 (see page 11) shows the subjects for which these factors are most and least influential.

Figure 2: The proportion of students who reported starting to think about what subject they wanted to study at university or college before starting their GCSEs/National 5s, by the JACS3 detailed subject group onto which they were accepted.
**Motivating Factor**

- "It is the subject I am best at."
  - X – Education (23%)
  - M – Law (23%)
  - G – Maths and related (74%)

- "It is the subject I enjoy most."
  - B – Subjects Allied to Medicine (incl. nursing) (60%)
  - M – Law (61%)
  - X – Education (61%)
  - R – European Languages and Literature (91%)
  - V – Historical and Philosophical Studies (91%)

- "I needed to study this subject to pursue a specific career."
  - R – European Languages and Literature (19%)
  - A – Medicine and Dentistry (76%)

- "It will give me good career prospects after graduation."
  - V – Historical and Philosophical Studies (36%)
  - W – Creative Arts and Design (38%)
  - G – Maths and related (69%)

**Table 1: JACS3 subject groups compared to motivations for degree subject choice**

- **Subject choice in HE: Students say the influence of their parents or carers is minimal, but many in fact do follow similar pathways**

Parents and carers play an important role in supporting a young person’s decision-making, and one in four students cite parents or carers as their ‘biggest help’ when determining their choice of degree course. However, only 6% say they chose their degree subject because their parents or carers wanted them to, with this more likely to be a factor for medicine students (10%).

---

"I wanted to follow in my mum’s footsteps. She is a senior probation officer, and that’s why I chose criminology"

Sociology student at a lower tariff provider

The influence of parents and carers may be greater than students realise – our data shows a clear synergy between a student’s HE subject choice and their parents’ or carers’ careers:

- 19% of students who reported having a parent or carer involved in farming are studying veterinary science, agriculture, and related subjects in 2020, compared to 1% of all students (with parents of any occupation).
- 17% of students who reported having a parent or carer who is a medical practitioner are studying medicine or dentistry courses in 2020, compared to 2% of all students.
- 32% of students who reported having a parent or carer who is an artist are studying creative arts and design courses in 2020, compared to 9% of all students.

Sutton Trust research has demonstrated that having a degree-educated parent or carer can positively impact an individual’s likelihood of excelling at school and entering HE. The influence of parental education is further highlighted in degree subject choice. Overall, 55% of students have a parent with a degree level education, but this differs by subject: 71% of students accepted for European languages, literature and related courses have a degree-educated parent or carer, compared to 43% of students accepted for education and related courses, or 45% of students accepted for subjects allied to medicine (including nursing).

"I spoke to my mum about it at around age 14 and she went out of her way to research different courses and universities and discussed all the information until I found something that I felt was right for me"

– Education student at a lower tariff provider
Subject choice in school: Enjoyment is the key motivator, whilst the influence of parents and carers fades with age

In Section 2 we will consider how the qualifications and subjects taken at school can affect a student’s later options. Firstly, it is important to acknowledge that some students are restricted by the range of post-16 options open to them, meaning the decision about what to study is somewhat out of their control. Our survey analysis found that 16% of students were unable to study all the post-16 options they wanted. Of these, 49% said their school or college did not offer that particular qualification or subject, and 21% were constrained by timetabling. In fact, restricted choice leads to more than 10% of students moving school specifically to study their chosen post-16 qualifications.

Our survey data highlights both similarities and nuances between the motivations driving the qualifications and subjects chosen at school, and those chosen for degree study – Figure 3 gives an overview of how differing factors become more or less important at each stage of a student’s journey. These motivations remain similar for students from advantaged (POLAR4 Q5) and disadvantaged (Q1) backgrounds.

Mirroring the key motivation driving a student’s choice of degree subject, 99% report being influenced by enjoyment or interest in making both their GCSE/National 5 and post-16 choices.

Parents and carers play an important part in influencing their child’s subject choice at school. One in two students report having chosen a subject at either GCSE/National 5 (49%) or post-16 (50%) because their parents or carers had wanted them to. But, as seen above, by the time students are ready to make their degree choice, their influence has diminished – this is supported by Ofqual research which suggests young people perceive advice from their parents and carers to be based on outdated or biased experiences and misconceptions.

Teachers are a critical source of support when pupils make their school subject and qualification choices. 88% of students report choosing a subject at GCSE/National 5 because their teachers told them it would be good at it, and 79% cite the same reason for making their post-16 choices – slightly more (81%) chose a post-16 subject because they would have good teachers.

The role of friends is another significant factor. 44% of students say their friends’ post-16 choices had affected their own, rising to 53% for their GCSE/National 5 subjects, which suggests younger pupils are slightly more swayed by their friends’ choices than their parents’ advice.

As well as being an important factor in degree subject choice, future employment prospects are also at the forefront of students’ minds when they make their post-16 decisions – almost all (94%) cite this as a key motivation. 84% chose their subjects based on what they wanted to study at university or college, and 93% report their choices were made to keep their employment and/or future study options open. Many students were already mindful of these factors when they made their GCSE/National 5 choices: 80% report choosing some or all their subjects with their post-16 choices in mind, 78% were considering future HE entry more generally, and 64% were thinking of a specific degree subject area.
Understanding these motivating factors and key influencers is critical to delivering reliable, comprehensive, and personalised information and advice – a key recommendation of this report (see Recommendation 4).

Figure 3: An indicative comparison of what influences students’ qualification choices at each stage of their education
In this section, we explore how the decisions students make along their journey impact their choice of degree. We discuss which degree choices are more ‘fixed’ or ‘fluid’ and the interaction between choices made at three key points: GCSE/National 5, post-16, and degree.

- One in five students report they could not study an HE subject that interested them because they did not have the relevant subjects for entry.
- Students with post-16 vocational qualifications are less likely to enter a higher tariff provider.
- More than a quarter of students would make different GCSE/National 5 choices now they know what their degree course involves – and around a third would choose a different post-16 option.

Qualifications taken in school affect HE subject choice

There is evidence that some students miss out on their preferred choice of degree subject because of the qualification and subject decisions they make in school. One in five students report they were unable to study a degree subject that interested them because they did not have the relevant subjects for entry\(^27\). Medicine is the degree subject cited most often (by approximately 500 students, over 10% of the group)\(^28\), and disadvantaged students are more likely to report not having the relevant subjects to study medicine\(^29\).

This means students who think about their degree subject later may already have limited their options. Of those students who report being unable to study medicine, only about a third\(^30\) had thought about the degree subject they wished to study before starting their GCSEs/National 5s, compared to 58% of those students who were ultimately accepted onto medicine courses. Therefore, ongoing information and advice explaining the affect that decisions made in school can have on later options is critical.

Some HE subjects require more forethought than others

By considering the pathways into degree subjects, we can identify subject areas where this is particularly relevant.

Some degree courses, such as medicine and dentistry, maths, economics or languages, require applicants to have taken a specific set of fixed pre-requisite qualifications. Other subjects, such as business or law, are much more fluid and accept applicants with a diverse range of qualifications – Figure 4 (on page 15) outlines the typical routes school leavers take into different degree subjects.

We found the typical route into different degree subjects by examining the qualifications held by accepted applicants. For example:

- **Medicine and dentistry** is a very fixed degree choice, with 94% of accepted applicants from England, Wales, and Northern Ireland aged 18 holding A levels in biology and chemistry, and many also holding maths A level. Similar subjects are held by Scottish students accepted with Highers or Advanced Highers.

- **Business** is a very fluid degree choice, where applicants hold a range of qualification types and subjects. One in four accepted 18 year old applicants from England, Northern Ireland, and Wales holds no A levels, and is instead accepted with relevant vocational qualifications.

More subject examples can be found in the accompanying resource – Table of fixed and fluid degree subjects.
Case study: THE ROYAL ECONOMICS SOCIETY – DISCOVER ECONOMICS OUTREACH PROGRAMME

Through this programme, schools, colleges, and youth and community groups across the UK can book, free of charge, a STEM Ambassador, a professional working in any science, technology, engineering or mathematics sector, to visit – either virtually or face-to-face. The programme inspires young people to pursue STEM subjects and careers, supporting learning by showing real world applications of their studies, illuminating careers by showcasing different roles and pathways into industry, and raising aspirations through meeting a wide range of inspirational role models.

More information: www.stem.org.uk/stem-ambassadors

Case study: UKWPMED

The UKWPMED initiative brings together six UK medical schools that provide sustained support programmes to help students from under-represented groups prepare to make their applications. Participants will receive a guaranteed interview and reduced offer at any of these six medical schools for the five-year degree course, provided they meet the appropriate criteria.

More information: www.keele.ac.uk/media/k-web/k-schools/medicine/documents/ukwpmed-scheme.pdf

Figure 4: Typical routes for school leavers into different degree subject areas

The forethought required to study the more ‘fixed’ subjects identified above does not always align with the subject areas students think about earlier (see Figure 2 in Section 1). Figure 4 shows both economics and European languages, literature and related to be ‘fixed’ degree paths, requiring students to hold specific qualifications and subjects. However, only a minority of these students had thought about their degree subject prior to choosing their GCSE/National 5 qualifications, 20% and 25% respectively. This mismatch may mean some students are unwittingly ‘blocked’ from accessing certain ‘fixed’ subjects.

The above emphasises the need for clarity in entry requirements across all school qualifications and subjects. Furthermore, there is a clear need for subject-specific outreach and awareness building of less linear pathways into different subjects, particularly for the most ‘fixed’, to encourage access and participation for all (see Recommendation 7).
Post-16 choices strongly influence students’ futures

As shown in Figure 4, the type of post-16 qualifications a student takes can have significant implications for their post-secondary choices, because some are more fixed to certain degree types than others.

For example, in Scotland there is a significant difference between the degree subject a student chooses and the university or college to which they apply, depending on whether they hold Advanced Highers or only Highers. Overall, 61% of students in Scotland hold at least one Advanced Higher. However, for students accepted at a higher tariff provider, this increases to 77% – and to 97% for students accepted for medicine. One in four SQA students report having been unable to study all their preferred post-16 qualifications, most likely due to gaps in Advanced Highers provision, which demonstrates how the school curriculum can curtail student choice at HE.

In England, certain vocational qualifications, such as the Level 3 Extended Diploma, can substantially narrow their pathway as they typically lead to just one or two specific degree subjects and these students typically only sit one qualification post-16. For example, two in five English 18 year olds with a Pearson BTEC Level 3 National Extended Diploma in Sport and Exercise Science are accepted to study sport and exercise science at degree level – these qualifications do not typically lead to any other subject at university or college, and the remaining pupils generally do not apply to HE. Such strong relationships may result in a student’s HE options being narrower if they take certain vocational qualifications: 26% of BTEC students report being unable to study a subject that interested them at degree level because they did not have the relevant subject, compared to 18% of A level students. This will inevitably impact disadvantaged students more, because they are three times as likely to hold only BTEC qualifications than those from a more advantaged background.

“I would like to have known if certain BTECs could take me into the course instead of believing I had to take A Levels.”

Theology and religious studies student at a higher tariff provider

“I did BTEC engineering which covers 18 different engineering areas, it will allow me to get to know every subject and decide which I am most interested in.”

Mechanical engineering student at a lower tariff provider
Case study: UNIVERSITY OF CAMBRIDGE – FOUNDATION YEAR

From 2022, the University of Cambridge will be offering a one-year Foundation Year for UK students whose circumstances have prevented them from reaching their full potential. The course will be fully funded, prepare students for higher level study, and enable them to progress onto an undergraduate degree at the university. The university will accept a wider range of qualifications for entry, including relevant vocational qualifications, with the offer level expressed in UCAS Tariff points rather than grades, to ensure flexibility.


Case study: LADY MARGARET HALL, UNIVERSITY OF OXFORD – FOUNDATION YEAR

This fully funded Foundation Year prepares students for higher level study, allowing them to specialise in a range of subjects spanning science and humanities. The course enables students who are under-represented in higher education to progress to an undergraduate degree at the university. Accepted grades are lower than for undergraduate level and the university accepts a wider range of qualifications, including vocational. From 2023, the Lady Margaret Hall Foundation Year will become Foundation Oxford, delivered centrally across the university.

More information: www.lmh.ox.ac.uk/prospective-students/foundation-year

Post-16 choices can influence access to higher tariff providers

The qualifications and subjects a student takes at school not only affect the degree subject they can study, but can also have an impact on the type of university or college they are likely to attend. Although the pathways outlined in Figure 4 are typical of those taken by accepted applicants across all universities and colleges, it should be noted that those which are more selective tend to accept a narrower range of qualifications and subjects.

This was made particularly clear when, in 2010, the Russell Group first published Informed Choices, a resource designed to help prospective students understand which subjects would enable them to study at their member institutions – now more commonly known as ‘facilitating subjects’. Subjects excluded from this list subsequently became less popular, despite many having seen yearly growth prior to 2010. For example, the number of pupils taking A level Media, Film and TV rose by 99% (+12,060) between 2000 and 2010, but between 2010 and 2020, this trend reversed, falling 43% (-10,535). To a lesser extent, a similar trend was seen with A level Law (+98%,-23%).

There is also a distinct link between the type of qualification taken in school and the type of university or college the student attends. For example, in England, students with post-16 vocational qualifications have a high likelihood of entering HE (overall entry rate of 49%), but they are significantly less likely to attend a higher tariff provider than those with general qualifications (e.g. A levels or IB) – this also holds true within specific degree subjects. Table 2 shows the proportion of 18 year old pupils in England who enter HE, broken down by qualification type held and the type of university or college. Although students with vocational qualifications are less likely to go into HE at age 18, previous research has found these students are more likely to go into employment, an apprenticeship or FE on leaving school.
“PSYCHOLOGY – AT SOME UNIVERSITIES I APPLIED FOR
I NEEDED A GRADE 6 GCSE MATHS, BUT WHILE I WAS DOING
MY GCSES I DIDN’T REALISE I HAD TO DO WELL IN MATHS
TO DO WHAT I WANTED TO DO AT UNIVERSITY
Psychology student at a lower tariff provider

“I WANTED TO STUDY CREATIVE WRITING AND LITERATURE
AT X UNIVERSITY, BUT THEY DIDN’T ACCEPT BTECs
Imaginative writing student at a medium tariff provider

PSYCHOLOGY – AT SOME UNIVERSITIES I APPLIED FOR
I NEEDED A GRADE 6 GCSE MATHS, BUT WHILE I WAS DOING
MY GCSES I DIDN’T REALISE I HAD TO DO WELL IN MATHS
TO DO WHAT I WANTED TO DO AT UNIVERSITY
Psychology student at a lower tariff provider

Table 2: The proportion of 18 year olds in England in 2019 who entered HE overall and split by qualification type gained post-16, and a subject-specific example

<table>
<thead>
<tr>
<th>POPULATION</th>
<th>OVERALL HE ENTRY RATE</th>
<th>HIGHER TARIFF PROVIDER ENTRY RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall entry rates for 18 year olds in England taken from the National Pupil Database</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All 18 year olds in England in 2019, including those without a post-16 qualification</td>
<td>35%</td>
<td>11%</td>
</tr>
<tr>
<td>Entry rates for 18 year olds in England with post-16 qualifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 year olds in England with a post-16 general qualification (A level or IB)</td>
<td>70%</td>
<td>27%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POPULATION</th>
<th>ENTRY RATE TO COMPUTER SCIENCE AT HE</th>
<th>ENTRY RATE TO COMPUTER SCIENCE AT A HIGHER TARIFF PROVIDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 year olds in England with a post-16 general qualification (A level or IB)</td>
<td>2.6%</td>
<td>0.7%</td>
</tr>
<tr>
<td>18 year olds in England with a post-16 vocational qualification (any vocational qualification equivalent in size and level to an A level)</td>
<td>3.3%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Given that disadvantaged applicants are more likely to hold vocational qualifications, this conceivably acts as an additional barrier to their progression to higher tariff providers, where the equality picture remains worst. It also highlights the importance of awareness building of less linear pathways into higher tariff providers, including HE bridging provision and foundation year programmes.

Subject choice at GCSE/National 5 can be limiting, but attainment is more likely to narrow options

Typically, the range of subjects studied by a student at GCSE/National 5 far exceeds the range studied by them post-16. For example, in England, a student usually takes eight or nine subjects at GCSE and up to four subjects post-16. Consequently, it is unlikely that the subjects taken at GCSE/National 5 would limit students’ post-16 choices – of those unable to study all the post-16 qualifications they wanted, only 6% cite this as a factor in them being unable to take a particular qualification.

Students are far more likely to report their attainment at GCSE/National 5 had been a limiting factor, with 18% citing this as the reason they could not take all the post-16 options they wanted. In addition, the entry requirements for some universities and colleges specify a minimum grade in certain GCSE/National 5 subjects, so attainment can have a longer-term consequence.
I only had National 5 Maths at a D but needed a C, this was the only conflicting element the rest of my qualifications matched.

Law student at a medium tariff provider

Certain subjects limit what you can do or how some subjects impact others even if you don’t expect it; for example my French GCSE grade affected my prospects of getting to do International Business.

Business studies student at a lower tariff provider

Now I know what my degree course entails, I would go back and choose different GCSE / National 5s because...

- I would choose a subject more useful for my degree (52%)
- I would choose a subject I enjoy more (57%)
- I would choose a subject to keep my options open (12%)

Although GCSE/National 5 subject choices do not commonly create a significant barrier to accessing particular post-16 qualifications or degree subjects, more than one in four students stated they would make these choices differently now they know what their degree course entails42 – nearly as many as report wishing they had chosen a different post-16 option (32%).

Students who think about their HE choices earlier are less likely to wish they could go back and change the choices they made at school. Of the students who had not thought about their HE choices until starting their post-16 qualifications, 52% said they would change a GCSE/National 5 or post-16 option if they could, compared to 46% who had thought about their degree subject before making their GCSE/National 5 choices. This suggests students would benefit from considering their degree options before they choose their GCSE/National 5 subjects.

There is, therefore, a clear role for UCAS and others to support pupils’ understanding of how qualification and subject choices at GCSE/National 5 and post-16 may affect their later options (see Recommendation 4). Reviewing the range of UCAS’ qualification information to ensure it remains fit for purpose is a key action to arise from this report (see Recommendation 3).
In this final section, we explore whether students are receiving the right information and advice – both about what to study in school and where it could take them in later life. We also highlight the benefits of earlier, broader and, most critically, personalised information and advice.

- Two in five students believe that more information and advice would have led to better HE choices.
- 28% of UK 18 year old applicants are seriously considering an apprenticeship at the point of their application, and 7% of unplaced students go into an apprenticeship.
- Almost one in three students report not receiving information about apprenticeships from their school.

**Information and advice: Earlier, broader, and personalised**

The role of earlier, broader, and personalised information and advice is highlighted through our research. Students who think about their degree subject early tend to feel more prepared once they start studying. 65% of those who started thinking about the HE subject they might want to study before choosing their GCSE/National 5 options felt extremely or mostly prepared, compared to 56% of those who only started to consider this after they entered post-16 education. Advantaged students are also more likely to feel extremely or mostly prepared, with 64% of POLAR4 Q5 students reporting this to be the case, compared to 58% of Q1 students.

Two in five students felt more information and advice would have led to them making better choices, and over 60% said this would have been beneficial when they made their GCSE/National 5 choices. Moreover, students who report more information and advice would have led them to make better choices are almost three times as likely to report not being able to study a degree course that might have interested them at university or college due to not holding the necessary subjects (30% of students vs. 11% of students).

A lack of information and advice is also more strongly felt by disadvantaged students; 43% from POLAR4 Q1 report that more information would have helped them make better decisions, compared to 37% of those from Q5. Disadvantaged students are also more likely to have welcomed this advice earlier, when they made their GCSE/National 5 choices, with 65% of those from Q1 who reported they feel more information and advice would have been beneficial saying they would have liked it when choosing GCSE/National 5, compared to 56% from Q5. Additionally, non-selective school students are more likely (over 10 percentage points) to report that more information and advice would have led them to make better decisions.

“IT WOULD HAVE BEEN REALLY USEFUL TO HAVE HAD A ONE TO ONE DISCUSSION WITH A TEACHER, FOR EXAMPLE, AND GO OVER ALL MY OPTIONS”

Anatomy, physiology, and pathology student at a medium tariff provider

“COMING FROM A DEPRIVED AREA, TALKS FROM STUDENTS SPECIFICALLY ABOUT HOW EVERYONE HAS THE POTENTIAL TO GO TO UNIVERSITY – NO MATTER WHERE YOU COME FROM [WOULD HAVE BEEN USEFUL]”

Psychology student at a higher tariff provider
In addition, students with a parent or carer who is educated to degree level tend to feel more satisfied with the information and advice they receive, with 37% reporting more information and advice would have helped them make better choices compared to 47% of those without a degree-educated parent or carer. Efforts must therefore be focused on levelling-up the information and advice landscape for all, to ensure disadvantaged students’ pathways are not limited by a lack of support.

Where students may lack traditional support, the opportunity to talk to peers allows individuals to share experiences with one another. Although not a direct replacement for face-to-face CIAG, this is particularly relevant for students who may not have a degree-educated parent or carer, or where not many students from their area and/or school attend HE. Users of the Unibuddy on UCAS service (see case study) reported high levels of satisfaction, with 94% of users finding it useful, and 87% saying it influenced their degree choice.

The next decade will see an overhaul in technical education, including T Levels, higher technical qualifications, and the Lifetime Skills Guarantee. Additionally, the focus on increasing apprenticeship opportunities continues, and interest is growing. Following the ‘Kickstart Scheme’ announcement in July 2020, there has been a 12% month-on-month increase in the number of listed opportunities on the UCAS apprenticeship search tool, Career Finder. UCAS survey data shows that 28% of UK 18 and 19 year old applicants are seriously considering an apprenticeship at the point of their application and 7% of unplaced students go into an apprenticeship the year after applying to HE. A recent JISC survey of students and graduates also reported that three quarters of respondents had looked for an apprenticeship or training scheme in the last 12 months.

A recent UCAS article highlighted that nearly a third (30%) of parents and carers said they didn’t know it was possible for someone taking a degree apprenticeship to achieve a degree level qualification, and degree-educated parents are more likely to advocate a university or college degree exclusively over an apprenticeship. Furthermore, many students report they were only offered information about traditional pathways (e.g. a three-year degree) – almost one in three applicants received no information about apprenticeships from their school. This points towards the need for Ofsted and school inspectorates across the UK to place more emphasis on the monitoring of CIAG about technical education and apprenticeships (e.g. upholding of the Baker Clause in England) (see Recommendation 5).

Case study: UNIBUDDY ON UCAS – PEER-TO-PEER CONVERSATIONS

The rising influence of peer review led UCAS to launch a partnership with Unibuddy in 2019. This service allows students across the UK to gain authentic insight into the HE experience by chatting to existing students. So far, around 90 universities and colleges are part of this service and 20,000 students have sent more than 500,000 messages across the platform. UCAS continues to work with Unibuddy and the sector to develop this initiative.

More information: www.ucas.com/chat-to-students

["AS A STUDENT WHOSE PARENTS HAD NOT GONE TO UNI AND HAD NOT STUDIED IN THIS COUNTRY I WAS UNPREPARED FOR EVERYTHING UNIVERSITY HAD TO OFFER AS IT WASN’T A PARTICULARLY TALKED ABOUT TOPIC AT SCHOOL. I WAS NOT AWARE OF THE INFLUENCE MY SUBJECT CHOICES WOULD HAVE ON FUTURE DECISIONS"

Chinese studies student at a higher tariff provider

"[I WOULD HAVE BENEFITTED FROM] ADVICE FROM CURRENT OR PREVIOUS STUDENTS TAKING THE SUBJECTS"

Pre-clinical veterinary medicine student at a higher tariff provider

["[I WOULD HAVE LIKED] HELP TO EXPLAIN TO MY PARENTS HOW USEFUL THINGS LIKE APPRENTICESHIPS OR A YEAR ABROAD ARE"

Cinematics and photography student at a higher tariff provider
With so much choice – and more around the corner – supporting students (and their parents and carers) in understanding innovations in technical education and apprenticeship pathways alongside their HE options will only grow in importance. UCAS, working with partners, is committed to supporting the delivery of the Baker Clause via digital means, providing comprehensive information, advice, and content tools to help students make informed and aspirational choices across all pathways (see Recommendation 4). This is part of our ambition to be the go-to place for all post-secondary education, including apprenticeships, to enable students to consider and connect to all options fairly (see Recommendation 6).

‘I WOULD HAVE LIKED TO RECEIVE ADVICE FROM TEACHERS AT SCHOOL THAT IT WOULD BE A GOOD IDEA TO DO AN APPRENTICESHIP OR SOMETHING MANUAL RATHER THAN PUSHING ME TO UNI’

Management studies student at a lower tariff provider

The same applies to how students might change pathway. Although most students are satisfied with their choice of degree subject – research from Advance HE and the Higher Education Policy Institute (HEPI) suggests three quarters of students would choose to do the same course at university or college if given the opportunity to start again – there is a significant minority who wish they had chosen a different course.

There are processes in place to enable changes at different points, which are utilised by a small number of students:

Before enrolment: In 2020, 3%\(^1\) of accepted applicants (9,560) changed their specific subject area through Clearing. 93% of these used the ‘decline my place’ option in UCAS Track.

Between enrolment and graduation: 8% of students change the specific subject area of their degree, whilst 5% change the general subject area\(^2\).

To improve and increase the options available to students who want to change their course or provider once they have entered HE, the Government has set out its ambition in the ‘Skills for Jobs’ white paper. This expansion of options once again highlights the need for accessible information and advice about a student’s options throughout their journey – not only at the common transition points.

‘[I’D HAVE LIKED TO KNOW] WHICH SUBJECTS TRADITIONALLY LEAD TO WHICH CAREER PATHWAYS. MORE ABOUT ALTERNATIVE PATHWAYS LIKE APPRENTICESHIPS ALSO [WOULD HAVE BEEN USEFUL]’

Law student at a higher tariff provider

Case study:

**THE CAREERS & ENTERPRISE COMPANY – ENTERPRISE COORDINATORS**

The Careers & Enterprise Company is made up of Enterprise Coordinators, co-funded by The Careers & Enterprise Company and Local Enterprise Partnerships (LEPs). These are trained, senior-level professionals from a wide range of industry sectors who use their own connections with local and national employers to work with senior leaders in schools to build effective careers plans, and they are also instrumental in promoting apprenticeships and work experience opportunities.

More information: [www.demo.careersandenterprise.co.uk/about-us/our-network](http://www.demo.careersandenterprise.co.uk/about-us/our-network)
Knowing what is important to the individual is the key to personalisation

A student’s journey into HE is a web of layered and entwined choices, which can feel overwhelming. UCAS has already spoken about psychologist Barry Schwartz’s ‘choice paradox’, that faced with a world of choice, we find ourselves lost in information overload and struggle to evaluate the different sources of advice and insight.

Whilst Section 1 taught us that interest or enjoyment is the primary motivator in degree choice, graduation is not where a student’s journey ends. Therefore, it is important that students consider what will be personally important to them post-graduation, whether that be salary, employability, or a healthy work/life balance. They should be encouraged to think early about these next steps, which occur after their degree, to ensure their satisfaction endures into the years that follow graduation.

We know the motivating factors behind degree choice are often not based on financial return and salary is not the ‘be-all and end-all’ – only 13% of finalists consider salary as more important than interest in the role when looking for a graduate job\textsuperscript{53}. Encouragingly, the motivations of students in choosing their degree tend to correlate with trends in graduate outcomes. For example, maths students are particularly motivated by graduate prospects when choosing their degree subject and have one of the highest recorded salaries – almost half of maths graduates earn £27,000 approximately 15 months after graduating\textsuperscript{54} (compared to 31% of all graduates).

<table>
<thead>
<tr>
<th>SUBJECT AREA</th>
<th>PROPORTION OF GRADUATES IN FULL-TIME EMPLOYMENT 15 MONTHS AFTER GRADUATING\textsuperscript{15}</th>
<th>PROPORTION OF STUDENTS MOTIVATED BY PURSUING A PARTICULAR CAREER\textsuperscript{16}</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>57%</td>
<td>46%</td>
</tr>
<tr>
<td>Subjects allied to Medicine (e.g. Nursing) (B)</td>
<td>69%</td>
<td>64%</td>
</tr>
<tr>
<td>Veterinary Science (D1)</td>
<td>91%</td>
<td>85%</td>
</tr>
<tr>
<td>Medicine and Dentistry (A)</td>
<td>80%</td>
<td>76%</td>
</tr>
<tr>
<td>Education (X)</td>
<td>67%</td>
<td>63%</td>
</tr>
<tr>
<td>Languages (R &amp; T)</td>
<td>51%</td>
<td>21%</td>
</tr>
<tr>
<td>History and Philosophical Studies (V)</td>
<td>48%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Table 3: Proportion of students in full-time employment 15 months after graduating and the proportion of applicants who reported being motivated by being able to pursue a specific career

Knowing what is important to the individual is the key to personalisation

Case study:

CASE STUDY: THE CAREERS & ENTERPRISE COMPANY – CAREERS HUBS

Careers Hubs were launched in 2018 and are backed by Government funding. Currently, over 2,200 secondary schools and colleges are part of a local Hub that work together with employers and other organisations to deliver the Gatsby Benchmarks and improve careers outcomes for young people. The first wave shows that Careers Hubs are outperforming the national average across all aspects of careers education – 58% provide every student with regular encounters with employers, and 52% provide every student with workplace experiences.

More information: www.careersandenterprise.co.uk/about-us/our-network/careers-hubs
Table 3 (left) shows how applicants for vocational subjects, including nursing, medicine, education, and veterinary science who are particularly motivated by how their degree will allow them to pursue a specific career tend to experience high graduation employment rates, compared to subjects where students are less motivated by this – history and philosophical studies, and languages.

This same premise of ‘thinking ahead’ towards career opportunities is equally applicable at earlier decision-making points. As explored in Section 2, students with vocational post-16 qualifications tend to study different subjects, at different types of universities or colleges. Consequently, graduate outcomes for students differ depending on their post-16 qualification type: those with vocational qualifications tend to have higher graduate employment, with 73% in full or part-time employment 15 months after graduation, compared to 68% of students with A levels. However, they are also less likely to earn higher salaries, with 17% of students with vocational qualifications earning over £27,000, compared to 32% of students with A levels.

Reassuringly, there is evidence to suggest students are already aware of this and that students holding vocational qualifications are more vocationally minded: 53% of students taking BTEC qualifications this year chose their degree subject to pursue a certain career, compared to 44% of students taking A levels. Additionally, we found little evidence to suggest students with vocational qualifications are less satisfied with the post-16 choices they made – with 26% of BTEC students reporting that, if given the opportunity, they would choose one or more post-16 options differently, compared to 32% of A level students.

The individuality of student choice means it is critical to ensure the range of available information sources are joined-up and effectively communicated to students in a personalised way. As part of this, consideration should be given to the importance of UK-wide comparability and parity of information provision across all routes, including technical education and apprenticeships (see Recommendation 1). Above all, information and advice must reflect the interests of the next generation, to ensure relevancy for those embarking on their journey for years to come.
This report uses a range of different data sources to map a student’s journey from GCSE/National 5 through to their choice of degree subject and beyond. The data is restricted to UK school leavers (primarily aged 18-19) unless otherwise specified. When using subject groupings, we use the JACS subject groupings to be able to assign each student to an individual subject area and to look at long-term trends in demand using a consistent definition.

The main new evidence comes from a new UCAS survey of first and second year students at UK universities and colleges. In total, more than 27,000 first and second year students accepted at age 17-19 over the last two cycles took the time to tell us about their pathway(s) to HE, what motivated their decisions along the way, and any barriers or challenges they faced. The survey ran in November 2020 and covered accepted applicants from the 2019 and 2020 application cycles. This gave us unparalleled insight into their journey into HE, and how this differs by background, geography, school qualification type, HE subject, and university or college choice.

We also make use of extensive results from other UCAS surveys in the following ways:

- Early results from UCAS’ ongoing new applicant survey for the 2021 cycle (26,790 UK respondents aged 18-19 at the time of analysis), to analyse the reasons students choose their degree subjects, and consider the effects of COVID on their motivations.
- UCAS’ survey of unplaced applicants from the 2020 cycle (490 UK respondents aged 18-19), to understand the alternative pathway some students choose.
- UCAS’ survey of placed applicants from the 2020 cycle (over 10,000 UK respondents aged 18-19), giving us insight into who has supported them at each stage of their journey.
- A new UCAS survey of applicants’ parents and carers from March 2021 (over 1,200 parents/carers surveyed), to analyse their role in student choice.
- A UCAS survey of finalists in 2020 (in the last year of their full-time undergraduate degree), to help us understand what factors are important to students when looking for a graduate job (380 UK respondents).

This breadth of survey data covering the different points in a student’s journey gives us a comprehensive understanding of their thoughts and feelings, from school age all the way through to completing their degree.
Alongside our survey insights, we explore UCAS data from the 2.8 million applications each cycle that, in themselves, tell a story about the patterns and trends in progression to UK HE. This allows us to develop a clearer understanding of the relationship between the qualifications taken post-16 and degree subject, and to analyse trends in subject demand over time. Where appropriate, we have combined UCAS application data with data from the National Pupil Database (NPD), allowing us a deeper understanding of the experiences of all school pupils in England – for example, to assess the proportion of students with different qualifications accepted to HE, and specifically to higher tariff providers. Where appropriate, other research and data are used to build a more complete picture of the student journey – for example, in analysing longer-term trends in qualification demand.

The final piece of the puzzle shows what happens after a student completes their degree. To help us complete our picture of the student experience, we use data from the Higher Education Statistics Authority (HESA) to pinpoint where each degree leads after graduation. We control for post-16 qualification and degree subject to observe how decisions made at a younger age play out on graduation.

In summary, we lead with the voice of the student: survey data allows us to identify what is important to different groups of students and to map their journeys. This data is coupled with UCAS application data often linked to, or used alongside, other relevant third-party data sets, to further enhance our understanding of the varied routes students take into HE.
In England, the **statutory guidance** for careers education is linked to the Government’s **Careers Strategy**, and stipulates that all schools should use the eight **Gatsby Charitable Foundation’s Benchmarks** as a framework for their careers provision. Specifically addressing HE and FE opportunities, Benchmark 7 requires that ‘By the age of 16, every pupil should have had a meaningful encounter with providers of the full range of learning opportunities, including sixth forms, colleges, universities and apprenticeship providers’ and ‘By the age of 18, all pupils who are considering applying for university should have had at least two visits to universities to meet staff and pupils’.

Furthermore, all English schools were required to ‘ensure that there is an opportunity for a range of education and training providers to access all pupils in year 8 to year 13 for the purpose of informing them about approved technical education qualifications or apprenticeships’ – this is known as the ‘Baker Clause’, introduced as an amendment to the Technical and Further Education Act 2017.

The premise behind this clause is clear – to ensure that technical education is recognised as equally valid and important as traditional academic routes – but IPPR research shows it has not been universally implemented. In the recently launched, **Skills for Jobs**, white paper, Government commits to ‘a three-point-plan’ to enforce the Baker Clause, which will include ‘a new minimum requirement about who is to be given access to which pupils and when; tougher formal action against non-compliance; and government-funded careers support for schools to be made conditional on Baker Clause compliance’.

Since 2008, schools in Wales have been required to use the **Careers and the world of work framework** to deliver careers education to 11-16 year olds. Likewise, take-up has been patchy and many schools report being under-resourced to use the evaluation and tracking systems. After 2017 **proposals** to adopt the Gatsby Benchmarks in Wales, Welsh Government funded a **pilot**, supported by a strategic steering group, and also published **proposals** in 2019 for a new curriculum where age appropriate careers education is required for all pupils aged 3-16.

In Scotland, skills for learning, life and work are embedded within the **Curriculum for Excellence for ages 3-18**. This is supported by the Government agency, **Education Scotland**, whose particular focus on skills development and preparation for the world of work aged 3-18 is outlined in the **Career Education Standard 3-18**. Skills Development Scotland, the national skills body, also delivers CIAG from Primary 5 through to S6 using the **Career Management Skills Framework** and the **My World of Work website** (enhanced this year to support users through the COVID pandemic).

In Northern Ireland, all schools have a partnership agreement in place with the careers service, and the NI Government’s **strategy** for careers education sets out key priorities including ‘face to face impartial advice to young people at key transition stages, providing additional support to those at risk of becoming disengaged and those with barriers; and providing more advice to parents’.

In Wales and Scotland, government guidance promotes age-appropriate careers education from three years old.
1 www.officeforstudents.org.uk/publications/developing-an-understanding-of-projected-rates-of-progression-from-entry-to-professional-employment


3 The Gatsby Benchmarks of Good Career Guidance are a blueprint of what good careers provision looks like. The eight Benchmarks are described by section 2 of the Gatsby Benchmarks of Good Careers Strategy for England’s schools and colleges programme. Careers Education & Enterprise Scotland are a blueprint of what good careers provision looks like. The eight Benchmarks are described in their Career Education and Guidance Framework. Careers Scotland are a blueprint of what good careers provision looks like. The eight Benchmarks are described in their Career Education and Guidance Framework.


5 Unless otherwise specified the statistics quoted in this report cover UK 18-19 year olds.


7 Weighted proportion from survey of UK 18-19 year old applicants from the 2021 cycle with 26,790 respondents. Question asked was: ‘Which of the following statements, if any, describe how your choice of subject has been influenced by the COVID-19 outbreak and subsequent lockdown?’

8 www.heacademy.ac.uk/sites/default/files/resources/student_choice.pdf.

9 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles, with 27,040 respondents. Question asked was: ‘When did you start thinking about the subject or course you wanted to study at university or college?’

10 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles, with 27,040 respondents. Question asked was: ‘When did you first realise that going to university or college was an option for you?’

11 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles, with 27,040 respondents. Question asked was: ‘Which did you choose first, the universities or colleges you wanted to study at or the subject or course you wanted to study?’

12 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles, with 27,040 respondents. Question asked was: ‘When did you start thinking about the subject or course you wanted to study at university or college?’

13 Restricted to subjects with more than 300 respondents to the survey.

14 Weighted proportion from survey of UK 18-19 year old applicants from the 2021 cycle, with 26,790 respondents. Question asked was: ‘Which of the following influenced your choice of subject(s)? Please select all that apply’.

15 Since the start of the pandemic, do you feel differently about the following in terms of their importance? Base: All respondents (743) 21 September 2020.

16 Since the start of the pandemic, do you feel differently about the following in terms of their importance? Base: All respondents (743) 21 September 2020.

17 Weighted responses to a survey of placed UK applicants in the 2020 cycle aged 18 and 19, with over 10,000 respondents. The question asked was: ‘Who was the biggest help during each of the following stages of the application process?’ Deciding which uni/courses to apply for: 20% teacher, 8% friends, 25% parents/carer, 6% outreach, 15% other, 27% none.

18 Weighted proportion from survey of UK 18-19 year old applicants from the 2021 cycle, with 26,790 respondents. Question asked was: ‘Which of the following influenced your choice of subject(s)? Please select all that apply’.

19 The grouping of universities or colleges (providers) based on the average levels of attainment of their UK 18 year old accepted applicants (summarised through UCAS Tariff points) in recent cycles. The groups are higher tariff, medium tariff, and lower tariff. Each group of providers accounted for around a third of all UK 18 year old acceptances in recent cycles.

20 Figures here refer to all UK applicants (as otherwise the number of applicants included would be too small).

21 Acceptances of all ages and domiciles included who answered the questions of what occupation their parent/carer has. Occupational background ‘Farming’, JACS3 subject group D – Veterinary Science, Agriculture and related.

22 Acceptances of all ages and domiciles included who answered the questions of what occupation their parent/carer has. Occupational background ‘Medical Practitioner’, JACS3 subject group A – Medicine and Dentistry.

23 Acceptances of all ages and domiciles included who answered the questions of what occupation their parent/carer has. Occupational background ‘Other’, JACS3 subject group E – All other.
24 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles, with 27,040 respondents. Question asked was: ‘Were you able to study all the post-16 options you wanted to at your sixth form or college?’ and ‘Why weren’t you able to study all the post-16 options you wanted to? Please select all that apply’.

25 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles, with 27,040 respondents. Question asked was: ‘Which of the following are reasons for you not attending sixth form or college at the school you did your GCSEs or National 5s at?’ and the options included were: ‘My school wouldn’t let me do some or all of the post 16 options I wanted to take’ and ‘My school didn’t offer some or all of the post 16 options I wanted to take’.

26 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles, with 27,040 respondents. Question asked was: ‘For each of the following statements please tell us whether this was a reason for you choosing all, most, some or none of your post-16 choices. I chose this subject because…’. We have taken the proportion who chose any of their subjects for each reason.

27 Based on analysing the influence of parents on subject choice from this question: ‘Which of the following influenced your choice of subject(s)? Please select all that apply’ as per Section 1.

28 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles, with 27,040 respondents. Question asked was: ‘Were you able to study all the post-16 options you wanted to at your sixth form or college?’ and ‘Why weren’t you able to study all the post-16 options you wanted to? Please select all that apply’.

29 Estimate based on free text responses to the above detailing which course students couldn’t study.

30 45% of medicine acceptances are from POLAR4 Q1, but 14% of those reported not being able to study medicine. 7% of students who reported not being able to study because they didn’t have the required post-16 and/or GCSE or National 5 subjects.

31 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles, with 27,040 respondents. Question asked was: ‘When you were looking at courses to study at university or college, was there a course, or any courses, you were interested in that you weren’t able to study because you didn’t have the required post-16 and/or GCSE or National 5 subjects?’.

32 Based on a smaller number of respondents (about 190 respondents).

33 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles, with 27,040 respondents. Question asked was: ‘Were you able to study all the post-16 options you wanted to at your sixth form or college?’ and ‘Why weren’t you able to study all the post-16 options you wanted to? Please select all that apply’.


35 By Extended Diploma, UCAS is referring to a range of vocational qualifications that are large in size (commonly above 1,000 Guided Learning Hours (GLH), often covering a single subject. Common versions include: BTEC National, OCR Cambridge Technical, and AQA Applied General qualifications. In general, students only take one post-16 qualification if they are studying for a Level 3 Extended Diploma, as these qualifications are equivalent in size to three A levels.

36 Based on analysis of the National Pupil database for KS5 in 2019 linked to UCAS admissions data.

37 15% of POLAR4 Q1 UK 18 year old applicants hold only BTEC quals in 2020 compared to 5% from Q5.


40 Based on analysis of the of the National Pupil database including all pupils in England at age 15, as recorded in the National Pupil Database in 2017 (source: National Pupil Database and School Census, Department for Education). Post 16-qualifications data is taken from the KS5 National Pupil Database in 2019 linked to UCAS admissions data. All qualifications included are Level 3, at least equivalent in size to an A level. General qualifications include A levels, IB qualifications, and Cambridge International Level 3 Pre-U Vocational qualifications include Pearson BTEC, OCR Cambridge Technical, WJEC Advanced General, NCFE CACHE, City & Guilds, WJEC Applied Diploma, and LBF Level 3 Diploma.

41 JACCS3 general subject group I – Computer Science.

42 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles. Question asked of those who stated they had moved school for sixth form was: ‘When would you have liked to receive this information or advice? Please select all that apply’.

43 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles, with 27,040 respondents. Question asked was: ‘Now that you are studying at university and know what your course involves, have you for your course?’.

44 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles. Question asked was: ‘Now that you are studying at university and know what your course involves, how prepared do you think your school qualifications have made you for your course?’.

45 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles. Question asked was: ‘Would it have helped you to make better decisions if you had had more information or advice at the time you made your degree, post-16 and GCSE or National 5 choices?’.

46 Weighted proportion from survey of UK 18-20 year old first and second year university students over the 2019 and 2020 cycles. Question asked of those who stated they had moved school for sixth form was: ‘When would you have liked to receive this information or advice? Please select all that apply’.

47 Weighted proportion from survey of UK 18-19 year old applicants from the 2021 cycle with 26,790
respondents. Question asked was: ‘In addition to your application for higher education, are you seriously considering any of the following? Please tick all that apply’.

48 Weighted proportion from survey of UK 18-19 year olds who applied in 2020 but did not gain a place by the end of the cycle, with 490 respondents. The question asked what ‘What are you currently spending your time doing?’.


50 Weighted proportion from survey of UK 18-19 year old applicants from the 2021 cycle, with 26,790 respondents. Question asked was: ‘Has your school or college given you any information about the option of doing an apprenticeship or degree apprenticeship?’.


52 Of all UK 18-19 year old applicants who were accepted at any point through a main scheme choice, 3% (9,560) were subsequently accepted for a different detailed JACS3 subject group through Clearing and, of these, 8,850 used the self-release (decline my place) option in UCAS Track.

53 These percentages are based on students graduating between the 2014/15 and 2017/18 cycles, who started their studies after the 2012/13 cycle, had an expected length of study of more than two years on entry, and were studying for a degree in one detailed JACS3 subject group, or one general JACS3 subject area, on entry and qualification.

54 A UCAS survey of finalists in 2020 (in the last year of their full-time undergraduate degree) to help us understand what factors are important to students when looking for a graduate job (380 UK respondents). The question asked was: ‘When looking for a graduate job, do you consider your interest in the job, or pay, to be more important?’ and it was only asked of students who were certain they would look for a job once they had graduate.

55 www.hesa.ac.uk/data-and-analysis/graduates/salaries

56 www.hesa.ac.uk/news/18-06-2020/sb257-higher-education-graduate-outcomes-statistics. Includes students graduating from HE providers with a full-time first degree (this includes graduates of all ages and from all domiciles).

57 Weighted proportion from survey of UK 18-19 year old applicants from the 2021 cycle, with 26,790 respondents. Question asked was: ‘Which of the following influenced your choice of subject(s)? Please select all that apply’.

58 UCAS analysis based on unweighted Graduate Outcomes survey responses from UK domiciled first degree students who started their studies between 2012/13 and 2015/16 cycles, and have graduated in 2017/18 cycle. Here vocational qualifications include BTEC qualifications and OCR Cambridge Technical qualifications of any size.

59 In 2021, based on 18 and 19 year old UK applicants predicted BTEC qualifications equivalent to three A levels, and students predicted at least three A levels. Weighted proportion from survey of UK 18-19 year old applicants from the 2021 cycle, with 26,790 respondents. Question asked was: ‘Which of the following influenced your choice of subject(s)? Please select all that apply’.

60 Method of classifying academic subjects and modules (www.hesa.ac.uk/support/documentation/jacs). Unless otherwise specified, refers to the JACS 3.0 specification.
