Schools, attainment and the role of higher education

Introduction

English universities and colleges have a long established history of engaging with schools to help prepare their pupils for higher education.1 Such engagement can range from traditional outreach visits to helping run multi-academy trusts. It often includes such activities as providing information, advice and guidance, and running summer schools and masterclasses for school pupils.

Part of the rationale for this work is to raise the attainment of pupils to a level where university application and attendance are realistic prospects for them. We know of persistent gaps in attainment between learners from advantaged and disadvantaged backgrounds, which start early in life and continue through school and into their later education and employment careers. Low levels of literacy and numeracy reduce participation in tertiary education, limit employment options and mean that salary expectations remain low.

The work universities and colleges do with schools can help to ameliorate this disparity, benefiting not just the pupils who go on to higher education but the institutions themselves, and society in general. Universities are major local institutions with substantial influence, and their mission should include improving the prospects of their nearby populations, and of pupils from disadvantaged backgrounds further afield. Raising school attainment is a critical way of achieving this.

It also enables the universities to recruit and support better prepared students, who are equipped to participate successfully, thus reducing attrition, improving degree outcomes and leading to more successful graduates. A more skilled workforce then helps to generate a stronger, more...
productive economy, once again benefiting the local area.\textsuperscript{4} With all these ends in mind, progress has been made to reduce attainment gaps over the last decade.\textsuperscript{5} However, those gaps continue to affect lives, from primary school through secondary and tertiary education and into adult careers. Moreover, the pandemic has represented a substantial setback to this progress, which had already begun to slow down prior to its arrival.

This Insight brief looks at the history and prospects of these long-term disparities, and at how they can be addressed. It outlines what universities and colleges can do, and what the Office for Students (OfS) will encourage them to do, by building on their existing work with schools to develop strategic partnerships focused on raising attainment.

The attainment gap

Most families want a university education for their children, and that aspiration is shared by most young people.\textsuperscript{6} But there have been significant barriers to access to higher education, including the impacts of socioeconomic disadvantage, geography and available guidance about the options. At the core of many of these problems is the attainment gap - young people from disadvantaged backgrounds, even those who want to attend higher education, have been unable to acquire and demonstrate the same levels of knowledge and skill as their more advantaged peers in relevant areas of learning. This is not a failing with the pupils, but a result of accumulated impacts that schools, appropriately supported, can do a great deal to ameliorate.\textsuperscript{7}

The gaps in development and attainment between advantaged and disadvantaged children are evident from the early years and widen throughout school. Poverty, special educational needs and ethnicity have been among the most important factors in this educational disparity.\textsuperscript{8} In the latest year of published data, for example, young people who were not eligible for free school meals (FSM) at age 15 were 70 per cent more likely to enter higher education by age 19 than those who were.\textsuperscript{9}

As Figure 1 shows, between 2012-13 and 2016-17 (when many students now at university were taking their GCSEs), 23 per cent of pupils eligible for FSM were awarded no higher grade GCSEs, whereas only 8 per cent of those not eligible faced this outcome. Meanwhile, 18 per cent of pupils not eligible for FSM attained 11 or more higher grade GCSEs, compared with only 6 per cent of those eligible.\textsuperscript{10}

Achievement at GCSE is an important indicator of future participation in higher education. In the most recent published data, just 27 per cent of pupils eligible for FSM went on to university, compared with 46 per cent of pupils not in this group.\textsuperscript{11} For pupils awarded the same number of higher grade GCSEs, the chance of entering higher education is pretty much the same whether they were eligible for FSM or not, as seen in Figure 2. So, the participation gap between these two groups can be almost entirely explained by their prior attainment at this stage of their education.

Effects of the pandemic

The COVID-19 pandemic, and the consequent national lockdowns that began in March 2020 and continued through 2021, resulted in schools closing to most pupils, who had to continue their education at home. They also changed the operation of national tests and public exams, reducing the opportunity for disadvantaged pupils to demonstrate their knowledge in a standardised test, rather than relying on teacher grading. In disrupting education and assessment, impacting mental health and wellbeing, harming language and communication skills, and obstructing careers advice and guidance, the pandemic has almost certainly exacerbated these disparities.

The issue of learning loss during lockdowns has been widely acknowledged for both primary and secondary pupils, but the evidence shows that those pupils from more disadvantaged backgrounds suffered greater learning loss than their more advantaged
Regional disparities have also emerged. There has also been an increase since the beginning of the pandemic in children eligible for FSM. Digital and learning poverty remain an important factor, with many more pupils from deprived backgrounds reporting that they had no access to quiet study spaces, as well as limited access to technology to participate. The Department for Education has responded to this need by providing 1.9 million learning devices for learners by March 2022.

The changes in how A-Levels and GCSEs were awarded during the pandemic have seen a big increase in top grades. In 2021, 44 per cent of A level grades were A or A*, compared with 25 per cent in 2019, the last year when national exams took place. While this applied to pupils from across the school system, these increases were unevenly distributed, with the proportions of top A-level grades awarded in 2021 to pupils in independent schools increasing by nine percentage points (from 61 to 70 per cent) – considerably greater than the six percentage points (from 38 to 44 per cent) seen overall.

Although the actual numbers of entrants, including those in the most underrepresented groups, increased in both 2020 and 2021, these increases benefited more of those pupils whose background made them more likely to attend university in the first place. Among students from those communities most underrepresented in higher education, 6.1 per cent gained places at the most selective universities in 2021. Proportionally this was a 12.7 per cent increase on the rate in 2020, but it was accompanied by a similar increase in the proportion of students entering these universities from the areas with the highest representation.

Since the former numbers are still small in absolute terms, this means that the increase in headcount was larger among the more advantaged pupils. And since graduates from these universities are more likely to access professional careers, report higher life satisfaction and earn an average of £10,000 more annually, this disparity will continue to have an impact on the lives of these students.

Benefits of higher education

As well as being a key factor for understanding who has the opportunity to go on to higher education, prior attainment has been reflected in how well students have done when they get there and what they have gone on to do once they graduate. Analysis for 2019-20, shown in Figure 4, identifies a difference of 23 percentage points in degree attainment...
between those who entered with A\(^{\text{A*}}\)A\(^{\text{A*}}\) at A-level and those who had entered with below DDD, with 98.4 per cent of the former gaining a 1st or 2:1 compared with 75.4 per cent of the latter.\(^{21}\) Those from disadvantaged backgrounds who have participated in higher education have been more likely to drop out, less likely to graduate with a first or upper second class degree, and less likely to progress into graduate-level employment than their more advantaged peers.\(^{22}\)

While there are substantial benefits to being a graduate, not all have benefited equally from their degree. Smaller proportions than average, both of graduates whose parents had no residual income and of black graduates, have gone on to a highly skilled job or further study. Both are groups whose attainment at school is likely to have been lower than average. Among those graduating in 2016-17, this outcome was observed in 74.0 per cent of white students and only 69.3 per cent of black students, and (as illustrated in Figure 5) was 72.7 per cent among those whose parents had a household residual income of £42,601 and above, compared with 65.0 per cent among those with no residual income.\(^{23}\)

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Note: ‘IB’ = ‘International Baccalaureate’.

Figure 4: Percentage of qualifiers by entry qualifications, 2019-20 graduates

Qualifications on entry

Note: Population consists of full-time undergraduate students domiciled in England, Wales and Northern Ireland.\(^{24}\)
The benefits of improving the chances of entering and succeeding at higher education are clear. Recent research from the Sutton Trust followed the age of 30 three cohorts of pupils who sat their GCSEs between 2002 and 2004. It showed that attending university remained a key driver of social mobility. Disadvantaged young people who got a degree were more likely to gain a job in a higher income bracket. By the age of 30, people from disadvantaged backgrounds who did not enter higher education were much more likely to be in the lowest income groups.

This benefit has held up during the pandemic. In 2020, 86.4 per cent of graduates of working age were in employment, compared with 71.3 per cent of non-graduates: the proportion of graduates not employed in graduate occupations decreased by 5.0 percentage points to 25.5 per cent between the respective third quarters of 2019 and 2020. The median salary for graduates was £35,000, £9,500 higher than for non-graduates. Postgraduates earned on average £42,000. While only 24.5 per cent of non-graduates were in highly skilled employment, the same was true of two-thirds of graduates.

What universities, colleges and schools can do

The government has signalled that it expects ‘to see the whole higher education sector stepping up and taking a greater role in continuing to raise aspirations and standards in education’. Money spent by universities on access and participation should be ‘used effectively and in line with evidence to deliver real social mobility’. The OfS supports this work and is keen to see the independent evaluation of all our interventions.

It is not reasonable that there should be a trade-off between access and quality, or that students who have travelled demanding routes to reach higher education should have lower expectations of their outcomes. Rather, universities and colleges have a responsibility to improve equality of opportunity and quality together. It is also incumbent upon all involved in education, at whatever stage, to work to close the gap between disadvantaged pupils and their peers through improving attainment much earlier in life. To this end we will expect universities to continue to seek out strategic, enduring and mutually beneficial partnership with schools and third-sector organisations, and to experiment with new ways to improve the attainment of disadvantaged pupils. These approaches will potentially be very diverse, and tailored to the specific circumstances of particular universities, their geographical regions, and the groups being targeted. Many universities have a long history of collaboration with schools. These have included:

• Raising the expectations (rather than simply the aspirations) of pupils and their parents, teachers and guardians. Findings from the formative evaluation of the Uni Connect programme show that 79 per cent of participants who responded to the survey had increased expectations for the future, while 94 per cent had better knowledge of higher education options.

Case study: Books and Stories, Bournemouth University

Bournemouth University developed Books and Stories in 2014, as a targeted intervention aiming to achieve demonstrable improvement in the reading ability of Year 6 pupils, and to advance their confidence in and attitudes towards reading. Selected local schools are asked to identify up to 20 Year 6 pupils with reading ages over a year lower than their actual age, and without special educational needs. The university selects 10 at each school to benefit from 10 weekly one-hour sessions, delivered by its staff with support from student ambassadors.

Each session consists of a 30-minute guided reading session, followed by an interactive activity to develop reading comprehension skills. They aim to:

• Support learners to develop specific literacy skills, including reading fluency and comprehension and expanded vocabulary.
• Record a significant improvement in learners’ reading skills, based on tests at the beginning and end of the programme.
• Reduce the attainment gap between disadvantaged and non-disadvantaged learners at Key Stage 2, enabling learners in the long run to progress to higher education.

Evaluation uses a Type 2 approach based on the OfS standards of evidence. Analysis of 70 pupils in seven schools in 2019-20 showed that 67 per cent had improved their reading age by an average of 12 months, while 38 per cent had improved by two years or more. There was a 35 per cent increase in reading confidence, and a 44 per cent improvement in pupils’ comparison of their own reading abilities with those of their peers.

The programme has expanded to delivery by the local authority in Weymouth and Portland, with aims to reach more learners across the region and nationally. A parallel programme, Maths Mates, is being piloted in three local primary schools with the aim of improving maths attainment among pupils at Key Stage 1.
Case study: The Brilliant Club Scholars Programme

The Brilliant Club is a UK-wide charity that mobilises the PhD community to support students who are less advantaged to access and succeed at the most competitive universities. In 2020-21 it delivered the Scholars Programme to 15,000 pupils in schools across the UK.

In the Scholars Programme, PhD tutors share their subject knowledge and passion for learning with small groups of students aged eight to 18, over seven tutorials. These pupils are targeted as being least likely to access the most competitive universities because they have no parental history of higher education, are eligible for free school meals, or live in an area of postcode deprivation.

Courses are based on tutors’ own areas of research, and the students experience university-style learning and complete a challenging final assignment to build the knowledge, skills and confidence needed to progress to university. The programme includes two trips to universities so students can learn about university life.

UCAS evaluation shows that graduates of the programme are significantly more likely to progress to a competitive university than a control group with matched prior attainment (44 per cent compared with 28 per cent). The charity itself tracks significantly more likely to progress to a competitive university than a control group with matched prior attainment (44 per cent compared with 28 per cent). The charity itself tracks intermediate outcomes, focusing on key skills that support academic achievement and university preparedness, such as written communication, subject knowledge, critical thinking and university self-efficacy.

- Appointing ‘influencers’ and running dedicated open days and interactive events for pupils with experience of local authority care.
- Sponsoring local schools, as 73 universities and colleges reported in their 2019-20 access and participation plans that they were doing or about to do. Some have set up maths schools, such as the Exeter Maths School sponsored by the University of Exeter and Exeter College. The Liverpool Institute of Performing Arts has incorporated a primary school and a sixth form college into its LIPA Learning Group. Bridgwater and Taunton College sponsors a multi-academy trust.
- Running summer school programmes for school pupils. Evidence suggests that participating in summer schools is associated with greater confidence and increased aspiration, and with higher GCSE grades and rates of progression to higher education.
- Programmes of intervention in schools to raise attainment. The Education Endowment Foundation has rated interventions related to metacognition and self-regulation as highly impactful, and some universities and charities take this approach to raising attainment. Others focus their interventions on improvements to subject knowledge or to grades and capabilities: for example, Bournemouth University’s Books and Stories programme that has increased the reading age of participants.
- Supporting attainment at Level 3 through Access to HE courses taught in further education colleges.
- Providing initial teaching training and continuing professional development to teachers. The Sutton Trust found that ‘for poor pupils the difference between a good teacher and a bad teacher is a whole year’s learning’. A separate report also found six teacher characteristics associated with increased attainment, including a strong pedagogical knowledge. Evidence shows that high quality continuing professional development has an average effect on pupil attainment equivalent to a month of extra learning.
- Broadening the available routes into higher education to include short courses and apprenticeships. Over 100 universities and colleges offer degree apprenticeships, but some young people lack the knowledge to make an informed choice. With strategic partnerships, providers can show how diverse the sector is and help young people to choose a path to a successful career.
- Staff and alumni involvement in school governor structures. For example, the University of Manchester has a longstanding staff and alumni school governor initiative. The university recently conducted an impact study showing that, if all universities in England and Wales adopted the initiative, they could fill more than 10 per cent of the current nationwide school governor vacancies.
- Access and outreach work, which is often collaborative and can contain elements of raising attainment. For example, in the National Outreach Coverage project, between 2017-18 and 2019-20 over 80,000 activities related to skills and attainment were reported through tracking services in England.

Universities can also do more
Case study: Children’s University

Children’s University is a programme to improve the attainment and aspirations of primary pupils by supporting schools to provide a range of learning opportunities outside the school day. The aim is to improve pupil attainment and such other attitudes and skills as motivation, confidence and teamwork.

The Education Endowment Foundation, a charity focused on improving teaching and learning, particularly for socioeconomically disadvantaged pupils, through better use of evidence, has funded a trial of Children’s University. Over 2,500 pupils in Years 5 and 6 in 68 primary schools took part in a randomised control trial. Children in the schools receiving Children’s University chose from activities including trips to libraries and museums, after-school clubs and sports activities. Participation was rewarded through credits, certificates, and a ‘graduation’ event.

Pupils who took part in the Children’s University programme made slightly more progress in reading, maths, teamwork and social responsibility. This efficacy trial provided initial evidence that under ideal conditions well supported enrichment activities may improve children’s academic and non-cognitive outcomes. 150 primary schools are taking part in a further trial to establish whether this holds in everyday conditions.

We are asking universities and colleges to refocus their access and participation plans to show how they are addressing these new priorities, while taking all reasonable steps to comply with the provisions of their existing plans. Universities are asked to make changes to their existing plans for 2023-24, and then to renegotiate all their plans to cover the academic years 2024-25 to 2027-28. We will ask universities to make their plans more straightforward and accessible, while ensuring that they reflect both the needs of small providers and the increasing importance of degree apprenticeships.

We will review all current plans to capture the full scale of universities’ work on strategic school engagement, quality, and non-traditional pathways such as short courses and degree apprenticeships. We have also brought forward the cycle by a year, so that the new plans will run for up to four years from September 2024.

We are working to ensure universities and colleges generate robust evidence of what works and in what contexts, through increased emphasis on independent evaluation of activity and through ensuring that the findings from those evaluations are published. This will ensure that we can pursue the approaches that work and learn from those that do not. We will ensure that our access and participation work reinforces, and is seen as an important part of, our approach to quality and
standards. And we will promote more and more impactful school-university partnership activity to address the disparities in attainment in early life.

In preparation for the government’s plans for the Lifelong Loan Entitlement, the OFS is running a trial to help universities and colleges develop of new, short courses at higher technical and degree levels. This will trial distribute funding of up to £2 million to around 20 colleges.

In the next phase of the Uni Connect programme, we are expecting partnerships to develop evidence-informed collaborative approaches to raise attainment in local state secondary schools, acting as a broker, drawing on the resources and input of local higher education providers. We expect them to continue to engage schools and colleges to deliver higher education outreach with the aim of supporting young people to make informed choices about their options in relation to the full range of routes into and through higher education, including through apprenticeships.

**Conclusion**

Young people want to improve themselves, their lives and careers through the opportunities available to them. Understanding the options that are available, including higher education and vocational courses, is important. But so is recognising that the most competitive options, and those with better career prospects, also have higher attainment expectations for entry. In practice, however, young people’s access to and ability to succeed at university or college has often been limited by their socioeconomic background among other factors. Helping to eliminate these barriers for disadvantaged pupils so that they can flourish at university and in later life is a simple question of fairness. But it also has the potential to benefit higher education and the country at large, by drawing on the untapped talent, resources and life experiences that these students represent.

To achieve this, those involved in higher education need to establish creative, sustained and effective partnerships with schools and others, not simply to raise the expectations of children, their parents and advisers, but to improve their attainment in practical terms.
Notes

1 In this brief, for the sake of readability, we have used ‘universities and colleges’, or sometimes simply ‘universities’, to refer to what our regulatory framework and other more formal documents call ‘higher education providers’.


18 ’Most selective’ refers to high-tariff providers.


24 This data relates to entrants from 2011-12 onwards, meaning that the data for 2013-14 qualifiers does not include students who completed their qualification in four years. The difference in attainment rate between 2013-14 and 2014-15 results in part from this.

33 Transforming Access and Student Outcomes in Higher Education (TASO), ‘Summer schools’ (https://taso.org.uk/intervention/summer-schools/).