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# RAISING ATTAINMENT THROUGH UNIVERSITY-SCHOOL PARTNERSHIPS



Universities UK

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## INTRODUCTION

Universities are committed to improving social mobility, widening access to higher education opportunities, and raising aspiration and attainment. One important way in which this is evident is through the diverse range of university-school partnerships that already exist across England, all of which have a key role to play in contributing to meet the joint objectives of raising standards across schools, removing the attainment gap between advantaged and disadvantaged pupils, and promoting student success.

*We strongly support the government's ambition to raise standards and attainment in the school system.*

In line with guidance from the Office for Fair Access (OFFA), analysis of universities' approved access agreements for the 2018–19 academic year shows a significantly increased focus on work to raise attainment in schools is to come. In fact, every university's approved access agreement sets out plans to upscale existing or develop new initiatives in this area, with a greater emphasis on targets and milestones to measure impact and progress. This demonstrates a clear commitment from universities to work with schools to raise attainment.

Universities and schools are working closely together through effective partnerships, in ways that are driven by local need, and that have demonstrable impact. Although the 'school sponsorship' model has received particular attention as of late, it is only one of a number of ways that school-university partnerships drive attainment and social mobility.

This booklet provides case studies, information, and evidence of impact from the range of ways in which universities and schools are already working collaboratively to raise standards and attainment – objectives

shared by the government – and sets out how universities could work with the government to best deliver and measure progress against its objectives based on what works and what schools need.

As Universities UK's [response](#) to the previous government's schools green paper made clear, we strongly support the government's ambition to raise standards and attainment in the school system. In order to maximise the contribution of university-school partnerships:

- the focus should be on ends rather than means, with great flexibility over how higher education can support schools based on local context and need, and meet the government's objectives
- universities and their school partners need access to information on 'what works', which the proposed Evidence & Impact Exchange can support by evaluating and promoting the evidence on social mobility, and assisting the direction of future partnerships to support attainment, access and student success

## THE CURRENT LANDSCAPE

- There are around 60 higher education institutions currently providing school support through formal sponsorship, co-sponsorship or an educational partnership.
- Arrangements between schools and universities are diverse, reflecting the high level of diversity across both the higher education and schools sectors.
- These partnerships are based on the local circumstances of universities, schools and the region or local area.
- There is evidence to demonstrate the positive impact of such arrangements, as shown by the [case studies](#) in our additional briefing.

A significant strength of the current landscape of university-school engagement is the flexibility that both partners have to tailor interventions and partnerships to suit the local context and need, and also to evaluate their impact to best target future interventions accordingly.

Existing examples of university-school engagement include:

- traditional school sponsorship arrangement
- establishing a new school
- summer/residential schools
- provision of initial teacher training (ITT)
- offering continuing professional development (CPD) opportunities for the teacher workforce
- teaching provision (eg in A-level science, technology, engineering and medicine (STEM) subjects)
- curriculum development, enrichment and design
- educational research to enhance the evidence base
- whole-school-level interventions as well as classroom-level/ teacher-level interventions

- support for subject-specific departments and subject-specific teaching
- a membership model, whereby a university can offer a range of support and opportunities to a group of schools in the local area
- bespoke partnerships

Any single institution engages across one or more of these areas. This wide variety of engagement and support aligns well with the government's objectives, in that the overarching aim of each is to increase school-level attainment and the overall number of good school places.

Universities UK's [additional case study briefing](#) provides a more detailed overview of the diversity of the relationships between universities and schools, and is supported by institutional case studies to demonstrate how existing initiatives are delivering on wider objectives around raising attainment.

## EXISTING EVIDENCE ON SCHOOL SPONSORSHIP

The most recent and detailed research that has been carried out into the impact of universities sponsoring schools was commissioned by the Higher Education Funding Council for England (HEFCE). It examined the experiences of 20 higher education providers involved in the establishment, development and sponsorship of academies, university technical colleges and free schools.

The research showed that motivation was a critical driver of current sponsorship arrangements – or the setting up of a new school. This has been mirrored in evidence from Universities UK members, which indicates that arrangements are most effective when there are genuine motivations to improve pupil attainment and aspiration across both partners, and where sponsorship of a particular school – or establishing a school – is closely aligned to the university's core mission.

The institutions involved in the HEFCE study identified a range of motivations, which can be grouped into three broad areas:

- performance-related reasons – such as raising attainment and addressing school underperformance
- industry/sector-related reasons – meeting local employer needs, promoting specific subjects or approaches to learning
- community and regeneration – helping to improve the prospects of a local area

Prior to this, in 2014 HEFCE undertook an initial analysis of trends in pupil attainment and progression to higher education from secondary schools, with a focus on academies sponsored by higher education institutions. This analysis found that at Key Stage 4 there had been a significant increase in pupil attainment in all sponsored academies over recent years.

Between 2005 and 2013, the proportion of pupils achieving 5 A\*–C GCSEs and equivalent in sponsored academies more than doubled.<sup>1</sup> The analysis found that this improvement appears to have been driven by achievement in vocational qualifications in particular, with some improvement in progression to higher education from sponsored academies.

*Research shows that motivation is a critical driver of sponsorship arrangements.*

When looking just at GCSEs, there was a slight increase in attainment. This suggests that while sponsorship may be effective in some circumstances, it may not always be the most appropriate form of engagement to improve school-level attainment. A more flexible, outcomes-focused approach is necessary to ensure universities and schools can work together in a way which takes account of local context, need and expertise.

<sup>1</sup> [www.hefce.ac.uk/schools/analysis/](http://www.hefce.ac.uk/schools/analysis/)

## PARTNERSHIP AND FLEXIBILITY OF APPROACH ARE CRUCIAL TO SUCCESS

Universities are fully supportive of the government's objective to raise school attainment.

Between 2015 and 2016, Universities UK convened a Social Mobility Advisory Group, drawing together the expertise of schools, university practitioners and employers to identify practical ways to address inequality in higher education. The group's final report, *Working in partnership: enabling social mobility in higher education*, highlighted the importance of effective partnerships with schools and the need to take local circumstances and requirements into account in order to achieve sustained change.

The group also recognised that universities have an ongoing commitment to widening participation, acknowledging the issue of differentials in both entry rates and graduate outcomes for different types of students. While there has been some successes in narrowing these gaps, there is still more to do.

Universities UK built on this position in a response to the government's green paper, *Schools that work for everyone*, by clarifying the higher education sector's commitment to raising standards and attainment in the school system, and by doing so, improving social mobility across all parts of society. The response also stressed that the focus should be on ends rather than means, with flexibility over how higher education can meet these objectives.

Raised aspirations, improved attainment, increased teacher ability and retention, and improved school success can all be achieved through a number of partnership and engagement mechanisms with schools.

Although sponsorship can be effective, it is not always the most appropriate option. These other mechanisms broaden the concept and practice of sponsorship to a wider set of partnership and engagement tools.

*Universities are fully supportive of the government's objective to raise school attainment.*

One way to view this would be to conceive of university-school engagement as a continuum in which universities use their different capacities and circumstances to contribute to the education system and pupil attainment. This could vary from outreach work with schools, to establishing a new school: all points on the continuum would have value that could be recognised through universities' access agreements. Each point would reflect the needs of schools, the local context and institutional strengths and circumstances.

## UNIVERSITY OF ESSEX, SCHOOLS MEMBERSHIP PLUS

The university plays an ‘anchor’ role for schools in the region through its Schools Membership Plus (SMP) programme. This involves relationships with 32 schools, benefiting from 25 different types of support methods.

**87%** *of students indicated they would apply to university.*

Support methods include specialist A-level plans, teacher continuing professional development (CPD), an annual teachers’ conference, free access to university library online resources, twilight subject sessions in schools, access to an online learning platform for students, and fee discounts for teachers studying at postgraduate level. PhD students deliver research methods training as well as subject sessions.

The university also provides SMP schools with travel grants to attend activities on campus as well as bursaries to support school engagement activities. The university also has an established governor network so that members of staff already acting as governors of local schools can share experiences and offer support and guidance. Academic and professional staff are encouraged to take on governor roles to contribute expertise, skills and experience to the primary and secondary schools in the area.

## VI6 PROGRAMME

As part of SMP, the university also runs the VI6 (six-six) partnership scheme, which brings together six schools in the local area. This involves jointly teaching eight A-level subjects that the schools would not be able to deliver themselves. Around 170 students study on the university site each week for two years across a range of subjects. The partnership is developing annually with more subjects being included. There are plans to expand the provision past A-levels to include BTECs, as well as engaging with parents and carers to break down barriers to university.

The Tendring region is home to half of the students benefiting from VI6. This area has some of the lowest rates of progression to university in the UK. For these students, regular access to a university not only builds up self-confidence and aspiration, but also aids attainment by enabling them to access excellent teaching both in the secondary and higher education sector.

## IMPACT

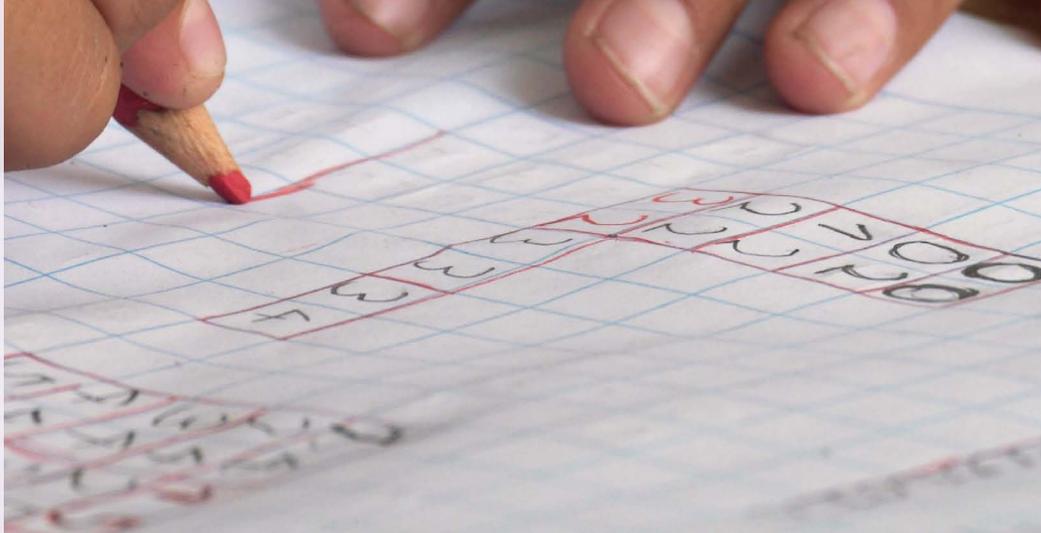
- At the end of the first year, 87% of students indicated they would apply to university.
- Teachers involved in the scheme have been hugely positive, highlighting that students become noticeably more engaged in school following these experiences of university life.
- Teachers have also noted the impact on teacher recruitment and retention as teachers are given new opportunities to teach at A-level and take on a new and innovative challenge.
- VI6 enables students to have a wide choice of A-levels and continue studying in an environment they are comfortable with.

It is crucial that different types of engagement between universities and schools are recognised as important by the government and the higher education and schools sectors, with a focus on objectives and outcomes, rather than an overly prescriptive approach as to what is more effective.

Different universities approach collaborations with schools with very different contributions to make, and the way universities engage will depend on an institution's mission, strengths, size and local circumstances. To maximise the impact of their investment, institutions will take account of all these factors when developing their access strategies.

This range of engagement and the benefit it brings is highlighted in the case studies included throughout this booklet, while further examples are covered in detail in UUK's [case study briefing](#), drawing on the experiences of different types of universities working with schools in a variety of ways.

UNIVERSITY  
OF NOTTINGHAM,  
SCHOOL OF EDUCATION



The School of Education at the University of Nottingham is a leading centre for research in education, as well as offering high-quality teaching and professional education.

*Students re-sitting GCSE mathematics are more likely to be disengaged and have problems with key concepts.*

Research projects focus on topics such as subject teaching and learning, community, social justice, and school leadership. Teachers in partner schools are offered free continuing professional development opportunities, for example in relation to teaching specific subjects and to special educational needs and disability, and discounted fees for masters and higher-level degrees in education.

Through the Schools of Education on their campuses in China and Malaysia, the university also brokers international engagement for local teachers, school and student exchanges and comparative research.

### **MATHS-FOR-LIFE**

Students re-sitting GCSE mathematics are more likely to be disengaged and have problems with key concepts. Maths-for-Life teaches these concepts through problems designed to re-engage learners, and cement their understanding of fundamental areas. It aims to make GCSE resit classes more student-centred, focusing on problem-solving and discussion.

The resources were initially tested 10 years ago with government funding in post-16 settings, and found that across groups of GCSE retake students there was a difference in algebra tests between those who received 'many' of the lessons, to those who had received none of the

lessons. The resources will be updated and accompanied by support for teachers to ensure the practices are used effectively.

The first year will be a formative pilot, with a small group of teachers focusing on developing the content and structure of the training, as well as feeding back on the feasibility of the model. The Behavioural Insights Team will collect independent assessments on the feasibility of the intervention which will be used to decide whether to proceed with a randomised controlled trial in spring 2018.

### **INCREASING COMPETENCE AND CONFIDENCE IN ALGEBRA AND MULTIPLICATIVE STRUCTURES**

Increasing Competence and Confidence in Algebra and Multiplicative Structures (ICCAMS) is designed to teach two mathematical areas that are key parts of the Key Stage 3 curriculum, but which cause particular problems to students – algebra and multiplicative reasoning (for example, percentages and proportions).

The programme is comprised of 40 evidence-informed lessons and extensive teacher professional development. A matched controlled trial of ICCAMS in 2010 indicated progress equivalent to making a gain in attainment of about two years' normal progress in one year.

A team at the University of Nottingham will develop the existing ICCAMS materials and create a two-year CPD package consisting of nine days of training and support in between. The recruitment of schools to the trial, and the training and support for locally-based trainers, will be carried out by Durham University. The trial itself will be an 'effectiveness trial' to assess the potential and impact of delivering the intervention independently of the developers, as well as its suitability for scalability and wider roll-out.

## TAKING ACCOUNT OF LOCAL NEED AND IMPACT

A significant strength of current university-school engagement is the flexibility that both partners have to tailor interventions and partnerships to suit the local context and need. This is also critical for building relationships, which are in turn crucial to the success of university and school collaboration.

There are a number of core factors that need to be taken into account by both parties when deciding how and where an institution might work closely with a school to raise attainment.

### CIRCUMSTANCES OF THE SCHOOL

- demographics of the school population
- socio-economic background of the pupils and their families
- rates of progression to higher education
- ongoing and historic school performance
- school targets/ key performance indicators
- local authority constraints
- education provision in the local area – for example, in Portsmouth no secondary school has a sixth form college attached

### CIRCUMSTANCES OF THE UNIVERSITY

- availability of resource (time and financial)
- motivation of the institution to work with schools to raise attainment
- senior leadership commitment
- existing relationships with schools
- reach of existing measures
- interaction of any new activity with existing measures
- the strategic mission of the university

**EXPERTISE: WHAT EXPERTISE DOES THE UNIVERSITY HAVE AND WHAT DOES THE SCHOOL NEED?**

- school of education
- subject area expertise
- governance/management/ estates/finance expertise
- access to facilities (eg libraries, laboratories, etc)
- resource sharing opportunities

*The diversity and capacity across the country varies dramatically depending on the local area.*

The proportion of school places that are ‘good’ also varies between different regions of England. The proportion of secondary schools that are rated Ofsted ‘good’ or ‘outstanding’ ranges from 66% (North East) to 89% (London), meaning that there is also a difference between regions of the proportion of schools rated ‘requires improvement’ or ‘inadequate’ (11% to 34%).<sup>2</sup>

For primary schools, there is less variation between the proportion of schools rated ‘good’ or ‘outstanding’ between the regions (87% to 94%).

The number of universities in regions of England range from five (in the North East) to 38 (in London). The diversity and capacity across the country therefore varies dramatically depending on the local area, and it is worth noting that the English region with the highest proportion of secondary schools rated ‘requires improvement’ and ‘inadequate’ is also the region with the smallest number of universities (North East).

This highlights the need to avoid a prescriptive approach which precludes the full range of activity from being recognised for the contribution it makes to raising attainment.

The danger of requiring a certain type of engagement is that resource and investment is focused on fewer schools to ensure that criteria are being met, rather than a flexible approach focused on maximising better overall outcomes in a way which suits the local context.

<sup>2</sup> As at most recent inspection, of those inspected, September 2017: <https://www.gov.uk/government/statistical-data-sets/monthly-management-information-ofsted-school-inspections-outcomes>. This data is the most up to date information on school inspections, providing a snapshot of Ofsted ratings across the country.

NOTTINGHAM TRENT  
UNIVERSITY,  
SCHOOLS AND COLLEGES  
COMMUNITY OUTREACH



Nottingham Trent University's programme is designed to address the specific needs of the city of Nottingham, which is among the ten lowest ranking local authority areas nationally for GCSE attainment. Its projects reach around 120 schools and education providers.

For the majority of schools in the city, over half their intake is from areas identified by HEFCE as 'cold spots' – low participation neighbourhoods with lower than expected progression rates to higher education, when taking account of the schools' Key Stage 4 attainment.

*The scheme has reached over  
**30,000** pupils in its  
12 years of operation.*

## STUDENTS IN CLASSROOMS SCHEME

Nottingham Trent University recruits around 500 of its students each year to work in schools, particularly in those communities where progression rates into university are lower than expected. The Students in Classrooms scheme provides pupil support for maths and literacy in the classroom, as well as one-to-one mentoring. It has helped to close the gap in educational achievements for children from more disadvantaged backgrounds. The scheme has reached over 30,000 pupils in its 12 years of operation.

## CHILDREN'S UNIVERSITY

The Children's University recognises and rewards learning and activities that children take part in outside normal school hours, and is open to children aged 7 to 14 at participating schools. Children receive a Passport to Learning from their school and collect credits for each activity, including after school clubs, sports clubs, museums, activity centres and music groups.

This learning does not need to be purely academic; often, it is focused on developing the skills that help children go on to university, and many of the activities link with university subjects. If children gain 100 credits, they are invited to attend an awards ceremony at the university.

In addition to the activities listed on the left, Schools, Colleges and Community Outreach also covers:

- chemistry outreach – funding from The Royal Society of Chemistry supports an extended project which aims to increase pupils' interest and participation in chemistry
- summer school and residential summer school activities – provide pupils with first-hand insight into and experience of higher education at subject level
- Nottingham Trent volunteering – matches 1,000 volunteers to a range of associated community projects across the city

## BRUNEL UNIVERSITY LONDON, THE URBAN SCHOLARS PROGRAMME

The Urban Scholars Saturday school began in 2001 and focuses specifically on interventions with gifted and talented students in receipt of free school meals from the London area. It is based upon proven techniques in raising aspiration and channelling talent through improving core subjects and critical thinking skills. The work is supported by evidence from research undertaken by Brunel University's Department of Education in previous years.

Around 1,500 pupils have passed through the programme since 2013. Pupils are drawn from across London or within a satellite programme in Milton Keynes.

### IMPACT

The impact of the scheme can be seen in destination data which is available for 60% of the 2012–13 cohort:

- 65% had a higher education orientation on entry to the programme, rising to 96% on leaving
- 85% of the cohort are now studying in university, of which around 20% are at higher tariff institutions

*The centre will cater for  
**30,000** pupils each year.*

### WIDENING PARTICIPATION ATTAINMENT-RAISING PROGRAMMES

For a number of years Brunel University London has offered local schools a forensic science day for gifted and talented school pupils. The target group for the scheme has now been expanded to include pupils in lower sets. During a pilot project at Hatch End High School in Harrow, the team delivered activities to enable the forensic science unit of a BTEC Level 2 science course to be taught in the university laboratories.

In a further expansion of the scheme, Brunel delivered the initiative to Harrow and Brent schools, resulting in two new schools signing up for the 2017–18 academic year.

The team have also run a pilot project in Stockley Academy (Hillingdon) for Year 11 white males from socio-economically disadvantaged backgrounds with the aim of boosting English GCSE attainment.

### IMPACT

- Underperforming students in the lower set not only achieved the 'Pass' grades they were predicted, but in most cases exceeded them and achieved Merits and Distinctions.
- Feedback from teachers demonstrated that the intervention of working in an adult learning environment, raising expectations and using a range of assessment methods helped students to remain focused, work to their strengths and fulfil their academic potential.

### INSPIRE

Inspire is the Brunel STEM Learning Centre, a multi-million-pound construction project on campus. Launching in autumn 2017, Inspire will deliver age-relevant, curriculum-linked science education for children from Key Stage 1 to Key Stage 4. Once operating at full capacity, the centre will cater for 30,000 pupils each year. The intention is to encourage pupils to study STEM subjects and to increase the number of women studying and working in engineering.

The activities of the centre are being co-created by a curriculum board consisting of local school and college staff, the Ofsted Excellent-rated Department of Education, and Inspire staff. An early intervention for the centre is to improve the ability of local secondary schools to deliver mandatory science practical examinations, which are proving difficult to replicate effectively in school.

**85%** *of the cohort are now studying in university.*

The Higher Education Attainment Tracker (HEAT) system will be used to measure impact, monitoring individual pupils as part of a long-term study into whether regular exposure to STEM activities throughout Key Stage 1 to 4 encourages greater participation and performance in STEM subjects.

## MOVING FORWARD

As set out in this booklet, Universities UK's engagement and the experience of our members shows that raised aspirations, improved attainment, increased teacher ability and retention, and improved school success can all be achieved through a number of partnership and engagement mechanisms with schools.

To ensure that the impact of university-school engagement is maximised, and taking into account what the current evidence suggests, Universities UK proposes that a flexible approach to university-school partnerships is maintained to achieve the policy objective of raising attainment and increasing the number of good school places.

This can be implemented by recognising a number of models of engagement, which align the expertise, resources and mission of the university with the needs of the school, and the local context within which both are operating. Any number of these may be in place at any one time – the crucial focus should be an assessment of need and potential impact to determine what type of model/s might be adopted, extended or run in addition.

There is also a need for evidence of what works. Universities UK envisages a role for the Evidence and Impact Exchange proposed by the Social Mobility Advisory Group in their report on higher education and social mobility, *Working in partnership: enabling social mobility in higher education*.

*Universities UK proposes that a flexible approach is maintained to achieve the objective of raising attainment and increasing the number of good school places.*

This would systematically evaluate and promote the evidence relating to the role of higher education in supporting social mobility.<sup>3</sup> This evaluation function should provide a valuable resource for determining what works in terms of raising school-level attainment and support universities to develop ways of working with schools to achieve maximum impact.

<sup>3</sup> See recommendation 6 in the final report of the Social Mobility Advisory Group, *Working in Partnership: Enabling social mobility in higher education*, published in October 2016.

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