

**Part one:
The root causes
of under-representation**

**RUSSELL
GROUP**



Opening doors

Understanding and overcoming
the barriers to university access

Acknowledgements

The Director General of the Russell Group, Dr Wendy Piatt, would like to thank Thomas Murphy, Elizabeth Woodfield, Nick Ratcliffe, Dr Tim Bradshaw and Fiona Macleod at the Russell Group for their work on this publication.

The Russell Group would also like to thank:

Dan Abramson

King's College London
Mathematics School

Dr Annalisa Alexander

Imperial College London

Lucy Backhurst

Newcastle University

Professor Trevor Bailey

University of Exeter

Louise Banahene

University of Leeds

Paul Blagburn

University of Warwick

Julie Bond

University of Liverpool

Anne-Marie Canning

King's College London

Laura Cattell

University of Liverpool

Lucy Collins

University of Bristol

Dr Sally Curtis

University of Southampton

Dr Will Curtis

University of Warwick

Professor Sir David Eastwood

University of Birmingham

Professor Anthony Finkelstein

University College London

Alison Gregory

University of Manchester

Dr Penelope Griffin

University of Nottingham

Kathleen Hood

University of Edinburgh

Richard Kemp

University of Leeds

Dr Samina Khan

University of Oxford

Stephanie Lee

University of Manchester

Tom Levinson

University of Cambridge

Rachel Lister

University of Cambridge

Melissa Mead

University of Oxford

Robyn Pearce-Jones

University of Oxford

Zoe Pither

University of Bristol

Tara Prayag

University of Oxford

Emma Reay

Newcastle University

Gail Rothnie

University of Birmingham

Anne Setright

Queen Mary University of London

Jo Sharp

University of Liverpool

James Slattery

University of Oxford

Contents

Foreword	4
Executive summary	6
1 Attainment gaps	12
2 Reasons behind attainment gaps	18
3 Making informed choices	24
4 Problems of poor advice and misconceptions	32
Concluding remarks	38
References	40
Russell Group universities	42

Foreword

Ensuring our doors are wide open to able students from all backgrounds really matters to us. That's why Russell Group universities are investing a huge amount of time, effort and resources and developing pioneering schemes to help close the access gap. And real progress has been made over the last few years: for example, in 2013 students eligible for free school meals (FSM) were 39% more likely to win places at leading universities than they were in 2011¹. The proportion of students from state schools and colleges increased from 68.3% to 75% between 1997 and 2013.

But precisely because broadening access matters so much to Russell Group universities, we are far from complacent or content with progress to date. There is still much further to go in solving the problem of the under-representation from poorer backgrounds in higher education.

The root causes of the problem are many and complex. They are founded in a child's earliest years and compounded at each stage of a young person's life. Indeed, there is evidence to show educational disadvantage starts, not with the UCAS form, but in the cradle.

The aim of this two-part report is to explore the root causes of the under-representation of students from disadvantaged backgrounds at our universities, and to show what Russell Group universities are doing to help.

In this first section we set out the barriers that are preventing these pupils from going to leading universities.

Low attainment at school is the key reason why too few students from disadvantaged backgrounds apply to a leading university. The problem is stubbornly linked to social class and parental education. But while attainment is a big piece of the puzzle, choice of subject and qualification are also important. It will take time, commitment and sustained action to raise pupils' aspirations, increase attainment and improve the advice and guidance offered. Progress is being made, as the box to the right shows, but this is an entrenched problem for which there is no quick fix.

While we can't solve deep-rooted problems in society, universities undoubtedly have an important role to play. That's why the second section of this report looks at some successful examples of how Russell Group universities are working with schools and colleges to help raise attainment, aspirations, and improve information, advice and guidance.

Huge investment and progress has been made...

£234million

In 2015-16, the 20 Russell Group universities in England alone will be investing £234 million in scholarships, fee waivers, bursaries and outreach activities aimed at the most disadvantaged – with additional investments being made across the Devolved Administrations.

3/4

In 2012-13 three quarters of young full time first-degree entrants at Russell Group universities were from state schools and colleges. This figure has increased from 68.3% in 1997, when these figures were first collected.²

2.7x

Looking across all universities, application rates from disadvantaged groups in England are at record levels. In 2004, demand from 18 year olds in advantaged areas was 4.3 times greater than in disadvantaged areas. This had fallen to 2.7 times greater in 2013.³

1in5

Around one in five first-degree entrants at Russell Group universities in 2012-13 were from lower socio-economic groups.

39%

Students eligible for free school meals (FSM) are more likely than ever to attend highly-selective institutions. In 2013 FSM-eligible pupils were 39% more likely to enter high tariff institutions than they were in 2011.

We want every student with the qualifications, potential and determination to succeed at a Russell Group university to have the opportunity to do so, whatever their background.

Having access to leading universities is important for young people, because they deserve every opportunity to succeed in life. It is important for our universities, because we want the best possible students. And it is important for our society, because we want to make the most of our young talent.

Dr Wendy Piatt
Director General & Chief Executive,
Russell Group

Professor Sir David Eastwood
Chair, Russell Group

Executive summary

Summary of Part one: The root causes of under- representation

This report explores the root causes of the under-representation of students from poorer backgrounds at leading universities, and shows that these causes are varied, complex, and interlinked.

Low attainment at school is a key reason why too few students from disadvantaged backgrounds apply to leading universities. The attainment gap starts early and widens as the student progresses through their school years. It continues to A-level, the point at which a young person usually applies to university.

The attainment gap is affected by numerous factors including parental education, school type and ethnicity. There is still much more to be done to address these deeper issues, and universities cannot hope to solve this alone.

Subject and qualification choice is important too. Yet, even with good grades in the right subjects for the degree course, disadvantaged students are less likely to apply to top universities. Poor advice and sometimes poor quality of applications are adding to the problem.

On top of this, there has been much misinformation about the effect of graduate contributions in England on access, which threatens to create barriers where none should exist.

The attainment gap starts early and is stubbornly linked to social class and parental education

Early years

Inadequate stimulation or barriers to opportunities for productive learning can lead to sizeable and persistent gaps in attainment. At 18 months, children of parents with lower incomes and lower levels

of formal education already score substantially lower in development tests than their peers.

These gaps continue to widen, with children from homes of higher socio-economic status having double the vocabulary of their low-status counterparts by the age of three.

Research suggests that infants from low socio-economic backgrounds who achieved promising early test scores are less likely to continue along this trajectory, on average being overtaken in cognitive performance by their better-off peers.

Pre-school

Involvement in pre-school is key: having attended any pre-school is a positive predictor of total GCSE scores at age 16, of more full GCSE entries, of better grades in English and maths and of a higher probability of achieving 5 A*-C GCSEs including English and maths.

However, the most vulnerable families and those at the most risk of poverty are the least likely to take up their entitlement to free early learning and childcare places.

Primary school

The primary school attainment gap is only now beginning to close. But there is still a significant gap between the test results of 11-year-olds eligible for Free School Meals (FSM) compared to all other pupils.

Test results for more than half a million 11-year-olds (Key Stage 2) show 74% of pupils receiving Free School Meals (FSM) achieved the expected level (level 4) or above in maths compared to 87% of all other pupils.

Secondary school

What is really disappointing is that inequalities continue to widen

Summary of Part one: continued...

in secondary school, so that the two thirds of FSM pupils who beat the odds to be in the top fifth of performers at age 11, are not among the top fifth of performers by the time they reach GCSE; then half of these do not go on to university.

High-achieving students from the most deprived families perform worse than lower-achieving students from the least deprived families by Key Stage 4. Conversely, lower-achieving affluent children 'catch up' with higher-achieving deprived children between Key Stage 2 and 4. That some of our brightest students do not achieve their full potential at GCSE level has an impact on their subsequent achievement at A-level and therefore entry to university.

There is also strong evidence that even among those with similar attainment up to age 16, new gaps can still emerge during the transition to advanced level. Young people from low-income groups who achieve five or more GCSEs at grades A*-C are less likely to get the equivalent of two or more A-levels than their better-off counterparts with the same grades at GCSE.

There are many complex and interlinked reasons behind the persistent inequality in attainment between students

Teaching quality

There is a strong relationship between quality of teaching and the attainment levels achieved by students. Expectations also matter: in the best performing schools, there is a culture of teachers expecting the best from every child, regardless of their background. But some teachers and some schools fall short of adopting such a culture.

School type

Despite huge efforts across the education sector, there is still an attainment gap between state and independent schools.

In 2013/14, 28.4% of students in independent schools achieved three A*-A grades at A-level compared with 10% at state funded schools, 8.4% at sixth-form colleges, and 4.3% at other Further Education (FE) sector colleges.

With this gap in attainment by school type as context, we are able to understand the reasons behind the over-representation of students from independent schools compared to those from state schools at selective universities.

Within the diverse state sector there is a marked and stubborn attainment gap between selective and non-selective schools. Selective state school students are more than twice as likely to achieve grades AAB or better at A-level than comprehensive school pupils.

Ethnicity

Attainment continues to vary widely by ethnicity. At A-level the gap between those achieving the highest grades from different ethnic backgrounds is substantial.

The consequence is a much smaller pool of highly-qualified students from certain ethnic backgrounds from which selective universities can recruit, and there is evidence to suggest that minority ethnic students apply in much greater proportions to certain courses – which also tend to be the most over-subscribed.

Putting attainment into context

Grades are an excellent and reliable indicator of a student's academic ability and overwhelmingly, evidence

suggests prior attainment is the best predictor of degree success.

But grades are not the only source of information used in the admissions process at Russell Group universities. Other factors are taken into account in determining ability and potential, including personal statements, teacher references and contextual information.

Making informed choices

Subject choice, especially at advanced level, can have a large impact on which degree courses will be open to students when it comes to applying to a competitive course.

Some students are still not getting the right advice and guidance on the subjects, or qualifications, to study – resulting in many good students not gaining the qualifications they need for their choice of course.

Awareness of the importance of subject choice is higher than it was, but there is more to be done in some schools.

Problems of poor advice and misconceptions

Disadvantaged students are less likely to apply to leading universities

State school students are much less likely to apply to leading universities than students at independent schools with equally good grades. Addressing this complex issue requires input from many different stakeholders, including schools, parents and universities.

There is also evidence to suggest that students from state schools apply disproportionately to the most competitive degree courses.

Better quality information, advice and guidance is needed

There are many good examples of effective information, advice and

guidance (IAG) throughout state schools, but there is widespread concern that poor advice may be contributing to the low progression rates in many comprehensive schools and further education colleges.

Some teachers harbour misconceptions about Russell Group universities, reporting that they would not encourage disadvantaged pupils to apply to Russell Group institutions, and some are uncomfortable talking to students about the differences between universities.

Graduate contributions to higher education need to be explained better

Participation in higher education continues to rise among young applicants, including those from disadvantaged backgrounds.

But it is also clear that there is still much misinformation about graduate contributions. It is essential that potential students know that going to a good university is a sound investment, with no up-front fees, repayments only when they are affordable and generous help with living costs. Money worries should not stop anyone from applying to a Russell Group university.

Conclusion

It will take time, commitment and sustained action to raise pupils' aspirations, increase attainment and improve the advice and guidance offered. Progress is being made, but this is an entrenched problem for which there is no quick fix.

While we can't solve deep-rooted problems in society, universities can and do play an important role in helping to tackle the under-representation of students from disadvantaged backgrounds.

Summary of Part two: How Russell Group universities are working to help solve the problem of under- representation

Russell Group universities have been investing an increasing amount of time, effort and resources to help more students from under-represented groups apply successfully to our universities. We have developed a wide range of programmes and initiatives to help tackle some of the many underlying barriers to access.

In part two of this report we present some of the many successful examples of how Russell Group universities are working with schools and colleges to help raise attainment, aspirations, improve information, advice and guidance and support students.

Individual universities face different challenges, and tailor their approach to admissions, access and widening participation accordingly. So the Russell Group solutions are diverse – there is no ‘one size fits all’ approach.

Universities in the UK are sometimes urged to emulate the access and admissions practices of elite institutions in the United States. However, it is important to be cautious when drawing comparisons between the higher education systems in the USA and the UK. Importing US approaches would not be the best solution to the challenges that UK universities face.

Raising attainment

Russell Group universities work extensively with schools and colleges of all types, across the UK, to support teachers to identify and support the students with the potential to develop academically – and to raise the attainment of pupils, particularly those from disadvantaged backgrounds.

Collectively, Russell Group universities’ students and staff have an enormous reach, working with

thousands of young people and teachers in the UK.

Information, advice and guidance

The quality of information, advice and guidance given to students ahead of their application to university varies significantly between schools and colleges. Russell Group universities know that lack of relevant information – or worse, misinformation – can cloud the picture and create ‘false barriers’ to access.

This is why the Russell Group and its member universities invest significant time and resources in developing and delivering high quality information, advice and guidance initiatives.

Raising aspirations

Raising aspirations and increasing awareness of higher education from an early age is key to ensuring talented students know that a place at a Russell Group university is well within their grasp.

Choosing the right subjects

It is really important for all young people – especially those whose parents didn’t go to university – to have clear information about how the subjects they choose to study can affect their options at university and their chances in life.

Russell Group universities are working hard, individually and together, to ensure that the link between subject choice and future opportunities is understood by students, teachers and parents alike, but this is an on-going challenge.

Advice on applications

Russell Group universities are keen to ensure that no barriers to access, either real or perceived, exist in their admissions processes.

£234m

In 2015-16, the 20 Russell Group universities in England alone will be investing £234 million in scholarships, fee waivers, bursaries and outreach activities aimed at the most disadvantaged – with additional investments being made across the Devolved Administrations.

Admissions staff and tutors are skilled at using a wide range of methods to seek out high quality candidates and in particular to identify where, because of personal circumstances, an individual's grades might not fully reflect their potential.

The personal statement, teacher references and predicted grades can provide valuable additional insights. Some universities also use interviews and extra tests to ensure that pupils with real potential can be identified from among a field of highly qualified candidates, who may all look outstanding on paper.

Alternative routes to Russell Group universities

Not all students enter Russell Group universities through a 'traditional' route. Russell Group universities have developed a number of routes for students who wish to apply to a course, but who may not fulfil the 'typical' A-level entry criteria due to the challenging circumstance they faced in their lives.

One example is offering extended degree programmes taken over a longer period than standard degrees, allowing students more time to develop knowledge and confidence. Foundation degrees allow students without traditional qualifications to be taught in a further education college, before making the transition to studying at undergraduate level.

Student support

There has been much misinformation about the effect of fees in England on access.

With no up-front fees, repayments only when they are affordable and generous help with living costs available, money worries shouldn't stop anyone with the

right qualifications from applying to a Russell Group university.

Generous bursaries and scholarships enable our leading universities to attract talented students, from a wide range of different backgrounds. Bursaries help to overcome some barriers caused by a lack of information and preconceptions. They help encourage students to apply for a course and institution best suited to their abilities and that will maximise their life chances. They also play a role in helping students with limited funds to get the most out of the university experience for example by enabling them to buy the right books and equipment, join in on social events and reduce the need to find paid work.

However, student support is not just financial. Peer support and on-course mentoring provided at our institutions keep students from under-represented groups on track during the first year of their course.

Conclusion

The examples we highlight in part two of this report only scratch the surface. There is a much wider range of work going on at Russell Group universities to raise attainment, improve information, advice and guidance, and support students than we could ever hope to capture in a short publication.

We are committed to opening doors to students from disadvantaged backgrounds. We want every student with the qualifications, potential and determination to succeed at a Russell Group university to have the opportunity to do so, whatever their background.

1

Attainment gaps

The attainment gap starts early, and is stubbornly linked to social class and parental education

If we are to dismantle the barriers to university access, it is vital to understand and address the root causes. Without a doubt, the key reason why too few students from disadvantaged backgrounds apply to leading universities is their lower attainment at school. Attainment is influenced by various factors over a person's lifetime, but especially in the early years.

Educational disadvantage starts long before school. It begins with a mother's health at pregnancy. At this vital time, health inequalities such as smoking, poor diet and depression can have a significant and negative impact on a child's early development⁴, affecting educational progress later in life.

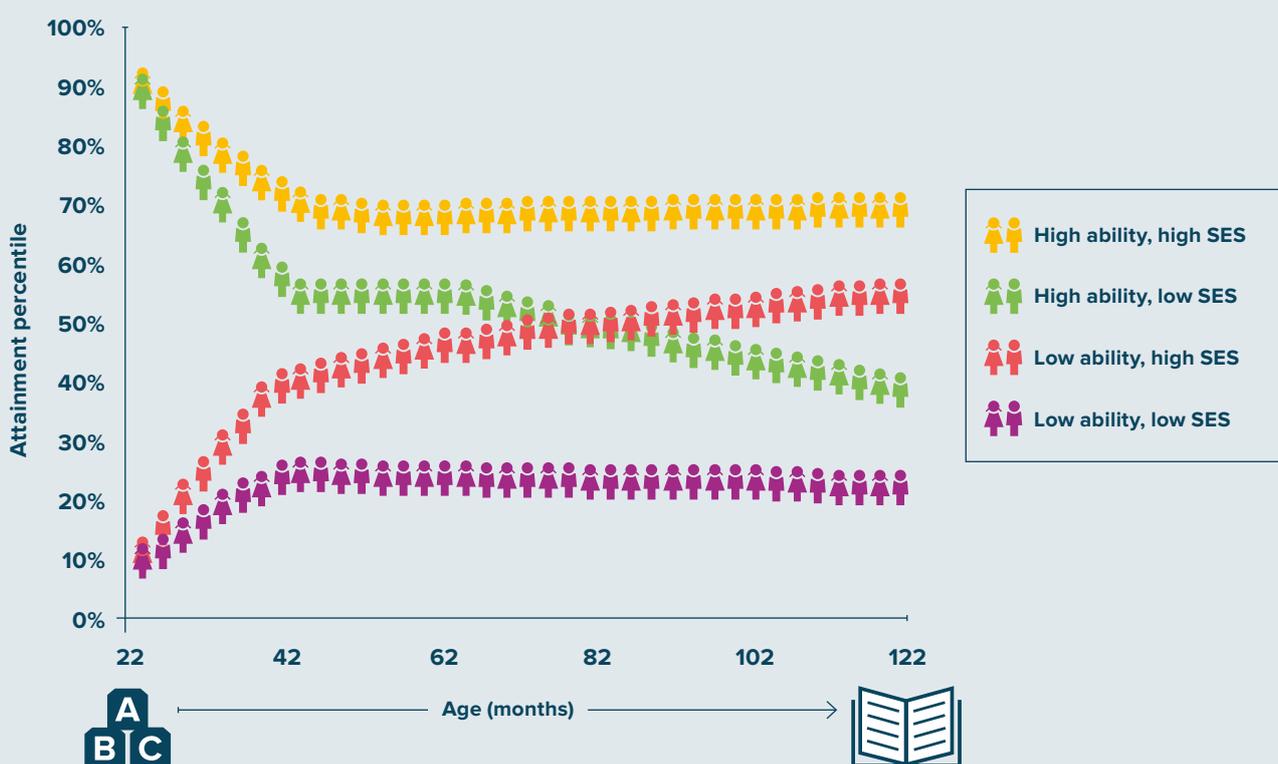
There is a body of compelling evidence which demonstrates just how early the problem begins. In 2009, the then Department for Children, Schools and Families described the relationship between deprivation and educational attainment as: "substantial and pervasive."⁵ It is also by no means a problem which is isolated to the UK.⁶

Even from a very early age, children from disadvantaged backgrounds have poorer cognitive skills than their more advantaged peers. Feinstein's (2003) research⁷ suggests that while not all children from low socio-economic backgrounds will have lower than average attainment, infants from these backgrounds with promising early test scores are less

likely on average to continue along this trajectory, tending to fall back relative to their better-off peers. While it may be difficult to assess the ability of infants in controlled tests reliably⁸, the results of this research are still striking.

The graph below illustrates the effect: on average, high-scoring poorer children will be 'overtaken' by lower scoring better-off children before they enter secondary school.

Attainment gap between children with varying ability and socioeconomic status (SES)⁷



The first few years of life lay down strong or weak foundations for a child's subsequent development. During their first year, infants' brains rapidly create pathways, or synapses. In a child's second year of life these synapses begin to be 'pruned' – pathways that are used are strengthened, and those that aren't are discarded.⁹

Inadequate stimulation or barriers to opportunities for productive learning can lead to sizeable and persistent gaps in attainment. At 18 months old, children of parents with lower incomes and lower levels of formal education are already scoring substantially lower in development tests than their peers. These gaps continue to widen, with children from homes with higher socio-economic status having double the vocabulary of their low-status counterparts by the age of three.¹⁰

Early learning is key to a child's development. Children who receive pre-school, or 'early years' education, enter school at a cognitive advantage, and the longer children have been in pre-school, the greater the advantage. Children who began pre-school education aged two were ahead of children who began at three, and maintained that gain at school entry.¹¹

However, evidence shows that the most vulnerable families and those at the most risk of poverty are the least likely to take up their entitlement to free early learning and childcare places.¹² Students from less well-off backgrounds are less 'school-ready', and continue to slip behind their peers throughout primary school.¹³

In Scotland, data from a longitudinal study¹⁴ showed that children from high-income households significantly outperform those from low-income households in vocabulary and problem solving at both ages three and five. By age five, the scores corresponded to a 13-month gap in vocabulary development.

The importance of pre-school to later educational attainment is demonstrated by a 2014 study¹⁵ which showed that having attended any pre-school¹⁶ was a positive predictor of GCSE scores at age 16; more full GCSE entries; better grades in English & maths and a higher probability of achieving 5 A*-C GCSEs including English & maths.

The effect of attending any pre-school compared to none is equivalent to achieving an additional seven grades at GCSE. For example, this could mean the difference between attaining seven GCSE grades at B, compared to seven at grade C.

Students' examination attainment is also strongly influenced by the education level of their parents. When taking account of other background characteristics, students with highly qualified parents have a much higher attainment – equivalent to two GCSE grades higher and four extra full GCSE exam entries.¹⁷ Indeed, parents' highest qualification level has been shown to be the strongest net predictor of better attainment in GCSE English and maths, and of achieving the key benchmark indicator of five A*-C grade GCSEs including English and maths.

It is clear that by the time a disadvantaged child starts primary school many factors will have influenced their attainment. But while the primary school gap in attainment is now beginning to close¹⁸, a significant gap still persists between the test results of 11-year-olds eligible for Free School Meals (FSM) and those of all other pupils.

According to the Department for Education, the test results for more than half a million 11-year-olds (key stage 2) show 74% of pupils receiving Free School Meals (FSM) achieved the expected level (level 4) or above in maths compared to 87% of all other pupils.¹⁹

The gap widens throughout secondary school

Worryingly, these inequalities continue to widen as pupils go through secondary school: the two thirds of pupils on Free School Meals who beat the odds to reach the top fifth of performers at age 11 are not among the top fifth of performers at GCSE, and half do not go on to university.

Lower-achieving children from more advantaged backgrounds catch up with higher-achieving less well-off children between Key Stages 2 and 4, and by Key Stage 4 (students aged 14-16), previously high achievers from poorer backgrounds have fallen behind.²⁰

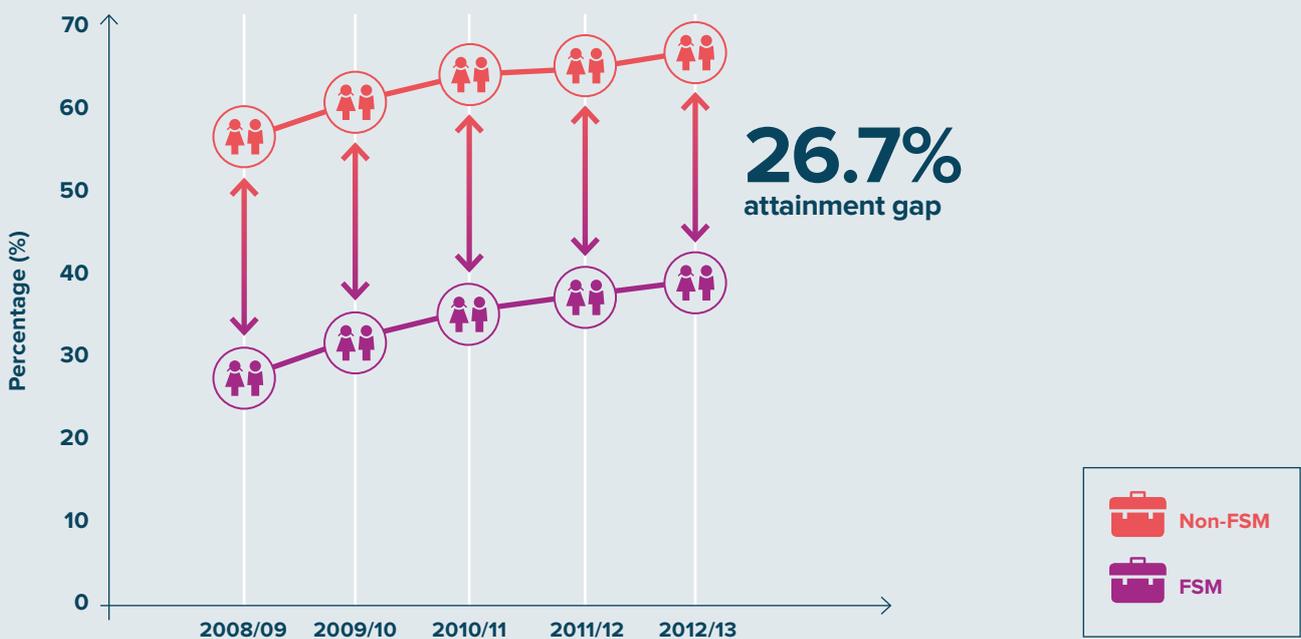
In England in 2012, only 38% of disadvantaged pupils achieved five good GCSEs, including English and Maths, or equivalent qualifications, compared to 65% of other pupils.²¹

The attainment gap between FSM and non-FSM pupils achieving five or more A*-C graded GCSEs (or equivalent) including English and maths has narrowed by just one percentage point between 2008/09 and 2012/13 (see graph below).²²

The failure of our brightest students to achieve their full potential at GCSE level is likely to have an impact on their subsequent achievement at A-level and entry to university as a student's highest grades at GCSE are often a predictor of the highest grades at A-level.²³

In England, an attainment gap at GCSE, between students eligible for Free School Meals and those who are not, exists across all regions. On average the gap is around 30 percentage points: so, for example 35.5% of FSM students in north-west England achieve five plus A*-C grades at GCSE (including English and maths), compared to 65% of students who are not eligible for FSM. Compared to other regions, London appears to have been much more successful in closing this gap, with more than 51% of FSM pupils achieving the GCSE benchmark.²⁴

Percentage gaining 5 or more A*-C grades (including English and Maths) at GCSE



Source: Department for Education statistics, GCSE and equivalent attainment by pupil characteristics in England 2012/13. Modelling: The Russell Group

In Wales, 21% of young people receiving FSM in 2011 achieved the equivalent of five or more higher-grade GCSEs, including English (or Welsh) and mathematics compared with 55% not receiving FSM.²⁵

There is also evidence that even among those with similar attainment up to age 16, new gaps can still emerge during the transition to advanced level. Young people from low-income groups who achieve five or more GCSEs at grades A*-C are less likely to get the equivalent of two or more A-levels than their better-off counterparts with the same grades at GCSE.²⁶

By the time students reach advanced-level, the attainment gap is substantial.

At each stage of secondary education, the pool of highly qualified disadvantaged students from which highly selective universities can recruit shrinks.

As shown by the graphic opposite, for non-FSM eligible pupils, of those 162,609 pupils who took three or more A-levels in 2010/11, 22,353 achieved three or more A*-A grades.

Fewer than 8,500 students eligible for Free School Meals took three A-levels. Of these students, only 546 achieved three or more A* or A grades.²⁷

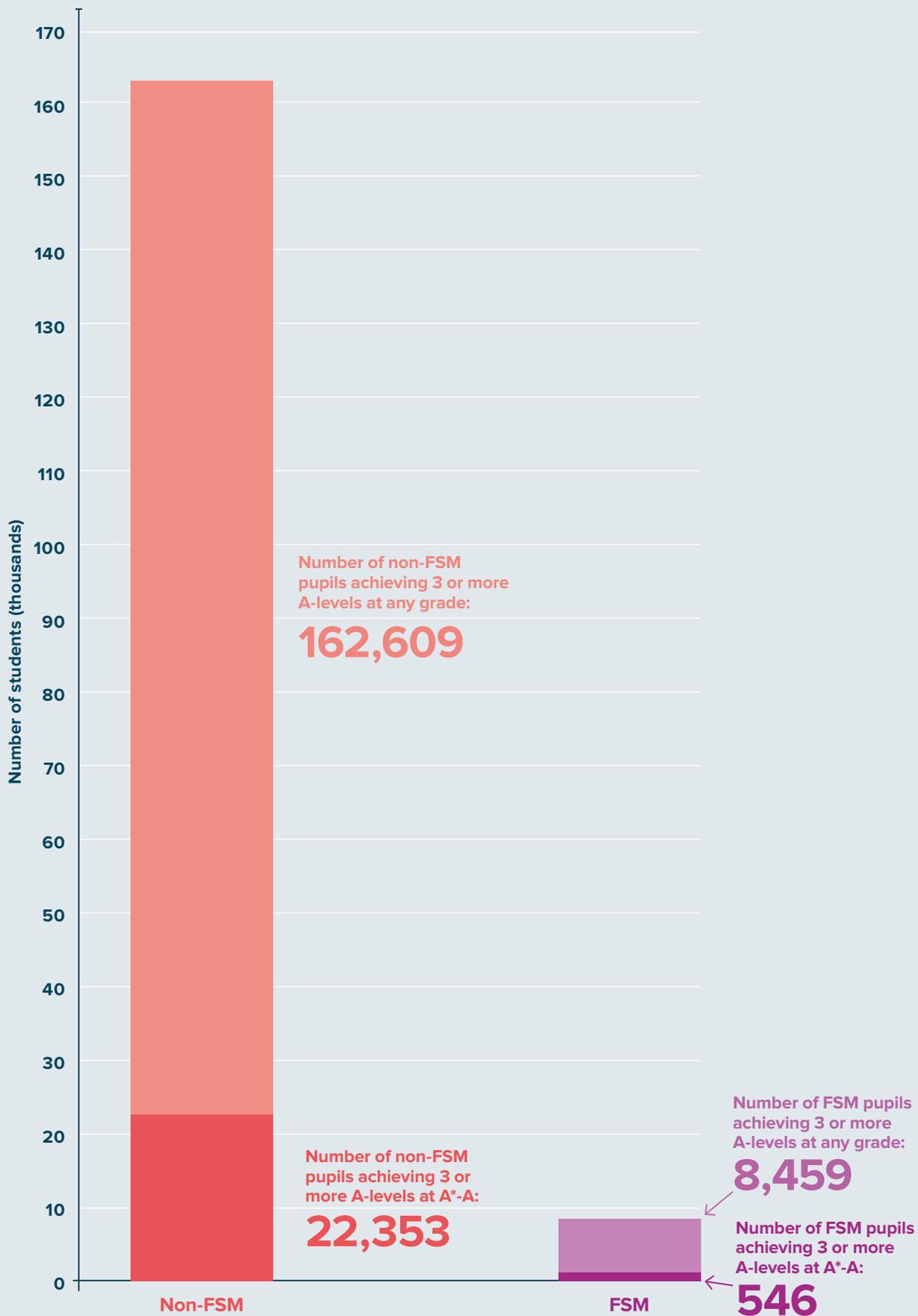
This shows that not only is the pool of Free School Meal-eligible students achieving the very best grades very small, but in 2010/11 non-FSM A-level students were more than twice as likely as their FSM-eligible peers to get the very best grades.

It is perhaps not surprising, looking at 'snapshot' destination data from the Department for Education²⁸, that we then see FSM students are under-represented at Russell Group universities:

Of the 13,540 Free School Meal pupils who went to a UK higher education institution, 1,240 (9%) went to Russell Group universities.

Of the 163,010 non-FSM pupils who went to a UK higher education institution, 33,970 (21%) went to Russell Group universities.

Attainment gap at advanced level between non-Free School Meal (FSM) pupils and FSM pupils



2

Reasons behind attainment gaps

School and teacher quality remains variable and this affects attainment too

The answer to why these inequalities persist lies in many contributing factors. This section examines just some of the factors that are particularly significant, but it is by no means comprehensive.

There is a body of evidence to suggest that social class influences a parent's choice of school for their child, and a school's type and performance, in turn, is known to influence a child's attainment. For example, research has found that pupils eligible for Free School Meals (FSM) attend 'worse' schools than pupils living on the same street who are not FSM eligible.²⁹

A reason for this may be found in a 2014 review of research literature³⁰ which showed that middle class parents tend to value school performance and peer group, whereas lower socio-economic status parents may look for accessibility, friendliness of staff and support for those of lower ability. This, according to the research, may lead lower socio-economic status groups to 'select themselves out' of high performing schools to avoid possible rejection or failure. Middle class parents, through their own personal networks, also tend to have a better 'know-how' with regard to accessing information on school quality.

Quality of teaching is one of the most reliable international indicators of a thriving and successful education sector.³¹ Once at secondary school, a lack of high quality teachers can exacerbate existing social, economic and family reasons why a young person might not attain highly at school.

In its state of the nation report³² the Social Mobility and Child Poverty Commission argued that disadvantaged students are not getting their fair share of high quality teachers. In the North East, fewer than a third of schools in the most deprived areas had teaching rated as 'good' or 'outstanding' compared with 85% in the least deprived, and 77% in the most deprived areas of London. Highly qualified teachers are unevenly spread across our schools. For example, research by the Centre for Education and Employment Research at the University of Buckingham found that in more than a quarter of state schools in England and Wales, one in four or fewer of physics teachers had studied the subject to any level at university. In contrast, none of the grammar schools, sixth-form colleges or FE colleges, and only 7.8% of the up-to-18 independent schools were in this position.³³

There is a strong relationship between quality of teaching and the attainment levels achieved by students. Expectations also matter. In the best performing schools, there is a culture of teachers expecting the best from every child, regardless of their background. But some teachers and some schools fall short of adopting such a culture.³⁴ Making progress towards raising attainment will require every teacher to have high expectations of all their pupils.

There is still a large attainment gap by school type

Unfortunately, and despite huge efforts across the secondary education sector, there is still an attainment gap between state and independent schools. But while school type is often used as a proxy for social class, it is important to acknowledge that this is an imperfect measure, likely to conceal the diversity of both state and private sector institutions.

In 2014 of all GCSE and IGCSE exam entries from schools which are members of the Independent Schools Council³⁵:

- **32.7% received the A* grade, compared to the UK average of 6.7%**
- **60.6% were graded A* or A compared to the UK average of 21.3%**
- **94.4% were graded A*-C compared to the UK average of 68.8%**

Students from independent schools are approximately three times more likely to achieve three A*-A grades at A-level than students at state-funded schools. In 2013/14, 28.4% of students in independent schools achieved three A*-A grades at A-level. In state schools, 10% of students achieved three A*-A grades. The figure was 8.4% at sixth-form colleges, and 4.3% at other Further Education (FE) sector colleges.³⁶

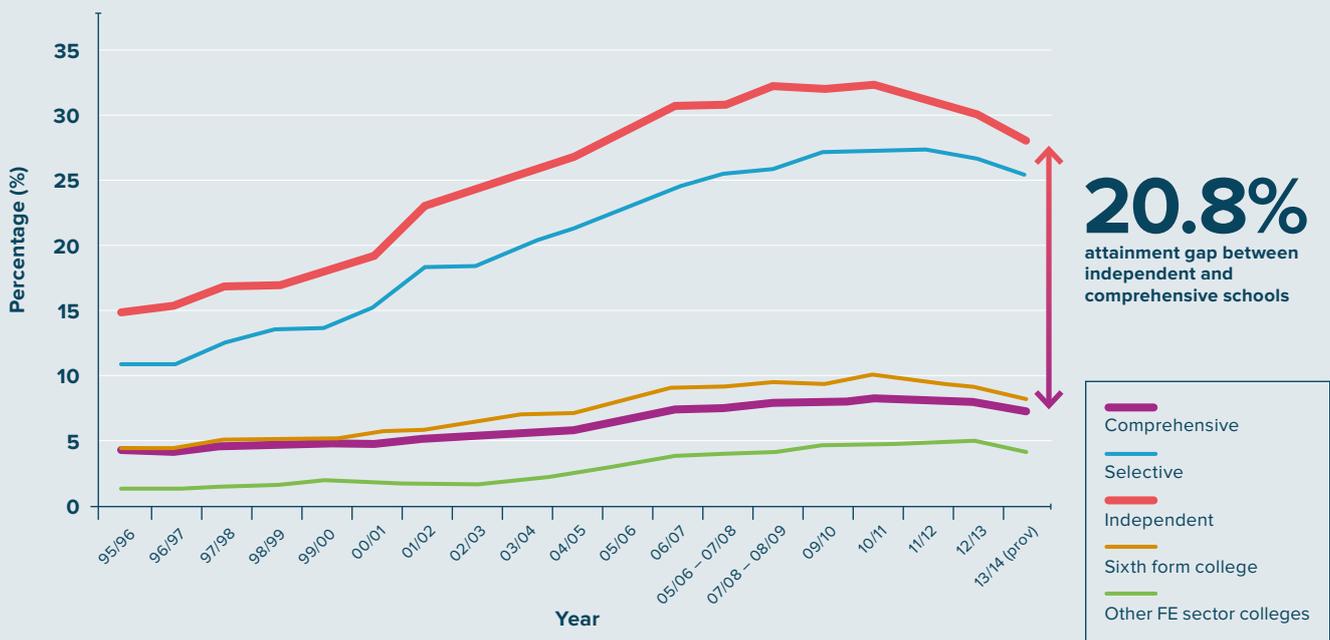
Within the state school sector, students in comprehensive schools are significantly less likely than those at selective state schools to achieve three A*-A grades at A-level. In 2012/13 just 8.1% of students in comprehensive schools achieved three A*-A grades compared to 27.0% of students from selective state schools.

The graph below shows this attainment gap over time, clearly illustrating how independent school students have, for a number of years, consistently outperformed those in other types of schools.

ABB BBC

Independent school students enter higher education with better A-level grades than those from state schools. The average A-level attainment of students from independent schools is ABB, whereas for those from other schools and colleges it is BBC.³⁷

Percentage of candidates achieving 3 or more A grades (and A* from 2009/10) by school type from 1995/96 to 2013/14 (provisional), and attainment gap between comprehensive and independent school candidates



Attainment continues to vary widely by ethnicity

Attainment also varies by ethnicity. In 2012/13, pupils in England from White backgrounds performed broadly in line with the national average at GCSE level, while Chinese pupils and Asian or mixed background pupils continued to perform above the national average. Pupils from a Black background had shown the most improvement on previous years, but remain low-performing.

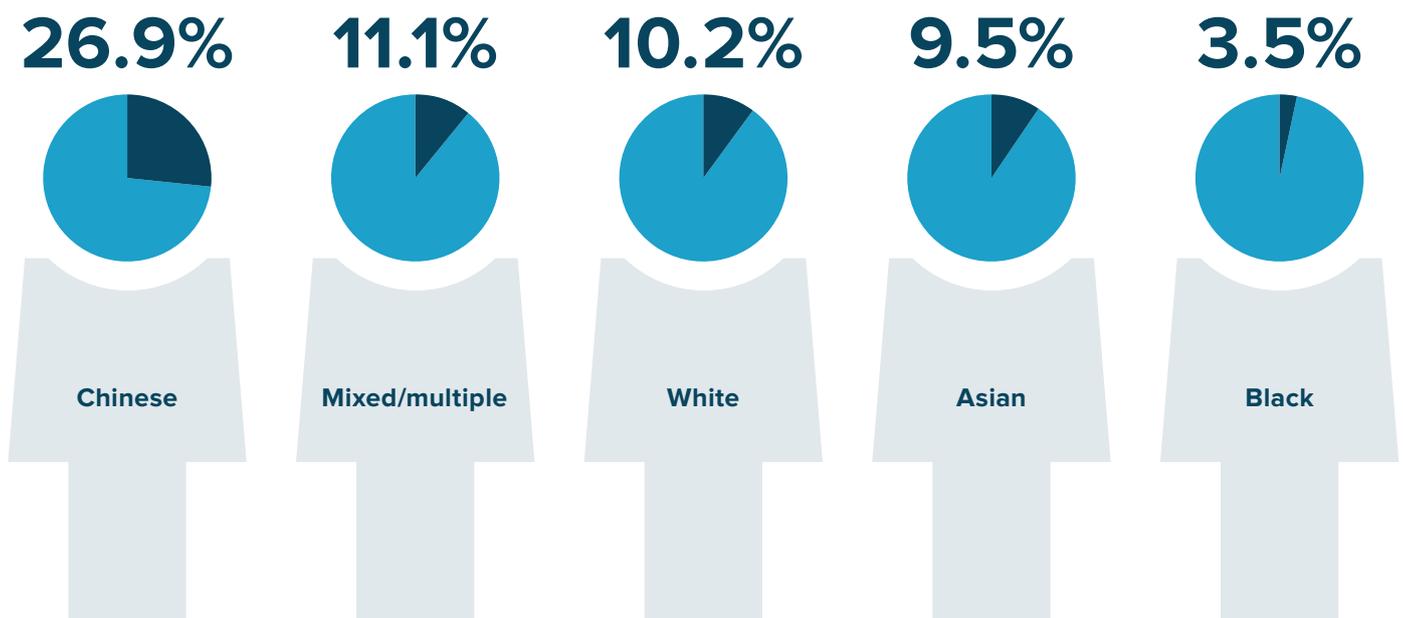
At A-level the gap between those achieving the highest grades from different ethnic backgrounds is substantial.

In 2011/12 only 3.5% of A-level (or other level 3 equivalent) students from Black backgrounds achieved three A*-A grades. This compares to 26.9% of Chinese students, 11.1% of Mixed Race students, 10.2% of White students, and 9.5% of Asian students.

Again, these figures show that there is a smaller pool of highly-qualified students from certain ethnic backgrounds from which selective universities can recruit.

Russell Group universities work in a range of ways to help raise primary and secondary attainment and support teaching. Some of these are explored in the raising attainment case examples in part two of this report.

In 2011/12, the following percentages of students from different ethnic backgrounds achieved three A*-A grades:



Putting attainment into context

Prior attainment is key when it comes to assessing applications from prospective students. Russell Group universities want all their students to succeed, and demanding entry requirements help to ensure that a student is well prepared to get the best out of and excel on their chosen course.

Grades are an excellent and reliable indicator of a student's academic ability and overwhelmingly the evidence suggests prior attainment is the best predictor of degree success.

In national research about the effect of schooling on degree success, Higher Education Funding Council for England (HECFE) noted that:

'...no other single item of information provides a better indication of how a student will get on.'⁴¹

More than 80% of students with grades AAB or above at A-level gain a first or upper-second class degree. Approximately 50% or fewer of those with CCC or lower do so.⁴²

But grades are not the only source of information used in the admissions process at Russell Group universities. Other factors are taken into account in determining ability and potential, including personal statements and teacher references which can provide valuable additional insights about the applicant. Some universities also use interviews and extra tests to ensure that pupils with real potential are identified. So raw grades are considered by Russell Group universities, not just on their own, but in a broader context.

For many years Russell Group universities have made targeted use of 'contextual information' to help inform their admissions processes and access programmes. This means that they draw on a range of information, for example school performance, socio-economic or geographical data, or whether the student has spent time in care, to help put the candidate's qualifications into the broader context in which they were achieved.

However, Russell Group universities do not use contextual information in a mechanistic or 'blanket' way, and they do not place too much weight on one indicator. This means that admissions decisions are not made on the basis of a single piece of contextual information. The evidence to support treating candidates very differently in the admissions process through the routine 'automatic' use of differential offers is simply not robust enough.

“Modern economics, like physics, requires a broad range of knowledge and skills with maths in particular being an intrinsic tool for analysis. Taking a scientific approach to current economic issues requires formal modelling of economic relationships and testing hypotheses against data. Therefore, mastery of economics requires not merely a narrow knowledge of a few aspects of mathematics, but true fluency and confidence in the subject as indicated by high achievement at GCE A-level.”

Undergraduate admissions tutor for economics,
London School of Economics and Political Science

Most recently, a study has shown that around one in 10 pupils from non-selective state schools will go on to do better at university relative to pupils from selective independent schools who had the same prior attainment levels.⁴³ This finding has led to the suggestion that students from non-selective schools may have more potential to do very well at university than their independent school counterparts, and should therefore routinely be given less demanding offers for university entry.

Routine use of differential offers raises serious questions about fairness, and would not be in line with two key principles that underpin the use of contextual information in admissions decisions – that it should be ‘research-based’ and ‘justifiable’.⁴⁴ Significantly, the study found that the small proportion of non-selective state school students who outperformed their independent school peers did so with the same, rather than lower grades. Using contextual data in assessing applications needs to be done carefully; it is very important

to get the balance right to ensure fairness to all candidates. This is not an easy or straightforward task – which is why a range of factors are usually taken into consideration, often when weighing up candidates with the same excellent grades.

Where universities do use contextual information it is in specific circumstances, such as:

To help select which students could be eligible for foundation degrees or other alternative entry routes

To help decide whether a student should be interviewed or set additional assignments

To help in ‘confirmation’ decisions, when a student may have narrowly missed the grades in their offer

To help determine whether a student is eligible for an ‘alternative offer’ scheme where, as well as a standard course offer, a student may be given an alternative and lower offer too. This approach is exemplified by the ‘Access to Leeds’ scheme described in the second part of this report.

When contextual information is used to give lower offers, it is usually because candidates have been asked to demonstrate their strengths through other means such as extra tests and extended essays.

—
3

Making informed choices

Looking at attainment data alone gives a good idea of the scale of the problem of under-representation, but, while attainment is a big piece of the puzzle, subject and qualification choice is important too

Subject choice, especially at advanced level, can have a large impact on which degree courses will be open to students when it comes to applying to a competitive course at a selective university.

Many courses at university level build on skills and in some cases, knowledge which students gain while still at school. Where this is the case, universities need to make sure that all the students they admit have prepared themselves in the best way to cope with their chosen course. For this reason, some university courses may require students to have studied a specific subject prior to entry. There are some advanced-level subjects that are required more often than others as prerequisites for entry to degree courses, and the Russell Group refers to these as facilitating subjects.

It is still the case that some students are not getting the right advice and guidance on the subjects to study, with the result that many good students haven't gained the qualifications they need for the course they want to apply for.

Admissions staff in several of the most selective universities report that it is commonplace for able candidates to seek places on degrees for which they are not qualified. The Russell Group's online publication *Informed Choices* seeks to address this problem, and is discussed in more detail in the second part of this report.

Qualification and subject choice at Key Stage 4 is also fundamental to participation in higher education, as 2014 research by the Institute for Fiscal Studies and the University of Warwick suggests.⁴⁵

Subjects the Russell Group identify as facilitating subjects are:

MATHS
FURTHER MATHS
PHYSICS
BIOLOGY
CHEMISTRY
HISTORY
GEOGRAPHY
MODERN AND CLASSICAL LANGUAGES
ENGLISH LITERATURE

Subjects the Russell Group identify as facilitating subjects are: Maths and further maths; Physics; Biology; Chemistry; History; Geography; Modern and classical languages; English Literature.

Looking at STEM A-levels in particular, Maths A-level is commonly required for Economics degrees across the Russell Group. Many Engineering courses require both Maths and Physics; and some Biology degrees require both Biology and Chemistry at A-level.

“Good grades in highly-regarded subjects and qualifications at Key Stage 4 are not only associated with a higher probability of staying in education beyond the age of 16 and doing well at Key Stage 5, but we find that they also continue to be significantly associated with HE participation decisions and university outcomes even after accounting for subsequent measures of attainment.”

Institute for Fiscal Studies and the University of Warwick

Awareness of the importance of subject choice and university entry requirements is higher than it was, but there is more to be done in some schools

The increasing take-up of facilitating subjects, as shown in the below graph, is welcome, as is the recent reversal in the trend of entering students early for GCSE exams.

Some schools had used an 'early entry' policy for GCSE exams to allow students to take more GCSEs in their final year, but by banking a 'good enough' result early on, schools had been disadvantaging some pupils by not allowing them to reach their full potential. In terms of admission to many Russell Group degree courses the difference between a C and a B grade at GCSE maths, for example, can be very important.

Department for Education graph showing entries in facilitating and non-facilitating A-level subjects by 16 to 19 year olds since 1996, all schools and colleges in England

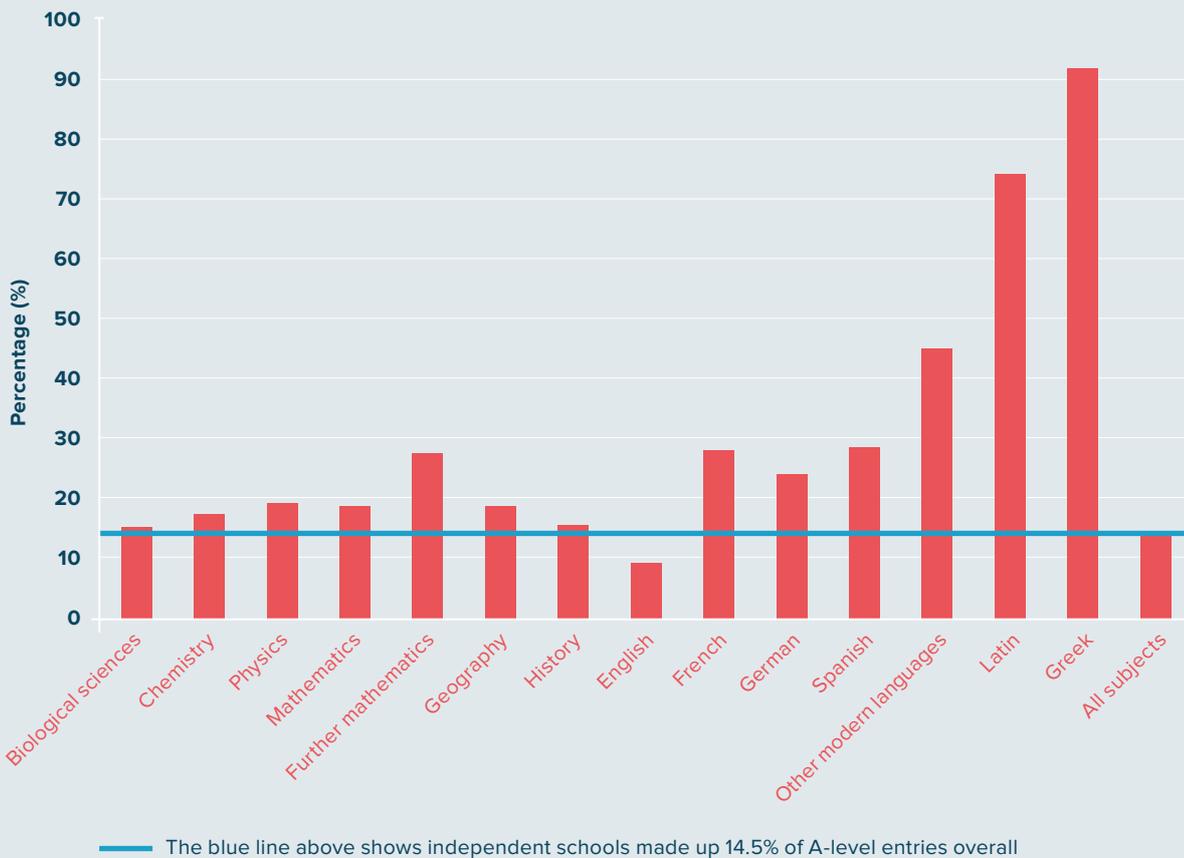


In 2013/14, A-level entries in traditional science subjects – which are often required for entry to degree courses – increased by 2.0% combined, when compared with 2012/13. Entries in mathematics and further mathematics also increased, with maths rising by 0.9% and further maths by 1.5%.⁴⁶

However, we know that students at independent schools account for a disproportionately large percentage of these entries. As the graph overleaf shows, in 2013/14, independent schools made up 14.5% of A-level entries overall, but they accounted for 19.3% of entries in physics, 17.7% of entries in chemistry and 15.3% of entries in biology. Independent schools also accounted for more than a quarter (27.7%) of entries in further maths.

In languages, while independent schools made up 14.5% of A-level entries overall, they accounted for 27.9% of entries in French, 24.4% in German, and 28.4% in Spanish.⁴⁷ In classical languages the proportion is much higher.

Percentage of A-level entries from independent school pupils

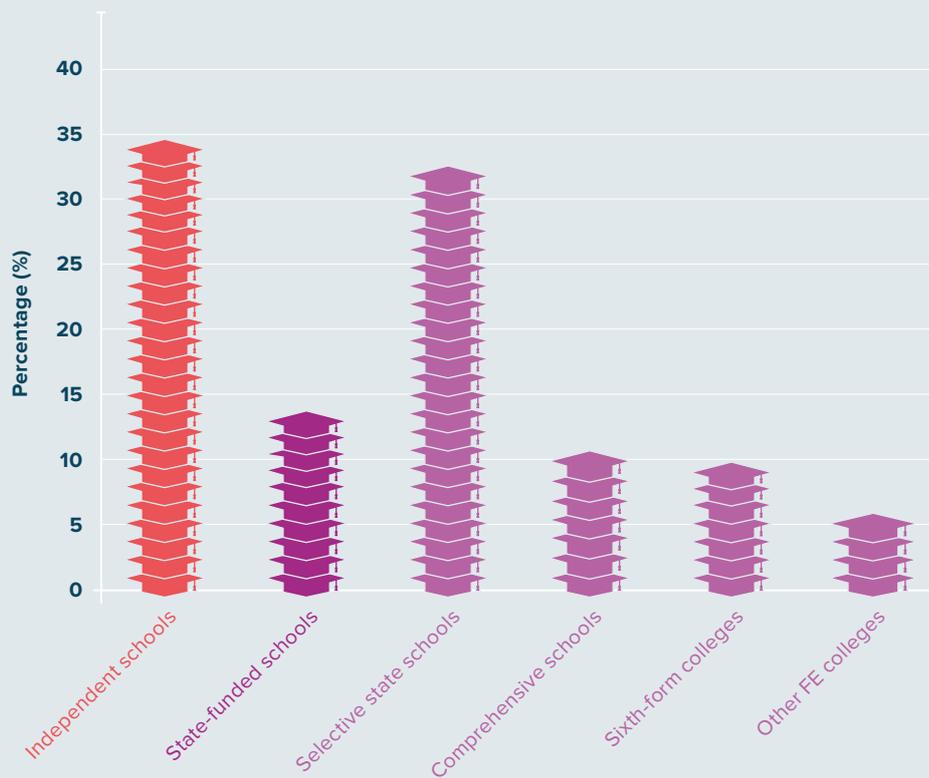


Although the English school performance table measures regarding achievement in facilitating subjects are imperfect⁴⁸, they shed some light on the take-up of and achievement in facilitating subjects by school type.

We know that independent and selective state school students are much more likely to achieve AAB in two or more facilitating subjects:

- In 2013/14 13.2% of state school students achieved grades AAB or better at A-level, of which at least two were in facilitating subjects. For independent schools the figure was 34.5%.⁴⁹
- In 2013/14 10.3% of comprehensive school students achieved grades AAB or better at A-level, of which at least two were in facilitating subjects. For sixth-form colleges the figure was 9.6%, and for selective state schools the figure was 32.2%.⁵⁰

Percentage of students achieving AAB or better at A-level, of which two or more are in facilitating subjects



Qualification choice is also important

As well as subject choice, qualification choice is critical when it comes to preparing a successful application for a competitive university course.

For example, not all vocational qualifications prepare students adequately for courses at Russell Group universities and some students feel they are not receiving the right advice about which subjects and qualifications leave more doors open later on in life.

Evidence from UCAS suggests BTECs are becoming increasingly popular, and that students studying BTECs are more likely to come from areas of low participation in higher education (POLAR2 quintiles 1 and 2) than applicants holding A-levels.⁵²

The same data shows that 35% of 18-year-old English domiciled students accepted to low tariff institutions held BTEC qualifications, compared to only 3% who were accepted to higher tariff institutions.

While BTECs are the right choice for some students, it is worrying that students, particularly from disadvantaged backgrounds, may be turning their backs on A-levels, without realising that this may close doors to competitive university courses further down the line.

High attainment in the right subjects for the degree course is fundamental to opening doors, but even with good grades, disadvantaged students are less likely to apply to leading universities

Pupils from top independent schools make twice as many applications to the most selective universities as their equally well-qualified peers from the best comprehensives.

“The single most important factor determining the probability that students obtained a place on one of the most academically demanding degree courses was the student’s own A level (or equivalent) results. Beyond this, the differences, by type of school or college, in participation rates on the most academically demanding courses can be largely explained by differences in the number and patterns of applications from different types of school or college.

Pupils from independent schools in the top fifth of schools according to average A level attainment, on average made twice as many applications to ‘Sutton 13’ universities than their peers from comprehensive schools with similar overall levels of attainment.”⁵⁴

Even schools with pupils achieving very similar UCAS tariff points produce strikingly different outcomes. For example, in two comprehensives in the north of England with identical results, one sent 57% of UCAS applicants to selective universities, the other just 27%.

The Sutton Trust suggests that such differences cannot be explained solely by the ability range, but may be influenced by parental background, geography and curriculum, as well as by the information, advice and guidance offered. The complexity of the issues that need addressing regarding access is such that many different stakeholders need to be involved. Universities alone cannot find a solution for these problems. But the evidence from the Sutton Trust also gives reason to be optimistic – it shows that something can be done.

Research on the London Challenge, published by the Social Mobility and Child Poverty Commission, found that much of the ‘London effect’ – the rapid increase in GCSE attainment of poor children in London observed since 2004 – can be traced back to earlier improvements in attainment in primary schools.⁵⁵ This demonstrates that a concerted effort, if targeted early enough, can make a difference in raising attainment among the most disadvantaged.

Part two of this report looks at some of the ways Russell Group universities are working to challenge negative perceptions and encourage applications.

Under-represented students are more likely to apply to more competitive degree courses

As well as advanced-level subject choices, degree subject choice inevitably has a bearing on the likelihood of an applicant being admitted, especially at highly selective and competitive institutions.

There is evidence to suggest that students from state schools may apply disproportionately to the most competitive courses. This is the case at the University of Oxford, where between 2010 and 2012, 35% of applications by UK domiciled state school students were for the five most oversubscribed subjects at the university. This compared to 29% of independent school applications.

There is also evidence to suggest that students from ethnic minority groups apply in much greater proportions to certain courses. In some cases progression for Black and Minority Ethnic (BME) students to university may be linked to cultural factors, which may be experienced as, for instance, parental pressure to study a particular subject that leads to a professional qualification.

UCAS data shows that between 2007 and 2009, 36% of all applicants to study medicine at UK universities were students from BME backgrounds. Within the same years, 30% of all applicants to study law at UK universities and 30% of all applicants to study business and administration courses were also students from BME backgrounds.

The fact that BME students tend to apply in much greater proportions to the most competitive courses means that many very able students find that they are unsuccessful in securing a place.⁵⁶

4

Problems of poor advice and misconceptions

Poor advice and, sometimes, the poor quality of applications are adding to the problem

There are many examples of effective information, advice and guidance (IAG) being offered throughout the state sector, but there is widespread concern that poor advice may be contributing to the low progression rates in many comprehensive schools and further education colleges.⁵⁷

Research has found that a significant number of teachers harbour misconceptions about Russell Group universities; some report that they would not encourage disadvantaged pupils to apply to leading universities, and some are uncomfortable talking to students about the differences between universities.^{58 59}

In 2014, a Sutton Trust-commissioned survey of secondary state school teachers found that fewer than half (42%) said they would advise their brightest pupils to apply to Oxford or Cambridge universities – a situation that had worsened since a survey carried out seven years before.

The recent survey also found that more than 60% of teachers underestimate the percentage of students from state schools on undergraduate courses at Oxford and Cambridge – with a quarter saying fewer than 20% of students come from the state sector.⁶⁰ In fact more than half of students on undergraduate courses at both Oxford and Cambridge are from state schools.

Another survey⁶¹ showed “a significant minority” of teachers – 21% – agreed that their colleagues

had lower expectations of disadvantaged students.

Receiving good advice and guidance on the preparation of personal statements is also important. A striking pattern emerges in the distribution of errors in personal statements, even between students who go on to receive identical grades at A-level: applicants from sixth form colleges make, on average, three times as many writing mistakes as those from independent schools.⁶²

The personal statement has been described as ‘an indicator of disciplinary socialisation’⁶³ and can show how applicants from independent schools characterise themselves in ways that explicitly demonstrate their suitability for academic life.

Other applicants, especially those from comprehensive schools and sixth form colleges, follow UCAS directions more literally, and tend towards unsubstantiated, over-personalised claims. This can mean some university applicants from comprehensive school backgrounds may undersell themselves in their statements. Admissions professionals are sensitive to this, and universities’ own outreach work with students and teachers on personal statements and teacher references is one part of the solution to this problem. The Russell Group’s programme of conferences for teachers, explored in part two of this report, aims to support teachers in their role as advisors and referees.

There has been much misinformation about the effect of graduate contributions in England on access

We have detailed some of the key root causes of under-representation: lower attainment, low aspirations and in some schools, poor quality of information, advice and guidance. However, hugely important to this discussion is evidence that, despite much misinformation, fees are not deterring poorer students from applying to university.

The introduction of variable fees in England has been accompanied by an improvement in access, with application rates increasing from all socio-economic backgrounds, and with marked improvements in applications and admissions of those from the lowest socio-economic backgrounds.

In the last decade there has been a substantial increase in the rates of applications from the most disadvantaged students. The latest UCAS figures show that young people from the most disadvantaged areas in England (as measured by POLAR2) are now almost twice as likely to apply as they were in 2004. The figure has increased from 10.7% in 2004 to 20.7% in 2014.⁶⁴

FSM pupils were 8% more likely to apply to university in 2014 than in 2013 and their overall application rate reached a new high of 18%. But overheated debates around university funding and fees have distorted the facts and confused many young people and their families.

International experience

- The experience of other countries which have implemented graduate contribution schemes provides powerful evidence that tuition fees, coupled with income contingent loans, protect access to higher education.
- Australia first introduced a universal tuition fee in 1989, of A\$2,250 per year, under the Higher Education Contributions Scheme (HECS). The system has been modified since, but the basic principle remains the same: students have the option of paying fees up front to receive a 25% discount or alternatively, graduates make income-contingent repayments on their tuition fees once their income exceeds a threshold.
- Research demonstrates that access levels have improved for all socio-economic groups since the introduction of HECS. Overall participation of 18 year olds from the lowest income quartile increased over the period 1988–1998, with a significant increase in participation from this quartile following the fee increases in 1997.⁶⁶ Participation rates among all income brackets increased substantially over the period.
- Tuition fees were introduced in New Zealand in the late 1980s, and had risen to NZ\$3,500 by 1999. Again, fees were coupled with income-contingent loans to students, and evidence indicates that participation rates have seen a significant overall increase, without any negative impact on the proportion of entrants from lower income or minority ethnic backgrounds.⁶⁷

Effective information, advice and guidance (IAG) about the benefits of higher education is essential to ensure that young people have the information they need to make decisions that will maximise their life chances.

Many pupils do not receive adequate IAG at school about higher education. It is particularly important that pupils from low-income backgrounds, from families who have not been to university, or who have less knowledge about higher education than others, are given robust support and guidance at school.

There is evidence to suggest that students from low-income backgrounds are more risk averse – rather than debt averse – than their better-off peers.⁶⁸ The current repayment system is designed to minimise risk to students and therefore to minimise the impact of risk aversion on application behaviour.

When A-level grades are taken into account, however, students from deprived and wealthy backgrounds are equally likely to go to university.⁶⁹ It is essential that potential students know that going to a good university is a sound investment – with no up-front fees, repayments only when they are affordable and generous help with living costs. Money worries should not stop anyone from applying.

Tuition fees do not have to be paid up front by students. In England, loans and bursaries are available to cover costs, and graduates only repay their loans when they are earning a salary of at least £21,000 a year. Even then, they will only pay back a small proportion (9%) of their income above £21,000.

This means that a graduate earning £30,000 a year would only have to repay their loan at a rate of less than £16 a week. And if they never earn enough to repay it, their loan is written off after 30 years. So this repayment system protects both low-earners and those students who come from disadvantaged backgrounds.

Bursaries can help to overcome barriers caused by preconceptions or lack of information

74,550

students from the very poorest backgrounds attending Russell Group universities received bursaries or scholarships during 2011-12.

£234m

In 2015-16, the 20 Russell Group universities in England alone will be investing £234 million in scholarships, fee waivers, bursaries and outreach activities aimed at the most disadvantaged.⁷¹

Institutional bursaries can play a role in helping students from low-income backgrounds overcome concerns and misconceptions about whether they can afford to study at university.

74,550 students from the very poorest backgrounds attending Russell Group universities received bursaries or scholarships during 2011-12. In 2013 a third of all fee-paying undergraduate students in the English Russell Group universities were receiving an OFFA-countable bursary or scholarship.⁷⁰

In 2015-16, the 20 Russell Group universities in England alone will be investing £234 million in scholarships, fee waivers, bursaries and outreach activities aimed at the most disadvantaged – with additional investments being made across the Devolved Administrations.⁷¹

Bursaries are also important in encouraging students from low-income families to consider institutions located further away from home. Moreover, in an environment of variability in graduate contributions between institutions and in courses within a large and diverse number of universities, bursaries have a role to play in widening access to the most selective institutions.

In a recent survey of bursary holders at Imperial College London, undertaken by Imperial College Union (ICU), more than 70% of bursary recipients who knew about the College's bursary provision before applying said that it played an important part in considering whether to go to Imperial.

The survey also confirmed that such support is necessary to cover the cost of living and studying in London, with more than 95% reporting that it was at least helpful (around 67% said that it was essential).⁷² Evaluation⁷³ of the University of Leeds Student Financial Support 2012/13 packages found that:

90% of respondents viewed the financial support package as an important or very important factor in their destination decision.

86% felt that receiving an award made them more confident about their ability to stay on their course. This finding was most pronounced among students from the lowest income households.

Bursaries and scholarships are valued by students as a source of extra finance, giving them the means to continue studying and achieve higher levels of attainment than they might otherwise have done. They are important, undoubtedly, but they can only ever be one tool in tackling the root causes of under-representation: financial support alone does nothing to help those who have neither the qualifications nor the aspirations to go to university.

The role of bursaries is explored further in part two of this report.

Concluding remarks

In this report we have explored the root causes of under-representation of disadvantaged students at leading universities. We have shown that the attainment gap starts early, and is stubbornly linked to social class and parental education.

The gap widens throughout secondary school, and we have noted there is variation in the attainment of different ethnic groups, and by school type.

Attainment data alone gives a good idea of the scale of the problem, and how it results in too few students from certain backgrounds reaching the levels needed to enter and do well in the most selective universities. But while attainment is one big piece of the puzzle, grades are not the only source of information used in the admissions process at Russell Group universities. Other factors are taken into account in determining ability and potential.

Subject and qualification choice is important too. The picture is improving, as evidenced by increased uptake in facilitating subjects, but more needs to be done in some schools.

High attainment in the right subjects needed for a particular degree course is fundamental to opening doors although, even with good grades, disadvantaged students are less likely to apply to leading universities, and under-represented students are more likely to apply to more competitive degree courses. Poor advice and sometimes, disappointingly, the poor quality of applications are compounding the problem.

An additional concern is the misinformation about the effect of fees in England on access. It is essential therefore that, from an early age, effective information, advice and guidance is available about the benefits of higher education and to address unhelpful preconceptions.

Making in-roads on under-representation is not something that universities can do alone. Ultimately this is a long-standing, deep-rooted, and highly complex social challenge.

However, the second part of our report looks in detail at what Russell Group universities are doing to tackle some of the key causes of under-representation. Our accompanying film also presents several examples of Russell Group universities' work in this area, and highlights how they work with schools and colleges to achieve a real increase in the numbers of their students coming to Russell Group universities.

References

- ¹ UCAS, *Submission to the call for evidence to the Commission on Child Poverty and Social Mobility* (July 2014)
- ² HESA performance indicators for 2012/13 (calculation by the Russell Group)
- ³ UCAS, Submission to the call for evidence to the Commission on Child Poverty and Social Mobility (July 2014)
- ⁴ Chief Medical Officer, *Our Children Deserve Better: Prevention Pays*. Annual Report of the Chief Medical Officer (2012)
- ⁵ DCSF, *Deprivation and Education*. The evidence on pupils in England, Foundation Stage to Key Stage 4 (March 2009)
- ⁶ UNICEF, *School Readiness* (2012)
- ⁷ Feinstein, L. 'Inequality in the Early Cognitive Development of British Children in the 1970 Cohort', *Economica* 70 (2003)
- ⁸ Jerrim and Vignoles (2011) critiqued Feinstein's 2003 methodology, arguing that the tests at 22 months were too reliant on 'luck on the day' and that an initial misclassification at 22 months means the graph may not be tracking high and low ability children. See: Jerrim, J, Vignoles, A, 'The use (and misuse) of statistics in understanding social mobility: regression to the mean and the cognitive development of high ability children from disadvantaged homes'. *DoQSS Working Paper No. 11-01* (2011)
- ⁹ IPPR, *Early developments: Bridging the gap between evidence and policy in early-years education* (2013)
- ¹⁰ Hart, B. and Risley, T. 'The Early Catastrophe', *Education Review* 17(1): 110–118 (2003)
- ¹¹ IPPR, 'Social mobility, life chances and the early years', *Maintaining Momentum* (2005)
- ¹² HM Government, *New Opportunities, Fair Chances for the Future* (2009)
- ¹³ The Sutton Trust, *Sutton Trust Submission to Sir Martin Harris: Widening Access to Selective Universities* (January 2010)
- ¹⁴ Joseph Rowntree Foundation, *Closing The Gap In Scottish Education* (May 2014)
- ¹⁵ Department for Education, *Influences on students' GCSE attainment and progress at age 16*. Effective Pre-School, Primary & Secondary Education Project (EPPSE) (September 2014)
- ¹⁶ The study defines pre-school in its sample as children who attended nursery classes, play groups, private day nurseries, local authority day care nurseries, and integrated centres.
- ¹⁷ Department for Education, *Influences on students' GCSE attainment and progress at age 16*. Effective Pre-School, Primary & Secondary Education Project (EPPSE) (September 2014)
- ¹⁸ Department for Education, *Primary school pupils on free school meals close gap on their peers*. press release (2013) <https://www.gov.uk/government/news/primary-school-pupils-on-free-school-meals-close-gap-on-their-peers>
- ¹⁹ Ibid
- ²⁰ Social Mobility and Child Poverty Commission, *Progress made by high-attaining children from disadvantaged backgrounds*. (2014)
- ²¹ Laws, D. 'Closing the achievement gap' speech to the Association of School and College Leaders, 5 March 2013. <https://www.gov.uk/government/speeches/closing-the-achievement-gap>
- ²² Department for Education statistics, GCSE and equivalent attainment by pupil characteristics in England 2012/13. <https://www.gov.uk/government/statistics/gcse-and-equivalent-attainment-by-pupil-characteristics-2012-to-2013>
- ²³ Social Mobility and Child Poverty Commission, *Progress made by high-attaining children from disadvantaged backgrounds* (2014)
- ²⁴ Department for Education statistics: Attainment gap between pupils eligible for FSM and all other pupils by Government Office Region in 2012/13
- ²⁵ Joseph Rowntree Foundation, *Poverty and Low Educational Achievement in Wales: Student, Family and Community Interventions* (2013)
- ²⁶ HM Government, *New Opportunities Fair Chances For the Future* (January 2009)
- ²⁷ A-level attainment of pupils eligible for free school meals in 2010/11 (Parliamentary Question, [116023] (9 July 2012)
- ²⁸ The Department for Education Key Stage 5 destination data is a snapshot which does not take into account students who may delay entry into HEI for a year or more. There are still high percentages of activity not captured in the key stage 5 measure, probably due to limited employment and unemployment data from some local authorities. The data is experimental and so should be treated with caution.
- ²⁹ Burgess, S. and Briggs, A. 'School assignment, school choice and social mobility', *CMPO Working Paper, 06/157* (2006)
- ³⁰ Department for Education, *School performance and parental choice of school: secondary data analysis*, Research Report (January 2014)
- ³¹ Barber, M. and Mourshed, M. *How the World's Best Performing School Systems Came Out on Top* (2007)
- ³² Social Mobility and Child Poverty Commission, *State of the Nation 2013: Social Mobility and Child Poverty in Great Britain* (2013)
- ³³ Smithers, A and Robinson, P. *Physics in schools and colleges: Teacher Deployment and Student Outcomes* (2005)
- ³⁴ Social Mobility and Child Poverty Commission, *Cracking the Code: how schools can improve social mobility* (October 2014)
- ³⁵ The results are from 552 ISC schools, representing 393,351 entries from 40,901 candidates. See <http://www.isc.co.uk/> and the Joint Council for Qualifications 2014 GCSE results: <http://www.jcq.org.uk/examination-results/gcse>
- ³⁶ Department for Education Statistics, A level and other level 3 results: 2013 to 2014 (provisional)
- ³⁷ HEFCE, *Differences in degree outcomes*, Issues paper (March 2014)

- ³⁸ The percentage of Chinese pupils achieving 5 or more GCSEs at grade A*-C or equivalent including English and mathematics GCSEs or iGCSEs is 17.5 percentage points above the national average; pupils of any Asian background by 3.6 percentage points; and pupils from any mixed background by 2.0 percentage points
- ³⁹ The percentage of black pupils achieving 5 or more GCSEs at grade A*-C or equivalent including English and mathematics GCSEs or iGCSEs is 2.5 percentage points below the national average
- ⁴⁰ Attainment at A-level by young people from different ethnic backgrounds (Parliamentary question, [149093] 15 April 2013)
- ⁴¹ HEFCE, *Schooling Effects on Higher Education Achievement* (2003)
- ⁴² HEFCE, *Differences in Degree Outcomes*, Issues paper (March 2014)
- ⁴³ Department for Education, *The link between secondary school characteristics and university participation and outcomes*. (2014).
- ⁴⁴ Supporting Professionalism in Admissions, *Principles for the use of contextual data in admissions* (October 2010) <http://www.spa.ac.uk/information/contextualdata/spasworkoncontextual/>
- ⁴⁵ Department for Education, *The link between secondary school characteristics and university participation and outcomes* (2014)
- ⁴⁶ Department for Education statistics, A level and other level 3 results: 2013 to 2014 (provisional)
- ⁴⁷ Ibid
- ⁴⁸ Russell Group response to Department for Education 16-19 School Accountability measures consultation: <http://www.russellgroup.ac.uk/uploads/41b-Russell-Group-response-to-DfE-16-19-accountability-consultation.pdf>
- ⁴⁹ Department for Education statistics, A level and other level 3 results: 2013 to 2014 (provisional)
- ⁵⁰ Ibid
- ⁵¹ The Student Room, *Options 2013 and Options 2014* (2013 and 2014)
- ⁵² UCAS, *Submission to the call for evidence to the Commission on Child Poverty and Social Mobility* (July 2014)
- ⁵³ The Sutton Trust and the Department for Business, Innovation and Skills, *Applications, Offers and Admissions to Research Led Universities: A joint report by the Sutton Trust and the Department for Business Innovation, and Skills* (July 2009)
- ⁵⁴ The Sutton Trust, *Degrees of Success* (2011)
- ⁵⁵ Social Mobility and Child Poverty Commission, *Lessons from London Schools for Attainment Gaps and Social Mobility* 2014
- ⁵⁶ Runnymede Trust, Debbie Weekes-Bernard (eds.) *Widening Participation and Race Equality* (December 2010)
- ⁵⁷ The Sutton Trust, *Degrees of Success* (2011)
- ⁵⁸ The Sutton Trust, 'Summer schools aim to dispel state school teachers' press release (2014) <http://www.suttontrust.com/newsarchive/summer-schools-aim-dispel-state-school-teachers-oxbridge-misconceptions/>
- ⁵⁹ The Sutton Trust, 'Less than half of state teachers would advise their most able pupils to apply to Oxbridge' press release (2012) <http://www.suttontrust.com/newsarchive/less-half-state-teachers-advise-able-pupils-apply-oxbridge/>
- ⁶⁰ Ibid
- ⁶¹ Social Mobility and Child Poverty Commission, *Cracking the code: how schools can improve social mobility* (2014)
- ⁶² The Sutton Trust, *The Personal Statement: A fair way to assess university applicants?* (2012)
- ⁶³ Robert M. Brown, 'Self-Composed: Rhetoric in Psychology personal statement'. *Written Communication* 21(3) (2004)
- ⁶⁴ UCAS statistics: Application rates, 2014 cycle, January deadline release
- ⁶⁵ UCAS, Analysis Note, 2014/02
- ⁶⁶ Chapman, B. and Chris, R, 'The access consequences of the Australian income contingent charge system for higher education', *Centre for Economic Policy Research, Australian National University* (2002)
- ⁶⁷ McLaughlin, M. *Tertiary education Policy in New Zealand: Fulbright report* (2003)
- ⁶⁸ The Bank of England has calculated that mortgage holders in lower income households have increased their debt as a proportion of income more than any other group, while unsecured debt rose most in households in which the head was aged under 25 (See reference in Bradley P, Whitehead A *Excellence, Equity and Access: squaring the circle of higher education funding* (November 2003)
- ⁶⁹ Studies have shown that 94% of children from lower socio-economic backgrounds who achieve 25 A-level points or more enter higher education, compared to 97% of children from higher socio-economic groups (Youth Cohort Study, DfES (2002): analysis has been replicated by the NAO for 2006 UCAS application data, with similar results. There was minimal difference in acceptance rates by socio-economic group for students with the same level of attainment (NAO, 2008)
- ⁷⁰ OFFA monitoring reports 2011/12 (Russell Group calculation)
- ⁷¹ OFFA access agreements 2014/15 (Russell Group calculation)
- ⁷² Imperial College London, *Access Agreement 2014-15*
- ⁷³ University of Leeds, *Access Agreement 2014-15*

Russell Group universities

- 1 University of Birmingham**
www.birmingham.ac.uk
+44 (0)121 414 3344
- 2 University of Bristol**
www.bristol.ac.uk
+44 (0)117 928 9000
- 3 University of Cambridge**
www.cam.ac.uk
+44 (0)1223 337 733
- 4 Cardiff University**
www.cardiff.ac.uk
+44 (0)2920 874 000
- 5 Durham University**
www.dur.ac.uk
+44 (0)191 334 2000
- 6 University of Edinburgh**
www.ed.ac.uk
+44 (0)131 650 1000
- 7 University of Exeter**
www.exeter.ac.uk
+44 (0)1392 661 000
- 8 University of Glasgow**
www.gla.ac.uk
+44 (0)141 330 2000
- 9 Imperial College London**
www3.imperial.ac.uk
+44 (0)20 7589 5111
- 10 King's College London**
www.kcl.ac.uk
+44 (0)20 7836 5454
- 11 University of Leeds**
www.leeds.ac.uk
+44 (0)113 243 1751
- 12 University of Liverpool**
www.liverpool.ac.uk
+44 (0)151 794 2000
- 13 London School of Economics
and Political Science**
www.lse.ac.uk
+44 (0)20 7405 7686
- 14 University of Manchester**
www.manchester.ac.uk
+44 (0)161 306 6000
- 15 Newcastle University**
www.newcastle.ac.uk
+44 (0)191 208 6000
- 16 University of Nottingham**
www.nottingham.ac.uk
+44 (0)115 951 5151
- 17 University of Oxford**
www.ox.ac.uk
+44 (0)1865 270 000
- 18 Queen Mary University of London**
www.qmul.ac.uk
+44 (0)20 7882 5555
- 19 Queen's University Belfast**
www.qub.ac.uk
+44 (0)2890 245 133
- 20 University of Sheffield**
www.sheffield.ac.uk
+44 (0)114 222 2000
- 21 University of Southampton**
www.southampton.ac.uk
+44 (0)23 8059 5000
- 22 University College London**
www.ucl.ac.uk
+44 (0)20 7679 2000
- 23 University of Warwick**
www2.warwick.ac.uk
+44 (0)24 7652 3523
- 24 University of York**
www.york.ac.uk
+44 (0)1904 320 000

Central London



RUSSELL

University of Birmingham
University of Bristol
University of Cambridge
Cardiff University
Durham University
University of Edinburgh
University of Exeter
University of Glasgow
Imperial College London
King's College London
University of Leeds
University of Liverpool
London School of Economics
and Political Science
University of Manchester
Newcastle University
University of Nottingham
University of Oxford
Queen Mary University of London
Queen's University Belfast
University of Sheffield
University of Southampton
University College London
University of Warwick
University of York

GROUP

The Russell Group of Universities

www.russellgroup.ac.uk

+44 (0)20 7969 5288

enquiries@russellgroup.ac.uk

 [@russellgroup](https://twitter.com/russellgroup)

Part two: How Russell Group universities are working to help solve the problem of under-representation

In this section we highlight our universities' work across linked themes:

1 Raising attainment

2 Information, advice and guidance

3 Alternative routes to Russell Group universities

4 Student support

Introduction

In part one of this report we outlined the complex nature and root causes of the under-representation of students from disadvantaged backgrounds at our universities.

We identified that the stark attainment gap is a key reason why too few students from disadvantaged backgrounds apply to a leading university, and that this gap appears early on between these students and their more advantaged peers. In many cases, problems are exacerbated by lower aspirations, poor quality of advice, and poor applications. We also raised concerns that misinformation about the effect of fees in England risks creating false access barriers for certain students.

These issues are many and complex, and individual students will have different and possibly multiple needs, so it follows that a range of interventions are needed to make a difference. There is no silver bullet solution and universities cannot hope to solve these problems alone. Ultimately, the problems can only be addressed by taking a holistic approach that enables government, schools, universities and parents to work together to tackle the issues involved.

The Russell Group has long been committed to playing a key role in the areas that we can influence and this is achieved by targeting resources in the most effective way

and working collaboratively with other stakeholders. In 2015-16, the 20 Russell Group universities in England alone will be investing £234 million in scholarships, fee waivers, bursaries and outreach activities aimed at the most disadvantaged – with additional investments being made across the Devolved Administrations.

**RUSSELL
GROUP**

Over a number of years, our universities have developed a wide range of programmes and initiatives to help tackle some of the many underlying barriers to access. Part two of our report looks in more detail at some of these.

This second part of our report is divided into a number of pull-out sections in which we highlight our universities' work across linked themes:

1 Raising attainment

2 Providing information, advice and guidance

- Challenging negative perceptions and raising aspirations
- Choosing the right subjects
- Advice on applications

3 Alternative routes to Russell Group universities

4 Student support

Many of the programmes we highlight could fit under a number of these themes. For example, our universities work with students from a young age to enhance their attainment, gradually raise their aspirations towards university, and then support them to apply for a place when the time comes – and some of the programmes they run have multiple aims. But we think it is useful to set out the main problems that each scheme is trying to tackle.

The examples we set out are by no means exhaustive, but illustrate some of the ways in which universities can, and do, involve themselves in the practical work of raising aspiration and attainment, improving information, advice and guidance, and challenging negative perceptions of higher education.

Admission schemes in the USA

Universities in the UK have been urged by some to emulate the access and admissions practices of elite institutions in the United States. In recent years there has been interest in the UK in 'early commitment', 'reserved places' or 'percent schemes' for university entrance.^{1,2}

A key feature of these US schemes is that a certain number of places at university are reserved for the highest achieving pupils within each school, or that those pupils are fast-tracked within the admissions process, for example with the guarantee of an interview. The aim of these schemes is to help those who do not have the highest grades but who have been the strongest performers in schools with more disadvantaged pupils. Russell Group universities certainly draw lessons from any

successful international schemes which aim to increase the number of disadvantaged students at university. However, we do not think the answer lies simply in importing US approaches to facilitating access. There are a number of reasons for this.

First, it is important to be cautious when drawing comparisons between the higher education systems in the USA and the UK. While the US faces many of the same challenges in terms of improving access to highly selective institutions, in a number of fundamental ways it is very different. Importing US approaches – which some argue have not been effective in any case - would not be the best solution to the challenges that UK universities face.

Second, individual universities face different challenges, and tailor their approach to admissions, access and widening participation accordingly. So the Russell Group solutions are diverse – there is no 'one size fits all' approach.

Third, several of the US schemes which are often praised are in fact not very effective in broadening access (see below).

Fourth, it is important to reiterate that our work can only ever be part of the solution; universities are limited in what they can do to address underlying problems. It is up to others to play their part, but by giving opportunities for students, their parents, teachers and schools to collaborate, Russell Group universities are doing their utmost to improve access through a diverse range of initiatives.

The US and UK – similarities and differences

While the US school and higher education systems differ in many ways to those in the UK, many of the challenges faced are familiar. Students from schools with a high proportion of low-income families are less likely to attain highly on standardised tests; less likely to graduate from high school; and less likely to progress to and graduate from university.³ Participation in higher education, and especially at elite institutions, is unevenly distributed across socioeconomic groups.⁴

As in the UK, highly selective universities in the US have very competitive admissions for many of their undergraduate programmes and naturally defend their right to make their own detailed assessment of each candidate who applies. Again, just as in the UK, admissions considerations vary by institution but a student's admission to an elite institution is primarily based on prior academic achievement.

This is usually assessed through standardised SAT or ACT⁵ tests and evidence suggests that high-achieving disadvantaged students are less likely than their advantaged peers to take these tests, and on average are likely to score less well.⁶ Participation and achievement in 'advanced placement' classes (college-level classes for high school students) is often taken into consideration during admissions but they tend to be accessed by more advantaged students. Similarly, evidence suggests that high-achieving disadvantaged students are less likely to access rigorous courses than their high-achieving more advantaged peers.⁷

Additional admissions considerations given considerable weight by US universities might include a student's relationship with an alumnus, extracurricular activities, or their sporting talent.

Percent schemes

One approach taken in the US to increase the number of disadvantaged students to apply to university is 'percent admissions' schemes. A key feature of these schemes is that a certain number of places at university are reserved for the highest achieving pupils within each school. Some argue that this can help to widen participation, particularly to the most selective institutions, and that the guarantee of a university place can encourage more students from under-represented groups to aspire

to university than would otherwise do so. In recent years, universities in the UK have been encouraged to introduce this approach. However, as evidence from the 'Texas 10%' scheme highlighted below shows, many of these schemes have not been effective or could be viewed as having undesirable features or consequences.

Texas 10% scheme

A scheme was introduced in Texas in 1997 where pupils who came in the top 10% of their high school year were guaranteed a place at the public university of their choice.

The scheme was amended in 2009 to ensure universities did not have to allocate more than 75% of their total number of places through this method.⁸ Before this, universities had found that up to 86% of all their places were being determined by this guarantee. In practice the guarantee of a place now only applies to those in the top 5%-8% of their high school class.⁹

The Texas 10% scheme has been widely considered to have failed in meeting its objectives. Even with the admissions guarantee in force,

eligible students from poor high schools are still only about half as likely as their affluent counterparts to apply to the flagship universities. Research suggests that this may be due to cultural and historical factors relating to the school students have attended, for example. One study found that 'high schools without strong college-going traditions kept many such students from applying or matriculating'.¹⁰

Research focused on the Texas experience has concluded that if policy makers want to increase non-traditional student enrolment at selective universities, the focus should be on expanding the applicant pool by improving high school quality rather than on offering guaranteed places.¹¹

RUSSELL

University of Birmingham
University of Bristol
University of Cambridge
Cardiff University
Durham University
University of Edinburgh
University of Exeter
University of Glasgow
Imperial College London
King's College London
University of Leeds
University of Liverpool
London School of Economics
and Political Science
University of Manchester
Newcastle University
University of Nottingham
University of Oxford
Queen Mary University of London
Queen's University Belfast
University of Sheffield
University of Southampton
University College London
University of Warwick
University of York

GROUP

The Russell Group of Universities

www.russellgroup.ac.uk

+44 (0)20 7969 5288

enquiries@russellgroup.ac.uk

 @russellgroup

References

- ¹ The Sutton Trust, *Innovative University Admissions Worldwide: A Percent Scheme for the UK?* (2009); Nick Clegg and David Willetts cited in Allegra Stratton, “Nick Clegg’s new ‘report card’ aims to improve social mobility”, *Guardian*, 30 March 2011; Jon Marcus, “World cribs from the Texas 10 percenters”, *THE*, 26 May 2011
- ² IPPR, *A Critical Path: Securing the Future of Higher Education in England*, 2013
- ³ Orlich, D. and Gifford, G., *Test Scores, Poverty and Ethnicity: The New American Dilemma* Phi Delta Kappa “Summit on Public Education,” Washington, D.C.
- ⁴ *Family Background and access to ‘high status’ universities*, Dr John Jerrim (The Sutton Trust, 2013)
- ⁵ Originally abbreviations for ‘Scholastic Aptitude Test’ and ‘American College Testing’.
- ⁶ The Education Trust, *Falling Out of the Lead: Following High Achievers Through High School and Beyond*. (2014)
- ⁷ Ibid
- ⁸ <http://chronicle.com/article/Legislature-Gives-U-of-Texas/47284/>
- ⁹ <http://www.star-telegram.com/2011/04/02/2970160/qualified-texas-students-being.html>
- ¹⁰ Tienda and Harris (2008). “Changes in Texas Universities’ Applicant Pools after the Hopwood Decision”; “Hispanics in Higher Education and the Texas Top Ten Percent Law”, available from <http://www.texastop10.princeton.edu/workingpapers.html> See also report of this research project in Peter Schmidt, *Major Shifts in College Admissions Policies in Texas Had Unforeseen Consequences*, *Chronicle of Higher Education*, 27 March 2008. Available from http://chronicle.com/daily/2008/03/2271n.htm?utm_source=at&utm_medium=en
- ¹¹ Alfonso, M. & Calcagno, J. C. (2007). *Minority Enrollments at Public Universities of Diverse Selectivity Levels Under Different Admission Regimes: The Case of Texas*. Washington, DC: Research Department, Inter-American Development Bank

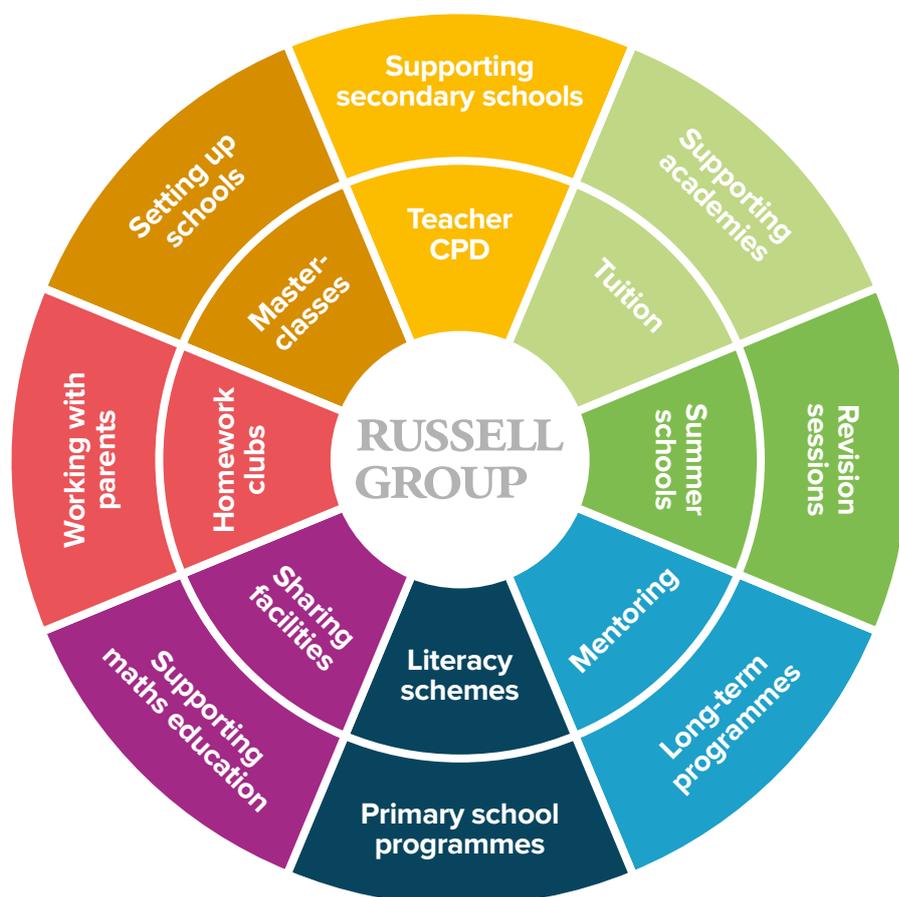
Raising attainment

Achieving the right level of attainment – and the gap that still exists between advantaged and disadvantaged students – is the fundamental problem that stops young people applying for and achieving a place at a highly selective university. It is also the problem that requires the most intervention from Government and its agencies because it stems not just from challenges in the school system, but involves broader societal issues too.

Russell Group universities work extensively with schools and colleges of all types, across the UK, to support teachers to identify and build on potential – and to raise the attainment of pupils, particularly those from disadvantaged backgrounds.

Our universities do this in a variety of proactive ways, including: sponsoring academies or setting up schools; running substantial, long-term programmes with students from poorer backgrounds; providing continuing professional development for teachers; delivering academic support through mentoring, and supporting after-school homework clubs and revision sessions.

Collectively, Russell Group universities' students and staff have an enormous reach, working with thousands of young people and teachers in the UK. The examples below provide an insight into just a few of the ways Russell Group universities work with school and colleges to raise attainment.



**RUSSELL
GROUP**

Russell Group universities' involvement in secondary education

Supporting local schools

Russell Group universities are working with schools to help them improve over time, providing academic support by creating challenging curriculum materials and devising projects to enthuse and engage students.

Queen Mary University of London

(QMUL) has established close partnerships with schools serving educationally disadvantaged communities in the London boroughs of Tower Hamlets and Havering.

In particular, the university has taken on the role of the lead trust partner at St Paul's Way Trust School, in Tower Hamlets, which has now noticeably improved its GCSE results.

Senior members of QMUL staff chair the governing body and Trust Board as part of a broad, long-term programme of academic and governance support being provided by the university.

QMUL has worked with its Trust partners to develop an innovative and exciting curriculum for the school. Its biomedical science programme, for example, examines how to tackle diabetes, a subject with particular relevance to the school as the condition is a serious public health problem in the local community. Pupils studying the programme can talk to Queen Mary's research scientists and use the university's world-class labs.

The University of Liverpool is working with North Liverpool Academy – one of three academies with which the

university has strategic links – and its feeder primary schools. The university's Educational Opportunities team provides learning materials for pupils aged 11 to 16, and supports a wide range of bespoke activities including master classes at the university.

The school has very high levels (97.9%) of students from areas of multiple deprivation, but applications from the academy to the university have risen as a result of this hands-on engagement, with 38 students applying in 2014. Consequently the number of students from the academy taking up a place at the University of Liverpool has more than doubled.

The University of Birmingham

runs Forward Thinking which is a programme for groups of local schools. Each year the schools involved select five Year 8 Gifted and Talented students from disadvantaged backgrounds to take part in a programme of activity through to Year 11. They are encouraged to think about their future education and career path in order to make informed decisions about progression to university, and to help motivate them to succeed at school and achieve. This programme has a particular focus on progression to selective institutions such as the University of Birmingham and other Russell Group universities, and giving participants an idea of what academic study and student life might be like.

Specialist maths schools

Links between schools and universities have the potential to raise attainment. The challenge is to make the best use of relationships to add real value to teaching and learning at school and to raise attainment levels as a result. One of the options is to focus on particular disciplines.

The University of Exeter and King's College London have developed specialist maths schools, to offer both outstanding secondary education for pupils and to support other schools' teaching of maths and other STEM subjects.

“What makes this school so special is the link between the school and the university. We are using personnel at the university to enhance the experience of pupils.”

Dan Abramson, Head Teacher, King's College London Mathematics School

These schools are the only two university-sponsored mathematics schools in the country and the selection processes for both schools are designed to identify those with the potential to flourish in a specialist mathematics environment.

Students attending the Exeter Mathematics School are mentored by mathematics undergraduates from the university and work with their peers from across the South West of England. The aim is to broaden students' outlook and for the experience to be a useful stepping-stone to university.

Both schools aim to provide an education for their students that is engaging and challenging, inspiring their curiosity and motivating an

interest in further study. But more than that, the schools are working to improve maths education more widely through their outreach and professional development work with teachers – and by acting as hubs to engage schools throughout their regions.

The King's College London Mathematics School works with the university to run a Further Mathematics course for new teachers to develop their subject knowledge. Funded by the London Schools Excellence Fund, the course offers new teachers core training days at the Mathematics School and assigns each participant a senior mentor who will visit the teacher at their own school.



Successful formula: The King's College London Mathematics School aims to inspire both teachers and students

University Technical Colleges

University College London is one of several Russell Group universities that sponsor University Technical Colleges (UTCs). A UTC is a new type of school where students learn practical skills alongside academic subjects.

UCL is a co-sponsor of Elutec, a college teaching 14-19 year olds living in east London and Essex who are looking to specialise in engineering or design. Other sponsors are the Ford Motor Company, CEME (Centre for Engineering and Manufacturing Excellence) and Prospects Learning Foundation. The college is also supported by the Jack Petchey Foundation for education.

UCL is contributing to the educational programmes and the governance of Elutec, led by Professor Anthony Finkelstein, Dean of UCL Engineering, who himself completed an engineering apprenticeship in the East End of London.

Elutec offers cutting-edge facilities, including a dedicated manufacturing line, a robotics centre and a hydraulic and pneumatic training suite. The college also has access to UCL's world-leading research and educational resources.

As part of the dynamic learning environment, industry and university experts are invited to deliver guest lectures, giving students an understanding of how science and technology are applied in the real world and how these subjects can improve lives.

As well as studying for their GCSEs and taking a course in modern foreign languages, students aged 14 to 16 work together on projects which are designed to solve real-life problems faced by industry. Students are supported through this challenging work by the sponsors and the Elutec teaching team, and present their findings to senior executives from the partner industries.

Approaches used by different universities vary but taken together these initiatives, and others found across the Russell Group, offer a significant opportunity to enhance the quality of education and raise attainment among pupils aspiring to go to a leading university.



World-class links: Students at Elutec benefit from UCL expertise

Imperial College London's Reach Out Lab and Reaching Further programme

The Wohl Reach Out Lab and the Reaching Further Programme at Imperial College London provide high quality science resource for schools, which the College believes has enormous potential to help transform science teaching, particularly within underperforming schools, or those with low progression into higher education.

The Reach Out Lab is championed by the renowned scientist Professor Robert Winston, and a team of energetic young researchers.

The Lab is popular with schools and has been used by significant numbers of pupils from primary level up to sixth form since it opened in 2009. This bespoke teaching space has also provided continuing professional development for STEM teachers across London, and is now expanding its reach to provide STEM resources at a national level through the Twig programme – a digital education project to support primary school teachers to engage children in science.

“The Wohl Reach Out Lab helps to show schools the point of science by putting it in a current research setting,” says Dr Annalisa Alexander, head of outreach at Imperial College. She added: “You can see teenagers thinking science is cool after meeting our young researchers.

“We did a session on enzymes recently and you could feel the excitement in the room as the pupils got to grips with using scientific equipment in a working lab.”

Having access to cutting-edge research equipment is also

highly beneficial. Making use of spectrometers within the Wohl Reach Out Lab and those within the chemistry department can help A-level chemistry pupils to understand spectrometry, a very complex and hard to teach part of the syllabus.

The Lab also enables pupils to take part in practical experiments that would be hard or impossible to run in a school setting. “Allowing the pupils to take part in dissections, for example, is a fantastic experience. To begin with, they don't want to cut



Look and learn: High level involvement in the Reach Out Lab from within Imperial is key. Back row L-R: Prof Sir Keith O’Nions (former President), Prof Lord Robert Winston, Prof Debra Humphris (Vice-Provost, Education)



In their sights: The Wohl Reach Out Lab at Imperial College London enables young scientists to take part in practical experiments that would be impossible to run in a school setting

Oxford Young Ambassadors

or even touch the tissue, but after 10 minutes or so, they are getting stuck in and talking excitedly about what they find,” Annalisa added.

The Reaching Further programme was developed in response to an increasing number of requests from science teachers for support when teaching outside their area of specialism, such as biologists who have to teach physics. By linking teachers with the research community at Imperial, they are given access to resources and real-life examples of how science works.

“It’s really inspirational for teachers to have access to early career researchers – they bring a relevance and passion for their subject which teachers can find harder if they aren’t teaching their specialism,” says Annalisa.

Through Reaching Further, a virtual learning environment for teachers has been set up to provide them with high quality resources and continuing professional development. In partnership with Twig World, a new and innovative education media company helping to deliver this resource, Imperial is at the forefront of STEM curriculum support.

Russell Group universities work with students who have the ability to achieve very high grades, but who may need extra academic support and encouragement to reach their full potential.

The University of Oxford’s Young Ambassadors programme is working to raise the attainment and aspirations of young people currently predicted B/C grades at GCSE level, who are also from families with no family history of higher education.

The three-year programme recruits Year 9 (13-14 year old) students from Oxfordshire schools who, at the time, are on course to achieve a B/C in their GCSEs. The programme is designed to raise the participants’ attainment to A and A* grades at GCSE, and invites them to become ambassadors for higher education.

The programme is focused on participants who have the potential to achieve grades that would enable them to gain entrance to academically competitive universities but are currently not performing to their highest possible level. The programme has found that these students often sit at a B/C level and their reasons for lack of attainment are varied, including low aspirations, lack of support or caring responsibilities at home, struggling to engage in the curriculum or a lack of clarity about future careers.

In becoming ambassadors for higher education, the participants are helped to focus on presentation and assertiveness skills, so that by the end of their first year on the programme they will be able to present to a

family group and, by the end of their second year, should be able to present to larger groups, for example at school assemblies. In this way, the programme empowers participants to inform others about further and higher education choices, access to academic taster sessions, student finance, and the study skills they have acquired during the course.

Widening participation coordinator, Robyn Pearce-Jones, describes the programme as an innovative way to encourage more participation in that it gives young people who might not otherwise think of university the responsibility for raising awareness among their peers.

The programme introduces higher education as a viable option and encourages the young ambassadors to engage others who, like them, might not have considered university.

“By taking part in the programme, Tom’s confidence, aspirations and expectations for the future have risen exponentially. The legacy of the OYA programme is something I know will stay with Tom for the rest of his life”

Parent of an Oxford Young Ambassadors student

Oxford Young Ambassadors work closely with Oxford student mentors, who meet them once a month to take part in drama workshops, chemistry demonstrations, visits to museums, botanical gardens, and other activities at many Oxford colleges.

In the second and third years the ambassadors work on academic sessions which are designed to help



Confidence boost: the Oxford Young Ambassadors scheme encourages young people to reach their full potential – and to tell others about their experiences

them work towards achieving the top grades at GCSE.

“What is really exciting is seeing young people respond to the mentors, who are only a few years older than them,” said Robyn. “We welcome students from non-traditional backgrounds who can help the ambassadors rethink their preconceptions about going to university. It is amazing to see the impact that this can have.”

At the end of the programme the 30 students a year who take part during Years 9, 10 and 11 – the 13-16 age range – are invited to a graduation ceremony at the university.

Robyn and her colleagues say the graduation is such a memorable day that most ambassadors’ families and friends want to attend. They in turn often tell a wide range of other local people, helping to spread the message even further that university can be for them.

Find out more about Russell Group universities’ work on raising attainment

Cardiff University’s Step-Up to University Programme develops a relationship over three years with pupils in schools from which there have traditionally been low rates of progression to university. Through e-mentoring, general and subject specific events, and by offering guidance during the application process, the programme aims to support secondary school pupils from disadvantaged areas— raising both aspirations and attainment.

Durham University’s Supported Progression two-year programme identifies talented pupils in the North East, Cumbria and West Yorkshire with the potential to study at a university like Durham and who will benefit from additional help and support to reach their full potential.

The **University of Glasgow’s Top Up** programme helps prepare pupils for the transition from school to university by introducing them to new learning methods and by helping them develop skills such as critical thinking, independent learning and essay writing.

Queen’s University Belfast’s Queen’s Academy programme works with pupils across Northern Ireland to develop their potential to study at university. Activities such as residential sessions and masterclasses help to develop pupils’ confidence and enhance their academic skills.

The Student Tutoring Scheme at the **London School of Economics and Political Science** brings together student tutors and disadvantaged pupils aged 11 upwards from state schools and FE colleges in Greater London for weekly one to one or small group sessions aimed at raising achievement and aspiration.

In presenting these varied case examples, we have only scratched the surface. There is a much wider range of work going on at Russell Group universities to raise attainment, improve information, advice and guidance, and support students than we could ever hope to capture here. But we hope we have shown the level of commitment and determination that exists across our universities to improve access to their institutions – and more than that, to help widen higher education participation in the UK and ensure that every student with the qualifications, potential and determination to succeed at a Russell Group university has the opportunity to do so, whatever their background.

Information, advice and guidance

The quality of information, advice and guidance given to students ahead of their application to university varies significantly between schools and colleges. Russell Group universities know that lack of relevant information – or worse, misinformation – can cloud the picture and create ‘false barriers’ to access. This is why the Russell Group and its member universities invest significant time and resources in developing and delivering high quality information, advice and guidance initiatives.

We want students to aspire to do well throughout their school years, and to benefit from the best information, advice and guidance possible.

We aren't able to cover every example in this short section, but we have highlighted three key themes typically addressed in our universities' information, advice and guidance work:

- **challenging negative perceptions and raising aspirations;**
- **choosing the right subjects and understanding course requirements; and**
- **advice on applications.**

Challenging negative perceptions and raising aspirations

Raising aspirations and increasing awareness of higher education from an early age is key to ensuring talented students know that a place at a Russell Group university is well within their grasp. If, for any reason, students have a sense that university might not be for them, it can deter applications from those with the ability and potential to succeed. These negative perceptions need to be challenged and overcome, and our universities are tackling this through a variety of approaches.

Many of the programmes facilitated by Russell Group universities to address this issue are designed to tackle other problems too. For instance, while the Children's University of Manchester, overleaf, sets out to challenge negative perceptions of university in the community in a colourful and engaging way, it is also aiming to raise pupils' aspirations and attainment.

The Children's University of Manchester

The Children's University of Manchester is an interactive website aimed at sharing the knowledge and expertise of a research-intensive university with its wider community, and particularly primary schools. The website provides learning materials that schools can use on whiteboards and computers, as well as educational games and video clips that bring the university into the classroom. All the content is aligned with existing web-based materials for students at Key Stage 2, the seven to 11 age range.

“It's important to reach out to children before they go to secondary school. At the age of seven or eight they are starting to make decisions about

their future based on their immediate environment,” says Alison Gregory, student recruitment and widening participation officer at the university.

A key aim is to give children an idea of what university life is like by introducing them to students, staff and graduates via profiles and video clips. These show that the University of Manchester is a welcoming, accessible and exciting place. By introducing young children to the idea of university, and by raising awareness of the benefits and opportunities that higher education can bring, particularly for students from traditionally unrepresented sections of society, the project also

aims to raise children's aspirations for their own future.

“If they go to secondary school with the idea that they could go to university in the back of their minds, they are much more likely to keep it there as they get older.”

Alison Gregory, student recruitment and widening participation officer

The website's teaching and learning materials are designed to be used for group and individual work, in the classroom and for homework. Importantly, the website is also designed so that parents or carers can use it to encourage and support children in their own homes.

The Children's University is just one strand in a number of programmes for children at Key Stage 2, including school visits to the university and outreach work in schools. The programmes support one another and are all aimed at children and families in Manchester without a history of attending university.

All the strands present information about university in colourful material and use quizzes and other activities to help engage children. Student ambassadors also play an important role as positive role models. This approach enables children to see that students are ordinary people – and being able to ask them questions in person helps them to imagine university life and ultimately aspire to going to university themselves.

Within half a mile of the university there are pockets of significant economic and social deprivation. The university is working hard to reduce the barriers faced by young people in these most disadvantaged areas and is determined to make a difference to the local community.

Engaging young learners: The Children's University of Manchester has an accessible web presence

The University of Edinburgh's Educated Pass scheme

At the University of Edinburgh, football is being used in an innovative way to reach some of the groups least likely to apply to university.

There is a challenge in getting young men to apply for a higher education course, particularly if they come from a family with no history of attending university.

Drawing on successful examples such as in the Netherlands, where the first division team Ajax has a strong tradition of working with young players to encourage participation in education, the University of Edinburgh developed its Educated Pass programme. The programme works with local boys' football teams, targeting boys from under-represented groups in the 13-16 age range. Its aim is to engage the boys, their coaches and their families in educational opportunities through a shared passion for sport, and football in particular.

The programme is innovative in its approach in that it does not work through schools: boys are targeted through their local football clubs, and their football coaches - rather than their school teachers - are involved in promoting messages about the importance of learning.

“The coach is the person young footballers really listen to, so I thought about how to take our message out of the classroom and into the locker room.”

Neil Speirs, University of Edinburgh widening participation team

The programme's eight sessions take place in the clubhouse over 18 months, first involving parents to ensure their support, then focusing on the coaches. The aim is to build on the boys' commitment to sport in order to generate a similar interest

and commitment to their education. The sessions provide generic advice on school, college and university pathways, using sport-related courses as a 'hook', but also demonstrate that educational and career opportunities exist outside the world of sport. Examples may include a graduate who read French and who now works for UEFA in Switzerland, or the graduate in architecture who designs stadia.

Sessions such as 'the rights of the game' look at issues surrounding human rights across the world. These are brought alive with examples of athletes who have taken a stance against political oppression or protested against civil war. Using football to teach science, other sessions look at, for example, the neuroscience behind concussion in modern sport.

Some 150-180 boys have participated in the scheme each year since it began in 2006/07 with early funding from the Sutton Trust.

Of the first cohort of boys to participate in the initiative in 2006-7

- **92% completed S5 (fifth year) compared to the Scottish national average of 75% in 2010-11**
- **68% completed S6 (final year) compared to the national average of 56%.**

Of those who completed S6, 67% progressed to higher education compared to the national average of 36%.

Five members of that original cohort went onto study at the University of Edinburgh – and one has joined a professional football team in Scotland.



Long-term goal: Edinburgh University's Educated Pass scheme reaches students through sport

University of Cambridge Area Links Scheme

Although the University of Cambridge has a world class reputation, some sixth formers feel that Cambridge is not for them – a misperception which can deter them from applying. To address this, the Area Links Scheme was set up in 2000 to provide schools and colleges with a straightforward way to contact the university, and to help the Cambridge colleges build more effective relationships with individual schools and colleges throughout the UK.

Under the scheme, each undergraduate college at Cambridge is linked with one or more local authority, London borough, nation and region in the UK. Each of the colleges employs a dedicated schools liaison officer (SLO) to provide support to and develop relationships with schools in their link areas. This means every UK school has a named point of contact with the university.

The work of the SLOs is tailored to the specific needs of their link areas. Where a college is linked with an area some distance from Cambridge, the SLO might spend a week or more at a time in the area, visiting schools and running events. SLOs in colleges with closer link areas may focus more on events which bring young people and teachers into their college.

For example, Downing College is linked with Cornwall, Devon and Dorset. Downing's SLO runs a series of information days for Year 12 students aged 16-17 in the south west, bringing admissions staff and students from the university into schools and colleges. Each summer the SLO organises a free residential event in college so that potential applicants who would not otherwise get the opportunity to visit the university can experience Cambridge for themselves.

In London, Clare College runs a mentoring scheme for young people in Hackney. Every year the college runs a mentor scheme for Year 12 students in partnership with Linklaters. The Year 12 students work with mentors from the company as well as with students from Clare. The sessions focus on improving interview skills, how to write a good personal statement and how to choose a university and course.

“Having a direct link to a specific team of admissions and outreach staff can help open the door into the university”

Tom Levinson, head of widening participation

“Schools and potential applicants no longer feel they are dealing with a large institution, but rather with a smaller and more intimate one which has links with, and a good understanding of, their local context,” said Tom Levinson, head of widening participation.

In 2012/13, through the Area Links Scheme, Cambridge colleges engaged with:

73,000
students

5,000
teachers

from
4,700
schools

across
2,000
events

1. Select your region



Show regions as list

2. Select your area

- Darlington
- Durham
- Gateshead
- Hartlepool
- Middlesbrough →
- Newcastle
- North Tyneside
- Northumberland
- Redcar and Cleveland
- South Tyneside
- Stockton-on-Tees
- Sunderland

3. Contacts for your area



King's College

Contact name:

Email:

Telephone:

[Visit site](#)



King's College

Contact name:

Email:

Telephone:

Area links: each region of the UK is linked with a Cambridge college

Find out more

Each **University of Oxford** college is linked with a local authority in the UK to ensure that each school has a first point of contact within the university.

The University of York's Shine project works with pupils across Yorkshire and Humber aged 10-16 to raise aspirations, broaden their horizons and enhance attainment levels. Participants are identified by their school as being high achieving and from backgrounds currently under-represented in higher education.

The University of Sheffield's Discover US is an aspiration-raising programme for 13-16 year old pupils

who have the potential to access higher education but who do not have a family tradition of going to university. They take part in activities such as 'The Student Apprentice' - an enterprise day where pupils aged 14-15 work with entrepreneurs to pitch a business concept.

The London School of Economics and Political Science's programme, Moving On, supports children in their move from primary to secondary school by showing them that change happens throughout life and can be a positive experience. The programme is often their first taste of university and so is also designed to help raise aspirations.

Informed Choices

Russell Group admissions teams often find that students have limited their chances of applying to our universities because they've not chosen their A-level or equivalent subjects well. That's why the Russell Group has published a guide to help students make those choices.

Informed Choices, which brings together expert advice from careers advisors and admissions professionals at Russell Group universities, takes students and their advisors through their options by showing how A-level subject choices have an impact on which degrees will be open to students. The guide identifies which A-level subjects leave the most options open for students – the 'facilitating subjects'.

The facilitating subjects are:

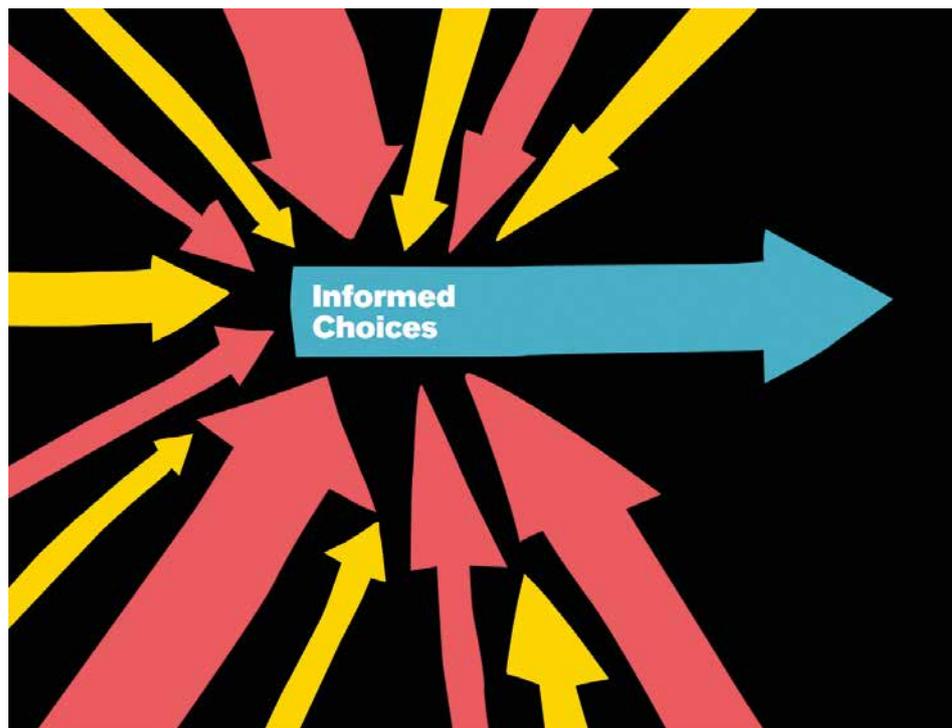
**MATHS
FURTHER MATHS
PHYSICS
BIOLOGY
CHEMISTRY
HISTORY
GEOGRAPHY
MODERN AND
CLASSICAL
LANGUAGES
ENGLISH
LITERATURE**

A range of other subjects are also identified as being essential or useful for particular undergraduate courses. For example, for general engineering degrees, mathematics and physics are typically essential A-level qualifications, but other useful A-level qualifications include further maths, design technology and computing/ computer science.

"It is so disheartening when young people with huge potential want to apply to a Russell Group university but discover too far down the line that they haven't studied the A-level subjects the university requires for the course," said Dr Wendy Piatt, Director General of the Russell Group.

"Our consistent advice is that taking two facilitating subjects will keep a wide range of degree courses and career options open. This is because these are the subjects most commonly required by our universities and hundreds of courses require one or more facilitating subjects."

Universities work extensively to provide their own detailed information and advice about subject choices and specific entry requirements, but the strength of the *Informed Choices* guide is that it brings this information together into one accessible format. As a result, the guide is used widely in schools as a resource in their options evenings and it is also used by Russell Group university outreach teams during their visits to schools. This is one of several examples where collaboration across institutions, in this case facilitated by the Russell Group, can really add value for students and teachers.



Expert advice: *Informed Choices* can be accessed on the Russell Group website

UNIQ at the University of Oxford

Following five years of support from the Helsington Foundation, the UNIQ summer schools programme was established in 2010 in order to widen access to the University of Oxford for state school students. Five hundred students were accepted onto the 2010 programme, and since then the programme has increased in size with each consecutive year, leading to 1001 students attending the schools in 2014.

The summer school aims to target highly academic students who have experienced some educational or socio-economic disadvantage, or who belong to a group which is under-represented at Oxford. 98% of 2014 UNIQ participants fell into at least one recognised category of social deprivation.

The UNIQ summer schools are only open to students studying in their first year of further education. Participation in the summer school takes place during one of six weeks in July and August. Students apply for one of thirty five specific subjects, and the week-long summer school aims to give them a realistic view of an undergraduate timetable and to inform students of the opportunities Oxford has to offer, together with advice on applying to the university.

UNIQ is supported by subject tutors, Oxford museums, libraries, departments and colleges, and this has proved absolutely crucial to the successful development and delivery of the UNIQ summer schools. Student mentors from the University accompany participants, providing subject specific advice and guidance as well as taking supervisory responsibility for students during their time in Oxford.

“There were so many great moments. One of the overall highlights was how friendly and approachable the mentors were.”

UNIQ student

In total 3757 students (20% of total UNIQ applications) have taken part in the summer schools across five years. The University was delighted recently to give conditional offers to 237 UNIQ 2013 participants into a range of undergraduate degree programmes. With 665 UNIQ students now studying in Oxford, every college has at least one UNIQ alumnus.

The Widening Access team at Oxford adopts a holistic approach with the students and facilitates this with online pre-UNIQ forums and several post-summer school events. In 2014 the UNIQ forums gathered close to

9000 posts from students looking to talk with each other about not only UNIQ related topics, but also typical teenager conversations and debates. In November and December each year the University holds a variety of evening events to cater for UNIQ students that are either attending the Oxford interviews or have just started studying at the University, these give the students an opportunity to not only catch up with each other but to also gain further advice if needed.

“I’m not usually one for hyperbole, but the summer school was one of the best weeks of my life. It was a massive confidence boost, not just academically but in a general way too; after a day or two I was comfortable speaking to people I didn’t know, I was happy to talk maths in front of a bit of a crowd and after arriving in Oxford on my own I had no qualms about travelling independently. I had an amazing time on UNIQ and I didn’t want to leave!”

UNIQ student



Summer school: UNIQ participants meet Professor Andy Hamilton, Vice-Chancellor of the University of Oxford

Find out more

University College London runs **Bring Your Parents to University** visits which focus on making the right choices at school and discuss the challenges and opportunities of higher education from a parents’ perspective.

The University of Cambridge runs **The Subject Matters** sessions with Year 11 pupils to highlight the importance of suitable A-level (or equivalent) subject choices when making an application to a selective, research-led university.

Advice on applications

Russell Group universities are keen to ensure that no barriers to access, either real or perceived, exist in their admissions processes. Each university publishes their own admissions policy, which details the ways in which they ensure that fair admissions practices are embedded throughout their processes, and staff and tutors undertake regular training.

Admissions staff and tutors are skilled at using a wide range of methods to seek out high quality candidates and in particular to identify where, because of personal circumstances, an individual's grades might not fully reflect their potential. For example, the personal statement, teacher references and predicted grades can provide valuable additional insights. Some universities also use interviews and extra tests to ensure that pupils with real potential can be identified from among a field of highly qualified candidates, who may all look outstanding on paper.

Interviews can also be a valuable opportunity for prospective students to demonstrate their passion, commitment and suitability for their chosen subject. A well-structured interview will be designed to assess a candidate's academic abilities and potential. As the example from Cambridge demonstrates, students do not have to give perfect answers or a polished performance to do

well at interview. Tutors are often looking for evidence of self-motivation and enthusiasm for a subject, and questions can be used to show an interviewee's ability to think clearly and apply logic and reason to an idea that has not been encountered before. In particular, universities want applicants to see the interview as an opportunity to stretch themselves in an area they are interested in. Skills tested at interview are crucial for undergraduate study.

Additional tests are used in a similar way. The STEP mathematics exams and Mathematics Admissions Test, for example, are designed to test a student's aptitude for university study in maths and related subjects. The exams are certainly not intended to test how well a student has been taught at school. Instead the tests should give the applicant a chance to show their ability to apply standard techniques in unusual ways and situations – just as they will be expected to do at undergraduate level study. STEP papers can sometimes form part of a university's offer to a student. Questions are longer than at A-level, and demand persistence and insight. As such, these tests are an opportunity for the most able students to demonstrate their potential. Marks are awarded for candidates who make good progress towards the solution, as well as for getting a correct answer.

Post-qualification admissions system (PQA)

The current UCAS admissions process and timetable allows universities time to make careful and informed admissions decisions about each candidate. A post-qualifications admissions system – where students apply to university after having received their A-level or equivalent grades – would reduce the time for universities to conduct fair, thorough and holistic assessments of candidates. The UCAS admissions process is designed to make sure that students are able to take up their firm offer, or give them a second chance with an insurance offer if they miss out by a few grades. For students who have exceeded expectations, the current system allows time for adjustment and clearing stages, enabling students who have done better than they thought to ‘trade up’ to another university or course.

Currently, A-level results are released in mid-August. If university applications were not assessed until then, this would leave universities with a very short window to make that assessment, make offers and confirm final student numbers for the forthcoming term.

Having only a very short period of time in which to assess and process applications, could be counter-productive in terms of widening access. A key feature of the current admissions process at Russell Group institutions is the holistic approach,

within which institutions consider not just qualifications, but also personal statements, references, and in some cases performance at interview and in admissions tests.

The process involves a lot of time and large numbers of staff. Any system of PQA would need to preserve time for universities to consider applications fully. A very tight timetable could require institutions to replace the existing admissions process with a much more mechanistic approach based on qualifications alone. Some students with great potential would miss out on a place, and such an approach could particularly disadvantage non-traditional students.

The application system is a good indicator of attainment at A-level, giving the overwhelming majority of students a fair chance of applying to a course that will match their aptitude.

The difference between actual and predicted grades is usually small, and in the majority of cases where there is a discrepancy between the actual and predicted grade, grades are *over-predicted* not under-predicted¹:

- **90% of predictions are accurate to within one grade**
- **For all grades and all backgrounds, 44.7% are correctly predicted and 46.7% are over-predicted. Only 8.7% are under-predicted.**

Russell Group teacher conferences

Teachers play an absolutely vital role in supporting their students to progress to Russell Group universities, and so it is important to develop and maintain a strong dialogue between schools, colleges and our universities. One way our universities are achieving this is by working together to hold Russell Group teacher conferences.

Anne-Marie Canning, head of widening participation at King's College London, puts it succinctly: "More information can be really helpful for teachers who are supporting sixth formers applying to Russell Group universities and the best way to do this is providing clear advice for teachers in one place."

The conferences, which involve staff from all 24 Russell Group universities along with current students, are a practical way of providing comprehensive information about Russell Group admissions in one day – significantly reducing pressure on teachers' time and ensuring they are able to see the full Russell Group picture in one go.

The conferences give teachers the chance to attend a wide range of workshops and sessions organised and co-delivered by staff at Russell Group universities.

Topics covered during our teacher conferences include:

ACADEMIC REFERENCES

PERSONAL STATEMENTS

ADMISSIONS REQUIREMENTS

APPLYING TO MEDICINE

STUDENT FINANCE

CAREERS AND EMPLOYABILITY

All Russell Group universities engage extensively with teachers, but the real strength of the conferences is that they bring together expert advice from all 24 Russell Group universities – something teachers value highly.

The conferences are targeted at state schools and colleges and held in different locations around the UK to ensure as many teachers as possible can attend. To widen the reach of the conference, the conference materials and presentations are being developed into an online resource to help teachers who are unable to get teaching cover or who cannot attend for other reasons.

Cambridge's preparing for interview and interview videos

Interviews at the University of Cambridge give applicants the opportunity to show their ability to think critically and independently, to engage with new ideas and to think conceptually. In turn, this gives the university a greater insight into how the applicant might respond to the teaching methods used at Cambridge.

“People are understandably apprehensive about the interview as it is something that few have any experience of,” says Dr James Keeler, senior tutor and admissions tutor at Selwyn College, Cambridge. “Also, it is sadly the case that despite all our efforts, there remains a lot of misinformation out there.”

In order to tackle those myths, and show potential applicants what an interview is really like, the university commissioned two films from award-winning film makers Contra.

The university was determined to make the films as authentic as possible. Dr Keeler, together with admissions colleagues from other colleges, interviewed four student volunteers as if they were applicants in the current round.

Three of the student volunteers were unconditional offer holders: they had already taken their A-levels, but had not yet started at Cambridge, bringing them as close as possible to the level of academic knowledge of a typical interviewee.

The interviewers reviewed the real application forms submitted by the

candidates, just as they would in preparation for an admissions interview.

Perhaps surprisingly, the videos show each of the applicants stumbling over questions.

“It’s a common misconception that to be successful a candidate has to answer every question perfectly and give a very polished performance”

Dr James Keeler, senior tutor and admissions tutor at Selwyn College, Cambridge

“The interview is designed to make the candidate think,” explains Dr Keeler. “As much as anything else, the interviewers want to see these thought processes in action. So going back over something, working through something which is not quite right, or giving hints, is all part of the process.”

“The key thing is that candidates should not give up if they get stuck, but should listen to what is being said and try a different track.”

Tips given in the films include:

- **Do re-read your application and think about why you want to study at Cambridge**
- **Wear something comfortable and arrive early**
- **Don’t be influenced by what other applicants tell you they have been asked**



Video advice: Films show interviews at Cambridge taking place in a setting that helps put the applicant at ease

In presenting these varied case examples, we have only scratched the surface. There is a much wider range of work going on at Russell Group universities to raise attainment, improve information, advice and guidance, and support students than we could ever hope to capture here. But we hope we have shown the level of commitment and determination that exists across our universities to improve access to their institutions – and more than that, to help widen higher education participation in the UK and ensure that every student with the qualifications, potential and determination to succeed at a Russell Group university has the opportunity to do so, whatever their background.

Reference

¹ UCAS, *Estimating the Reliability of Predicted Grades* (2005). Available from http://www.ucasresearch.com/documents/Predicted_Grades_2005.pdf

Alternative routes to Russell Group universities

Not all students enter Russell Group universities through a ‘traditional’ route. This section examines some of the alternative routes that are available to students who may not otherwise meet standard entry requirements or who face other challenges related to their background or personal circumstances.

Russell Group universities have developed a number of routes for students who wish to apply to a course, but who may not fulfil the ‘typical’ A-level entry criteria. One example is offering extended degree programmes which take longer than standard degrees, allowing students more time to develop knowledge and confidence. Foundation degrees allow students without traditional qualifications to be taught in a further education college, before making the transition to studying at undergraduate level.

Russell Group universities often make targeted use of ‘contextual information’ to help inform admissions processes and access programmes. By drawing on a range of information, such as school performance, socio-economic or geographic data, or whether a student has spent time in care, a candidate’s qualifications can be put into a broader context.

Access to Leeds

Access to Leeds is an ‘alternative’ admissions scheme, run in parallel to the standard admissions process at the University of Leeds, which guarantees special consideration for students whose personal circumstances may affect their ability to demonstrate talent through grades alone. But they must demonstrate their potential through other means.

Central to the scheme is the Access to Leeds module that students must complete. This module covers study skills and subject skills, and is designed to help students make the transition from school to university life.

“For me, the Access to Leeds module was a great way to ease into university life so that when I started my course I was less nervous. I was able to experience the type of questions and topics I would be answering at university, and having access to journals and text books really helped me understand what independent learning is like. My advice to students applying through the Access to Leeds scheme is, don’t let the module or the extra application put you off – the extra effort will really pay off in the long term.”

Law student involved in Access to Leeds

Students who complete the Access to Leeds programme successfully and who received a course offer will also receive an ‘Access to Leeds offer’ which is typically two A-level grades below the university’s standard offer for that course (e.g. BBB rather than AAB).

While some applicants do achieve their standard offers, staff running the programme believe it offers crucial reassurance and removes a sense of risk which could put some potential students off applying.

Richard Kemp, the manager of the contextual admissions scheme at Leeds, says: “The most significant benefit of the scheme is that it takes the risk out of applying. Applicants may be nervous about applying and the programme is a clear indication that the university wants them.”

Applicants need to satisfy two of seven criteria, including whether they come from a low income background; are the first generation in their family to apply to university and whether they come from a post code area with a low level of applications to higher education.

UCAS applications to Leeds are also sifted by the admissions department to help identify eligible applicants who don’t know about the scheme, but who could benefit from it.

Tracking data shows that the majority of students on the programme achieve either a first or 2:1 and the university is currently carrying out research on destinations of graduates.

The scheme has become very popular and well known since it started 10 years ago, when just 35 students a year took part. In 2014 more than 600 students registered on University of Leeds degree programmes through the scheme, which is one of the largest of its type in the UK.

Supported entry to medical degrees

King's College London – Extended Medical Degree Programme

The Extended Medical Degree Programme offered by King's College London is aimed at educationally disadvantaged students and students from non-traditional backgrounds who have the potential to complete a medical degree successfully. The programme offers a full medical degree but, by extending it by a year, it allows students more time to develop subject knowledge and confidence, and gives greater access to pastoral and academic support from staff.

Programme director at King's Dr Stephen Thompson says: "This is all about taking little steps and giving appropriate feedback to build learning, develop students' confidence and help them grow over time.

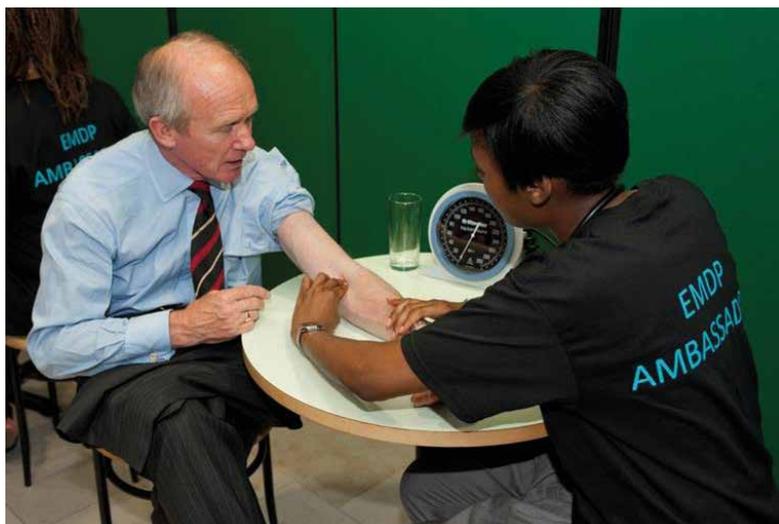
"Students can come with a range of needs and staff are experienced at assisting with issues such as financial problems or difficulties balancing family responsibilities and studying."

King's makes strenuous efforts to make sure the course recruits non-traditional students, by seeking out bright applicants from non-selective state schools in London, Kent and Medway.

Applicants need to have at least three Bs in relevant A-level subjects. Since the programme started in 2001, nearly 500 students have enrolled, and more than 150 have graduated.

- **Now in its 14th year, more than 300 students are currently studying on the Extended Medical Degree Programme.**
- **Each September King's takes another 50 eligible students on to the course.**

Staff believe the slightly slower pace helps build students' confidence that they can succeed on the course. Despite the additional challenges faced by applicants from non-traditional backgrounds, the course's retention and success rate since 2009 is 92%, which is within touching distance of the 97% achieved by students on the standard five-year medical degree at King's.



Medical outreach: EMDP students also act as ambassadors

University of Southampton – BM6 Programme

The University of Southampton also runs a six-year medical degree programme, 'BM6', with the aim of widening access to medicine for students from more diverse backgrounds and providing them with the support they need to succeed both on the course and in the profession. Some students on the course are carers, and others work as well as study. These students face extra stresses, and are often required to undertake family duties at short notice. Others face a weight of expectation, not only from their families but sometimes from the wider community too.

The admission process for the BM6 degree programme makes use of contextual information and tailored interviews, and the academic entry requirements are lower. Students must meet specific eligibility criteria relating to their socio-economic background, but students are not expected to have healthcare-related work experience.

A specially designed preliminary year, 'Year 0', allows students time to address any gaps they may have in knowledge or attainment and to develop their confidence so they can continue to Year 1 of the degree programme. Between 2002 and 2012, an average of 90% of students progressed successfully to Year 1 of the course.

'I believe the BM6 scheme is essential in encouraging those into medicine who would otherwise not have had the opportunity or believed they had the ability. It has helped my confidence and belief in myself that I can do it, and it's great to see my other friends from BM6 grow in the same way. I hope to be a GP when I have finished studying'.

BM6 student at Southampton

A unique part of the Year 0 curriculum is the Professional Practice modules. Students go on a range of observational healthcare placements, enabling them to gain experience in environments that previously they might have found inaccessible. The modules allow more time to focus on developing professionalism, which can be important for those students who are less likely to have professionals as role models in their lives.

The BM6 programme has been successful in attracting students from non-traditional backgrounds. There has been more than 60% participation on the course from those who are the first in their family to go to university. Likewise, the percentage of students who (independently or through their families) receive a means-tested benefit or the education maintenance allowance has been consistently above 98%.

Warwick 2+2 and Liverpool Foundation Degrees

Warwick 2+2

Many of the students on the University of Warwick's 2+2 Social Studies and Health and Social Policy course left school at 16 and never thought they would one day attend a leading university and go on to a graduate job.

The 2+2 programme allows students without traditional qualifications to spend two years at a local further education college studying for a University of Warwick degree before continuing to study at the university for a further two years. Introductory years at a further education college can help someone who has not experienced formal education for a number of years, giving them the chance to adjust to studying again, away from the more formal academic environment of a research-intensive university.

The programme takes 85 entrants a year, who come with either access level or vocational level 3 qualifications, although some have no level 3 qualifications at all. These are mainly students who may have missed out on educational opportunities earlier in life, or who may have faced barriers to continuing their studies.

Applicants take an entrance exam and are interviewed, giving tutors involved in assessing candidates a chance to evaluate their potential. Tutors at the participating colleges in Coventry, Solihull, North Warwickshire and Hinckley - and in future in Warwick and Leamington Spa - will also have made a recommendation to the university.

Students study in the familiar college environment and begin by studying first year degree modules such as research methods, which prepare them for university.

There is also a significant investment in student support: during their college years students will have up to four times as many contact hours as conventional students at the university. Those on the 2+2 courses also make much more use of the university's central support services in areas such as finance and welfare.

When they have completed the two college years, students choose from a range of interdisciplinary modules offered at the university, which they study with other 'traditional' students, as well as specialist modules for adult students offered in the Centre for Lifelong Learning.

The programme has run for 25 years and has a track record of graduates progressing into areas such as social work or into teaching or working in local government. Some also go on to postgraduate study.

The growing programme will admit 110 students for 2015 year of entry, through links being developed with an additional college in Leamington Spa. The intention is to have some 300 students across the four years by 2015.

University of Liverpool – Foundation Degree programme

At the University of Liverpool, a foundation year programme for medicine, dentistry, veterinary and allied health professions gives students time to adapt to being in full-time education. The programme is based at two nearby further education colleges and at the university, and is available to students from across the country.

While the foundation year helps the students academically, it also removes risk for mature students, because it guarantees them a place on the relevant degree course if they achieve a certain mark in their exams. Nearly 100% go on to do a medicine, dentistry, veterinary or allied health degree.

The 30-40 students taking the programme each year must have GCSEs and range in age from their 20s to early 40s. They may have worked in healthcare settings, and some may have degrees in non-related subjects.

The strong relationship with the FE colleges is a real strength of the course and both the university and the colleges learn from each other.

Find out more

The University of Birmingham's College of Engineering and Physical Sciences runs Foundation Year courses for students who do not hold the required qualifications and who need further preparation.

The University of Nottingham Foundation courses are designed for those whose school-leaving qualifications do not meet requirements for direct entry to undergraduate programmes, for example, an incorrect mix of A-level subjects.

In presenting these varied case examples, we have only scratched the surface. There is a much wider range of work going on at Russell Group universities to raise attainment, improve information, advice and guidance, and support students than we could ever hope to capture here. But we hope we have shown the level of commitment and determination that exists across our universities to improve access to their institutions – and more than that, to help widen higher education participation in the UK and ensure that every student with the qualifications, potential and determination to succeed at a Russell Group university has the opportunity to do so, whatever their background.

Student support

There has been much misinformation about the effect of fees in England on access. As highlighted in part one of this report, since the introduction of fees Russell Group universities have attracted more students than ever from non-traditional backgrounds.

With no up-front fees, repayments only when they are affordable and generous help with living costs available, money worries shouldn't stop anyone from applying to a Russell Group university.

Generous bursaries and scholarships enable our leading universities to attract talented students from a wide range of different backgrounds. They are a useful weapon in the battle to overcome barriers caused by a lack of information and preconceptions about the affordability of studying at a Russell Group university. They are also helpful in encouraging students to apply for a course and institution best suited to their abilities and that will maximise their life chances.

Bursaries also help make sure students, particularly those from low-income backgrounds, are able to meet the extra living costs involved in studying at a university. They give students ready cash to spend on books, travel and accommodation, and the means to continue studying with financial pressure taken off, enabling them to achieve higher levels of attainment than they may otherwise have done.

Higher tuition fees have enabled our universities to expand the range and level of expenditure on bursary provision and other support measures. Across the Russell Group institutions in England, on average nearly 33% of additional fee income received is spent on students who need it in the form of bursaries and additional support.

In 2015-16, the 20 Russell Group universities in England alone will be investing £234 million in scholarships, fee waivers, bursaries and outreach activities aimed at the most disadvantaged – with additional investments being made across the Devolved Administrations.

Evaluations conducted each year with student bodies confirm the importance of this support; very high numbers of students say that the bursaries and scholarships offered are crucial to their continuation and success on a given course.

However, student support is not just financial. Peer support and on-course mentoring provided at our institutions keep students from under-represented groups on track during the first year of their course.

Bursaries

Bursaries can play an important part in encouraging participation but, used effectively, they can also have other wider-ranging benefits by helping to drive attainment and encourage retention among non-traditional students.

Effective bursary schemes help address the concerns of some students who feel they may not be able to finance their years of study. There should be no reason for financial worries to present a barrier to studying at one of the country's best universities.

Newcastle University

The very direct financial impact that bursaries can have can be clearly demonstrated. Emma Reay, senior student recruitment manager at Newcastle University, explains how their bursaries support a range of students. In one case a young woman who had been in care received a bursary which gave her significant practical help during the challenging transition to university.

Receiving a bursary meant she would not need to work and could focus on her maths degree. It also had the advantage of giving her the financial security to carry on renting her own flat at home, giving her a base during vacation as she had no immediate family to stay with.

Newcastle University's substantial range of scholarships will benefit approximately 30% of new undergraduate students starting their degree in 2015.

University of Birmingham

Gail Rothnie, head of outreach at the University of Birmingham, describes the bursaries offered by the university as a series of overlapping initiatives, with those in the greatest need receiving the greatest financial assistance.

Some bursaries are also tied to attainment, encouraging a high level of academic work.

The university also offers a Gateway Bursary for internships or other activities to support employment, which students on low incomes might otherwise not be able to access due to travel costs and lost pay, as they may have been planning to work during the holidays.

This bursary supports students from priority groups to take up opportunities that will help improve their personal and professional development. Support is available up to a value of £2,000.

"Bursaries are about access and encouraging non-traditional students to reach their full potential," says Gail. "They are also about helping them access experience which will make a huge difference when they look for work."

University of Nottingham

Dr Penelope Griffin, head of widening participation at the University of Nottingham, says: "Bursaries have an important role in encouraging students to consider Nottingham – particularly those who live too far away to participate in our outreach activities – and in giving them more time to study while here."

Research undertaken at Nottingham shows that bursaries attract low-income students to the university, and that they ease the financial concerns of undergraduates during study. Importantly, bursaries reduce the need to do paid work.

At Nottingham, at least a third of students are eligible for the University Core Bursary, which offers up to £3,000 for each year of undergraduate study. This is a means tested bursary based on the student's household income.

University of Oxford

Financial support for undergraduate students at Oxford is a feature of the work of the university and its colleges. In addition to bursaries and tuition fee reductions, the collegiate University has always offered additional support to students through a number of additional financial assistance schemes, including supplementary financial provision offered by colleges.

The collegiate University continues to devote substantial resources to providing generous maintenance bursaries up to an estimated £7.2 million in 2015-16, and to maintaining tuition fee reductions worth £3.6 million.

Due to the high level of financial support, the University estimates students from households with incomes of £25,000 or less will be able to reduce the amount of government maintenance loan they take out by at least £2,000, based on the current lower range estimate of Oxford living costs over nine months.

University of Bristol peer mentoring and peer assisted study sessions

The University of Bristol has run a peer-mentoring scheme since 2006. It has grown to a substantial programme, offering mentoring to some 1,000 students - about a quarter of the first year student body - with 250-300 mentors offering their support. The programme plays an important role in helping people adapt to university life.

The scheme makes contact with students when they get a confirmed offer, to ask if they would like a mentor.

Mentors generally come from the same course as the mentees, and are trained to ensure they can handle the range of emotions which first-years may go through as they start their transition to university life. The scheme also allows new first-years to make a particular request about who mentors them – for example, mature students can ask to be mentored by fellow older students.

Mentors approach mentees a couple of weeks before the university's welcome week and offer them the chance to meet up in the first week. Many show mentees around as well as meeting them to talk through the transition to university and any last-minute worries. After the first week mentors contact mentees on a weekly basis to offer support.

“Many students are unsure whether they will fit in and feel at home at university, and our experience is that mentoring of new first-year students by existing students really helps, whatever your background”

Zoe Pither, widening participation and student support manager, University of Bristol

Feedback has shown that the biggest benefits are in helping a new student to settle in, answering questions and giving advice on practical topics – for example talking about accommodation or balancing academic work, joining clubs and societies and social life. The scheme also plays an important role in helping to flag up more serious issues faced by a small minority of new students which can then be addressed in other ways.

In presenting these varied case examples, we have only scratched the surface. There is a much wider range of work going on at Russell Group universities to raise attainment, improve information, advice and guidance, and support students than we could ever hope to capture here. But we hope we have shown the level of commitment and determination that exists across our universities to improve access to their institutions – and more than that, to help widen higher education participation in the UK and ensure that every student with the qualifications, potential and determination to succeed at a Russell Group university has the opportunity to do so, whatever their background.