EDUCATING THE NORTH

DRIVING AMBITION ACROSS THE POWERHOUSE

THE NORTHERN POWERHOUSE PARTNERSHIP

CONTENTS

Section 1 - Foreword	05
Section 2 - Executive Summary	06
Section 3 - Introduction	08
Section 4 - Importance of Early Years	10
Section 5 - The Impact of Disadvantage	14
Section 6 - Investment in School Leaders And Managers	22
Section 7 - Careers and Pathways	28
Section 8 - Skills Plan for the North	38
Section 9 - Acknowledgements	42
Section 10 - About The Northern Powerhouse Partnership	43

SECTION 1

FOREWORD

We created the Northern Powerhouse Partnership to bring businesses, civic leaders, universities and others together so that we can speak with one voice about how we build a better future for the North of England.

Over the last year, we've shown what great economic potential the North has if we invest in our key strengths; and we have helped create a consensus between the private and public sectors around the infrastructure needed to make the most of those strengths. That has fed directly into government decisions. The Strategic Transport Plan produced by Transport for the North – involving a real selection of priorities by the whole of the North working together – would have been inconceivable just three years ago. Today it's an example of the Northern Powerhouse working together as one.

Now we turn our efforts to perhaps the greatest challenge we face in the North: education. In all the work we have done consulting with businesses in the North, poor skills and inadequate training come across consistently as the major issues. As our report documents, the facts show educational attainment in the North of England lags behind the South. Compared with London pupils, pupils in the North make a third of a grade less progress overall at sixteen and almost half a grade less in mathematics on average – one in four of them at secondary schools judged by Ofsted as inadequate or requiring improvement. Too many children in the North aren't getting the education they need or deserve.

We can either resign ourselves to failure and say nothing can be done, or we can act. In the North, we are choosing to act. Our report sets out 14 recommendations we can take to improve the schools and training in the North of England. From radical new steps in devolving adult education funding to the new Metro Mayors, to a commitment from businesses here to help mentor and provide career support to 900,000 Northern schoolchildren, this is a detailed plan to address decades of underperformance in education in the North of England.

The potential is there. I've seen it in my own lifetime with the way schooling in London, once among the worst in the country, is now among the best because of concerted reform, investment and private sector involvement. I've seen it in the last year when I visited the brilliant Richard Rose Central Academy in Carlisle – and met motivated students and great teachers. There is no reason why these successes can't be replicated everywhere, from Blackpool to Bradford and from Bolton to Barnsley.

I want to thank Collette Roche from Manchester Airports Group for leading this work; thank the many dozens of businesses, schools, colleges and others who took part in our working sessions. As ever, my colleague Jim O'Neill was invaluable – as were the permanent team at the Northern Powerhouse Partnership.

The future of the North lies in our own hands. Good education and training is at its very heart. This report is a call to arms for the Northern Powerhouse – made in the North, by the North and for the North. I urge the government to play its part in implementing it. Let's make it happen for the sake of the next generation.

SECTION 2

EXECUTIVE SUMMARY

Of all the requirements to deliver a meaningful Northern Powerhouse, there is perhaps nothing more important than high-quality education and skills. In this, the third report from the Northern Powerhouse Partnership, we outline precisely what we believe is necessary to close the education and skills gap between the North of England and London, which will enable the North to narrow the long-standing and widening productivity gap in the future, and deliver on the ambition of the Northern Powerhouse. As set out in the list below, there are 14 specific recommendations that we believe are necessary to complete these goals.

These recommendations span the journey a child makes from the nursery to the workplace, addressing key intervention points where they need the most support. Of the most crucial factors affecting our next generation, there are three factors that stand out from many others: how vital a child's early years are, how disadvantage drastically impairs performance at school and drags the North further behind the rest of the UK and the importance of businesses across the North playing a much bigger role in leading and directing meaningful work readiness. Our top five recommendations to tackle these factors are:

1 THE IMPORTANCE OF EARLY YEARS

An initial

£300 MILLION

Increase in government funding for disadvantaged areas across the North, creating place-based funds integrated with other services such as health visitors and voluntary sector providers, ensuring every child is school-ready by age five.[1]

2 OPPORTUNITY FOR ALL

Reform Pupil Premium to better target funding for disadvantage by allocating more to pupils eligible for free school meals throughout their schooling, addressing the most entrenched barriers to social mobility.

3

A longer-term government commitment to Opportunity Areas – a Northern Powerhouse Schools Improvement Board to be established, drawing together existing funding with a dedicated 10-year fund to allow for further Opportunity Areas in the North. In particular, this needs to urgently address the lack of Opportunity Areas in the North East.

4

Simplify the Northern Regional Schools Commissioners areas to establish three: North West, Yorkshire and North East & Cumbria, working within frameworks and plans set by the Northern Powerhouse Schools Improvement Board. These would make the final decision on regional funding streams for school improvement, challenging poor performance in Multi Academy Trusts, re-allocating schools to those with capability and identifying schools that need rebuilding.

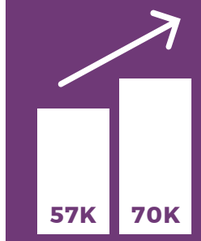
5 CAREERS AND PATHWAYS

Every Northern business to mentor or otherwise meaningfully reach out on careers and enterprise skills to at least the same number of young people as they have employees, from the age of 11. This would see 900,000 young people given experience of work. We already have examples of Northern businesses exceeding this commitment with Manchester Airport Group reaching 10,000 young people from their 2,500 colleagues.

AS WELL AS THESE FIVE KEY RECOMMENDATIONS, OUR OTHER PROPOSALS ARE:

EARLY YEARS

Investment to support local intervention to encourage families not taking up the early education offer for two-year-olds, to increase this from 57,000 currently to 70,000 in the North each year.



COLLABORATION IN SCHOOL IMPROVEMENT

Establish locally-led clusters for school improvement, to share services more effectively, supported by local government.

SUPPORT AND PROFESSIONAL DEVELOPMENT FOR TEACHERS

A Northern centre of excellence on transformational schools in disadvantaged communities that provides research and evidence on how to turn around failing schools and leave them sustainably improved. This would include a focus on retaining excellent teachers and high-quality professional development in the most challenging schools funded initially by the £42m Teacher Development Premium pilot announced in the 2017 Budget.

CAREERS AND PATHWAYS

Bespoke careers guidance and workplace-based learning for those receiving Pupil Premium funding and with greater needs[2], clearer choices for 14+ year-olds on educational pathways, and allowing all vocational choices – including University Technical Colleges – the opportunity to effectively promote what they offer.

All schools to be measured, alongside Further and Higher Education providers, for the employability and eventual success of their learners at age 25 compared to their previous attainment. This shifts the focus to long-term achievement rather than short-term measures of success.

APPRENTICESHIPS AND COLLEGE LEARNING

Metro Mayors and areas receiving further devolution deals to control the Adult Education Budget as well as overall vocational education spending from 16-18.

Establish the North as the world's leading centre for degree and higher-level apprenticeships, with up to one in five of our students pursuing them in the future. This would allow our brightest and best students to pursue a mix of work and applied learning, with new Institutes of Technology established to focus on the Northern Powerhouse leading the Fourth Industrial Revolution.

Retain the best minds in the North by improving the application system for all post-16 opportunities, including apprenticeships.

SKILLS PLAN FOR THE NORTH

The Northern Powerhouse Independent Economic Review (NPIER) should be refreshed to include a specific focus on the skills requirements in the prime capabilities and enabling sectors to deliver improved productivity.

THIS REPORT HIGHLIGHTS

The urgent need for government, local authorities, businesses and all organisations responsible for delivering education and skills in the North to work as one in pursuing the recommendations above. If executed correctly, this will transform the educational attainment of children in the North, ensuring businesses have a highly-skilled workforce from which to recruit and, in doing so, will help secure 850,000 more jobs by 2050 – one of the principal ambitions of the Northern Powerhouse Partnership.

[1] One suggested long-term funding stream would be a Northern Powerhouse additional allocation extension to the Shale Wealth Fund over above local and regional allocation already proposed.
[2] Supported by the Northern centre of excellence on transformational schools in disadvantaged communities.

SECTION 3

INTRODUCTION

The Northern Powerhouse Partnership was established to increase the North's contribution to the UK economy, rebalancing the country and delivering high-quality opportunities for the 16 million people across the North. Raising productivity, stimulating growth, creating jobs and attracting significant inward investment are major priorities, and our previous two reports – the Northern Powerhouse Partnership's First Report and Powerhouse 2050: The North's Routemap for Productivity – set out clear and bold proposals for how the North can achieve its stated objective of creating 850,000 extra jobs and an additional £100bn contribution to the UK economy by 2050.

The landscape in which education and skills sits is complex, with several stakeholders, policies, frameworks and governing bodies all playing critical roles in both the public and private sectors. Evidence suggests that while aspiration and activity has increased, this is leading to a fragmented and siloed approach with less focus on achieving the ultimate goal – to build a robust, relevant and productive workforce of the future; in the North, for the North.

This report seeks to address this issue by highlighting the current challenges and barriers to building the North's future workforce. It is based on extensive stakeholder engagement with the public, private and charity sectors and focuses on the opportunities and best practice to be explored from within and outside the North.

The Northern Powerhouse Partnership's ambition will not be achieved without confronting two key areas in which the North lags behind the rest of the country – the low performance of a significant proportion of its children, most notably at age 16, compared to the rest of the country and the skills gap, which leaves employers without a suitable skilled workforce to address a modern, changing world of work. The most deprived children in Northern schools are falling more than 13 points behind their 'better-off' Northern peers; six points greater than the same gap in London at age 16. With a quarter of schools rated inadequate or in need of improvement – typically an assessment of their leadership as bad or worse – the need for action is clear.

The North has a lower proportion of its workforce at the highest level of skills in the prime capabilities of the North – advanced manufacturing, energy, digital and health innovation – compared with the rest of the UK, despite these areas being the engine of the transformational growth the North needs to achieve by 2050.

To address this and all the major challenges holding back children in the North, there is a need to set out clear and aspirational pathways for the education journey from the playground to the workplace. Key points in this journey include the transition to secondary school and the variety of further education and career options at age-14 and beyond to teach research skills, allow students to be open and flexible and take measured risks within their careers.

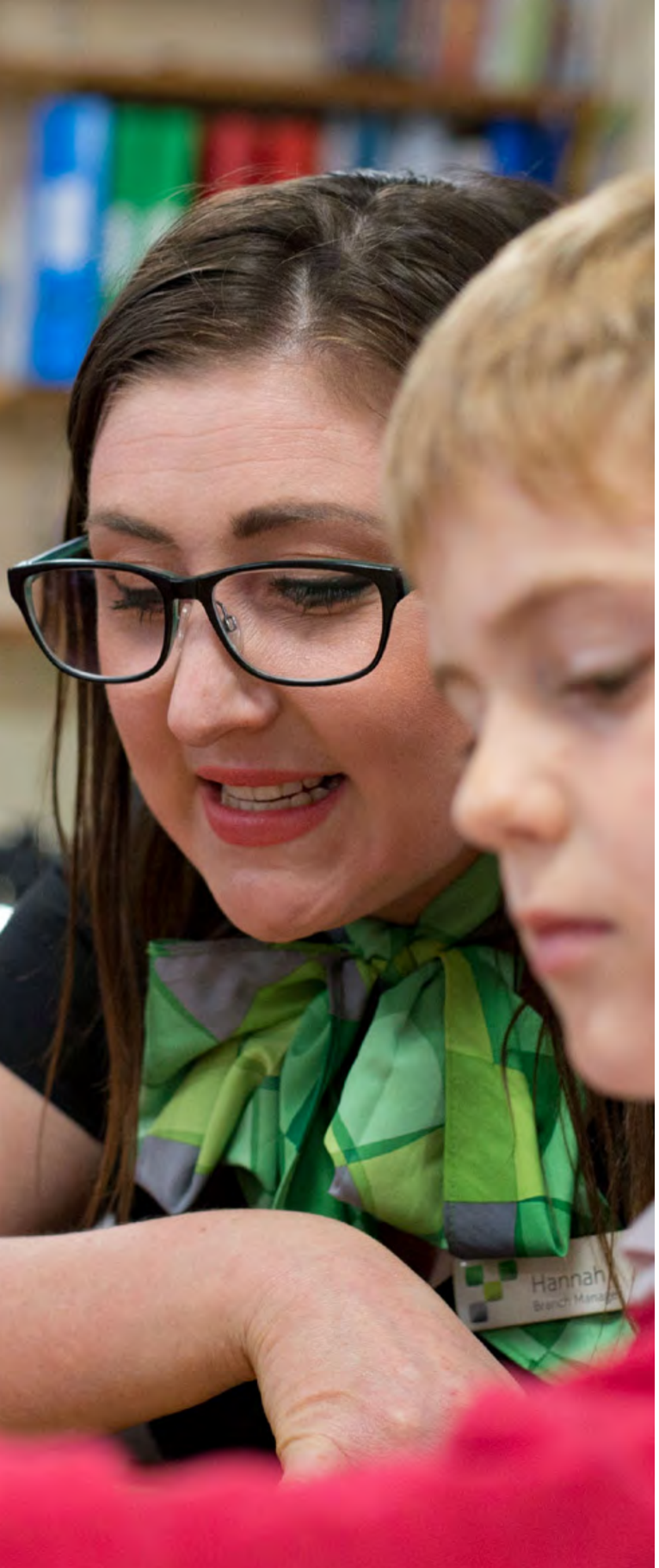
The importance of the primary-secondary transition is demonstrated by the fact that the differences in performance have not yet become pronounced on average, despite a significant disadvantage gap between those from the less affluent areas and those from more affluent areas. The North East has the greatest decline in achievement between age 11 and age 16, often as a result of weak school leadership and lack of support in transition from primary to secondary school.

This highlights the need to tackle one of the biggest and most devastating causes of poor educational attainment – entrenched deprivation, which in some areas has affected generations. One relatively simple fix is for government to increase the number of Opportunity Areas and share learning of what works in raising standards with deprived areas across the North. Through tackling social mobility by encouraging schools and businesses to work together, children will be given the opportunity to break out of a disadvantaged background and succeed in the North.

We are calling on employers of all sizes across the North to pledge to mentor or provide high-quality experience of the workplace to at least the same number of children and young people as they have employees – from a sole trader or an SME with a handful of staff to a global brand such as Barclays, who would expect to work with a number of young people far in excess of the 12,000 staff they employ in the North.

We also believe businesses should maximise their use of the apprenticeship levy and that the North must establish itself as the world's leading centre for degree apprenticeships, with the brightest and best school or college leavers considering them to have the same parity of esteem as a traditional university education. The mix of vocational and academic training, we believe, is key to achieving genuine social mobility.

Our recommendations follow the journey a child will make from early years to entering the workplace to address the challenges in the Northern Powerhouse Independent Economic review by 2050. This is a package for a North capable of delivering on its vast potential, where those jobs can be taken by children growing up in the Northern Powerhouse today and in years to come.



SECTION 4

IMPORTANCE OF EARLY YEARS

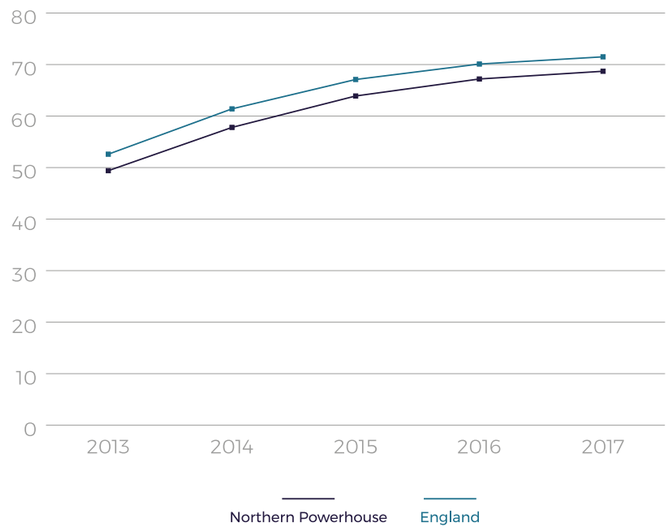
It has been proven that early years intervention can have the most significant impact on educational outcomes and attainment in the North. The significant increase in recent years of children achieving a good level of development at Early Years Foundation Stage (EYFS) has risen in line with the UK and London average, yet still falls two percentage points behind the national average. This average, however, masks significant variation across the North, with the percentage varying from 60.9% in Halton in the Liverpool City Region to 74.9% in Northumberland. Tackling these low outliers must be a priority to bring the North in line with the national average.

> *“ Better use of the reception year in Northern schools could reduce the number of children falling short of expected levels of education ”*

The 2016/17 Ofsted Annual Report[3] has shown that the EYFS completed in the reception year is not always used to best effect by primary schools. Through promotion of the 15 and 30-hour pre-school facility alongside Surestart services, the transition between nursery and primary school would be much more effective. This would increase the level of attainment (skills and knowledge) at the end of the reception year.

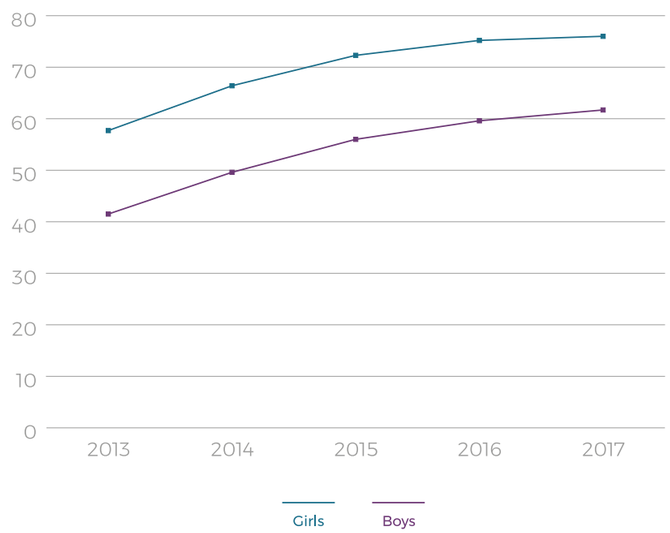
The data also indicates a difference between gender performance in early years with girls out-performing boys every year and only a slight narrowing of this gap. This is consistent with trends across the UK and persists throughout the education journey.

PERCENTAGE OF CHILDREN ACHIEVING A GOOD LEVEL OF DEVELOPMENT AT EYFS



Source: Department for Education, Early years foundation stage profile (EYFSP) results: 2017

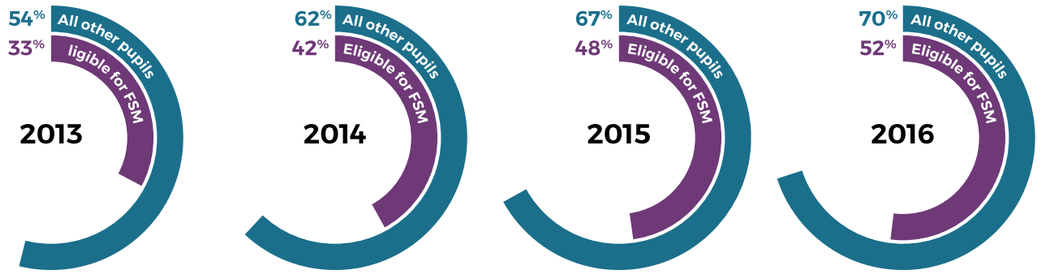
PERCENTAGE OF CHILDREN ACHIEVING A GOOD LEVEL OF PROGRESS AT EYFS IN THE NORTHERN POWERHOUSE BY GENDER



Source: Department for Education, Early years foundation stage profile (EYFSP) results: 2017

[3] Ofsted (2017) The Annual Report of Her Majesty's Chief Inspector of Education, Children's Services and Skills 2016/17

PERCENTAGE OF CHILDREN ACHIEVING A GOOD LEVEL OF DEVELOPMENT AT EYFS IN NORTHERN POWERHOUSE



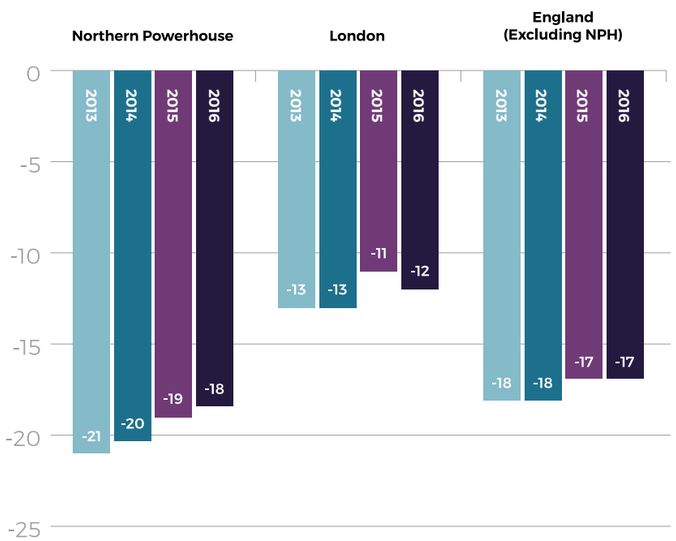
Source: Department for Education, Early years foundation stage profile (EYFSP) results by pupil characteristics: 2016

Given that the above data suggests that a larger proportion of children in the North are starting primary school below a 'good' level of development, it may be necessary to consider interventions for improving school readiness – as advocated by Andy Burnham, Mayor of Greater Manchester.

The data also indicates a strong correlation between disadvantage and early years achievement. In 2016, for example, the percentage of children achieving 'good' was 18% lower for the disadvantaged population, i.e. those eligible for free school meals. Whilst this has improved slightly from 2015, there is more to do.

As the number of disadvantaged children in the North is higher on average than the rest of the UK by 1.5%, this has a noticeable effect on attainment in the North.

GAP BETWEEN PERCENTAGE OF CHILDREN ELIGIBLE FOR FREE SCHOOL MEALS AND OTHER PUPILS IN MAKING GOOD LEVEL OF DEVELOPMENT AT EYFS



Source: Department for Education, Early years foundation stage profile (EYFSP) results by pupil characteristics: 2016

RECOMMENDATION:

An initial £300m increase in government funding for disadvantaged areas across the North, creating place-based funds integrated with other services such as health visitors and voluntary sector providers, ensuring every child is school-ready by age five.

RECOMMENDATION:

Investment to support local intervention to encourage families not taking up the early education offer for two-year-olds, to increase this from 57,000 currently to 70,000 in the North each year.

SECTION 5

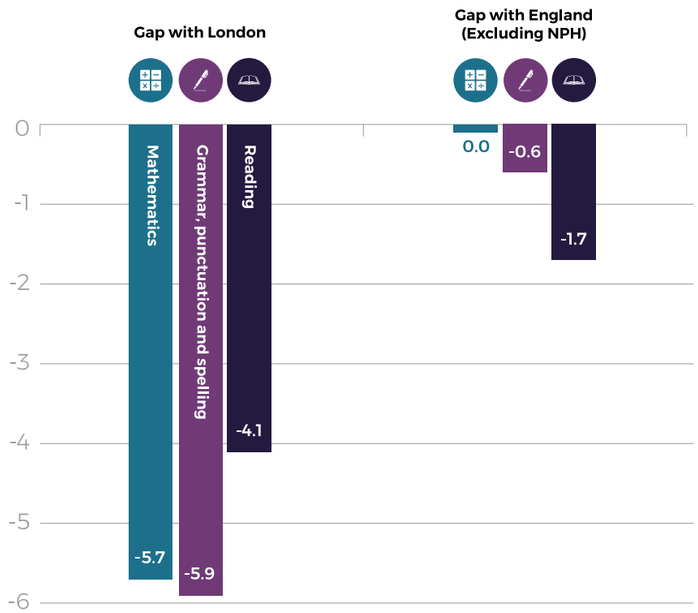
PROVIDING OPPORTUNITY FOR ALL - THE IMPACT OF DISADVANTAGE

Overall attainment in Northern schools hides the reality that the North's greatest problem is in areas with higher levels of deprivation, and where other factors beyond the education system prevent social mobility for young people.

> *"In Warrington, 70% of 11-year-olds achieve the expected standard in reading, grammar, punctuation and spelling & mathematics compared with just 54% in Doncaster"*

Across the North, attainment at primary level is broadly in line with the national average. Indeed, analysis of the revised 2016/17 KS2 results of children at age 11 shows the percentage of students reaching the expected standard is within one percentage point of the national average for reading, grammar, punctuation and spelling and Mathematics. It is worth noting that the North East generally performs better than the North West and Yorkshire and the Humber. For example, only 1.9% of primary schools in the North East were below the government's floor standard – the minimum standard for pupil attainment and progress – in 2017. This compares with an English average of 3.7%, 3.3% in the North West and 4.2% in Yorkshire and the Humber.

NORTHERN POWERHOUSE KS2 EXPECTED STANDARD: GAP WITH ENGLISH AND LONDON AVERAGE



Source: Department for Education, SFR69/2017: National curriculum assessments at key stage 2, 2017 (revised)

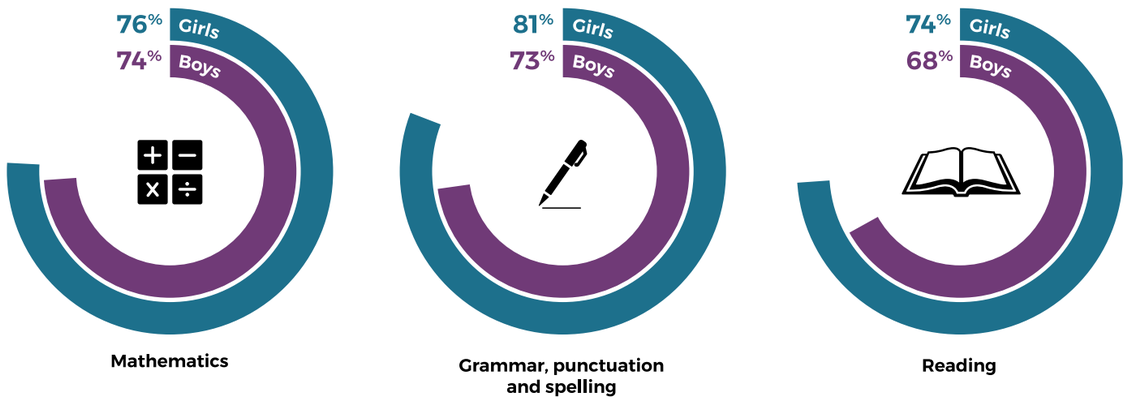
However, this picture masks significant variations between deprived and more prosperous areas, indicating the considerable impact that factors outside education have on early attainment. For example, in Warrington, part of the Cheshire and Warrington LEP, 70% of pupils achieve the expected standard in the combined KS2 measure compared with just 54% in Doncaster.

Sir Nick Weller's report[4] concluded that London's recent success in secondary attainment has been at least in part due to very high performance at primary school (where less than 1% of schools were below the floor standard in 2017). The chart below shows a much larger attainment gap at KS2 between pupils in the Northern Powerhouse and London. This suggests that through effective targeting, overall attainment in the North can be improved.

The research also indicated that the relatively low attainment of the North at KS2 may be linked to a high number of white working-class boys in the region, whose attainment levels are typically below that of girls and other ethnic origins.

[4] Weller, N. (2016) A Northern Powerhouse Schools Strategy

NORTHERN POWERHOUSE KS2 PERCENTAGE OF PUPILS REACHING THE EXPECTED STANDARD

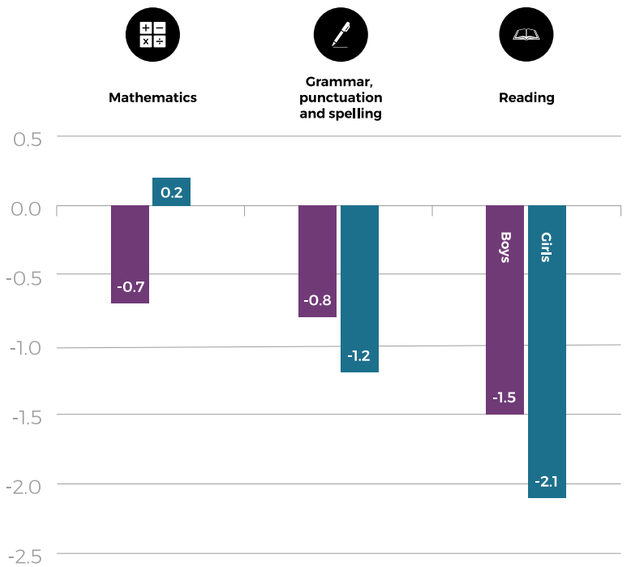


Source: Department for Education, SFR69/2017: National curriculum assessments at key stage 2, 2017 (revised)

NORTHERN POWERHOUSE KS2 EXPECTED STANDARD: GAP WITH LONDON AVERAGE

Source: Department for Education, SFR69/2017: National curriculum assessments at key stage 2, 2017 (revised)

NORTHERN POWERHOUSE KS2 EXPECTED STANDARD: GAP WITH ENGLAND AVERAGE

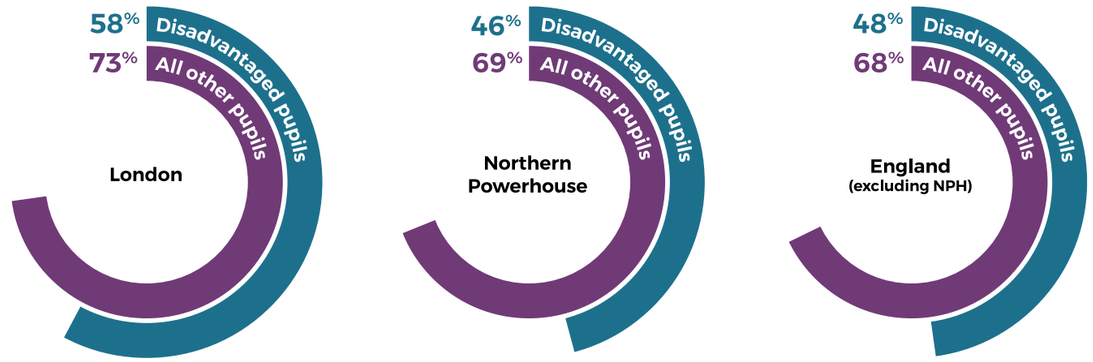


Source: Department for Education, SFR69/2017: National curriculum assessments at key stage 2, 2017 (revised)

DISADVANTAGE

Disadvantage is also considered as having a critical impact in primary schools (as noted above) with only 46% of disadvantaged pupils in the North achieving the expected standard in the combined reading, writing and mathematics assessment, compared with others at 69%.

PERCENTAGE OF PUPILS REACHING EXPECTED STANDARD IN READING, WRITING AND MATHS AT KS2 IN 2017



Source: Department for Education, SFR69/2017: National curriculum assessments at key stage 2, 2017 (revised)

THE NORTH'S DISADVANTAGED CHILDREN FALL FURTHEST BEHIND

Though average attainment at KS2 in the North is relatively close to the national average, the picture is considerably different once pupils enter their teenage years and complete GCSEs and equivalent qualifications. Measurement of school performance at KS4 has also recently changed with the introduction of Attainment 8 and Progress 8[5].

Taking the provisional 2017 KS4 results data[6], the average Attainment 8 score for the Northern Powerhouse is 45.1, compared with a national average of 46.1 and an average in London of 48.6. The difference of one point with the national average is equivalent to pupils in the Northern Powerhouse being one tenth of grade below the national average.

In the previous section, it was noted that primary schools in the North East had the highest levels of performance of the three regions making up the Northern Powerhouse. This situation is reversed at the end of KS4 with the North East achieving an Attainment 8 score of 44.3 compared with 45.1 in Yorkshire and the Humber and 45.3 in the North West.

This trend is a continuing one with the North East achieving the lowest Attainment 8 score of the Northern Powerhouse regions in 2015/16 and was only 0.1 points above Yorkshire and Humber in 2014/15.

> *"Only 46% of disadvantaged pupils in the Northern Powerhouse achieve the expected standard in reading, writing and mathematics compared with 69% for all other pupils"*

The transition from primary to secondary school may go some way to explaining this apparent decline in attainment in the North East and the lack of effective collaboration between institutions and teachers across both stages is key. In some primary schools when preparing children for KS2, there is little or no focus on encouraging more independent learning as required in secondary education. This once more has a negative impact on transition.

However, it is also important to consider the socio-economic environment within which the schools are operating. By analysing the annual school census, it is clear that the North East has high numbers of pupils from a disadvantaged background. As the two charts below show, the North East now has the highest percentage of children eligible for free school meals, following a dramatic decline in numbers in London over the past few years. This is now feeding through to the secondary school stage and, based on current trends, the North East will also have a greater proportion of pupils eligible for free school meals than London very shortly.

[5] Progress 8 takes groups of children with broadly similar starting positions and compares how well a child in each school progresses compared with the average for their group. A positive score therefore means that a child makes higher than average progress and a negative score that they make less than average progress. The reason for such a measure is to ensure that a school that receives pupils in year 7 who are well below the expected standard can still measure the value they add over the course of child's journey through the school even if their level of attainment may appear low.
[6] Source: Department for Education, SFR57/2017: GCSE and equivalent results in England 2016/17 (provisional)

PERCENTAGE OF PRIMARY SCHOOL CHILDREN ELIGIBLE FOR FSM

Source: Department for Education, schools, pupils and their characteristics 2011-17

PERCENTAGE OF SECONDARY SCHOOL CHILDREN ELIGIBLE FOR FSM

Source: Department for Education, schools, pupils and their characteristics 2011-17

At a more local level, the range of scores across Local Authority areas in the North is very wide ranging; from 55.3 in Trafford to 37.3 in Knowsley, suggesting that the challenges are most acute in specific schools and groups of schools in particular areas. However, even within more affluent areas such as Trafford, having selective grammar schools may impact negatively on the performance of those children in the remaining maintained schools – where the lowest Attainment 8 score is 37.4; almost the same as the average for the worst performing local authority in the North.

There is also a large difference in attainment between genders; a trend which is replicated across England. In the Northern Powerhouse, the average Attainment 8 score for boys is 42.5 compared with 47.7 for girls, a gap of 5.2 points, compared with scores of 43.5 and 48.8 respectively across the UK – a gap of 5.3 points. So, although the gender gap in the North is virtually the same as the national average, boys in the North currently score one point below the national average and girls 1.1 points. For comparison purposes the gender gap in London is 5.3 points.

According to the provisional 2017 KS4 results the average Northern Powerhouse Progress 8 score is -0.10 compared with -0.03 for state funded schools in the rest of England. Compared with London pupils, pupils in the North make a third of a grade less progress overall and almost half a grade less in Mathematics. Progress 8 scores in the North range from 0.17 in North Yorkshire to -0.77 in Knowsley.

In 2016, the average Attainment 8 score for boys in the North was 46.9 compared with 51.4 for girls, a gender gap of 4.5 points and broadly consistent with the English average gap of 4.6 points and a gender gap in London of 4.4 points.

Boys in the North have an average Progress 8 score of -0.24 compared with -0.17 for England and 0.02 in London. Girls in the North achieve an average Progress 8 score of 0.03 compared with 0.11 for England and 0.30 in London. This indicates gender gaps of 0.27 points in the North, 0.28 in England and 0.28 in London. So, whilst boys and girls in the North make significantly less progress than the national average and their counterparts in London, the gender gap in the North is similar to those two regions.

THE IMPACT OF DISADVANTAGE IN SECONDARY SCHOOLS

In secondary schools, disadvantage also plays a significant role. The attainment gap between pupils from disadvantaged backgrounds and their peers has been a focus of national education policy since the introduction of Pupil Premium funding by the Coalition Government in 2011-12. Pupil Premium was initially provided for pupils eligible for free school meals (FSM); the measure was widened in 2012-13 to include children that had been eligible for FSM at any point over the past six years in addition to looked-after children and those from families in the Armed Forces.

> *"At age 16, Northern pupils from a disadvantaged background achieved an average Attainment 8 score of 39.9, a whole 13 points below their fellow pupils"*

At the end of KS4 (age 16), Northern pupils from a disadvantaged background achieved an average Attainment 8 score of 39.9, 13 points below their fellow pupils[7]. Not only do disadvantaged pupils in the North face an attainment gap with their non-disadvantaged peers, they also achieve lower attainment levels than disadvantaged pupils elsewhere in the country, 1.3 points below the national average and a full 6.5 points below their peers in London. The Northern Powerhouse Partnership regards this as the most significant issue – those from disadvantaged backgrounds are falling further behind.

BETTER IDENTIFYING DISADVANTAGE

During our engagement activities, a number of participants suggested that the current definition of disadvantage did not capture those with the greatest need. The belief being that children with the greatest disadvantage came from families with very complex needs who required extensive support at home, well beyond the interventions that could be delivered at school.

However, a review of the literature on this subject suggests that most studies found that using Free School Meals (FSM) eligibility as a proxy for disadvantage is the most effective method. Though some children may be included who are not particularly disadvantaged, this is outweighed by the likelihood that very few children are missed under this definition, as well as being relatively simple to collect the data.[8 9 10] Treadaway (2017) at Education Datalab[11] highlighted the relationship between the length of time a child is eligible for FSM during their school career and the size of the gap between their attainment compared with children that have never been eligible for FSM. A serious consideration in light of this may be to improve Pupil Premium by applying different rates based on the length of time a pupil has been eligible for FSM[12]. Under such a scenario the three regions of the Northern Powerhouse would all see their funding from Pupil Premium increase at KS2 and KS4, though to a much lesser extent in Yorkshire and Humber.

RECOMMENDATION:

Reform Pupil Premium to better target funding for disadvantage by allocating more to pupils eligible for free school meals throughout their schooling, addressing the most entrenched barriers to social mobility.

BUILDING ON OPPORTUNITY AREAS

Opportunity Areas represent a welcome return to strong place-based policy making in education that has been missing for a number of years. Developed and supported by government, five of the 12 national Opportunity Areas are located in the North – Blackpool, Bradford, Doncaster, Oldham and Scarborough.

Individual areas present opportunities for further investment. In Scarborough, for instance, there is additional investment in school leadership, support for teachers in phonics and STEM as well as in crafting learning conversations. Regardless of the fact that two secondary schools are academies, and two remain local authority schools, these interventions are available to everyone in the area including primary schools. Unlike previously, this encourages collaboration and sharing of best practice across all schools within the area as opposed to creating unnecessary competition and a silo mentality.

While Opportunity Areas provide an interesting model for targeting support in areas of greatest challenges, they must be funded beyond the current financial settlement to 2020. Breaking down barriers and building collaborative relationships will take time and partners require confidence that funding and support will remain for the long term.

RECOMMENDATION:

A longer-term government commitment to Opportunity Areas – a Northern Powerhouse Schools Improvement Board to be established, drawing together existing funding with a dedicated 10-year fund to allow for further Opportunity Areas in the North. In particular, this needs to urgently address the lack of Opportunity Areas in the North East.

[7] Source: Department for Education, SFR03/2017: GCSE and equivalent results in England 2015/16 (revised)
[8] Taylor, C. (2017) The Reliability of Free School Meal Eligibility as a Measure of Socio-Economic Disadvantage: Evidence from the Millennium Cohort Study in Wales, British Journal of Educational Studies
[9] Gorard, S. (2012) Who is eligible for free school meals? Characterising free school meals as a measure of disadvantage in England, British Educational Research Journal
[10] Department for Education (2015) Factors associated with achievement: key stage 2
[11] https://educationdatalab.org.uk/2017/07/long-term-disadvantage-part-one-challenges-and-successes/
[12] https://educationdatalab.org.uk/2017/09/long-term-disadvantage-part-four-if-carlsberg-made-schoolsand-also-designed-funding-formulae/

SECTION 6

INVESTMENT IN SCHOOL LEADERS AND MANAGERS

There is strong evidence, both nationally and internationally, to support the fact that high-quality leadership and management is vital to turn around failing schools – a particular challenge in the North where many schools consistently face challenges, move in and out of special measures, are required to academise, but fail to sustainably improve. The quality of school leadership is second only to the quality of teaching in terms of its influence on pupil outcomes[13].

> *“ The quality of school leadership is second only to the quality of teaching in terms of its influence on pupil outcomes ”*

It follows therefore that improvement in school leadership is consistently found to be one of the earliest steps in the journey towards sustainable school improvement[14]. Analysis of Ofsted judgements shows that only 25 of the more than 6,000 schools in the North have a rating for the effectiveness of leadership and management that is higher than their overall rating. The quality of leadership therefore is effectively limiting the overall performance of schools.

Without effective leadership, it is unlikely that the performance of these schools will improve. As part of this review, focus groups were held with school leaders to gain insights into the challenges they faced as they sought to improve their schools.

One challenge cited by many was the low levels of aspiration from staff, pupils and parents. Leaders highlighted how a lack of local employment opportunities affects

parents' aspirations for their children. In some cases, parents had poor educational experiences which affected their engagement with the school and their capacity to support their child's learning. Some leaders also stated that pupils were focused only on achieving sufficient grades for their next step, rather than aiming for the best possible attainment. Poor leadership can also lead to teachers having low expectations of pupils, which is most likely to arise when they themselves are not properly supported.

The available effective models for school leadership mirror much of what works in business. Strong leaders create a clear vision of success in their school, with high expectations for staff and pupil performance. They build a culture of collective responsibility for school improvement and they develop distributed leadership and quality teaching across the school[15 16 17 18].

The focus groups with school leaders across the North reinforced these findings. Where new head teachers had been appointed to schools with poor leadership and management, it became clear that a consistent and ultimately successful strategy was to quickly establish a culture of high expectations both for staff and pupils.

One school leader explained how they had achieved high expectations for pupil performance by setting high targets and regular pupil progress meetings to monitor performance against these. Raising expectations was however, not considered to be an easy process. Another head teacher found it difficult to challenge the belief that the children were not able to achieve high standards and, in an attempt to drive improvement, implemented 'model lessons' – bringing high-quality teachers into the school to demonstrate outstanding teaching to the staff and pupils.

Many of the participants also spoke about engendering a culture of leadership across their schools. Some leaders engaged their own senior leadership team in running leadership development programmes. Others recognised the need to bring in external support. In all cases, leaders highlighted the challenge of creating time for staff development in busy school days.

When talking about their own development and support, head teachers felt quite isolated. The National Professional Qualification for Headship, their main development route, was criticised as not necessarily providing a solid grounding for headship and was considered more of a tick-box exercise. In particular it did not prepare them for the wide range of responsibilities they were given beyond teaching and learning, such as project managing construction of new buildings, financial management and marketing - in essence many of the skills required of business leaders. One head teacher spoke positively about leadership courses from private sector organisations and felt they had much greater impact than education specific courses. A number of head teachers were also positive about the impact of coaching for themselves and their leadership teams. They noted how leaders in other sectors have access to coaching throughout their leadership journey.

RECOMMENDATION:

Establish locally-led clusters for school improvement, to share services more effectively, supported by local government.

[13] Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2006). Seven strong claims about successful school leadership. Nottingham, UK: National College of School Leadership.
[14] Rudd, P., Poet, H., Featherstone, G., et al. (2011) Evaluation of City Challenge Leadership Strategies: Overview Report. Slough: NFER.
[15] P, Hallinger. & R. H, Heck. (2010) Collaborative leadership and school improvement: understanding the impact on school capacity and student learning. School Leadership & Management: Formally School Organisation (2010).
[16] The National College. (2010) Leading staff and effective teams, Nottingham, National College for School Leadership. Available at https://www.nationalcollege.org.uk/cm-mc-tp-overarching.pdf
[17] Hill, A., Mellon, L., Laker, B., and Goddard, J. (2016) School Leadership: Why isn't educational reform working? How can we fix it? Centre for High Performance.
[18] Robinson, V., M. Hohepa, and C. Lloyd. (2009) School Leadership and Student Outcomes: Identifying What Works and Why: A Best Evidence Synthesis Iteration. Wellington: Ministry of Education.

CASE STUDY:

BALANCED SCORE CARD

BALANCED SCORE CARD

Typically, these measurement frameworks would focus on the principles of:

- Understanding the required measures, which drive high performance
- Setting clear targets for these measures
- Monitoring performance and comparing with other organisations (in this instance schools)
- Develop clear plans for driving performance improvement (pulling on best practice from other schools)
- Ensure buy in from all stakeholders and link the 'School Scorecard' to the individual objectives and performance management of teacher/leaders

Key enablers include:

Accuracy – Place peer review at the heart of everything proposed, ensuring performance is precise and open.

Timeliness – Recognise the importance of timely delivery, meeting expectations and effective communication.

High Quality – Focus on support services for schools that meet need for school improvement.

Performance will be achieved against the framework by:

- Planning for excellence in all aspects of Multi Academy Trust service delivery support/ executive head teacher function
- Bringing unrivalled knowledge and expertise of the Northern educational needs
- Geographic and location flexibility
- Identification of pre-assembled expertise
- Employing high-quality, motivated and trained professionals
- Use of best practice, evidence-based in schools in disadvantaged communities in particular
- Developing and documenting the required outcomes from this performance framework
- Aligning individual education service delivery with the outcomes and the requirements of the performance framework

Making performance management part of the day-job, with visibility of how well Multi Academy Trust schools are doing aggregated across the North.

This approach provides a framework for Multi Academy Trusts to turn strategy into action.

PERFORMANCE MANAGEMENT OF MULTI ACADEMY TRUSTS

Evidence suggests that academies currently perform no better or worse than other schools nationally, which poses a number of consequences for the North. Although a proportion of previously-underperforming sponsor academy schools have been sustainably improved, there is clearly more work to be done in this area. To address this, 'tried and tested' performance management methodologies applied in business must be implemented for Multi Academy Trusts.

Currently, the Ofsted inspection regime does not extend to services such as school improvement provided by MATs, unlike local authorities who are subject to this regime for the equivalent services which they provide.

However, there are examples where Multi Academy Trusts perform well. In Carlisle, for example, United Learning adopted Richard Rose Central Academy in the middle of 2013, a school with a five-year history of poor performance. Having been placed in special measures in 2008 the school achieved a satisfactory Ofsted rating in 2010, only to return to special measures again just over two years later. Since United Learning have managed the school, gradual and sustained improvement has been made, culminating in the school achieving its best-ever results in 2016 and a 'Good' Ofsted rating in 2017.

United also adopted another local school, Richard Rose Morton Academy, which was also placed into special measures shortly after United came on board. As with Central Academy, United supported the school through a journey of school improvement resulting in a 'Good' Ofsted rating in late 2017.

Re-energising Multi Academy Trusts so they work as effectively in the North as they do in London is essential, as this is clearly the dominant model of delivery for secondary schools. There is a vital role for businesses, such as The Co-operative Group, to run schools which have the right ethos and effective management to impact on the lives of children and young people. Business leaders can rightly focus on needs of the world of work and employability, rebuilding buildings where they are substandard and managing costs to avoid financial failures or excesses.

While free schools have been popular elsewhere, disproportionately few have been built in the North - only nine free schools have been funded in the North East, compared to 123 in London. Re-purposing funding from the free schools budget to rebuild the schools which are in need of improvement, and where poor-quality buildings makes them inadequate places to learn and financially unsustainable, would remove one of the notable barriers to expansion.

RECOMMENDATION:

Simplify the Northern Regional Schools Commissioners areas to establish three: North West, Yorkshire and North East & Cumbria, working within frameworks and plans set by the Northern Powerhouse Schools Improvement Board. These would make the final decision on regional funding streams for school improvement, challenging poor performance in Multi Academy Trusts, re-allocating schools to those with capability and identifying schools that need rebuilding.

SUPPORT AND PROFESSIONAL DEVELOPMENT FOR TEACHERS

Sir Nick Weller's previous work made the case that 'securing high-quality staff is the biggest challenge for school leaders [in the North]'. Leadership, however, is also part of the solution. Research indicates that school leaders can have a considerable impact on teacher retention by affecting the working culture, working conditions within schools and the availability of professional development[19 20].

The North has higher vacancy rates in secondary than primary schools with specific challenges in subjects such as Physics and Maths. Some schools in isolated or deprived areas face real challenges attracting teachers. For example, one head teacher explained that although teachers within their local area moved schools, they could not attract new teachers into the area as a result of the distance from any other town or city. A review of official data suggests the key challenge for Northern schools overall is investment in teachers' skills and their wider development once they enter the profession rather than teacher supply, which was the focus of programmes like Teach First – a key part in the success of the London Challenge. This may of course be adversely affected by the sharp decline in applications to UCAS for the coming year in teaching. One clear area of consensus throughout this review has been seeking to emulate London's success, either in how academies work or in improving the quality of teaching. This is a challenge without first understanding the specific issues in the quarter of secondary schools rated less than good, which are markedly different to the focus areas of the London Challenge.

The quality of teaching is poorer in the North on average than in London or Southern regions: more than 20% of pupils are in schools where the quality of teaching, learning and assessment is rated less than good. Research shows that students perform better when taught by more experienced teachers, therefore schools need to either attract experienced teachers or retain new teachers until they have built up substantial experience, of between five and 10 years.

The focus group findings reinforced the need to concentrate on developing and retaining high-quality teachers. Head teachers in our focus groups who have been placed in low-performing schools, where teaching quality was typically low, invested considerable time and resource in supporting teachers to improve.

> *"In the North, more than 20% of pupils are in schools where the quality of teaching, learning and assessment is rated less than good"*

Leaders had used a range of strategies to improve the quality of teaching. One leader grouped teachers into groups of three, who would record and watch one another's lessons to gain feedback and improve their teaching. Another provided development for middle leaders to quality assure teaching and hold team members to account. A third sponsored all teachers in completing an external programme to understand outstanding teaching and bring the practice back into school. In many cases, some teachers were resistant to change and chose to move on or, ultimately, were subject to formal performance management. However, this process has been proven to create space to recruit new teachers more aligned to the school's vision and way of working.

Head teachers also emphasised the important role professional development plays in retention of quality teachers – a concept also evident in the business world.

[19] https://my.vanderbilt.edu/jasongrissom/files/2012/05/principal-effectiveness-TCR-version.pdf
[20] http://journals.sagepub.com/doi/abs/10.3102/0162373716668028

RECOMMENDATION:

A Northern centre of excellence on transformational schools in disadvantaged communities that provides research and evidence on how to turn around failing schools and leave them sustainably improved. This would include a focus on retaining excellent teachers and high-quality professional development in the most challenging schools funded initially by the £42m Teacher Development Premium pilot announced in the 2017 Budget.

SECTION 7

CAREERS AND PATHWAYS

The Northern Powerhouse Independent Economic Review identified four prime capability areas: advanced manufacturing, energy, digital and health innovation. Exploiting opportunities in these areas would enable young people from all backgrounds to explore aspirational career pathways – resulting in job growth. Key to achieving this is sustainable relationships between education and industry, way beyond those which exist today.

Whilst the research highlighted certain industry-based groups – such as the construction, design and engineering sectors – that offer frameworks to develop links between industry and education, these are too few and do not cover all of the prime capability areas. To establish strong opportunities and interest in the prime capabilities, whilst raising the aspiration of our young people, we must develop the training pathways, fully utilise the apprenticeship levy and provide young people with more experience of the world of work. High quality careers advice and guidance should also be extended to primary schools, based on evidence of what works best from the government's careers strategy.

From the perspective of young people in many underperforming schools, careers advice is severely lacking and tends to focus primarily on the route from GCSEs to A levels and on to further study, usually at university. The focus is mainly on education, not on careers. The Gatsby Benchmarks have become the accepted standard for judging the quality of school careers advice, having been piloted in the North East[21] and have been adopted in the government's careers strategy, published in December 2017, as the national standard of best practice. As the Social Mobility Foundation noted, the North East Local Enterprise Partnership has led careers support in the region from being the worst in the country to among the best. 60% of schools in the region have committed to achieving the Gatsby benchmarks compared with just 4% nationally[22].

The Careers & Enterprise Company's State of the Nation report[23] looked at the quality of careers provision in English schools compared with these benchmarks. The report found that very few schools nationally (less than 1%) achieved all eight benchmarks, with the majority of schools achieving zero, one or two. There is a relationship between the Ofsted performance of a school and better performance against the benchmarks.

> *"Many school leaders do not have the up-to-date knowledge on how industry and the nature of job roles and careers change"*

The government's careers strategy now requires all schools and colleges to identify a Careers Leader and has established training bursaries for 500 schools. However, during our engagement with school leaders, it was recognised that many do not have the relevant knowledge around industry opportunities, which is exacerbated due to the fact that the nature of job roles and careers constantly change and evolve over time. Therefore, the government solution does not go far enough.

Promotion of work placements and programmes, specifically in the prime capability areas could be key to developing the future workforce. Many organisations across the North offer this as a way of building their future workforce and where this is implemented it is considered by school leaders as an effective way of pupils applying academic knowledge in a work environment. Most importantly, it assists with creating an understanding of and a transition to the world of work.

The Lancashire Enterprise Adviser Network, which is co-funded locally with The Careers & Enterprise Company, now has more than 100 schools and colleges involved across the wider Lancashire area. The network is replicated with Local Enterprise Partnerships across the North, matching business leaders with schools and colleges, and together they develop a careers and enterprise plan which embeds employer engagement from Year 7 (11 years of age) through to Year 13. Results include raised aspirations, greater insight into the local labour market and local businesses and greater understanding of the range of career opportunities. Research indicates that four or more good-quality employer encounters significantly reduces the probability of being Not in Education Employment or Training (NEET) and increases earning potential by 18%[24]. Therefore, commitment to this in the government's careers strategy is welcomed.

RECOMMENDATION:

Every Northern business to mentor or otherwise meaningfully reach out on careers and enterprise skills to at least the same number of young people as they have employees, from the age of 11. This would see 900,000 young people given experience of work. We already have examples of Northern businesses exceeding this commitment with Manchester Airport Group reaching 10,000 young people from their 2,500 colleagues.

RECOMMENDATION:

Bespoke careers guidance and workplace-based learning for those receiving Pupil Premium funding and with greater needs[25], clearer choices for 14+ year-olds on educational pathways, and allowing all vocational choices – including University Technical Colleges – the opportunity to effectively promote what they offer.

RECOMMENDATION:

All schools to be measured, alongside Further and Higher Education providers, for the employability and eventual success of their learners at age 25 compared to their previous attainment. This shifts the focus to long-term achievement rather than short-term measures of success.

[21] http://www.gatsby.org.uk/education/focus-areas/good-career-guidance
[22] Social Mobility Commission (2017) State of the Nation 2017: Social Mobility in Great Britain
[23] The Careers and Enterprise Company (2017) State of the Nation 2017: Careers and enterprise provision in England's schools.
[24] Anthony Mann & Christian Percy (2013): Employer engagement in British secondary education: wage earning outcomes experienced by young adults, Journal of Education and Work
[25] Supported by the Northern centre of excellence on transformational schools in disadvantaged communities.

CASE STUDIES:

NATIONAL COLLEGE FOR HIGH SPEED RAIL

BARCLAYS LIFESKILLS

NATIONAL COLLEGE FOR HIGH SPEED RAIL

As an employer-led college with a campus in Doncaster, the National College for High Speed Rail is dedicated to solving the engineering, design, planning, manufacturing and construction skills gap that Britain faces as it looks to invest billions of pounds in modernising its rail network and wider transport infrastructure. The college will play a key role in generating the workforce of the future who will design and build the UK's new high-speed rail network and future infrastructure projects and has already created the UK's first Certificate of Higher Education (Cert HE) in High Speed Rail and Infrastructure.

The National College for High Speed Rail is the largest of five new national colleges being created by the Government to ensure British workers learn world-class skills. They will ensure that British workers will be at the forefront of these growth industries by creating a pipeline of British talent. The National Colleges will be addressing this shortage and as such, will play an important role in improving the quantity and quality of our skilled workers. The college is set to train 1,000 people every year. The college will offer a broad ranging curriculum which means there are opportunities available for school leavers, those already working in the industry or anyone seeking a change of career.

BARCLAYS LIFESKILLS

LifeSkills was created by Barclays to equip young people with the skills needed for the workplace both now and in the future. The programme gives teachers access to 60 hours of curriculum-linked employability resources free of charge. Resources are also made available for young people to work through in their own time in addition to sections for parents.

Since launch in March 2013, 84% of secondary schools have registered with LifeSkills and more than 5.5 million young people have participated in LifeSkills.

The LifeSkills 2017 impact report shows that the programme is positively impacting confidence, motivation and aspirations. Undertaken independently by Chrysalis, the report shows that, of the young people surveyed who had participated in the programme, 88% feel more positive about the future and 86% feel more motivated to do better in academic and vocational studies. With 85% feeling better prepared to make future career decisions and 71% feeling that they now have higher ambitions and aspirations.

APPRENTICESHIPS AND COLLEGE LEARNING

Though apprenticeship data for the first quarter of the 2017/18 academic year showed a promising pickup from the previous quarter, the total of 114,400 starts was a fall of 26.5% on the same period for the previous year. This is disappointing given that the majority of starts take place in the first quarter of the academic year and suggests that Apprenticeship Levy funds are not being fully utilised. Employers with a pay bill of more than £3m have the levy deducted through the tax system and made available through an account. Small to Medium Sized Enterprises can also access support across the North. However, there is extensive evidence to suggest that the process of courses being approved is slow and overly bureaucratic.

> *“ Uptake of this levy is key for employers to make a contribution to developing their workforce ”*

Uptake of this levy is key for employers to make a contribution to developing their workforce and in driving improved productivity. There is a significant need to help people who have missed out on access to the right skills when leaving school to move on from low-paid jobs – apprenticeships with their existing employer can be a viable route. For the North's economy, the role of UnionLearn and other pathways for people to get the required skills to access apprenticeships or college learning at Level 3 and Level 4 need to be significantly increased in scale and reach. There is a strong case for further investment in people currently unable to access apprenticeships and higher-level skills, and these groups should be prioritised in allocating any current and medium-term underspends in the apprenticeship levy until its take-up level increases.

CASE STUDIES:

ARUP APPRENTICESHIPS

EY FOUNDATION

ARUP APPRENTICESHIPS

The ambition to build a Northern Powerhouse and revolutionise transport infrastructure across the North means we need to significantly increase the number of skilled professionals working in the built environment. Companies like Arup are recruiting and training young planners, engineers, designers and technicians to help realise the plans for major economic regeneration in the North.

Arup is challenging the perception of engineering through its programme of initiatives designed to open up the profession to wider audiences. This is helping to attract employees it might otherwise have missed through traditional routes.

Arup offers apprenticeships at Level 2 (intermediate), Level 3 (advanced), Level 4 (higher) and Level 6 (degree). The firm's apprentices study a wide range of professional disciplines: civil, building services, structural engineering, rail design, business and administration, project management, transport planning, accountancy, digital consulting and environmental consulting.

In 2017, Arup introduced a new Level 6 Degree Apprenticeship programme, delivered in conjunction with Liverpool John Moores University. This programme enables school leavers or existing employees to study towards a Degree Apprenticeship, meaning individuals have the advantage of gaining professionally recognised degrees without incurring the fees of the usual degree entry route. The programme can range from five to seven years depending on the qualification. Programmes like this are still in their infancy and new to schools' career advisors.

Professional services firms, like Arup, are reliant on a steady influx of young enquiring minds. The challenge ahead lies in sparking interest and shaping perceptions – not just with future higher education students. Schools have a key role to play in communicating the wide range of Science Technology Engineering and Maths (STEM) paths now available for young people. Arup's Engineering Awareness Week programme has been designed to help schools engage with businesses, by offering a more structured approach to work experience.

EY FOUNDATION

The EY Foundation offers a number of programmes to disadvantaged young people aged 14 to 19 from low income households.

The ten-month Smart Futures programme broadens understanding of career pathways, introduces participants to employers, provides paid work experience, intensive skills training and mentoring. All participants also complete a CMI Level 2 qualification in Team Leading. Their Employability Workshops inspires and informs 14-16 year olds in half day workshops focused on core employability skills, pathways and job options.

Our Future helps 16-19-year-olds who face significant barriers, including low academic attainment, transition into work. In the six-month programme they undertake paid work experience, network with local employers with job vacancies and receive mentoring. All participants also complete a CMI Level 2 qualification in Team Leading.

300 colleagues from EY volunteered to deliver these programmes across the Northern Powerhouse, supporting more than 350 young people in the North in a 12-month period.

Degree apprenticeships offer a significant opportunity to the North of England, from established universities such as Manchester Metropolitan – already with 300 – to a commitment on the part of the new Coventry University campus at Scarborough to 3,000. This new route in combining apprenticeships and degree level qualifications provides significant scope to open up opportunities and/or study in the Northern Powerhouse to new entrants or existing employees. For example, Siemens has already developed pathways with Trafford College and Salford University to deliver degree apprentices ready for the Fourth Industrial Revolution.

> *“ Degree apprenticeships present a significant opportunity to the North of England ”*

The government T-levels are also a great opportunity, however they come with the challenge of identifying high-quality placements for those studying towards them. Employers, who may have offered some type of work experience in the past, should be encouraged to prioritise this group to gain the benefit for both parties from applied learning, although more flexible approaches than a three-month placement may need to be considered to maximise the quality of opportunities available.

RECOMMENDATION:

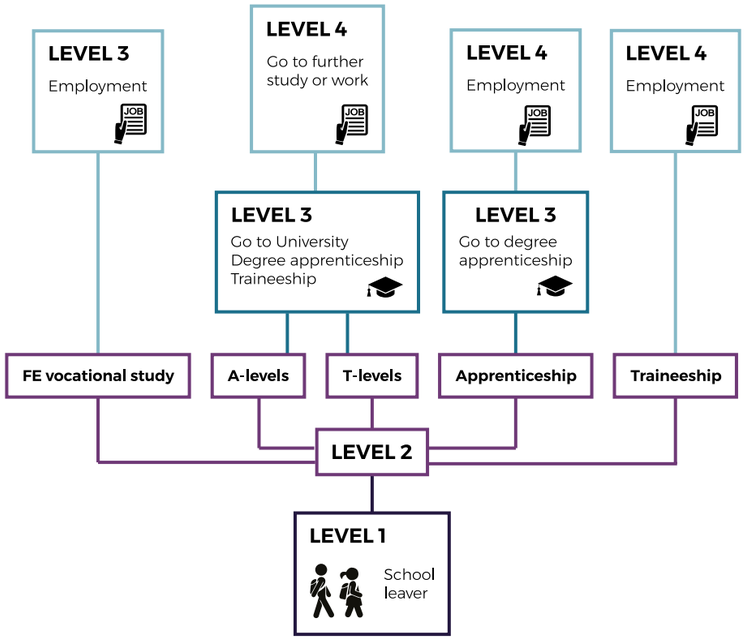
Establish the North as the world's leading centre for degree and higher-level apprenticeships, with up to one in five of our students pursuing them in the future. This would allow our brightest and best students to pursue a mix of work and applied learning, with new Institutes of Technology established to focus on the Northern Powerhouse leading the Fourth Industrial Revolution.

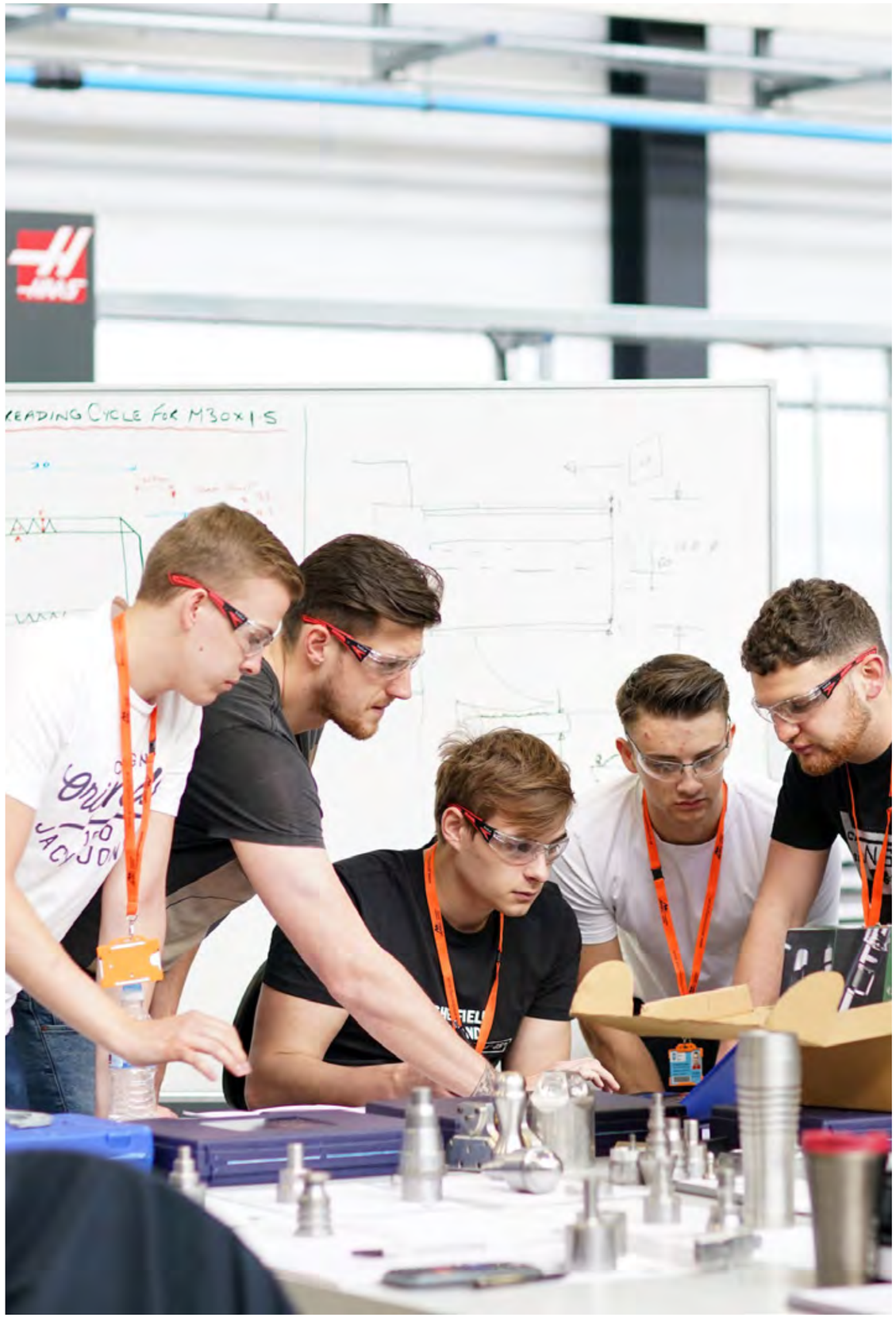
RECOMMENDATION:

Metro Mayors and areas receiving further devolution deals to control the Adult Education Budget as well as overall vocational education spending from 16 -18.

RECOMMENDATION:

Retain the best minds in the North by improving the application system for all post-16 opportunities, including apprenticeships.





SECTION 8

SKILLS PLAN FOR THE NORTH

In identifying the prime capabilities for the North, the Northern Powerhouse Independent Economic Review (NPIER) placed a significant focus on the productivity gap between each of our Northern regions and the national average. In the vast majority of cases it found that lower levels of qualifications and skills were significant causes of these gaps[26].

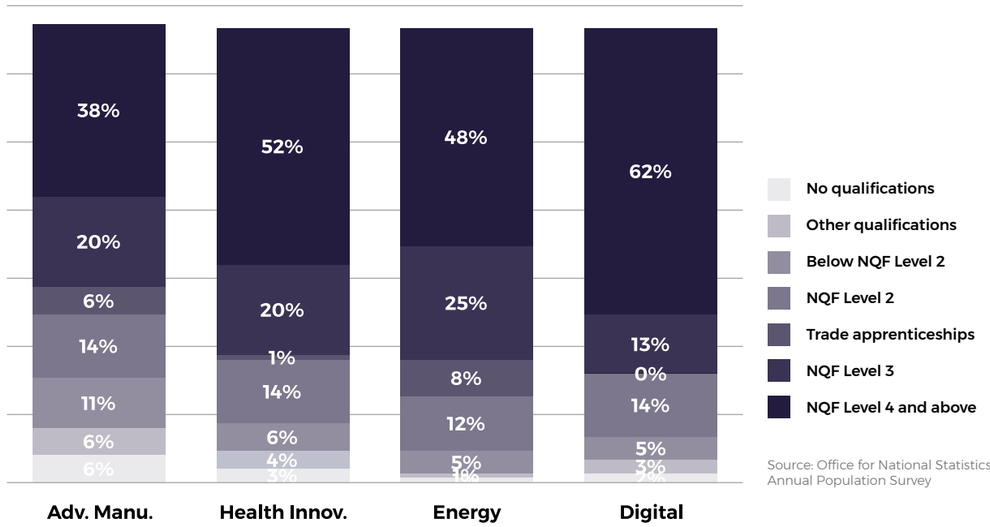
The chart opposite illustrates how each of the prime capabilities has a particularly high proportion of its workforce with the highest level of qualifications (level 4+). As these capabilities play a crucial part in driving wider economic growth, it is particularly important to address the skills issue in the North.

> *"There is an immediate priority to increase the level of high-level qualifications and skills to at least the national average if the North wants to become a world leader in its prime capability areas"*

The levels range from 38% in advanced manufacturing to 62% in digital. This difference in sectors is not particularly surprising; the definition of advanced manufacturing captures both more labour-intensive traditional industries (at lower levels of skill) and modern capital-intensive manufacturing which requires a more highly-skilled workforce. However, if the North is to lead the Fourth Industrial Revolution, this sector is most dependant on increasing skills levels to exploit the digital opportunities in manufacturing, such as Artificial Intelligence. The digital sector, being a younger sector, has likely benefited from the dramatic increase in the proportion of young people going to university and as such its workforce is likely more skewed towards a younger age range.

When compared with the national average for these sectors, it is clear that the Northern Powerhouse has a lower proportion of its workforce at level four

QUALIFICATION LEVEL BY PRIME CAPABILITY IN THE NORTHERN POWERHOUSE



Source: Office for National Statistics, Annual Population Survey

and above in each of these sectors. This ranges from a two percentage point (pp) difference in the health innovation sector to 4pp in advanced manufacturing, 7pp in digital and a 9pp gap in the energy sector. There is therefore an immediate need to increase the level of qualifications/skills at level four and above to at least the national average if the North is to achieve its potential to become a world leader in these prime capabilities. Clearly there are two ways to do this, the first through 'upskilling' the current workforce and the second by ensuring that new entrants to the workforce are qualified to a higher level than the existing.

Upskilling the current workforce potentially has the quickest impact. The new National Retraining Scheme supporting people to re-skill, with an initial £64m investment for construction and digital training, will go some-way to addressing this. Given the importance of the digital sector to the economy of the North, we must ensure that this funding is deployed effectively. With our higher number of former service people, the efforts of those like HSBC to recruit from this group to attract high potential talent with transferable skills is an example of how individuals can be re-trained in order to be able to work in the prime, or as in that case the enabling, capabilities.

Our Local Enterprise Partnerships invest heavily in those who have been failed by the education system, and it will take generations to tackle this legacy. There are also specific challenges from an ageing workforce, and the need to have a sustainable approach to migration – both internationally and between regions of the UK where degree apprenticeships will increase the proportion of Northern young people entering higher education with a greater likelihood to remain here. As transport creates a more interdependent functional labour market, specifically through Northern Powerhouse Rail, functional economic areas will need to work to a collaborative evidence base and policy approach beyond their near neighbours.

[26] For the purpose of this section, the level of an individual's highest qualification will be taken as a proxy for their level of skills. There is an argument that a person could have, for example, a level four qualification but is working in a job that requires a lower level of skill. Though that may be true, our interest is in the skills make-up of the workforce; what level of skills are present rather than what level of skills are currently being used.

CASE STUDY:

HIGHER SKILLS AND PRODUCTIVITY - LESSONS FROM THE RANDSTAD

The Randstad is a metropolitan region in the central-western Netherlands. The Randstad is more productive than the national economy.

TABLE 1: PRODUCTIVITY RELATIVE TO THE NATIONAL AVERAGE, 2013

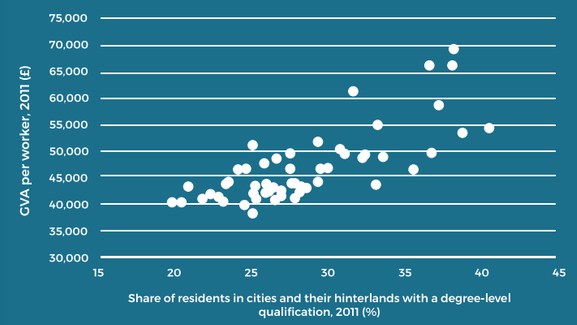
RANDSTAD	NORTH OF ENGLAND
+5.3%	-14.4%

Basis: GVA per worker - purchasing power standard (PPS) converted into £ to account for differences in the cost of living across the countries. North of England is not totally comparable as Randstad and Rhine-Ruhr have more concentrated density of economic activity.

Source: Centre for Cities

Table 1 highlights that the Randstad outperforms the national economy in terms of productivity, compared to the North of England which underperforms.

Graph 1: Qualification level relative to GVA per worker



Source: Census 2011; ONS Annual Survey of Hours and Earnings: ONS Regional Value Added (Income Approach); ONS Business Register of Employment Survey

Source: Centre for Cities

Graph 1 indicates the correlation between a greater share of residents with a degree level qualification and greater GVA per worker. Higher than average productivity levels are closely correlated with business investment, particularly in knowledge-based industries.

Evidence from the Centre for Cities suggests that Randstad's top five cities have a higher average skill level than the top five cities of Northern England.

TABLE 2: PROPORTION OF CITY POPULATIONS AT NQF LEVEL 6

TOP 5 RANDSTAD CITIES	SHARE OF RESIDENTS NQF LEVEL 6 (A DEGREE) %	TOP 5 NORTHERN ENGLISH CITIES	SHARE OF RESIDENTS NQF LEVEL 6 (A DEGREE) %
Amsterdam	45-61	Manchester	31-35
Rotterdam	25-30	Leeds	31-35
The Hague	31-35	Liverpool	25-30
Utrecht	45-61	Newcastle	31-35
Amersfoort	36-44	Sheffield	31-35

Source: Centre for Cities

Table 2 illustrates a snapshot of the different skill profiles of the top five cities in the Randstad compared with the North. The data suggests that the more productive Randstad region has a larger proportion of higher skilled residents than the less productive Northern England does in its top cities.

Table 3 shows business services – a significant area of knowledge-based employment- as a proportion of employment in the top five cities. Again, the Randstad appears to have a greater proportion of business service employment than the top cities in Northern England.

TABLE 3: PROPORTION OF BUSINESS SERVICES

TOP 5 RANDSTAD CITIES	SHARE OF EMPLOYMENT IN BUSINESS SERVICES %	TOP 5 NORTHERN ENGLISH CITIES	SHARE OF EMPLOYMENT IN BUSINESS SERVICES %
Amsterdam	32-43	Manchester	25-32
Rotterdam	21-25	Leeds	32-43
The Hague	25-32	Liverpool	21-25
Utrecht	32-43	Newcastle	21-25
Amersfoort	25-32	Sheffield	17-21

Source: Centre for Cities

KEY TRENDS:

Randstad has a higher proportion of skills and business service employment than the currently less productive North.

Concentration of activity is critical however. In the Randstad, knowledge-based jobs are concentrated with greater density and proximity which in turn facilitates knowledge flow. Cities in the Randstad do not act as one labour market however, but several labour markets. This means that transport systems to and from the different city regions are more important for enabling businesses to access workers and workers to access jobs, than transport links between cities.

Based on the Randstad comparison, we can assume that boosting skill levels in concentrated areas of Northern England by 30%+ will lead to increased investment in knowledge-based sectors and boost productivity over time. Investment in improving commuter links to and from these concentrated areas of activity to commuter belts is key to supporting this

RECOMMENDATION:

The Northern Powerhouse Independent Economic Review (NPIER) should be refreshed to include a specific focus on the skills requirements in the prime capabilities and enabling sectors to deliver improved productivity.

SECTION 9

ACKNOWLEDGEMENTS

This report was overseen by the Northern Powerhouse Partnership's (NPP) Education and Skills group bringing together representatives of our business-led Board as well as education experts from across the North. They held a series of focus groups, Dragons Den-style events and schools round tables sessions to direct their research.

The Education and Skills group is made up of:

Collette Roche (chair) – Chief of Staff, Manchester Airports Group

Lord Jim O'Neill – Former Commercial Secretary to the Treasury and Northern Powerhouse Partnership Vice-Chair

Sir Michael Wilshaw – Former Chief Inspector of Schools and Head of Ofsted.

Kate Willard – Head of Corporate Projects, Stobart Group

Gary Wallis-Clarke – Executive Head Teacher, West Jesmond Primary School, Newcastle

Helen Phillips – Head Teacher, Bedford High School, Leigh, Greater Manchester

Henri Murison – Director, Northern Powerhouse Partnership

Ian Billyard – Principal, Leeds College of Building

Raksha Pattni – Regional Director, Ambition School Leadership

Jonathan Moore – Northern Powerhouse Executive, Arcadis

Simon Nokes – Executive Director Policy & Strategy, Greater Manchester Combined Authority

They and the Northern Powerhouse Partnership's staff would also like to thank: Shine, Ahead Partnership, Arcadis, The Careers & Enterprise Company, Business in the Community, Ambition School Leadership, Greater Sport, Unite the Union, Reform Radio, Teaching Schools Council, The Co-operative Academies Trust, Warrington UTC, Tutor Trust, Key UK, CAB, Morrisons Trust, Reachout, Princes Trust, Reclaim, Morthyng Limited, Panjango, Primary Engineer, Jobskilla, Chambers of Commerce, Youth Work Unit – Yorkshire & Humber, Local Enterprise Partnerships and Combined Authorities across the North for help and analysis as well as all of the head teachers who attended our round table events.

PHOTOGRAPH ACKNOWLEDGEMENT

Front cover: Warrington UTC
Page 04 - Northern Powerhouse Partnership
Page 10 - Yorkshire Building Society
Page 13 - Tutor Trust
Page 20 - Cooperative Academies
Page 22 - Ahead Partnership
Page 23 - Arup
Page 24 - Arcadis
Page 28 - Ahead Partnership
Page 29 - Ahead Partnership
Page 30 - High Speed Rail College (Social Communications)
Page 31 - Barclays
Page 34 - Arup
Page 35 - EY
Page 37 - AMRC
Page 38 - Leeds City Region Enterprise Partnership (West Yorkshire Combined Authority)
Page 40 - Arcadis
All other images: Shutterstock

SECTION 10

ABOUT THE NORTHERN POWERHOUSE PARTNERSHIP

The Northern Powerhouse Partnership (NPP) exists to increase the impact and contribution of the North of England to the UK economy by bringing the individual cities, regions and counties closer together, so that the whole of the North has a greater economic input than its separate parts. The NPP has a business-led board, with representatives from key companies operating across the North including Manchester Airports Group, Mace, Barclays, Associated British Ports, Siemens, HSBC, Addleshaw Goddard, Arcadis, Drax, Arup, Bruntwood and support from EY.

These organisations play an important role in providing insight and evidence to drive the Partnership forward. We will also pay close attention to the views of small and medium-sized businesses, both directly and with the leading Chambers of Commerce across the North. Prominent city leaders across the North of England are represented on the Board, in addition to former Chancellor George Osborne, former Commercial Secretary Lord Jim O'Neill, Chair of Transport for the North John Cridland and Professor Dame Nancy Rothwell to ensure that the NPP maintains a cross-party approach.

To find out more about the partnership visit us online at www.northernpowerhousepartnership.co.uk or follow us on Twitter @NP_Partnership

THE NORTHERN POWERHOUSE PARTNERSHIP

THE NORTHERN POWERHOUSE PARTNERSHIP