The growing pupil population...

There is a growing demand for secondary school places in England. **Zoe Claymore** explores what the data tells us and the possible implications for schools and teachers

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With rapidly rising pupil numbers, a current shortage of places in one-fifth of local authorities and high parental expectations, secondary school admissions are arguably about to come under even more of a spotlight than usual.

Demand has already risen

Nationally, pupil numbers in state secondary schools have risen by 69,000 since January 2013 and now stand at nearly 2.85 million (as of January 2018), the highest level since the start of the decade. Secondary school applications also rose by 83,000 between 2013 and 2018, a rise of 17 per cent.

School applications data also shows that 96 per cent of local authorities had more applications in 2018 than they had five years previously. However, although most of the local authorities in England have seen some growth over this period, as Figure 1 shows, growth rates differed significantly by region.

Too few places to meet demand

Some local authorities may already be feeling the impact of this rapidly rising demand. In January 2018, 29 local authorities, nearly one in five, received more secondary school applications from families who live in their borders than there were places available.

This is a sharp increase from January 2014, when only 17 local authorities had more secondary school applications than places.

The excess demand in these oversubscribed local authorities is also getting worse. In 2014, the 17 oversubscribed local authorities received 191 more applications on average than they had spaces available. However, in 2018, the 29 oversubscribed local authorities received an average of 234 more applications than places available.

The shortage of places is most acute in urban areas. In 2018, 27 of the 29 local authorities that were short on places were cities such as Birmingham, Nottingham and Bristol, and London boroughs – particularly outer London boroughs such as Greenwich, Ealing and Croydon.

In contrast, areas with a large surplus of places appear to be largely rural. In 2018, there were 14 local authorities which had more than 1,000 surplus places, which were largely rural counties such as North Yorkshire, Norfolk and Cumbria. These large surpluses in some areas appear to suggest problems with place planning at a regional or national level. A surplus of this magnitude could indicate that some rural schools are struggling to remain viable, and difficult decisions may be required to ensure school places are located in the areas where they are needed.

Rising competition?

There has also been a steady increase in the proportion of families not getting a place at their most preferred school or a place in any one of their top three preferences.

Figure 2 shows the gradual increase in the percentage of families whose school preferences are not being met. As before there are big regional variations, with London worst affected. One in three families in London did not get their top preference in 2018, while about one in eight did not get any of their top three preferences.

The number of appeals is rising

Over the last three years the number of families who have had an appeal heard about their secondary school allocation has also risen slightly. In 2015/16, the proportion of parents appealing secondary school allocations was 3.6 per cent, which rose to 4.1 per cent in 2017/18.

While part of this may be due to the rising secondary pupil numbers since 2015/16, it may also be an outcome of growing tensions caused by greater competition for places and falling percentages of families being allocated a place in any of their top preferred schools.

Demand set to rise further

The supply and demand trends, along with a reduction in parental preferences being met, are particularly worrying as the Department for Education's (DfE) own projections indicate that there will be an extra 376,000 pupils in the secondary school system by January 2023 compared to 2018 levels (see figure 3).

This is largely due to the increase in the live birth rate in England from around the early to late-2000s. Overall, secondary pupil numbers in January 2023 will be 16 per cent higher than 10 years earlier.

What can local authorities do?

As local authorities know how many children they have in their primary schools, it should be possible for them to accurately predict the number of places needed at secondary level in any given year well in advance and take action to create sufficient pupil places. Many local authorities will have already started to make plans to meet this growing demand for places, although knowing about the growing demand and having the ability to implement changes at sufficient speed can be a challenge.

There are several ways that the available secondary capacity in a local authority may be increased, each of which will have an impact on school leaders. A new free school could be opened, which depending on its size could bolster capacity significantly, albeit not for a few years as there are considerable steps to work through, from navigating the complex planning process and finding a suitable site to hiring sufficient numbers of new staff. While a new school adds capacity, it also increases competition to attract pupils, which may be an issue for any local schools which are judged by Ofsted to be underperforming.

Another lever that local authorities may seek to use, which can be quicker to implement, is to work with school and academy leaders to expand an existing school. Local authority schools or academies may agree to take on a bulge class for one or more years, or to increase the number of form classes in the school, or expand existing classes. The local authority will work with school leaders in their planning area to explore whether they have scope to expand to help meet this extra demand or whether they can take on extra pupils within their existing structures, all of which brings extra challenges.

National data suggests that increasing secondary class sizes may already be happening as they average 1.1 pupils more than they did in 2013/14. Figure 4 shows that the number of classes with more than 30 pupils has also risen by 2.1 percentage points since 2013/14.

What does this mean for schools?

With secondary school places in England projected to continue to increase, and at an even faster rate than seen in the previous half decade, this could have a big impact on secondary schools. Without a considerable increase in places available in key areas, there could be yet more local authorities that do not have enough spaces to meet demand. This may lead to a rising number of families not receiving a place at one of their top preferred schools, increasing tension with parents and the unhappiness of pupils, who have to attend a secondary school they did not want.

There are also significant potential consequences for school leaders and teachers. School leaders may have to deal with more issues around reduced pupil engagement, more requests from parents seeking to move their child to/away from their school, and greater pupil mobility.

Teachers may be increasingly likely to teach in crowded schools or teach larger classes. Extra pupils, even if they can be accommodated in temporary classrooms, may put pressure on all school services, such as dining halls, sport facilities and pastoral care provision. These factors could have negative consequences for staff recruitment and retention, which may already be a problem area for the school.

So brace yourselves, as the next few years look likely to be challenging. It is important that the DfE looks urgently at how they can support local authorities and schools in areas where there are not enough school places to meet demand. SecEd

• *Zoe Claymore is a researcher at the National Foundation for Educational Research.*

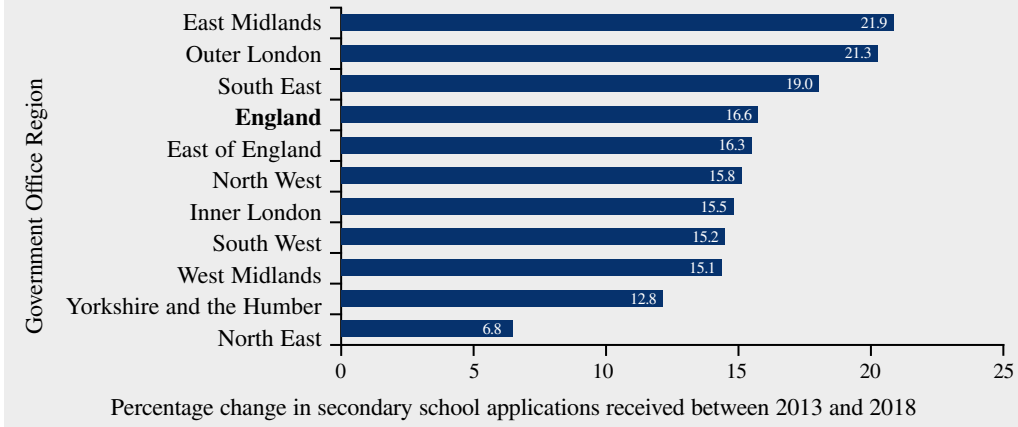

Figure 1: Pupil numbers have risen in all regions, with some having larger increases than others

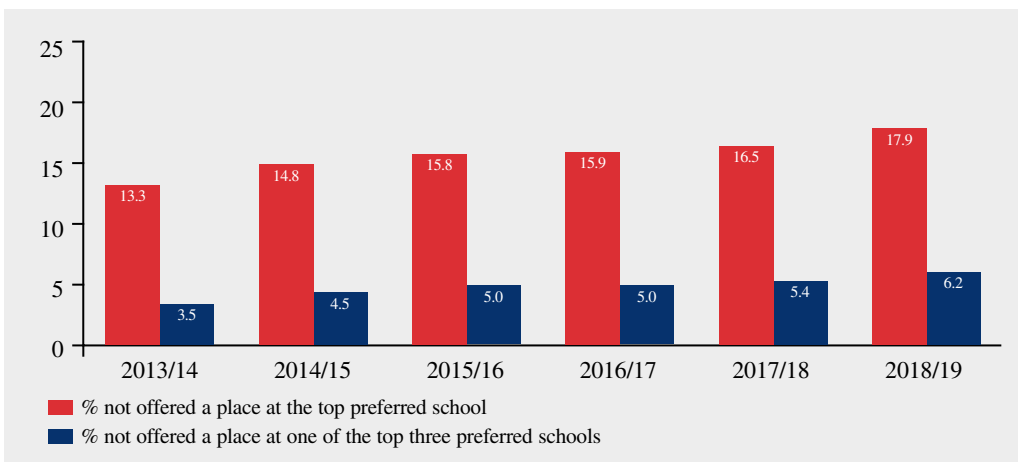

Figure 2: More pupils are not being allocated a place at their preferred secondary schools

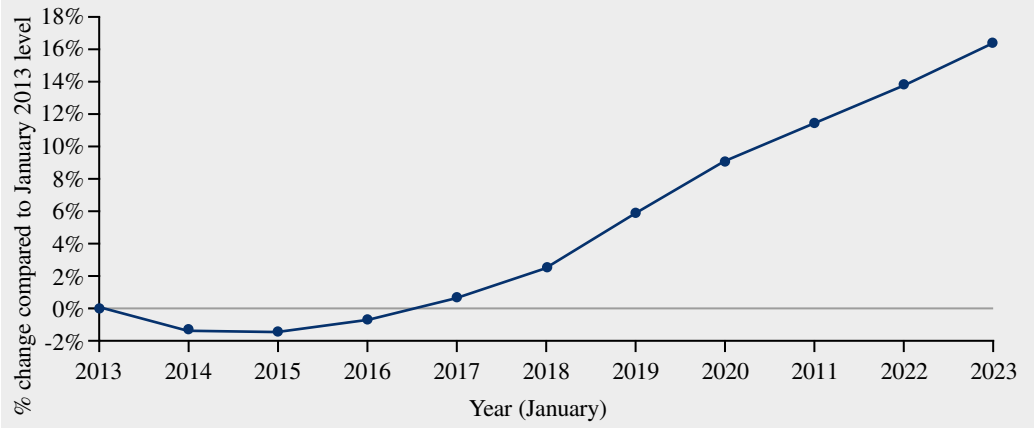

Figure 3: Pupil numbers in state secondary schools are projected to continue to rise

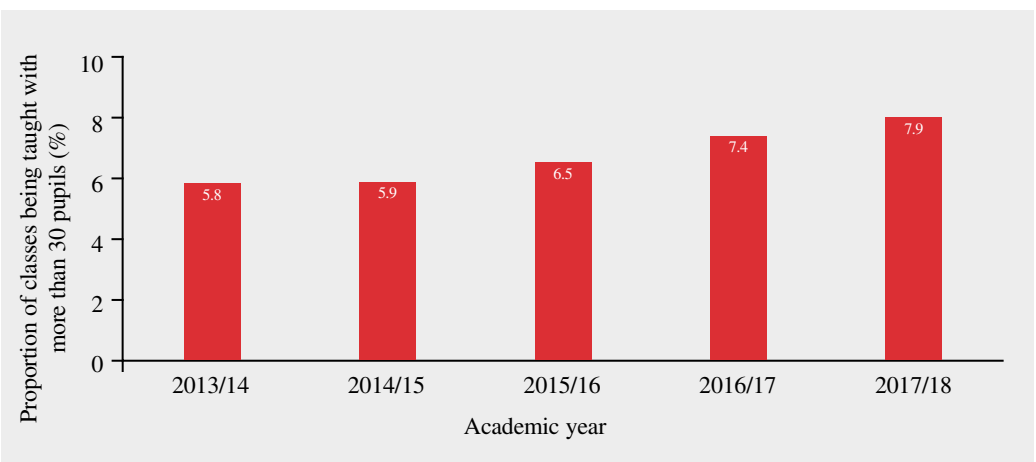

Figure 4: The proportion of classroom teachers teaching large classes is rising

Are free schools achieving their aims?

Image: Adobe Stock

The free school programme is a flagship policy of the Conservative government, but eight years on has it achieved its stated policy aims? **Jennifer Garry** reports on new research into the free school project

Recent research by the National Foundation for Educational Research (NFER) and the Sutton Trust found that pupils at secondary free schools perform slightly better compared to similar pupils at other schools.

Although it is still early days for free schools, these initial findings suggest that secondary free schools are doing well in terms of improving pupil performance. However, are they meeting all of their original policy aims?

Free schools were first introduced in 2010 as one of the coalition government's flagship education policies. The free school programme aimed to bring new and innovative providers, including parents, into a more autonomous and self-improving school system, driving up standards through greater innovation and school choice.

Today there are 113 secondary free schools in England and a further 37 which are all-through free schools. These numbers are expected to continue to rise, with more already in the pipeline.

During the 2017 General Election campaign, the Conservatives also pledged to open 100 free schools in each year of the current Parliament. More recently in May 2018, the government announced that they were looking to open new mainstream free schools in areas that currently have the lowest standards and have a need for additional school places.

As free schools are expected to remain a key part of the government's education policy in England, we looked at the data to consider whether the existing secondary free schools are having a positive impact on the education system and successfully achieving their original policy aims.

Encouraging parental involvement

One of the original intentions of the free schools programme was to encourage groups of parents to set up schools in their communities.

However, our research found that only one in five secondary free schools opened to date has had parents involved in their inception.

The number of schools with parental involvement was higher in the early years of the programme, with parents involved in the set-up of more than 40 per cent of secondary free schools opened between 2011 and 2013. However, since 2015, this figure has dropped to less than 20 per cent.

Innovation

Another aim of the free school programme was to increase the number of schools with innovative approaches to their curriculum or ethos. As part of this research, we explored how many secondary free schools opened to date demonstrate such an approach.

We did this by reviewing school prospectuses, websites and other publicly available documentation to identify which free schools demonstrated an innovative concept which was central to their identity and ethos, and widely embedded in the curriculum or school activities. These we classified as innovators.

After carefully reviewing all the secondary free schools, we found that we had classified less than one-third of those opened to date as innovators.

New academy free schools

Since the inception of the free schools programme, many of the new secondary free schools that have opened have had a multi-academy trust (MAT) involved in their creation.

Around half of the secondary free schools set-up between 2011 and 2015 were opened by a MAT. However, this jumped to over three-quarters of secondary free schools opened since 2015. Such schools are less likely to have parent involvement. Nor are they likely to be innovative – our research finds that only 18 per cent of secondary free schools set up by MATs are innovator schools compared with 46 per cent of the non-trust led schools.

It appears that the free school programme has primarily become a vehicle by which new schools are opened by academy chains to increase capacity.

Building capacity

One of the long-standing debates that has been taking place since the free schools programme was introduced is whether they are being set up in the areas where there is a need for more school places.

The report finds that secondary free schools have largely been set up in such areas (See figure 1, below).

While this additional capacity is welcomed, the Department for Education's (DfE) own forecasts show that an extra half a million secondary school places will be needed in the next 10 years. There is therefore, still much to do to expand capacity to meet this rising demand for places.

Improving school performance

Initial signs are that secondary free schools are taking positive steps towards raising pupil performance. We find that pupils in secondary free schools perform slightly better at key stage 4 than pupils with similar characteristics in other mainstream secondary schools. Furthermore, disadvantaged pupils in secondary free schools outperform their peers in other school types by the equivalent of one grade higher in three subjects.

Initial results at key stage 4 are promising but, they are still currently based on a relatively small number of pupils. As time goes on, it will be interesting to observe whether this positive trend in the key stage 4 performance of free schools continues.

What should the role of free schools be in future?

Our research indicates that secondary free schools may not be as unique and innovative as was initially intended.

Instead, the programme is increasingly reflecting the fact that it is the only vehicle for new schools at a time of rising rolls.

As free schools are a continuing area of investment for the government, greater clarity about their purpose would be helpful, and would allow a more full evaluation of whether they are delivering their policy objectives and are value for the investment made. SecEd

• *Jennifer Garry is a researcher at the National Foundation for Educational Research (NFER) and co-authored the Free For All? report.*

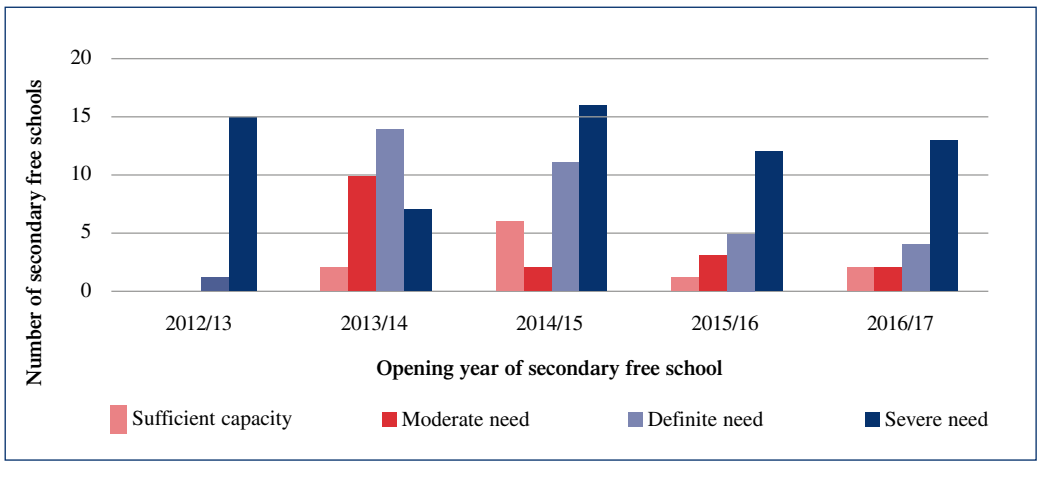

Figure 1: Most secondary free schools have been set up in areas with a severe basic need

"As free schools are a continuing area of investment for the government, greater clarity about their purpose would be helpful, and would allow a more full evaluation of whether they are delivering"

Summary: Free For All?

The research – *Free For All? Analysing free schools in England, 2018* – was published by NFER and the Sutton Trust in May 2018. It combines secondary data analysis using multiple government datasets and systematic searching to create a typology of free schools in England. Headline findings include:

- **Free schools are not fulfilling their original purpose. Only one-third of free schools set up to date were found to demonstrate a novel approach, while only one in five have had parents involved in their inception. In contrast, the number of free schools which have had MATs involved in their inception has increased. Overall, 178 free schools have been set up by MATs (nearly 60 per cent).**
- **Free schools have largely been set up in areas with a need for more school places. Almost all secondary free schools have opened in areas which had insufficient available capacity. Conversely, a number of the earliest primary free schools were opened in areas that had enough capacity. Since 2013/14, most primary free schools have been opened in areas with at least some need.**
- **Secondary free school pupils achieve slightly better attainment outcomes. At key stage 4 in 2016/17, they performed slightly better than pupils with similar characteristics at other types of school. Disadvantaged pupils in free schools performed the equivalent of a quarter of a grade higher in each subject compared to their peers with similar characteristics.**

The full report by Jen Garry, Chloe Rush, Jude Hillary, Carl Cullinane and Rebecca Montacute is free to download via www.nfer.ac.uk/free-for-all-analysing-free-schools-in-england-2018/

Image: Adobe Stock

The evidence on funding

Complaints about a lack of school funding are frequently hitting the headlines, with concerns over how budget pressures will affect schools and colleges in England. **Maire Williams** looks at what the evidence tells us

School funding continues to be a top issue in education, with parents, teachers, governors and schools all waiting for the government to announce their spending plans beyond 2020.

In a speech at the annual conference of the National Association of Head Teachers (NAHT) in May, the education secretary, Damian Hinds, recognised the new cost pressures placed on schools, such as higher employer contributions to National Insurance and the Teachers' Pension Scheme.

He also acknowledged that society now expects schools to do more with their funding than they did a generation ago, including looking after pupils' mental health, checking for signs of radicalisation, and monitoring health and social issues.

Yet no additional school funding was announced at the event. However, a few days later, an extra £50 million of capital funding was revealed, but this was for selective schools only and was designed to enable them to offer more places rather than increase spending per-pupil.

In terms of non-selective schools, the government appears to remain focused on making the current funds go as far as possible by eliminating any inefficiencies and focusing money on what works.

The House of Commons' Education Select Committee has launched an inquiry into school and college funding which echoes this interest, with one of their key questions focused on the effectiveness of targeted funding, such as the Pupil Premium.

The problem with this is that while we have some indication of what works, this is still being established, and what works in one school may not necessarily work in all schools. As noted by the National Audit Office (2016), this makes it difficult for the government and schools to identify with certainty, if and where costs can be cut without detrimental effects.

Schools' reaction to funding changes

Following the 2015 Spending Review, schools entered a period of reduced total funding. Between April 2015 and March 2017, total school funding fell by just under five per cent in real-terms.

The government's current funding plans for non-selective schools, including the additional £1.3 billion of funding announced in 2017, are expected to result in a real-terms freeze in per-pupil funding over 2017 to 2019.

A recent report by the National Foundation for Educational Research (NFER) – *School Funding in England Since 2010: What the key evidence tells us* – looked at what effect these changes have had on school spending, along with what we know about the relationship between school funding and educational outcomes.

This found that schools have typically reacted to reductions in their real-terms budget by:

- Reducing the number of staff they employ.
- Replacing more experienced staff with younger recruits.
- Relying more on unqualified staff.
- Narrowing their curriculum.
- Reducing maintenance spending.
- Not upgrading IT equipment.

However, our report also found that few studies provide any robust estimates of the impact of these specific changes on educational outcomes, meaning that we have little evidence on how recent cuts can be expected to affect pupils.

Such studies that do provide estimates suggest that school resources have a modest positive influence on attainment, though this relationship is usually confined to primary schools.

Funding targeted at disadvantaged pupils

NFER's school funding report did show that the observed benefits of higher spending appear to differ depending on the characteristics of pupils, and are typically greater for pupils from disadvantaged backgrounds.

In addition, the effects of expenditure are found to be higher and more significant in schools with more disadvantaged students – and all types of students in the most disadvantaged schools appear to benefit from additional funding, not just the disadvantaged students.

This suggests that funding targeted specifically at disadvantaged pupils, such as the Pupil Premium, has the potential to raise attainment not just among disadvantaged students, but also among their fellow students.

This does not mean that targeting more money at disadvantaged children is a simple solution. A range of work looking at the Pupil Premium indicates that what the money is actually spent on is equally important. Another report by the NFER – *Supporting the Attainment of Disadvantaged Pupils: Articulating success and good practice* – found that schools successful at increasing attainment among disadvantaged students were more likely to be teaching pupils specific strategies to monitor and evaluate their own academic development, as well as using peer-to-peer learning.

> **The effects of expenditure are found to be higher and more significant in schools with more disadvantaged students – and all types of students in the most disadvantaged schools appear to benefit from additional funding**

The Teaching and Learning Toolkit produced by the Education Endowment Foundation, which outlines the effectiveness of different strategies in raising attainment, also reached similar conclusions.

The future impact of the Pupil Premium

Resources such as those mentioned above are increasingly being used by schools to ensure their spending decisions are evidence-based, helping them to get the most out of their Pupil Premium funding.

In addition, given that funds targeted at disadvantaged pupils do appear to be associated with improvements in performance, the Pupil Premium has also been beneficial in terms of increasing the number of schools targeting funding at disadvantaged pupils.

In 2014, 94 per cent of schools targeted support at disadvantaged pupils, up from just 57 per cent before its introduction in 2011 (National Audit Office, 2015).

But there are concerns that funding cuts or continued freezes may undermine the future success of the Pupil Premium. NFER's Teacher Voice survey found that 20 per cent of teachers reported schools using the Pupil Premium to plug gaps in their budgets.

If budgets continue to tighten, this percentage may increase, limiting funds dedicated to helping pupils from disadvantaged backgrounds realise their potential. As the Pupil Premium is one of the main policies designed to address the attainment gap between disadvantaged and non-disadvantaged pupils, this could have knock-on-effects for the government's aim to improve social mobility.

At a time when increasing responsibility is being placed on schools to provide holistic support for pupils, it is important to note that providing this support comes with extra costs for schools. As we set out in our report on school funding, more work needs to be done to understand how current policies and demands on schools are affecting attainment and social mobility.

As we approach the end of the current spending review period and begin thinking seriously about how to fund schools beyond 2020, now is the time to prioritise this research, in order to ensure future school budgets are sufficient to allow schools to do all that is expected of them. SecEd

• *Maire Williams is a research manager specialising in school funding at the National Foundation for Education Research (NFER).*

Further information

- *Supporting the Attainment of Disadvantaged Pupils: Articulating success and good practice*, NFER, November 2015: www.nfer.ac.uk/publications/PUPP01
- *School Funding in England Since 2010: What the key evidence tells us*, NFER, January 2018: www.nfer.ac.uk/publications/IMSF01
- School and college funding inquiry, Education Select Committee: http://bit.ly/2r0zIlL
- *Financial Sustainability of Schools*, National Audit Office, December 2016: http://bit.ly/2JzqC9X
- Teaching and Learning Toolkit, Education Endowment Foundation: https://educationendowmentfoundation.org.uk/evidence-summaries/teaching-learning-toolkit/
- *Funding for Disadvantaged Pupils*, National Audit Office, June 2015: http://bit.ly/2xMSToY

Making new T levels a success

With the introduction of T levels, the government has signalled one of the biggest shake-ups in the English qualifications system for years. **Dr Claudia Sumner** looks at the evidence of how schools and colleges can work with employers to provide students with effective practical experience – a key part of the new qualifications

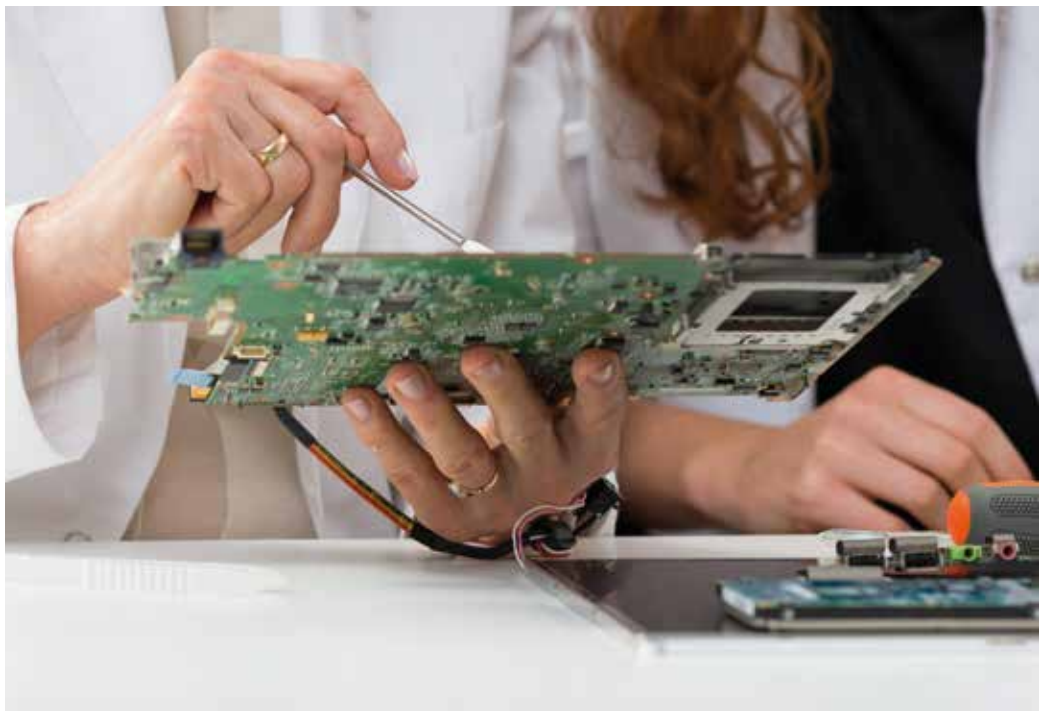

Image: Adobe Stock

The first tranche of new technical qualifications, known at T levels, will be available to students from 2020. Though T levels are new, there is existing evidence on the operation of work experience placements that can be used to inform the development of one of their key features: meaningful work placements.

In this article we consider what we can learn from that evidence about the contribution of employers in designing and delivering meaningful placements that will contribute to the success of the new qualifications.

In 2016, Lord Sainsbury published a review of technical education in the UK (*Post-16 Skills Plan*, July 2016). He identified "serious problems" with a system that it is "over complex", and unfit for the 21st century. He said that vocational qualifications had "become divorced from the occupations they should be preparing individuals for".

The government responded by introducing radical reforms to technical qualifications. It aims to simplify the system for post-16 by offering young people just three routes: academic A levels and the technical options of work-based Apprenticeships or college-based T levels.

What are T levels?

The Department for Education's (DfE) T level action plan (October 2017) states that T levels are new technical study programmes that will sit alongside Apprenticeships within a reformed skills training system.

The two-year T level study programme will generally be taught full-time in a "classroom, workshop or simulated environment". The qualification will also include a work placement of up to three months that is intended to build vocational competencies, as well as maths, English and digital skills. Assessment will take place at the end of the programme, leading to a Level 3 T level certificate.

In order to structure and deliver the new, simplified technical routes, the government has drawn up 15 technical occupation routes: four to be delivered through Apprenticeships and 11 though the T level programme. The first three T levels, in digital, childcare and education, and construction will begin in 2020 (for more details, see the DfE's T level action plan).

Timetable for the introduction of T levels

The first T levels will be available from 2020, with more being rolled out from 2021/22.

- From 2020: Digital; Construction; Education and Childcare.
- From 2021: Legal, Finance and Accounting; Engineering and Manufacturing; Health and Science.
- From 2022: Hair and Beauty; Agriculture, Environment and Animal Care; Business and Administrative; Catering and Hospitality; Creative and Design.

Work placements

Evidence on the way existing and previous work placements operate suggests that employer buy-in through the provision of high-quality work placements could be crucial to the success of the new qualification.

Research by NFER (2013) has identified a number of factors associated with successful work placements.

First, work placements must be meaningful and relevant to students. For example, animal care students working at a country park or vets; health and social care students working with speech therapists at a care home or working at a nursery school; engineering students putting their learning into practice at an engineering company; or creative arts students helping to edit a local radio programme.

Furthermore, students value the opportunity to assume responsibility for tasks. For example, an further education college digital and creative centre organised BTEC placements based on students undertaking a particular project/piece of work (assignment) to reflect the real-world digital creative industry sector.

Placement employers specified the content and deadlines of the assignment, including the activities they expected students to complete, what resources they expected them to use, and which people they expected them to consult. Prior to students embarking on a placement, employers came into the college and provided master-classes and other forms of employability-related support and guidance to students.

Our research on previous examples of work experience embedded in study programmes for 16 to 19-year-olds also suggests that creating longer work placements directly linked to the content of each T level programme could play a key role in providing students with a high-quality placement (NFER, 2015a).

Organising work placements

It is vital that schools, colleges, employer-organisations and the DfE work together to provide support to employers to identify and overcome any perceived barriers to hosting work placements, such as the need for DBS checks, health and safety issues and insurance cover.

NFER's *How to provide meaningful experience of the world of work for young people as part of 16 to 19 study programmes* guidance for senior leaders in schools and colleges (2015b) may help those starting to think about designing T level work placements in their own school or college because it identifies several ways of supporting employers to provide work experience, that can also help to inform the setting up of work placements. One excellent example is proactively engaging with the needs of local employers and working in partnership with them to prepare young people before they begin their work placements.

In our exploration of 16 to 19 study programmes, we found that the role of the college work experience coordinator was crucial in overcoming any reluctance among employers to offer work placements, as well as engaging a sufficient number of them.

Monitoring the quality of placements

Ensuring that work placements are high-quality, using college monitoring and support systems, is crucial to ensure that students enjoy and get the most from a successful experience. Schools and colleges can draw on existing evidence to inform their decisions.

Work placement coordinators are increasingly embedding monitoring functions in their management processes (NFER, 2013). Particularly valuable are ways to capture the benefits of the placement for students, such as the variety of work taken and the range of skills gained, which can be done in a number of ways:

- Colleges may help to gather evidence for student portfolios through collating feedback from students and employers with information collected by school/college staff though placement visits or phone calls.
- Some schools and colleges are introducing electronic Individual Learning Plans (ILP) with a section for work placements, where students can log details of placements they have undertaken and the skills they developed. Some ILPs included templates for employers to provide students with a reference – which they can then show potential employers, much like a real reference.
- Colleges can create review sheets to be completed by students and employers on a weekly/fortnightly basis in order to provide evidence of tasks and skills.

Support for vulnerable students

Vulnerable young people, including those with learning difficulties and disabilities, or those at high risk of becoming NEET (not in education, employment of training), may need additional support to reach their potential and succeed in their studies. Our research on work experience placements (NFER, 2013) found that the most effective colleges improved outcomes for vulnerable students by:

- Investing in procuring appropriate work experience and offering one-to-one support to help young people travel to and from a place of work.
- Offering guidance to students as to what will be expected of them while they are at the work experience. This investment was found to maximise young people's chances of succeeding in their chosen path.
- Providing mentoring for students through a dedicated project lead who establishes a relationship with the young person.

Conclusion

T levels have the potential to offer young people an alternative route to achieving a quality technical qualification. The work placements available through T levels could play an important part in helping young people to develop the skills they will need to succeed in the workplace. Meaningful employer engagement in the design and management of work placements, and careful monitoring of their quality and focus will be important to the success of the new qualification. SecEd

• *Dr Claudia Sumner is a senior research manager at the National Foundation for Educational Research.*

Further information

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- *Post-16 technical education reforms: T level action plan*, Department for Education, October 2017: http://bit.ly/2JqN4hZ
- *Evaluation of the work experience placement trials*, NFER, October 2013: www.nfer.ac.uk/publications/WEXX01
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- *What makes work experience effective?* NFER/*SecEd* Research Insights article, April 2015: www.sec-ed.co.uk/best-practice/what-makes-work-experience-effective/

Preparing schools for PISA 2018

As PISA 2018 gets under way, the NFER's **Rebecca Wheater** looks at how it works, what it tells us, and explains why it's important for schools to take part

The Programme for International Student Assessment (PISA) is the world's biggest international education study, involving schools and pupils in more than 80 countries.

Co-ordinated by the Organisation for Economic Co-operation and Development (OECD), PISA helps us to understand how well pupils can apply knowledge and skills in reading, mathematics and science in everyday life to analyse, reason and communicate effectively. It also collects valuable information on pupils' attitudes and motivations to help understand how they contribute to pupil performance.

Findings from the study will provide high-quality, internationally comparative data to inform education policy in the UK and across the world. This can be used to improve teaching and learning in reading, science and maths and to provide valuable insights into background factors such as pupils' attitudes, school resources, teachers' practices and qualifications – and how they relate to pupil achievement. PISA 2018 will particularly focus on reading skills and attitudes towards reading.

> **"There continues to be more difference in education outcomes within a country than between countries, and within schools than between schools"**

Pupils aged 9 and 10 in England and Northern Ireland took part in another international study focusing on reading in 2016 – the Progress in International Reading Literacy Study (PIRLS).

The PIRLS results, published in December 2017, showed that on average children in England had improved their reading scores compared with the previous round of the study, and England's lower performing children, typically boys and those from disadvantaged backgrounds, had improved their scores the most. Higher PIRLS reading scores were also associated with higher performance in the phonics check at the end of year 1 (DfE, 2017). PISA 2018 will make an important contribution to the debate, providing a baseline before this same cohort of children reach secondary school and we can examine whether the observed improvement in reading outcomes persists.

Pupils in Northern Ireland maintained their high level of performance in PIRLS with only two other participating countries scoring significantly higher. More than one-fifth of pupils in Northern Ireland achieved the "advanced international benchmark" in reading, which was the third highest percentage internationally and a significant increase since 2011 (Sizmur et al, 2017). These results provide important evidence on the strength of education in Northern Ireland, including its primary curriculum with its emphasis on cross-curricular skills.

Five benefits of the PISA study

- **Tells policy-makers, schools and researchers more about how well pupils can apply the skills and knowledge learned in school to real-life situations, and how their skills relate to their experiences in school and their attitudes.**
- **Provides more information about the relationship between disadvantage and pupil achievement, as well as the influence of other pupil characteristics.**
- **Provides insights for teachers into how to support the development of key skills.**
- **Gives participating schools the opportunity to tell us about their experiences and to be part of a study that gives governments independent information and directly influences policy-making in the UK and around the world.**
- **Participating schools receive a report, available only to each individual school, about their pupils, including comparative national information, which schools find useful for self-evaluation.**

PISA 2018

The National Foundation for Educational Research (NFER) is the PISA 2018 national research centre for the UK, conducting the survey on behalf of the Department for Education (DfE) (England), the Department of Education (DE) (Northern Ireland), the Welsh government and Scottish government. So, how can we be sure that data collected gives us a true picture of what 15-year-olds can do in the UK, and is comparable with other countries?

To ensure good quality data is collected, strict international quality standards are applied at all stages of the study. For instance, we can only invite schools to take part that have been randomly sampled by international researchers to be nationally representative, meaning that each school represents other schools with similar characteristics. This in turn means we require high participation rates from these schools to ensure the data we collect is a fair reflection of the country as a whole and can be used to make comparisons with other countries.

The assessments of reading, maths and science, and the questionnaires which pupils and schools complete also go through a rigorous process where they are adapted to the UK context by NFER researchers and all changes are agreed internationally to ensure that the materials used in the UK are comparable with those used in other countries.

What did PISA 2015 tell us?

PISA 2015 found that there continues to be more difference in education outcomes within a country than between countries, and within schools than between schools. Pupils with the highest attainment in the UK have results as good as the best in the world, but fewer pupils in the UK reach this level compared with the highest performing countries.

So, what did we learn about the UK nations from the last round of PISA in 2015?

- Science: England had the highest average science score of any UK country. Average science scores have dropped significantly in Scotland and Wales since 2006, while Northern Ireland has remained stable.
- Maths: England, Northern Ireland and Scotland had similar average maths achievement to the OECD average. Maths achievement has remained stable for all countries since 2012.
- Reading: There were no significant differences in reading achievement scores for England, Northern Ireland and Scotland. There was no significant change to reading achievement scores for any UK country since 2006.

Disadvantaged pupils

PISA examines the impact socio-economic status has on performance. In PISA 2015, in the UK, England had the largest gap between the average performance of pupils with high and low socio-economic status, and Wales had the smallest.

The relationship between socio-economic status and outcomes was also weakest in Wales, meaning differences between high and low performing pupils can only be weakly explained by differences in the socio-economic status of pupils – there are other factors also at play.

In England, a greater proportion of pupils with low socio-economic status had high achievement scores, than Northern Ireland, Wales and Scotland. These pupils are called "resilient" by the OECD.

What does participation mean?

As schools selected to participate in PISA 2018 start to receive information on taking part in the study, what does participation mean for them?

Schools are supported throughout their participation by the NFER PISA team and their NFER PISA administrators. PISA is a computer-based assessment, so we work closely with schools to ensure that their computers are ready to run the study on their agreed study day.

For pupils, the study comprises a two-hour assessment to answer multiple-choice and open-ended questions on reading, science and mathematics, and up to 45 minutes to complete a questionnaire about themselves and their school. Pupils do not need to prepare in advance.

A member of the senior leadership team of each school is also asked to complete a questionnaire asking about school climate and resources.

All marking is conducted by NFER, and schools receive their own school report when the results for the UK and other participating countries are published in December 2019.

It is the contributions of pupils and teachers that make PISA a success, and we are very grateful to all the pupils and teachers who take part. If you are invited to participate, thank you for all your efforts in ensuring that the study is a success in the UK. SecEd

• *Rebecca Wheater is a senior research manager at the National Foundation for Educational Research*

Further information

To find out more about the study, visit the NFER's PISA webpages at www.nfer.ac.uk/pisa

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Image: Adobe Stock

A successful careers offer

Image: Adobe Stock

Schools have a duty to offer independent and impartial careers guidance. **Dorothy Lepkowska** looks at research into how London schools are successfully delivering on this duty

The duty to provide independent and impartial careers guidance was passed to schools in 2012. Although many schools have risen to this requirement it is widely recognised that careers provision in England is still currently patchy.

To support London schools in their careers provision, the London Ambitions careers offer was developed by the London Enterprise Panel and London Councils and launched in 2015.

Some schools have proactively taken on board the new challenge to ensure their students were prepared for leaving school. In November, the National Foundation for Educational Research (NFER) and London Councils published the findings of a report into emerging promising practice in the delivery of impartial and independent careers advice and guidance in several London schools.

NFER researchers carried out an in-depth study on how five institutions – a primary school, a special school, two secondary schools and a further education college (identified by London Councils) – were successfully preparing their learners for the world of work.

The study – *London Ambitions Research: Shaping a successful careers offer for all young Londoners* – found that all five schools were outward-looking and placed a great deal of focus on responsive provision that was tailored to the needs of their students, as well as the local context of the communities they served (see panel, above right).

A successful strategy requires senior leaders to value the place of careers education and guidance, and to support its development, by making sure appropriate staff and curriculum time were available to deliver it effectively. In the college, each student was assigned a personal tutor, while one of the schools brought in careers advice to provide one-to-one input for year 11 students who were not aiming at university.

Senior leaders were backed by governors, who were able to assist with their own business contacts, but also to ensure that careers education, information, advice and guidance (CEIAG) was delivered across the school.

Among the most important aspects of delivering effective CEIAG was engagement with employers. All the institutions involved in the study were proactive in making these links to "widen their students' horizons and provide them with multiple opportunities to interact with different types of employers", the report said.

In one school, for example, the professionals who worked with the students included a radiographer, computer programmer, chef, accountant and musician.

One headteacher described the value of external input: "The visitors are great. Wherever we can get real-life people that do various things is wonderful because children are actually so fascinated."

Meanwhile, a student told researchers: "It kind of felt exciting learning about jobs, because some of them I didn't really know about."

Furthermore, the successful schools and college recognised the importance of developing students' employability skills, including team-work, problem-solving and communications. They ran workshops on aspects such as CV-writing, getting into university and discussions about Apprenticeships. In one school, students took part in a "speed-dating" event where they were able to spend short sessions with employers to question them on their business. In the primary school, meanwhile, staff organised a Family Careers Day, which was attended by parents and saw external speakers from a variety of sectors came into school to talk about their work.

The report recommended that if CEIAG is to become successfully implemented in a school, then it has to be delivered through a whole-school approach supported by senior leaders, with everyone in the school fully understanding its importance. It suggested teachers would benefit from CPD on the importance of CEIAG, and that it should be prioritised across the school into a structured approach across all year groups.

Schools also needed to ensure that the learning experiences given to students were meaningful, so they are able to make informed choices about what lies ahead.

> **"Many young people do not realise what a job involves, so enhancing business partnerships will help young people make the right choices regarding their education and employment opportunities"**

"The world of work should permeate all types of learning in school so that young people acquire a clear sense of the purpose of the subjects they are learning and the skills they need to develop in order to progress in study or employment," the report's authors said. Exposure to employers, it added, gave them a clear idea of what a particular job involved.

At the same time, more employers needed to be encouraged to become involved in schools, in order to offer opportunities of the work of world that awaits today's young people. The report added: "Employers' input into the education of young people and the development of young people's skills for the workplace is vital to the UK's industrial strategy and productivity".

Peter John, deputy chair of London Councils and executive member for business, skills and Brexit, said: "With youth unemployment in the capital at nine per cent, NFER's report reinforces the importance of London schools, colleges and businesses working together to deliver a successful careers offer for all young Londoners.

"It is encouraging that young Londoners are already starting to reap the rewards of schools and colleges working more closely with businesses. They can do more by signing up to the London Ambitions Portal, a website that links schools and colleges with local businesses, as well as getting further inspiration from the London Ambitions Careers Curriculum."

Tami McCrone, one of the authors of the report and senior research manager at NFER, added: "The schools and college we spoke to have already made significant steps in providing a high-quality CEIAG programme for their students. This report emphasises that giving CEIAG a priority in schools and colleges is important in raising aspirations and motivation in young people to succeed in the world of work.

"Many young people do not realise what a job involves, so enhancing business partnerships will help young people make the right choices regarding their education and employment opportunities. Students need to be prepared for the opportunities that are available and good CEIAG can help support that." SecEd

• *Dorothy Lepkowska is a freelance education journalist.*

Further information

- To support school leaders and teachers, NFER and London Councils have released an accessible PowerPoint guide, which provides evidence-based illustrations of delivery of careers education and guidance within some London schools and colleges. The free guide can be found at www.nfer.ac.uk/publications/LAMB01/
- The NFER and London Councils report, *London Ambitions Research: Shaping a successful careers offer for all young Londoners*, can also be found at www.nfer.ac.uk/publications/LAMB01/
- More on London Ambitions can be found at https://londonambitionsportal.london.gov.uk

Bring the world of work to school

- **Develop a whole-school strategy to provide CEIAG, led by senior leaders.**
- **Organise on-site careers events and workshops for pupils and their families.**
- **Organise external taster days and visits to workplaces and colleges/universities.**
- **Plan work experience placements for pupils, including in community settings.**
- **Hold mentoring sessions for pupils, particularly those who are disadvantaged or vulnerable, about opportunities on offer.**
- **Give advice about Apprenticeships as a part of careers advice and guidance.**

Successful school-to-school collaboration

Image: Adobe Stock

At the heart of the self-improving school system is school-to-school collaboration, but how can collaboration work effectively for the benefit of all involved? Claudia Sumner and Karen Wespieser look at the research evidence

The self-improving system relies on high-performing schools and effective school leaders working beyond the parameters of their own institutions to support the wider school landscape.

At its heart is the notion that stronger and weaker schools should work together to drive up standards for the mutual benefit of both. But what does this look like in practice and does the system have the capacity to support it?

The theory of the self-improving system

Describing the concept of a self-improving school system in 2010, the government stated: "Our aim should be to create a school system which is more effectively self-improving ... it is also important that

> **Ideally, collaborative arrangements should involve institutions demonstrating excellent practice that can be shared, while recognising that such practice cannot be simply replicated between institutions**

we design the system in a way which allows the most effective practice to spread more quickly and the best schools and leaders to take greater responsibility and extend their reach." (Department for Education, 2010).

In its report on school collaboration in 2013, the Education Select Committee noted that "school partnerships and cooperation have become an increasingly important part of what has been referred to as a 'self-improving' or 'school-led' system". A school-to-school partnership approach can facilitate collaboration and allow schools to provide resources to support each other while retaining autonomy. Ideally, collaborative arrangements should involve institutions demonstrating excellent practice that can be shared, while recognising that such practice cannot be simply replicated between institutions.

Collaboration between institutions should be two-way. For example, the national schools commissioner, Sir David Carter, has spoken of the incentives for outstanding schools to engage with underperforming neighbours, explaining that "every school ... should be both a giver and a receiver of support" (ASCL et al, 2016) and that "there is as much, possibly even more, to learn from the teachers who have gone from special measures to good as there is from the ones who have gone from good to outstanding" (Busby, 2016).

Collaboration in practice

In Wales, the Welsh government has been trialling a collaboration initiative called the Lead and Emerging Practitioner School Pathfinder Project. The project aims to raise the standards of educational practice and attainment within primary and secondary schools in Wales by facilitating school-to-school support. During the Pathfinder, a "Lead Practitioner School" works with an "Emerging Practitioner School" to share, disseminate and implement good practice approaches to teaching and learning on a systematic basis for 18 months.

The evaluation of the project found a range of collaborative practice is undertaken and could be grouped into three broad categories: teaching and learning, leadership, and using data and assessment.

Most schools engaged in activities which covered all three categories, with a main focus on teaching and learning.

The headteacher of one of the secondary lead practitioner schools said: "Effective and lasting change is attitudinal and cultural as opposed to structural. It requires change by all within the system, but particularly by schools which need to realise fully the advantages of collaboration over competition."

In England, initiatives such as the Department for Education's Gaining Ground Strategy have also focused on using school-to-school collaboration to drive improvement. Gaining Ground supported school improvement in secondary schools that have reasonable-to-good GCSE examination results, but have poor progression rates in English and mathematics. The intervention included, among other things, partnership with high-performing schools to support, challenge and inspire.

The evaluation of the strategy concluded that school-to-school partnership was most effective when:

- Schools have similar characteristics.
- Schools are within reasonable travelling distance.
- Schools have staff time and commitment from both parties and partnerships at different levels of seniority.

Capacity for collaboration

In order for these types of approaches to work, there needs to be sufficient capacity in the system within reasonable travelling distances. In order to assess capacity within the system for collaboration, the National Foundation for Educational Research (NFER) conducted an analysis to identify and match underperforming schools and high-performing schools within a limited radius using Ofsted data and Department for Education attainment data. To account for similar characteristics, the research only sought to match schools within the same phase (secondary or primary).

The analysis highlighted that there are more high-performing schools than underperforming schools, in both phases of education – in England there are 5,677 high-performing schools and 2,511 underperforming schools.

To assess the level of potential support, the research team looked at how many high-performing schools each school in need has nearby. The analysis revealed that each secondary school in need of support has a median number of two high-performing secondary schools within the set radiuses.

While having support close at hand does not necessarily mean that the schools in question will want to or will be able to help (because, for example, they may already be working with other schools), it is nonetheless positive that schools in need have options nearby that they can explore for support.

As a result of this analysis, NFER created an interactive map plotting the location of high-performing schools and schools in need by phase (primary and secondary), as well as calculating the ratio of the two groups, by region, local authority and Parliamentary constituency.

The tool is intended to help teachers, governors and school leaders to identify potential collaborative partners in their area, with a view to improving outcomes for all pupils.

Conclusion

Collaboration is a vital tool in the school improvement arsenal. It can be used to improve teaching and learning, leadership, and use of data and assessment. It works best when partners have similar characteristics, are nearby and both sides are fully committed at all levels.

There is clear evidence of capacity within the system to work in this way and NFER hopes this research, and the accompanying resources, can be used by headteachers, governing bodies and local authorities to embrace the opportunities offered by working with colleagues in other schools to raise attainment for all young people. SecEd

• *Claudia Sumner is a senior research manager and Karen Wespieser is head of impact at the National Foundation for Educational Research.*

Further information

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