Reversing the 'Widget Effect'



The introduction of performance-related pay for all teachers in English schools

Matthew Robb

Edited by Jonathan Simons

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Foreword

George Parker, former President Washington Teachers Union and Senior Fellow, Students First

In my previous life, I was a union leader in Washington DC. I fought for my members to get them the best deal possible - more money, better resources. And I protected them when they were in need of help. That was my job.

But I was also a union leader who signed the most innovative performancerelated pay deal in America, back in 2010, with the Chancellor of the District of Columbia.

I did that because I realised that when I was protecting teachers, I thought I was also defending the interests of kids. But I was wrong.

Oprah Winfrey talks about 'a-ha' moments - when you suddenly take a fresh look at yourself and realise something. I had my a-ha moment when I went into a high poverty primary school in Washington. I was speaking to children and said my job was to get the best teachers in front of that class to give these kids a good education. Afterwards, a little girl came up to me and hugged me, and said that no-one had ever said that before. No-one had ever been fighting for them to get a better education.

And in the car on the way back, I realised: you lied. You lied to that little girl. Because I didn't really care about her, and getting good teachers in front of her. In fact, I'd just spent \$10,000 to overturn a firing and keep a bad teacher in that school - a bad teacher who I would not want anywhere near my own granddaughter, but who I was happy letting teach a little girl just like her.

That was my a-ha moment. It made me realize that I'd forgotten my origins. That little girl was just like me – from a poor background and education was her only way out. I'd been working so hard to protect teachers, but forgotten about the kids.

So instead I decided to challenge what I had always just assumed were good things that unions fought for, and thought about whether they were putting kids first.

And many of them weren't. Giving teachers a job for life, paying teachers just for showing up, and not offering the smartest teachers any more money, even in the most challenging schools, wasn't in kids' interests.

So when the Washington Schools Chancellor proposed introducing a performance pay arrangement for Washington DC teachers, which offered the opportunity to tackle these issues, I agreed to consider it.

It wasn't easy. I was called a traitor by the other unions – I had calls from them every night, telling me that I was betraying the brotherhood, and that once I had done this, it would happen for everyone, and all teachers would suffer. But it was the right thing to do.

And I'm so pleased that today, you can start to see the results starting to come through. The latest study on the effect of our reform, from Stanford University, shows that good teachers are being paid more for working in high poverty schools, that teachers are working harder and that teachers who are not helping kids learn are leaving.

And that's why I was delighted to come to England, as a guest of Policy Exchange, earlier this year to learn about how England is seeking to introduce the same performance pay system for all its teachers.

It also gave me a chance to take on those arguments against performance-related pay. Many of them are complete copies of the arguments made at the time in Washington. I even made most of them back when I was a union leader! But they weren't true then, and they aren't true now.

Of course, we need a fair system. Principals need to be fair in how they reward performance, and teachers need to understand it. But it can't be right that we treat all teachers the same. We don't do that with kids, after all. We grade them differently – A, B, C. And they understand that. And they still play with their friends just the same. It's not divisive. It's not going to break down the whole teaching profession. It didn't in Washington and it won't here either.

This excellent report from Policy Exchange really lays it all out clearly. If we can design a system that is fair, and if we can make sure teachers understand it, then I believe that this new reform will ensure we have more excellent teachers, especially in our poorest schools, teaching our poorest kids. And that's the right thing to do.

Executive Summary

"If teachers are so important, why do we treat them like widgets?" The New Teacher Project, "The widget effect" (2009)

Politicians and policymakers the world over are unanimous in their shared belief about the importance of teachers, and teaching, in improving education standards and outcomes. Many reports have identified the importance of getting the right people to become teachers, developing them into effective professionals and ensuring the system is available to deliver the best possible education for every child. And much has been developed by this government and previous governments within this framework.

Yet, as the New Teacher Project found (looking at various American states), policy often takes exactly the opposite approach - and downplays or even ignores the differences in teacher effectiveness. Rather than treating teachers as professionals, it treats them as widgets in a system. And in the English system, nowhere was this more evident than in the way that schools rewarded teachers in their first few years of service (on what is known as the main pay scale). Under the old system, teachers automatically progressed up the pay scale every year being paid more for an additional year's experience, regardless of quality or their impact on pupils. Such flexibilities as did exist were not widely used and were not regarded as satisfactory - 37% of Heads said that they were not sufficiently flexible, 52% disagreed that the current system offered sufficient scope to reward high performance, and over 60% of head teachers indicated that there were forms of reward or recognition that they would like to use but could not. The announcement that schools in England will be required to pay teachers on the main scale by performance from the current academic year - echoing the current arrangements for those on the Upper Pay Scale, and those on Leadership scale offers the potential to reverse this 'widget effect' for the 45% of full time teachers and 28% of part time teachers currently on the main scale. A well-designed and implemented performance-related pay system will help improve teaching and learning in English schools. It will do this in three ways:

First, the evidence clearly demonstrates that improving expected and actual total take-home pay for talented teachers attracts more and higher calibre applicants into teaching. English teacher feedback and OECD international research shows that pay is an important part of what attracts applicants into teaching and that expectations of higher pay through performance-related pay should have a positive effect on the volume and quality of teacher applicants. Given that a large-scale system-wide rise in base pay is considered unaffordable by all political parties, (and that this approach did not lead to productivity increases when tried with GPs,) finding alternative ways to keep teaching attractive to highquality graduates is important.

Secondly, improving the thoroughness of performance evaluation and development of teachers is potentially the most important outcome of the reforms. The research for this report shows that – compared to other professions – performance evaluation, feedback and coaching is relatively weak within teaching. Although teachers are formally assessed on an annual basis, they receive less informal feedback, role modelling and coaching throughout the year than most professionals. Furthermore, the consequences of under or over-performance in teaching are weak: few teachers receive accelerated salary progression for excellent performance and fewer still leave the profession as a consequence of poor teaching. Evidence from international studies shows that improved

66 The 'objections in principle' attack the entire idea of performance-related pay in teaching. This report finds these objections to be without merit 99

performance evaluation can help teachers improve their practice and leads to improved student outcomes. The implementation of performancerelated pay will require Heads and senior managers to undertake more

rigorous performance evaluations of their staff because teachers themselves will insist on transparent and objective evaluations if their pay and promotions are tied to them. This will improve coaching and performance feedback, and it will also force managers to more explicitly acknowledge the range of teacher performance in their school and act on it.

Thirdly, the evidence suggests performance-related pay can work as an additional spur to performance. Although it is not in doubt that for the majority of teachers, the primary motivation is to help their pupils to progress, teachers have responded to financial incentives with improved pupil outcomes in several studies, not least in England when the Upper Pay Scale was introduced.

The current system of pay for teachers is, on paper, a performance-related pay system. However, this report shows that there is very strong evidence to suggest that, whatever the theoretical design of the system in England, in practice there is no correlation between the quality of a school overall or the teaching and learning as assessed by Ofsted and the pay of its teachers. More than half of all teachers at schools judged to be "inadequate" by Ofsted are on the Upper Pay Scale. Good schools, with good teaching and learning, do not have more teachers on the performance-related Upper Pay Scale. Schools with poor teaching and learning do not have teachers paid less or disproportionately on the lower Main Pay Scale. Moreover, evidence from the Department for Education to the School Teachers' Review Body showed over 99% of teachers on the Main Pay Scale being awarded a pay increase every year, regardless of performance, and over 90% of all teachers being successful in their application to join the Upper Pay Scale, which is nominally performance based. Rather, pay relates almost exclusively to teacher tenure.

Objections to the introduction of a more rigorous approach to performance-related pay can be categorised into objections-in-principle and objections-in-practice.

The objections-in-principle attack the entire idea of performance-related pay in teaching, e.g. that teaching cannot be measured and performance-related pay is divisive. This report finds these objections to be without merit. The Bill & Melinda Gates Foundation's work in this field shows clearly that effective teaching can be measured (including beyond 'just teaching for the test'). The objection that performance-related pay is divisive misses the point: it is intended to separate the

1 Department of Education evidence to School Teachers Review Body, using pay data from 2007–8 to 2008–9 (latest available figures), figure 7B/ paragraph B9 and B10, http://media.education.gov.uk/assets/files/pdf/e/evidence%20to%20 the%20strb%20the%20case%20 for%20change.pdf

2 Ibid, paragraph B12.

rewards for high-performing teachers from those for mediocre or poor teachers. The evidence suggests that doing so can improve student outcomes, which are the most important outcomes on which a school should be focussed. However, with regards to the implied negative implications of the word 'divisive' this report finds that other professionals across many sectors cope with the knowledge that not everyone in their workplace is paid the same — whether on performance levels, or scarcity, or skill level — and this does not necessarily lead to an absence of collegiality and co-operation.

In contrast to the objections-in-principle, the objections-in-practice are well-grounded and should be a focus for government and schools in order to deliver the effective implementation of performance-related pay. These objections include that Heads lack the expertise, capacity and will to design and implement a performance management system with associated payments; that the pace of implementation is too fast; and that the supporting infrastructure of government guidance and Ofsted guidelines is absent.

It is worth noting that there is a significant difference between union positions on this issue and the views of mainstream teachers. Unions have focused on objections-in-principle, opposing performance-related pay under any circumstances. In contrast, the YouGov polling undertaken as part of this research shows that teachers are primarily concerned with practical issues. Only 33% of teachers polled as part of this research objected to performance-related pay under any circumstances. However, 55% of teachers are not just ambivalent, but would be more likely to want to work in a school where pay is more explicitly linked to their performance, if it meant a reduction in administrative reporting and bureaucratic workload. Teachers would like their performance to be evaluated on student outcomes and classroom observations, and are mostly concerned that the quality of these evaluations is robust and objective. They are unsure that Heads can deliver objective performance evaluations and fear that the implementation will result in more bureaucracy and less time teaching.

This report argues that the practical objections can be successfully met through a well designed and implemented performance-related pay system. So what does this look like? This report draws the following conclusions:

- It should have an evaluation system that is transparent and credible to teachers.
 If teachers do not understand the system, then it is hard for them to respond to the incentives to improve performance.
- Schools also need to drive their own performance management systems and want to see results – if the schools do not want to differentiate between their staff members, make difficult decisions and have potentially difficult conversations, then performance-related pay will have little effect.
- The system must also motivate all teachers to progress in their performance, ultimately improving pupils' learning. The impact of performance-related pay is directly related to the number of teachers that genuinely want to understand how they are progressing in the profession.
- A performance pay system should have an impact on the overall labour market dynamic in regards to recruitment and retention of desirable candidates into teaching, encourage the best teachers to stay in teaching and give clear messages to under-performers to improve or exit the profession.

3 YouGov poll of 1,002 teachers conducted on behalf of Policy Exchange in August 2013. This report argues that the recommendations below will address these implementation challenges, and will significantly improve the likelihood that performance-related pay will be successful.

Recommendations for schools

- 1. Ensure system design is in line with the principles set out on this report for delivering effective PRP. For a system to be effective, schools will need to design and operate the system carefully. This report summarises UK and international evidence from education and elsewhere around the best ways to design a system, which can be summarised as follows:
 - Measure teacher performances over a basket of measures, rather than a single one (particularly
 external exam scores). Exam scores can be erratic and hard to distinguish
 between differences in the middle of the effectiveness distribution curve.
 More practically, not all teachers will have classes with exam or test data.
 - Consider making assessments over more than one year of data. Evidence suggests that
 teachers can move around the distribution curve of effectiveness from one
 year to the next averaging performance over as little as two years reduces
 this variance.
 - Make increases in base pay not bonuses. The evidence suggests bonuses are often seen as confusing and lose their incentive power. They can also encourage short term improvements rather than long term sustainability which base pay increases can achieve.
 - Link PRP to mechanisms that can help teachers improve. The YouGov polling for this
 report shows that teachers want opportunities to develop professionally,
 and to then be rewarded as such.
 - Consider using pay flexibilities to recruit and retain teachers in shortage subjects, or for schools
 in areas of higher deprivation. PRP offers the chance to address long standing
 labour shortages and get effective teachers into school and pupils which
 need them the most.
 - Do not use PRP as a way of controlling the pay bill, but have a system that does not allow for fudging which might include simplifying pay bands. Schools should look to use PRP to reward effective teachers. They extent to which they choose to reward all or few teachers is a matter for them. But one option to sharpen incentives might be to move to fewer paybands with bigger jumps between them, to really reward high performance.
- 2. Adopt a phased implementation approach: focus on establishing a clear performance evaluation system in Year 1 more than the actual performance-related pay results. The report recommends that in Year 1 (ie: throughout this academic year), schools prioritise implementing their new performance evaluation systems immediately, with a clear focus on bringing teaching staff into the process and understanding its consequences. New evaluation and pay systems need to have teacher buy in, in order to maximise credibility and therefore their impact. In practice, given limited funds available, it is likely that the actual financial consequences of a performance pay system will be relatively small after the first year. This report therefore recommends that, for those schools with relatively limited infrastructure and understanding of a

new system in place, they should operate a 'shadow system' that shows the implications of differential awards, but does not have immediate financial consequences until the end of Year 2. Such an approach would allow schools to iron out any difficulties in the first year, ensure consistent data is collected for two years (reducing evaluation error), give teachers time to understand the new system and build trust in the reliability of the evaluations. Schools who are more advanced in the process may wish to offer differential awards from Year 1.

3. Radically simplify the pay bands. The current system of pay bands has too many levels. In 2012, Andrew Adonis described how teachers were eligible to be placed on 27 levels of performance, "[where] the scales resemble the departure board at Waterloo station".4 Merging the main pay scale and the upper pay scale from the current nine bands to around five achieves two things. First, it makes the jumps in pay associated with moving between bands much larger and more meaningful and removes the expectation of annual increases in base pay (beyond any funded uplifts due to inflation). Secondly, it allows the bands to be identified with changes in underlying performance and quality of pedagogy. For example, the first band may simply be 'Newly Qualified Teacher', the fifth might be 'Master Teacher'. The specific titles are not important, but the idea is that sustained better performance is the trigger to move between bands. (An analogy could also be drawn with the medical profession, where doctors progress from junior doctor through to consultant). Such an approach would also go in hand in hand with a wider change of approach towards assessing teacher standards. Early moves between bands may be narrowly focused on classroom competence whilst more advanced teachers may be required to demonstrate the ability to coach other teachers or have an impact on the wider community (e.g. supporting parents in teaching their children). The full extent of this change to teacher assessment and standards goes beyond the scope of this report but is an area of focus for future work by Policy Exchange.

Recommendations for government and agencies

- 4. Review the Ofsted procedures for assessing leadership and management to ensure that assessments of performance-related pay are consistently applied across the system. Ofsted and the government should review how schools with strong performance evaluation and performance-related pay can be relieved of some of the compliance burden associated with the current inspection regime. The full extent of this recommendation goes beyond the immediate scope of this research but is an area of focus for future work by Policy Exchange.
- 5. **Fund a series of research projects** to help improve our understanding of what outstanding performance evaluation looks like in the English and Welsh context, how performance-related pay can be most effective, what the barriers are to its successful implementation and how they can be overcome. Part of the issue when looking at the applicability and benefits or otherwise of PRP is that the evidence base is all measuring slightly different schemes in different countries and there is a lack of real evidence on how this can be implemented well in an English system.

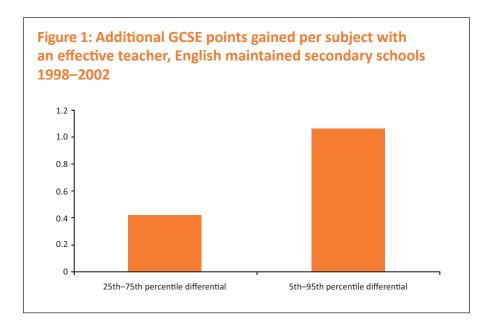
4 Andrew Adonis, Education, Education, Education: Reforming England's Schools, London: Biteback Publishing, 2012, p.222 6. Issue best practice non-statutory guidance on how to structure and implement performance-related pay, covering performance evaluation, base salary progression and annual bonus payments. This guidance should receive the widest possible consultation, and should contain a number of options that offer different benefits for different contexts. This guidance will give school leaders and governors a basis on which to make decisions suitable to their school. Importantly, this report argues that it should include top level financial models at the school level that will help Heads and governing bodies to understand the financial implications of any system they introduce, including the ability to model different scenarios easily, rather than needing to ask for specific work from the school finance team.

The Recent Reforms to Teacher Pay

Teacher quality is important

In the introduction to The Importance of Teaching – the Schools White Paper 2010, the Prime Minister and Deputy Prime Minister quote the Korean academic Lee Sing Kong with his phrase that "no education system can be better than the quality of its teachers". The research and evidence into teacher quality is strongly in support of this statement.

Pupils' progress with a highly-effective teacher⁵ compared to a poorly performing teacher⁶ is 40% greater, and this result is even starker when looking at disadvantaged pupils who progress an additional full years' worth of learning with a good teacher as compared to a poor teacher.⁷ This result was also repeated by British academics Simon Burgess, Neil Davies and Helen Slater who were able to show that a pupil taking eight GCSEs and being taught by eight good teachers will score 3.4 more GCSE points than the same pupil taught by eight poor teachers8.



The quality of teaching and resultant outcomes is more than just the marks pupils ultimately receive as it significantly impacts their earning potential. Senior Fellow of the Hoover Institution at Stanford University, Eric Hanushek, found that the most effective teachers (84th percentile) will raise a single student's earning potential by \$800-\$1,000 a year compared to the average teacher (50th percentile). The corollary is also true: poorly performing teachers reduce pupil's aggregate earnings by comparable amounts.9 A recent paper from the National 5 Highly Effective Teacher are defined as those at the 84th percentile (one standard deviation from the mean)

6 Poorly Performing Teacher defined as those at the 16th percentile (one standard deviation from the mean)

7 Aaronson, Barrow, and Sander,

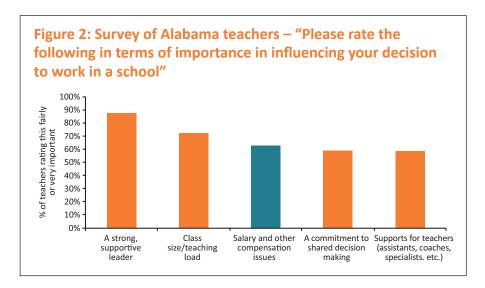
8 Simon Burgess, Neil Davies, Helen Slater, "Do teachers matter? Measuring the variation in teacher effectiveness in England," University of Bristol, January 2009

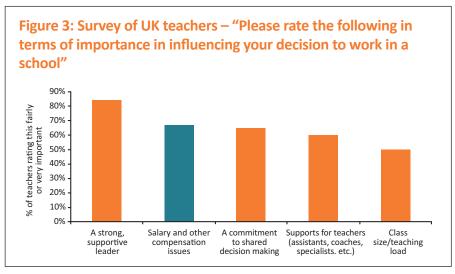
9 Eric Hanushek, 'Valuing teachers: How Much is a Good Teacher Worth?', Education Next, 2011

Bureau of Economic Research in the U.S. supported this analysis, and found that students assigned to 'good' teachers (defined as those that added value compared to forecast achievement) in primary school are more likely to attend college, earn higher salaries, live in higher earning neighbourhoods, and have higher savings rates. They are also less likely to have children as teenagers. The paper also calculated that replacing a primary phase teacher whose value-add is in the bottom 5% with an 'average' teacher would increase the present value of students' lifetime income by approximately \$250,000 per classroom.¹⁰

Attracting and retaining excellent teachers requires excellent pay

As the School Teachers' Review Body notes in their recent review of pay conditions, relative earnings play an important role in attracting people to the profession. In research by The Parthenon Group, a leading strategy consulting firm that works with large urban school districts in the US, when teachers are asked about factors that influence their decision to work in a school, nearly two thirds of teachers report that salary and other compensation issues are either important or extremely important to their decision.¹¹

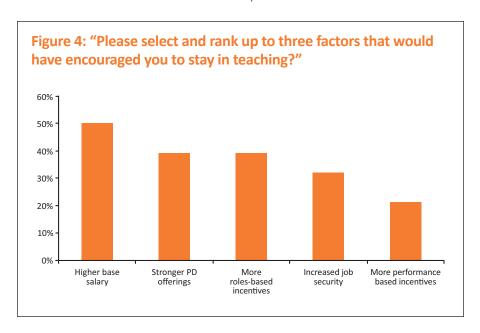




^{10 &}quot;Measuring the Impacts of Teachers II: Teacher Value-Added and Student Outcomes in Adulthood" Chetty, Friedman and Rockoff, NbER working paper 19424, September 2013

¹¹ Parthenon Group data, 2012

The Parthenon Group's research in a large urban district US also found that half of effective teachers who chose to leave the profession rated the desire to receive a higher base salary as one of their top three reasons for leaving the profession. Furthermore, they found that in one urban district, after the first year of implementing a performance based pay system along with other human capital strategies, that the district retained 89% of highly-effective teachers, 83% of effective teachers and 66% of minimally effective teachers.¹²



Further Parthenon work in England with teachers leaving the profession revealed similar sentiments:

"I was consistently rated as a good or outstanding teacher but left the profession after two years. I felt undervalued given the hours I put in. Would a stronger link between pay and performance have made me think twice? Definitely."

Secondary school teacher, Inner London

"I had to move schools to get a better salary by taking on a head of department role. There was no way for me to get a pay rise, despite being rated as an outstanding teacher, in my previous school. It is a shame, because I've now moved to a much more privileged area."

Secondary school teacher, Sheffield

"This will be my last year in teaching. I want to be paid for the hours I put in, and I don't get that here. I'm going to move into a city career. If I could rapidly progress my pay and responsibilities in teaching through my ability, then I would stay in the profession longer."

Secondary school teacher, Inner London

Teachers care about professional development and their pay and conditions – and this is not inconsistent with teachers also choosing to teach because of a duty to public service and education. Teachers' financial positions remain a top of mind

12 Parthenon analysis of large US urban school district, 2011

consideration for many in the profession – and indeed, for the unions who have challenged the government's change to the pension structure of teaching which will ultimately reduce teachers' lifetime income.

Consistent with the belief that teacher quality matters and that attracting excellent teachers requires excellent pay, there is evidence from international comparisons that teacher pay correlates with improved teaching. There is reasonable consensus in the literature that there is a relationship between the levels of teacher pay (normalised for GDP per capita), the quality of pupil outcomes and the overall quality of the

66 Changes to pay will change who enters the profession and/or alter the quality and actions of existing teachers in the system with regards to their classroom impact 99

education system. The level of pay may or may not include some performance related compensation.

This report has looked at three studies that adopt different methodological approaches, each of which show that there is a relationship between teacher base pay

and pupil outcomes. The result holds across three types of analysis: (i) education system classification and analysis of common factors, (ii) common independent test performance (PISA) and (iii) cross-country statistical comparison. This indicates that pay, at least in some form, has an impact on overall teacher performance.

- 1. McKinsey & Co. classified education systems into five types: poor, fair, good, great and excellent. In each classification, they identified a number of characteristics that appeared to be common across each category.¹³ The report was clear that those education systems classified as "fair to good" and "good to great" paid teachers at levels close to GDP per capita, while those education systems that were considered "great to excellent" paid teachers substantially above this rate. For example, in Korea, teachers are paid at twice the average GDP per capita.
- 2. The Programme for International Pupil Assessment (PISA) has "long established that high-performing education systems tend to pay their teachers more" and that pay was prioritised over other factors including class size which is often the constraining budgetary factor.¹⁴
- 3. Researchers from the University of London & the London School of Economics showed that the levels of teacher pay are strongly related to overall pupil outcomes. ¹⁵ The study is important as it focused on salary levels expected at 15 years into the profession, giving an indication that both initial salaries and expected salary progression are both important when designing pay systems for teachers. The study indicated that a 10% increase in the real pay of teachers resulted in an improvement in pupil test scores between of between 5 to 10%.

These studies indicate that the quality of teaching and the appeal of the profession to graduates and potential teachers are strongly influenced by financial considerations. Changes to pay will change who enters the profession and/or alter the quality and actions of existing teachers in the system with regards to their classroom impact.

Flaws in the prior performance and pay regime

Until the recent reforms, the teaching profession operated under a pay system that recognised three types of school contribution: (i) "core" teaching duties (ii) additional teaching and learning responsibilities (iii) advanced skills teaching.

- 13 McKinsey, How the World's Most Improved School Systems Keep Getting Better, 2011
- 14 OECD, Does performancebased pay improve teaching?, PISA in Focus, May 2012, http://www.oecd.org/ pisa/50328990.pdf
- 15 Peter Dolton & Oscar Marcenaro-Guierrez, "If you pay peanuts do you get monkeys? A cross country analysis of teacher pay and pupil performance", Economic Policy, January 2011

Core teaching duties referred predominantly to classroom teaching and teachers typically moved through the salary bands as they gained additional years of experience. The increments through each band were reasonably small real increments (~3-7% nominal increase). In 2001, Labour introduced a limited form of performance-related pay into schools by creating the Upper Pay Scale for teachers in relation to their core teaching duties. The reform focused on creating a higher Upper Pay Scale that served as a "performance" threshold for teachers. All teachers in the system at the highest spine point of the Main Pay Scale could apply to pass this performance threshold by demonstrating they had reached the standards required in five areas: (i) knowledge and understanding of teaching; (ii) teaching management and assessment; (iii) wider professional effectiveness; (iv) professional characteristics and (iv) pupil progress. The reward was substantial, as it gave teachers an annual bonus of £2,000 payable without revision and access to further base salary rises as they progressed.

Teachers were (and remain) able to obtain additional salary increments for the additional responsibilities they undertake - teaching and learning responsibility payments (TLRs). These range from payments for being head of department or head of a curriculum area/year group. The school maintains discretion (within bands) about the amount of extra money that a teacher will receive based on the level of the tasks undertaken. For many teachers in the current system, this is what helps drive salary upwards as they take on management roles, but they do not relate to a teachers' performance in the classroom.

Finally, there are a number of other teaching scales, such as the advanced skills teacher scales, which focus on outstanding teachers disseminating good practice within their own school as well as other local schools. Typically, the take up of such posts is low as they require substantial coordination and the majority of teachers move onto the leadership pay scale rather than following and advanced skills teacher route.

During the current debate about reform of pay, a number of issues were raised with this system. In broad terms, issues could be distilled into three areas: (i) that the system offered no relationship between pay and performance and hence does not have a differentiated effect on the attraction and retention of excellent and poor teachers, (ii) that it failed to serve the purpose of attracting the best possible people into the teaching profession, and (iii) it resulted in a system in which hard-working and excellent teachers are paid the same as less-well performing teachers and taxpayers continually fund annual pay rises without overall improvements – both of which are difficult to justify on moral grounds.

(i) Despite recent improvements, the system still does not sufficiently recruit, nor retain, the best people

It should be made clear that recent reforms to teaching, and wider educational policy changes, have made teaching an increasingly attractive profession over the past decade or so. Indeed, both the current and previous Secretaries of State are on record as hailing the "best generation of teachers ever". Michael Gove has also recently argued, in a speech to Policy Exchange¹⁶, that teaching "has never been more attractive, more popular or more rewarding".

This report concurs with much of the argument put forward in this speech. Compared to the same system from a generation ago, teaching in England is 16 Michael Gove speech to Policy Exchange 5th September, "The Importance of Teaching", https://www.gov.uk/government/ speeches/michael-gove-speaksabout-the-importance-of-teaching now indeed better paid, with more opportunities for advancement, and self development and intellectual satisfaction through curriculum control. Moreover, wider structural changes, such as the introduction of free schools, means that highly ambitious and entrepreneurial teachers now have the opportunities to shape not just their own work or their own Department but their own school.

However, it is still a fact – and one which implies no slight or aspersion on the many outstanding teachers currently in the profession – that the teaching profession in England is not as attractive as in other countries with world-

66 It is a fact that the teaching profession in England is not as attractive as in other countries with world-class educational systems, and this is reflected in lower numbers of applicants to the profession 99

class educational systems, and this is reflected in lower numbers of applicants to the profession.

Despite the improvements noted above, the Education Select Committee found in the UK there are still only two applicants for every job vacancy, compared to ten in Finland and six in Singapore. Furthermore, the world's best

education systems recruit from only the top-third of graduates, and this demand for teaching jobs is reflected in the number of applicants per post.¹⁷ This lack of high quality teachers entering the profession is most stark when considering the STEM subjects, which, at present levels of recruitment, will lead to a significant shortfall, such that over 100,000 pupils will be taught by non-subject specialists by September 2014. In part, this is because STEM graduates often have a large range of job options and are therefore harder to attract.¹⁸

Retention of teachers is a problem too. The Department for Education's *Great Teachers* report found that "retention of teachers is low", especially within inner cities. 20% of England's teacher trainees drop out within two years, and nearly half within five years. In the world's best education systems, like Singapore, it is 3%. ¹⁹

There are doubtless many reasons for this relative unattractiveness of the profession to the highest quality graduates. Absolute pay levels – certainly compared to other graduate destinations – may be one reason. Another contributing factor may be the complex structure of the previous system of teacher pay scales. This has led to a lack of transparency around teacher pay, which has disincentivising effects both to those who are in the teaching profession and those outside of it. Teaching is a fairly well-paid profession where those on the top of the Upper Pay Scale can earn four times the national average²⁰ but those outside the profession are unaware of the potential. In 2012, the teacher pay system had 27 levels of performance, "[where] the scales resemble the departure board at Waterloo station". This report will argue that a less complex, less rigid and more transparent pay progression system would go some way to making the profession more attractive.

(ii) No relationship between pay and performance

As noted above, the previous system of national pay scales did, notionally, include performance based progression between the Main and Upper Pay Scales. If performance based criteria were already incentivising performance-based progression, as has been suggested by the NUT,²² and given the importance of teachers to overall school outcomes, one would expect to see a link between the

17 McKinsey, ibid.

18 Professors John Howson and Chris Waterman, *Teacher Training Places in England: September* 2013

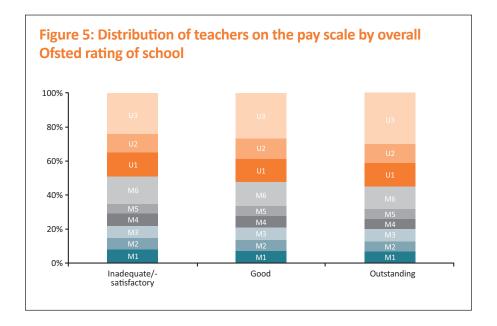
19 Andrew Adonis, Education, Education, Education: Reforming England's Schools, London: Biteback Publishing, 2012, p.222

20 Annual Survey of Hours and Earnings, Office of National Statistics, November 2012.

21 Adonis (2012) p.222

22 'Submission to the School Teachers' Review Body', National Union of Teachers (2012) number of teachers on the Upper Pay Scale and the quality of the school, or at least the quality of teaching and learning in the school. he Parthenon Group's analysis shows, however, that there is the same number of teachers on the Upper Pay Scale (25%–30%) irrespective of the Ofsted rating of the school. This suggests that either the quality of teaching has no relation to the standard of the school (which seems unlikely) or that the old salary scales bore no relation to teaching quality.

Furthermore, when analysing the ranges of teacher pay in schools of varying quality between 2006 and 2011, Parthenon found no relationship with the Ofsted quality of teaching rating and average gross teacher compensation. The chart below shows the distribution of teacher salaries on the pay scales against the quality of teaching in the school. As can be seen, there is no relationship between the number of highly paid teachers in the school and its overall teaching quality, and poor schools are just as likely to have paid their teachers highly as more effective schools.



(iii) The fairness argument

The fairness argument for performance-related pay has been made strongly by the Secretary of State, the head of OFSTED and the Chancellor (in relation to the wider public sector). They make the fairness argument through two fundamental questions:

a. Why should excellent teachers be paid the same as the least-well performing? Ofsted has reported that nearly all teachers are receiving a pay rise every year.²³ Sir Michael Wilshaw has said that "the thing that irritates good teachers, people who work hard and go the extra mile, is seeing the people that don't do that being rewarded".²⁴ Indeed, frustration with underperforming senior colleagues was cited by Jeremy Heywood as a reason behind the civil service pay reforms: "nothing annoys the civil service itself more than bad performers staying on year after year. We won't push them out of the door, but we will address this."²⁵

23 Sir Michael Wilshaw, Reform Roundtable Discussion, May 2013; 21st Report of STRB; Parthenon Analysis

24 'Block pay rises for poor teachers, says Ofsted chief', Telegraph (2012), http://www.telegraph.co.uk/education/educationnews/9057724/Block-pay-rises-for-poor-teachers says-Ofsted-chief.html

25 Heywood quoted in: http:// www.guardian.co.uk/publicleaders-network/2012/may/24/ poorly-performing-civil-servantsface-axe b. Why should teachers be given annual pay rises if outcomes are not getting better? Why should taxpayers pay more every year for no improvement? The Chancellor, George Osborne described automatic pay progression as "the practice whereby many employees not only get a pay rise every year, but also automatically move up a pay grade every single year, regardless of performance". He further argued that the practice is: "[at best] antiquated; at worst, its deeply unfair to other parts of the public sector who don't get it and the private sector who have to pay for it". He further argued that the process of the public sector who don't get it and the private sector who have to pay for it".

The criticism of the system has focused on the fact that moving up the pay scale and the speed at which you do so is typically unrelated to quality of teaching but mainly focused on years of experience. This has also been picked up by Ofsted, and Michael Wilshaw has commented that "40% of lessons last year were not good enough, and yet everyone is getting a pay rise. Something is wrong with the system". ²⁸ This indicates that schools need to implement strong performance evaluation, but also stronger feedback loops and formative assessment to ensure that the vast majority of lessons are reaching the standards required.

This is an argument that is not just made by those who operate outside of the profession – but by those who are inside it too. In a survey conducted by YouGov on behalf of Policy Exchange, of more than 1,000 primary and secondary school teachers in England, 89% of teachers believed that quality of teaching should be a driver for pay and progression within the teaching profession. This report argues that teachers themselves wish to be recognised for their efforts, and rewarded for doing so.

The current performance-based reform of teachers' pay began in December 2012. The Chancellor of the Exchequer, George Osborne, announced the end of national pay bargaining for teachers.²⁹ Mr Osborne cited the Schools Teachers' Review Body's 21st Report, which recommended:

"the extension to all teachers of pay progression linked to annual appraisal, with differentiated decisions on progression through the main scale **replacing** increments based on length of service".³⁰

It is worth noting that this recommendation sits amongst a series of recommendations that imply a complete overhaul of teacher pay beyond just the implementation of performance-related pay. The School Teachers' Review Body recommended:

- Replacement of increments based on length of service by differentiated progression through the main scale to reward excellence and performance improvement.
- Extension to all teachers of pay progression linked to annual appraisal (which is already established for more senior teachers). Appraisal should be against a single set of teacher standards and individual objectives, with a strong emphasis on professional development.
- Abolition of mandatory pay points within the pay scales for classroom teachers, to enable individual pay decisions, but with retention at present of

- 26 Spending Review Statement, HM Treasury, June 2013
- 27 http://www.bbc.co.uk/news/ uk-politics-23053693
- 28 http://www.bbc.co.uk/news/education-19683920
- 29 HM Treasury, The Chancellor of the Exchequer's Autumn Statement, 2012
- 30 School Teachers' Review Body: Twenty-first Report, October 2012

- points for reference only in the main scale, to guide career expectations for entrants to the profession.
- Retention of a broad national framework, including the higher pay bands for London and fringe areas and an Upper Pay Scale as a career path for experienced teachers who make a wider contribution in the school.
- Replacement of the unnecessarily detailed threshold test for progression from
 the main to the Upper Pay Scale, with simple criteria based on one set of
 teacher standards. This will create a consistent progression path from graduate
 entry to the top of the Upper Pay Scale and allow schools to promote the
 best teachers more rapidly.
- Local flexibility for schools to create posts paying salaries above the Upper Pay Scale, enabling some of the very best teachers to remain in the classroom and lead the improvement of teaching skills.
- More discretion for schools in the use of allowances for recruitment and retention and freedom to pay fixed-term responsibility allowances of up to £2,500 a year for time-limited projects.
- Reinforcement of the responsibility of head teachers to manage staff and resources and of governing bodies to hold school leaders to account for managing and rewarding the performance of teachers in the interests of pupils.
- On the basis of the above, a much simplified School Teachers' Pay and Conditions Document, including a brief guide to the national framework and the flexibilities open to schools.

The government responded to the School Teachers' Review Body report on the 5th December 2012, accepting all the School Teachers' Review Body recommendations in full. In April 2013, the Department for Education produced a Draft document: Schools Teachers Pay and Conditions Document (STPCD) that laid out advice to the schools in how to enact performance-related pay. The Draft STPCD document will come into effect from 1 September 2013, but was circulated in advance so that schools could review and prepare pay policies. The STPCD made clear that September 2013 would be the last time that annual pay increments would be awarded on length of service and, that from September 2014, "decisions about teachers' pay progression will be appraisal based." 31

It should be emphasised how radical shift this represents with respect to teacher pay. Teachers have enjoyed automatic pay increases for decades, so long as they received satisfactory evaluations. This automatic increase applied to more than 90% of teachers and so the new regime marks a complete about-face in how teachers will be compensated. The government have broken the spine of pay progression. Breaking this spine has much larger implications than just performance-related pay — it allows for huge freedoms around what Heads will be able to do with their salary budget (for instance, pay differences based on subject or attracting teachers into more deprived areas) which could ultimately have profound labour market effects.

This paper only covers the implementation of performance-related pay, not its potential follow-on effects, but it is critical to keep the idea of liberalisation, and its broader implications, in mind as this is the context in which governors, Heads and teachers will be operating.

31 STPCD 2013, http://www. education.gov.uk/g00227186/ school-teachers'-pay-andconditions-2013

New models

It is important to note how radical this is. In theory teachers could be paid £70-90k a year or more. Schools could now create radically different models for pay. For example, schools might implement a model with a 'master' teacher teaching 100 pupils at a time, supported by 3 assistants. These freedoms allow the creation of a new structure of teaching practice, which can be tailored by specific schools based on the quality of the available labour market and school requirements. 32

Over time, this may reduce the dependence on the quality of each teacher and place more importance on organisational models and systems. It may break the current uniformity of teaching practice and organisation, in which a teacher typically stands alone in front of a class delivering a lesson that they have planned themselves. Examples of teaching and school organisation models that would reduce the dependence on the individual teacher exist, and range from increased use of standardised technology-based curricula to team teaching to implementation of 'standard school operating models' (e.g. Edison Learning). However, despite the acknowledged success of some of these approaches (e.g. at ARK or Cramlington Learning Village), teaching in England and Wales is structured so as to be dependent on the quality of the individual teacher in the classroom. The fundamental dependence on teacher quality was wired into the system by the pay scales.

32 This has already been experimented with by schools in the US, such as the The New American Academy, a charter school network operating in New York City.

2 The Arguments for Performance-Related Pay

Performance-related pay has been the norm in the private sector for many years, and many of the arguments advanced in favour of this reform were just as applicable a decade or two decades ago as they are now. So why is performance-related pay a focus now? There are three factors pushing performance-related pay towards the top of the policy agenda.

Performance-related pay is the only viable way to increase teacher pay

As discussed above, under the existing system, despite recent improvements, the English system is not consistently attracting the brightest and best graduates to the teaching profession. There are several ways to increase the status of the profession to attract and retain the best beyond adjusting pay. Teach First is the most prominent example of a high status route into teaching, and is rightly heralded as one of the greatest success stories of recent education reforms.³³ The scheme is now the largest graduate employer, bringing over 1,000 teachers to the profession every year, of which 80% attended a Russell Group University and all qualified with a minimum of 2:1 degrees.³⁴ The scheme has gained such a high status due to (i) the ability for graduates to begin earning immediately while training, (ii) a strong professional development programme and (iii) the option to exit after two years into one of many partners across the public and private sector.

However, as described above, overall pay is a significant factor affecting graduate choices and existing teacher retention. The latest School Teachers' Review Body report has already found that "there are early signs that the position of teachers is deteriorating in relation to other graduate professions". In the context of that deterioration and the principle of payment for results, performance-related pay can increase the attractiveness of the profession and both the quantity and quality of applicants to it. Performance-related pay is a method of attraction and retention which has already been shown to be a positive aid for recruitment as noted by the Education Select Committee who found that Singapore's system of performance-related pay has proved "an incentive and positive aid to recruitment". 36

Whilst many teachers have received progression-based increments during this period of pay freezes, the last increase in the pay scales was seen in September 2010. 40% of teachers who are on the top of the pay scale will have seen no change

33 Ofsted rated Teach First "Outstanding" in all 44 categories examined in teacher training in Ofsted's 2011 assessment of Teach First.

34 Teach First website

35 STRB 22nd Report

36 Education Committee, 9th Report, Greater Teachers: Attracting & Retaining the Best in their annual salary since September 2010. Analysis by the ATL and NASUWT teaching unions presented to the School Teachers' Review Body estimated the impact of the pay freeze and inflation on take home pay as costing teachers between £2,633 and £3,628³⁷ over the last three years.

The financial situation makes a reversal of this current tightened circumstances implausible. Indeed, the 2013 Budget announced a further year of public sector pay restraint, as pay rises were capped at 1% until 2015–16. In the current economic climate, there is no realistic prospect of across the board pay increases for teachers

66 In the current economic climate, there is no realistic prospect of across the board pay increases for teachers at a level that would materially affect the quality of the teaching workforce

at a level that would materially affect the quality of the teaching workforce. This is especially true given that there have been base pay rises in the public sector with no clear productivity benefit in the recent past. The National Audit Office recently highlighted that when NHS staff received pay increases, there was

actually a decline in productivity and quality of care. Most recently, the public accounts committee noted that, despite 20%+ increases in the base pay of consultants, there has been no clearly observed productivity benefit. In part, these findings may be due to the difficulty of isolating productivity changes in a health context. However, they do show that simply increasing base pay has been wasteful in a recent public service improvement context.³⁸

Given that there is no political desire or finances for an across the board pay increase, a move towards performance pay represents the only viable way for teachers to receive additional remuneration in the short to medium term.

Many other levers have been tried with mixed benefits

Recent governments have tried to improve the quality of education provision by pulling almost every other lever at their disposal. The Blair/Brown governments focussed particularly in three areas: physical estate (school buildings) through the Building Schools for the Future (BSF) scheme, in hiring new teachers and teaching assistants to reduce the pupil/teacher ratio; and structural changes through Academies. The evidence on the first two is disappointing at best, and whilst the third offers more grounds for optimism, it does not necessarily on its own offer a solution for within-school improvement.

1. The Labour Government's Building Schools for the Future was an ambitious set of reforms aimed at regenerating every one of England's 3,500 secondary schools and committed to building 200 new and refurbished schools per year by 2011. According to the Education Select Committee, "not since the huge Victorian and post-war building waves has there been investment in our school capital stock of this scale". ³⁹ Indeed, Gordon Brown promised the outcome of the scheme would be the delivery of schools "that were the best equipped in the world for 21st-century learning". ⁴⁰ The scheme was rife with problems from the beginning. Early building projects were delayed, with just 37 of the planned 200 schools completed by the end of 2008. ⁴¹ There were then problems both with design and implementation. CABE, the government's architectural watchdog, found that the designs for

37 STRB 23rd Report

38 National Audit Office, Management of NHS Hospital Productivity

39 "Sustainable Schools: Are we building schools for the future?" p.60 http://www.publications. parliament.uk/pa/cm200607/ cmselect/cmeduski/140/140.pdf

40 "£35bn revamp will produce generation of mediocre schools" *The Guardian*, 2008 http://www.theguardian.com/politics/2008/jul/21/education. secondaryschools

41 "School buildings 'delayed by up to two years'" The Daily Telegraph http://www.telegraph. co.uk/news/uknews/3189756/ School-buildings-delayed-by-upto-two-years.html the first set of school plans were not up to the expected standard. 33/40 of the most developed designs were denounced as "not good enough" or "mediocre". 42 CABE subsequently audited 52/124 schools that had been completed and found that the quality of building and design was poor in 16 and mediocre in almost half of those inspected. 43 By June 2010, 178 school rebuilds were complete, with a further 231 in construction and the estimated cost of the scheme had been revised up from £45B to £55B. The Education Secretary Michael Gove announced the end of BSF in June 2010. In scrapping the scheme, the Education Secretary said that, "The Building Schools for the Future scheme has been responsible for about one third of all this department's capital spending... But throughout its life it has been characterised by massive overspends, tragic delays, botched construction projects and needless bureaucracy". 44

- 2. When Tony Blair took office in 1997, UK's spending on education as a proportion of GDP was 4.6%, the lowest percentage since the 1950s. The Labour government presided over a 78% real terms increase in expenditure, lifting spending as a percentage GDP to 6.2% by 2010, level with a post-war high point of 1973-4. Secondary schools benefited most from this increase, with spending rising from £10bn to 18bn; 35,000 additional teachers and 133,000 additional teaching support staff were added in 13 years. Across primary and secondary schools, this increase amounted to 275,000 full time teachers and support staff.45 The evidence suggests that the increase in non-teaching adults has had limited effect. A major study⁴⁶ as to their impact shows that, perhaps paradoxically, the more time that a pupil spent with a TA, the less progress they made (even accounting for other factors including their previous lower attainment levels which led them to be given support in the first place). The report did however find positive results on teacher productivity and stress levels, and noted that some of the limited benefits may be due to poor overall school management of non-teachers. More broadly, a study by the think tank Reform showed no correlation between levels of expenditure and school performance - arguing that in and of itself, more resources do not drive improved standards. 47
- 3. Labour also introduced a series of structural reforms aimed at closing and reopening low performing schools under different names (and leadership). This included programmes such as Beacon Schools, Education Action Zones, and Fresh Start and also included area wide improvement programmes such as the mandatory contracting out of failing Local Education Authorities to not for profit and private providers (in Hackney, Islington, Bradford and Walsall amongst others). Most notably, it introduced the City Academies programme, which grew steadily over the period of the last government and has been continued (under the title of Academies) by the current government. Although the debate about the efficacy of Academies is much broader than can be covered here, it should be noted that there is evidence that both the 'sponsored' Academy model and the newer 'Converter' Academy model can have significant benefits for pupils, if operated by high performing schools or chains.⁴⁸
- 42 £35bn revamp will produce generation of mediocre schools' *The Guardian*, 2008 http://www.theguardian.com/politics/2008/jul/21/education.secondaryschools
- 43 "School buildings scheme scraped", BBC, 2010, http://www. bbc.co.uk/news/10514113
- 44 Ibid
- 45 Labour's Record on Education: Policy, Spending and Outcomes 1997–2010
- 46 Institute for Education, "The Deployment and Impact of Support Staff", 2009
- 47 Reform, "Must do better: Spending on schools" 2013
- 48 https://www.gov.uk/ government/speeches/michaelgove-speech-on-academies

In addition, there has been a comprehensive range of additional changes to the education system from macro-level structural changes to micro-level guidance to teachers. These have included:

- Curriculum reviews at every level;
- Literacy hours and an insistence on phonic-based reading schemes;
- Improved marketing of the profession;
- New teacher training models and
- A huge increase in the level of scrutiny from, and evidence required by, Ofsted.

Whilst many of these changes may have been successful, during the period 2000 to 2011, England's PISA and TIMMS rankings have been broadly flat and do not reflect the increase in spend over the period. As Lupton and Obolenskaya have pointed out, assessing the impact of these changes is problematic. ⁴⁹ Labour's own attainment targets were met, 5 A–C GCSEs pass rate rose from 45% (1997) to 76% (2010) for instance, but divorcing – let alone quantifying – the impact that Labour policy/expenditure had on this change is not possible given the data available. Indeed, the Deputy Director of Education at the OECD, Andreas Schleicher stated that: "spending in the UK has gone up really a lot and has not been reflected in changes to exam scores. You have seen huge effort on the part of government and at the same time outcomes have been flat". ⁵⁰ The LSE researchers note that assessing the value for money achieved through New Labour spending is difficult: "evidence that standards in England improved or declined relative to other countries is not conclusive". ⁵¹

This is because, at their heart, such structural reforms have at best a tangential link to improving the overall quality of teaching, which, as has been argued, is the intervention that drives standards. Whilst these reforms have their place — and, some, such as Academies, arguably have a close relationship to strengthening both teaching and leadership and are rightly being expanded — the next stage of reform should focus more closely on the profession itself.

Performance-related pay is part of 'professionalising' teaching

The professionalisation of teaching is a topic that has received increasing amounts of airtime. Earlier this year, Charlie Taylor, Chief Executive of the National College for Teaching and Leadership, talked about how little control teachers had of how new teachers enter the profession. Dr Raphael Wilkins (President of the College of Teachers) has recently laid out a 'Road-map' towards professionalisation in the UK. In his road-map, he highlights some basic steps that could take place to professionalise teaching. These include allowing individual schools to play a role in training their teachers (much like the training for future barristers provided by their Chambers), evidence-based continuous professional development rooted in subject-area development, or greater peer-to-peer observation between teachers that is not graded, so the 'evaluation' pressure is off and conversations can be more open and honest.

At one level, professionalisation is entirely welcome and unobjectionable (who wants an 'unprofessional' teacher?) However, it is open to multiple interpretations: for example, what does professionalisation mean? Which profession(s) should teachers resemble?

49 Lupton and Obolenskaya, Labour's Record on Education: Policy, Spending and Outcomes 1997–2010, http://sticerd.lse. ac.uk/dps/case/spcc/wp03.pdf

50 OECD, Education at a Glance 2012

51 Labour's Record on Education: Policy, Spending and Outcomes 1997–2010 p.48

52 Charlie Taylor, 'Towards a school-led education system,' January 2013, https://www.gov.uk/government/speeches/charlie-taylors-keynote-speech-to-the-north-of-england-education-conference

When commentators talk about turning teachers into a profession, the focus is typically on the external accoutrements of 'professions': a professional body, formal entrance exams that certify an approved body of knowledge, etc. However, there is another way in which teaching falls short of 'professional standards'. This is in relation to the professional development and evaluation model. Most professions operate under a form of apprenticeship, in which senior professionals (e.g. consultants in medicine, partners in professional service firms) lead teams of more junior practitioners who learn their trade from working alongside them. These senior professionals assess, coach and develop more junior staff on an ongoing basis for up to half the hours worked. This is in stark contrast to the way

in which newly qualified teachers are developed on the job: mostly, alone in their classrooms, with just a few hours per year of observation and feedback.

One of the strengths of the Teach First programme is its focus on teacher performance assessment and evaluation. The Teach First system was designed to Performance-related pay will put pressure on the teaching profession to find a less 'confrontational' approach to performance evaluation

apply the rigour and professional development focus of the consulting profession (with particular influence from McKinsey & Co.). Brett Wigdortz, former McKinsey consultant and Founder and CEO of Teach First asserts that "One of the great strengths of the Teach First programme is the focus on teacher performance assessment and evaluation. Teach First teachers receive more intensive performance feedback and coaching than most teachers, and this is essential to their success".53 Teachers in the programme typically receive immersive training in the summer before they start teaching, and are observed approximately every two weeks by an external, Teach First-sourced, examiner (typically from a university such as Canterbury or the Institute of Education) who provides formative feedback to new teachers. Additionally, the school will provide further observations and mentoring by a member of the teacher's department to provide further guidance. This extensive training and feedback model allows teachers to understand problem areas quickly and receive the right advice to move their teaching quality forward. It is perhaps no surprise that teachers undergoing this form of extensive evaluation and feedback are seen to deliver on average stronger results, recently confirmed by an Institute of Education study.54

By putting much stronger emphasis on the consequences of performance evaluation, performance-related pay will put pressure on the teaching profession to find a less 'confrontational' approach to performance evaluation in which ongoing performance review and apprenticeship (e.g. through more 'team teaching') is the norm rather than the exception.

And more generally, when considering the choices graduates make in terms of careers to pursue, professionalism plays a role. Graduates are continually attracted to firms and professions where progression and pay levels are linked to their performance in their roles. When looking at the top 100 firms that graduates themselves rank as the best places to work, it is no surprise that a substantial number of them offer performance-related pay and performance related progression as part of their graduate schemes. These kinds of systems are common across multiple industries that consistently rank highly – the "Big 4"

53 Interview with Brett Wigdortz, CEO, Teach First, September 2013

54 "Stressed GCSE candidates 'get lower results'", BBC News, September 2013, http://www.bbc.co.uk/news/ education-23958164 accountancy firms, of which three occupy the top three graduate workplace destinations, John Lewis ranked 10th, finance organisations that occupy four of the top 20 positions and consultancy firms that fill 15 of the top 100 graduate destinations. Graduates continue to be attracted by the prospect that they will be rated on their performance and paid accordingly and that is part of what attracts high numbers of excellent graduates to apply to these companies year after year.⁵⁵

Also, teachers are asking for a greater focus on professional development. In the YouGov polling, while the teachers remain somewhat ambivalent regarding working in schools in which their pay is more explicitly linked to their performance, they have stronger feelings when pay is linked to performance and professional development. Based on this polling, around 20% of teachers would prefer a pay system in which it was explicitly linked to their performance and ~40% of teachers remain indifferent. However, when asked if they would prefer a system in which pay was linked to their professional development then around 35% of teachers are in support and around 45% of teachers are indifferent. This is not surprising, as teachers wish to be judged on their own improvement and development, rather than a completely non-relative threshold. Teachers want to be treated like professionals and rewarded as such.

55 The Times Top 100 Graduate Employers 2012–2013, http:// www.top100graduateemployers. com/

3

Why the Objections to Performance-Related Pay in Principle are Wrong

From public statements and the submissions to the School Teachers' Review Body, the objections to performance-related pay fall into two categories: (i) objections-in-principle and (ii) objections-in-design and implementation of the system. This chapter focuses on the arguments raised against performance-related pay in principle, and the next chapter addresses the design and implementation challenges in the subsequent sections.

"Teaching cannot be measured"

Some members of the education community contend that teaching, as an activity, cannot be measured, and hence it will be impossible to design any kind of system that captures differences in teaching quality. Christine Blower, the general secretary of the NUT commented that "children are not tins of beans and schools are not factory production lines" and Kathryn Lovewell, an education commentator, contends that "teaching is a highly complex matrix of building trust, confidence and esteem; developing effective communication through healthy and robust relationships; and creating a learning environment that will sustain internal and external challenges. It is a myth that there is one magic characteristic or teaching feature that can be measured to prove each teacher's influence in a pupil's progress." ⁵⁷

Whilst Lovewell is almost certainly right that there may not be one special characteristic, there is some connection to teacher impact and pupils' progress — as contended by the Gates Foundation, The New Teacher Project, researchers and Stanford at Columbia University, the OECD and others. And while measuring one metric of teacher quality would be meaningless, by utilising multiple measures of teaching quality, it is possible to gain an insight into the quality of particular teaching staff and the impact they are having on their pupils.

This objection suggests that teaching is so complex that performance appraisal is difficult, or even impossible. But this report argues that teaching's complexity is not unique and across many other professions where projects may vary in difficultly, teams vary in quality and a multitude of soft and hard skills are used, organisations manage to operate successful performance-related pay and progression for employees. Complexity is something that must be thought about carefully, and any such incentive system will need thoughtful design – but

56 Press release from the NUT on Education Select Committee's report on teacher recruitment and retention, May 2012, http://www.teachers.org.uk/ node/15660

57 'Performance-related pay is wrong for teaching', *Daily Telegraph*, June 2013, http:// www.telegraph.co.uk/education/ educationopinion/10110348/ Performance-related-pay-iswrong-for-teaching.html the idea of the perfectly-designed system should not be the enemy of making progress towards a well-designed system that will deliver benefits.

Recent work by both the Sutton Trust⁵⁸ and the Measures of Effective Teaching Project (MET Project)⁵⁹ show that using a mix of pupil progression data, alongside pupil feedback and classroom observations can prove a reliable indicator for teacher performance. Supporting evidence from the National Bureau of Economic Research has also shown that teacher value add can be rigorously identified.⁶⁰ Understanding the precise metrics to use is a considerable issue; however, there is strong evidence that suggests that it is possible to meaningfully and effectively measure the quality and impact of a particular teacher.

"The evidence supporting performance-related pay is poor"

The significance of performance-related pay depends in large part on how effective it is at driving educational outcomes. Even proponents of performance-related pay acknowledge that introducing performance-related pay is a significant change for teachers, and the benefits need to be commensurately large, and certain. This was supported by PISA in their global 2012 study of teacher pay. PISA found that "In countries with comparatively low teachers' salaries (less than 15% above average GDP per capita), student performance tends to be better when performance-based pay systems are in place" indicating that teachers need to see a potential for substantial increase in pay.

Below the report summarises the evidence behind performance-related pay.

General evidence for performance-related pay in the UK public sector

Policy Exchange's paper Local pay, local growth summarised much of the evidence around reforming pay in the public sector more broadly.⁶² This quoted a study noting that "public servants are responsive to financial incentives",⁶³ another one that identified particular gains in education,⁶⁴ and another that showed positive impacts in the civil service,⁶⁵ although the evidence on healthcare is scarcer.⁶⁶ Looking internationally, the report quoted a study by the World Bank that found that, across 110 case studies of public and relevant private sector jobs in various countries, 65 of 110 found a clearly positive effect for performance-related pay.⁶⁷

This report noted that, when it comes to evidence for performance-related pay in the public sector in the UK:

"there is scant evidence on the effects of a well designed system of PRP in the case of the UK public sector. One of the main reasons for this is that the UK public sector has only seen performance-related pay on a very small scale. For example, the Defence Aviation Repair Agency paid awards of between just £50 and £150 for excellent performance. Top performers in the Home Office received just 2% of their base salary. In some instances, the results have been complex — for example, a system of team-based reward in Jobcentre Plus for job entry, varying by the difficulty of placing a claimant, showed incentives aimed at smaller teams produced 10% greater output than larger teams. Schemes are often pilots which last for less than a year. Though well established elsewhere, this makes evidence on the efficacy or otherwise of PRP in the UK public sector alone, sparse".

It is worth noting, of course, that sparse evidence is not the same as negative evidence, which was not identified in this report.

58 "Testing Teachers: What works best for teacher evaluation and appraisal", Sutton Trust, March 2013, http://www.suttontrust.com/public/documents/teacherevaluationreport.pdf

59 The MET Project is a research partnership of academics, teachers, and education organizations committed to investigating better ways to identify and develop effective teaching funded by the Bill & Melinda Gates Foundation.
"Ensuring Fair and Reliable Measures of Effective Teaching," Met Project, January 2013

60 "Measuring the Impacts of Teachers I: Evaluating Bias in Teacher Value-Added Estimates", Chetty, Rockoff and Friedman, NBER Working Paper 19423, September 2013

61 "Does performance-based pay improve teaching?", OECD, May 2012

62 "Local pay, local growth: reforming pay setting in the public sector" Policy Exchange 2012

63 'The Motivation and Bias of Bureaucrats'. American Economic Review (2012)

64 OME, "Performance pay in the public sector: a review of the issues and evidence" 2007

65 Makinson J, 'Incentives for change: rewarding performance in national government networks', 2000

66 Gravelle, Sutton and Ma "Doctor behaviour under a pay for performance contract: Evidence from the quality and outcomes framework" (2007)

67 Zahid Hasnain Z, Nick Manning N, Pierskalla J, 'Performancerelated Pay in the Public Sector: A Review of Theory and Evidence', World Bank Working Paper 6043

Evidence from England for performance-related pay in schools

The government introduced the Upper Pay Scale (UPS) in 2000 as a way to incentivise teachers to improve performance with the prospect of higher pay. The Department for Education describes obtaining that level of performance and making it onto the UPS as "The Threshold" stating that "Progression to the Upper Pay Scale is dependent on a teacher being able to demonstrate that they have met the Post-Threshold Standards set out in the current Framework of Professional Standards for Teachers". 68 Those standards included skills, knowledge and characteristics a teacher

must possess in order to be paid based on the UPS. While the UPS initially had 5 different spines, it was reduced to three in 2004. Burgess et al. studied the effect that the introduction of this policy had on pupil outcomes and found that, despite the fact that 97% of teachers passed the performance "threshold", there was still a measurable increase in pupil performance of the eligible

37% of Heads said the current system was not sufficiently flexible, 52% disagreed that it offered sufficient scope to reward high performance, and over 60% of heads said there were forms of reward that they would like to use but could not

teachers. 69 This can also be explained by survey data that showed 82% of teachers agreed with the statement that "many excellent teachers will not pass the threshold because there is certain to be a quota on places available" showing that ex ante they treated the threshold as a genuinely difficult threshold to pass. The study found that eligible teachers added almost a full GCSE grade per child and half a grade of valueadded per child, when compared to non-eligible teachers.⁷⁰ (It is worth noting that these effects were subject-dependent and not seen in maths). This suggests that teachers can and do change their behaviour to improve pupil outcomes in the face of performance-related financial incentives - at least where they are viewed as difficult to attain by teachers (which is only sustainable in the long run when success rates at passing thresholds are significantly less than 90%). The study only focused on a single teaching cycle after the policy was introduced, meaning it is not possible to know if the results were persistent after teachers had moved onto the UPS. It should also be noted that, as discussed earlier, it has now become apparent that application rates to cross the threshold and enter the Upper Pay Scale are very high, meaning that there is a strong likelihood that this effect has now diminished.

Survey evidence from Heads, conducted as part of the STRB process, shows some dissatisfaction with the current abilities of the pay system to reward and retain performers. Overall, 67% of heads were happy in 2011 with the current pay system, but 37% said that the current system of Teaching and Learning Responsibility points (used to reward high performers and additional responsibilities) were not sufficiently flexible, 52% disagreed that the current system offered sufficient scope to reward high performance, and over 60% of head teachers indicated that there were forms of reward or recognition that they would like to use but were currently unable to.⁷¹

In order to bolster the UK evidence base around effective use of PRP in schools, this report recommends that government fund a series of research projects to help improve our understanding of what outstanding performance evaluation looks like in the English and Welsh context, how performance-related pay can be most effective, what the barriers are to its successful implementation and how they can be overcome.

68 "Evidence to the STRB: the case for change," Department for Education, May 2012, pp 17

69 Burgess, Davies, et al. 2009

70 Ibid

71 "Teachers pay issues: research findings 2010" ORC international research for OME

International evidence for PRP in schools

The existing body of research on PRP in schools is small and there are large differences between studies such as how performance is measured, the complexity of the incentive structure, the type of incentive offered and the scale of the incentive relative to base salaries. There are also important definitional queries that can hamper the reliability of research: for instance, in a 2012 report from the OECD that looked at systems with and without performance-related pay, the UK was classified as a system with performance-related pay.⁷² Based on the views of Ofsted and structure of the current system, this is not an accurate representation. However, in summarising the evidence overall, the Office for Management Economics concluded in 2007 that

"There is strong evidence that teachers do respond to financial incentives. Several studies suggest that this response does not universally affect all students: most of the improvement appears to come from previously weak students performing better under such schemes. All studies suggest that directly rewarded outcomes improve under school and teacher level incentive schemes. The evidence on unrewarded outcomes is, however, inconclusive. Nearly all studies evaluate a sample of schools which are unrepresentative or specially selected to take part. This means that care must be taken in applying the results of studies more generally. From a welfare perspective, there is still little understanding of the processes of change within schools that have adopted a financial incentive scheme, and subsequent effects on staff morale. Neither is there an understanding of the full costs and benefits of these schemes."

There have been a number of successful studies in developing countries that indicate teachers respond effectively to changes in pay structures. In two studies in India that implemented relatively simple incentive structures both at the group and individual levels resulted in sustained improved test scores over multiple years and a large reduction in teacher absenteeism. In Kenya, a group

The Office of Management Economics concluded that there is strong evidence that teachers do respond to financial incentives

based incentive structure resulted in improved test scores although they were not persistent.

There have been a number of studies in developed countries, particularly the US, where the presence of state based

education systems provides fertile ground for differentiation and research. Studies in Dallas, Denver, and Arkansas all indicate that performance-related pay produced a demonstrable improvement in pupil outcomes. One methodologically different study, in Illinois, involved primary and middle school teachers who had to "pay-back" bonuses if their pupils did not hit certain benchmarks. The study provides clear evidence that teachers are motivated by performance-related pay. It also highlights the important point that teachers are risk averse, which has been confirmed by studies showing teachers "are more risk averse than employees in other professions, and that relatively risk averse individuals sort into teacher occupations."⁷³

Outside of the US, an Israeli study also showed significant gains in both English and maths (Indeed, in Israel it was shown that teachers began to adopt differing behaviours such as after school teaching and increased responsiveness to pupil needs.) However, when looking at the systems that have been adopted

72 Ibid

73 Dohmen and Falk, "You get what you pay for: incentives and selection in the education system" Royal Economic Society, in places such as Tennessee,⁷⁴ Portugal⁷⁵ and New York City⁷⁶ schools, there was either limited or no demonstrable increase in pupil performance following the introduction of performance-related pay – or even, in the Portuguese example, a decline in performance.

Box 1: International evidence

1. Duflo and Hanna (2005) investigated the effects of performance-related pay in India using an experimental design incorporating 60 rural schools. The incentive scheme was simple and aimed to reduce teacher absenteeism in schools (a significant problem in India) and increase student learning. Teachers pay was linked linearly with attendance, and it was found that absenteeism dropped by 20% in treatment schools, students received 30% more learning time and pupil performance was raised by 0.17 standard deviations (or, in layman's terms, 17% better than the average score of a pupil in a control-group, non-incentive system, school).⁷⁷

Glewwe et. Al. (2010) conducted a randomised experiment in Kenya that provided teachers with group incentives based on test scores, and found that while test scores increased the gains were temporary indicating that teachers responded to the incentive but not in a way to generate long term learning outcomes. Students in the study did improve their studying and test-taking techniques.⁷⁸

Muralidharan and Sundararaman (2011) investigated both individual and group incentive structures in government-run rural primary schools in the state of Andhra Pradesh in India and found that both resulted in an improved in pupil achievement. The gains were sustained across multiple years but individual incentives in the second year were found to be twice as effective at raising pupil achievement.⁷⁹

2. Lavy (2002) conducted an analysis of a tournament style performance pay system in which the top third of teachers within each subject group were rewarded monetary bonus for pupil progress (adjusted for socio-demographics). Teachers were ranked across two metrics, both the pass rate of their pupils and the average score of their pupils. The results of the study showed improvement in pass rates in core subjects (Maths & English) – and an average score improvement of 0.7 credits. The most striking part of this example was that teachers were seen to change behaviours which included an increase in after school teaching and a perceived increase in the responsiveness to pupil needs. The study also asserts that the incentive scheme was more cost-effective compared to other interventions like additional instruction time.⁸⁰

Goldhaber and Walch (2012) analysed the results of the Denver Professional Compensation System (ProComp) – one of the first district-wide experiments with performance-related pay in US schools. They found at over the period 2003 – 2010 that there were gains observed for pupils taught by teachers enrolled in the scheme, but that similar gains were seen in non-participating teachers. There was evidence that those who volunteered into the scheme were more effective teachers than who do did not volunteer.⁸¹

Ladd (1999) measured the results of a group incentive scheme in Dallas schools from 1991 to 1995, which issued bonuses to the top 20% of schools in the city based on pupil progress. (\$1000 per teacher and leader in each school, \$500 to support staff, and a school level \$2000 bonus). Compared to pass rates in other similar

74 http://news.vanderbilt. edu/2010/09/teacherperformance-pay "Teacher performance pay alone does not raise student test scores"

75 http://cee.lse.ac.uk/ceedps/ ceedp112.pdf "the increased focus on individual teacher performance caused a signicant and sizable relative decline in student achievement, as measured by national exams

76 http://www.rand.org/news/ press/2011/07/18.html "New York City School-Based Financial Incentives Program Did Not improve Student Achievement or Affect Reported Teaching Practices"

77 http://www.povertyactionlab. org/publication/incentives-workgetting-teachers-come-school

78 Glewwe, Paul, Nauman Ilias, and Michael Kremer. 2010. "Teacher Incentives" American Economic Journal: Applied Economics, 2(3): 205-27

79 Muralidharan and Sundararaman, "Teacher opinions on performance pay: Evidence from India", Economics of Education Review, Volume 30, Issue 3, June 2011, Pages 394–403

80 Victor Lavy, "Evaluating the effect of teachers' group performance incentives on pupil achievement." Journal of Political Economy 110, no. 6 (December): 1286-1317

81 Dan Goldhaber and Joe Walch, "Strategic Pay Reform: A Student Outcomes-Based Evaluation of Denver's ProComp Teacher Pay Initiative", Economics of Education Review, 2012 schools in other cities, reading outcomes improved between 10% and 15% more in Dallas schools over the 4 year period, while for maths, the improvement ranged from 14% to 17%. Results also got stronger over time. The effect was most marked amongst white and Hispanic students with almost no impact from black students.⁸²

Tennessee introduced a scheme that closely resembles the introduction of the Upper Pay Scale in England, with progress up a fixed career ladder being dependent on professional evaluation and observation. Some teachers entered the scheme whereas others did not, and pupils and teachers were randomly allocated. Dee and Keys (2004) looked at the relative performance of teachers on and not on the career ladder and found that the former had 3% high maths scores than the latter for their pupils, which is statistically significant but relatively small (the authors estimate between 40% and 60% of the effect size of introducing smaller class sizes) with effects greatest for those younger teachers on the early stages of the career ladder. Gains in reading were not statistically significant.⁸³

- 3. Woessmann (2011) focuses on a cross-country comparison in order to see longer-term effects of performance pay, which include labour market equilibrium effects in attracting different types of people into teaching and within-system selection bias. He finds that across countries who reward outstanding teachers, you can expect to see a ~25% of a standard deviation improvement in math and reading, and a ~15% of a standard deviation improvement in science.⁸⁴
- 4. Levitt and Fryer (2012) conducted an experiment with 150 K-8 teachers from Illinois and they were randomly assigned into a control and two treatment groups. The first group was given a simple \$8,000 bonus incentive if they achieved the required standardised test scores for their pupils, while the latter were given a \$4,000 upfront bonus and informed they would have to pay some back if their pupils did not meet the benchmarks at testing time. The results showed that expost bonuses yielded no increase in test scores, but ex-ante bonuses resulted in an improvement in outcomes equivalent to improving a teacher's quality by one full standard deviation.⁸⁵

The performance-related pay system introduced in Washington DC, which George Parker refers to in this report's foreword, has also been positive evaluated. The study from Stanford Center for Education Policy Analysis⁸⁶ concluded that:

- Teachers being ranked 'highly effective' (top score) once, and who needed to
 be ranked again to become eligible for a financial incentive, showed "strong
 improvement relative to high performing teachers not eligible for the pay
 increase" an equivalent gain to moving them from the 78th percentile of
 effectiveness to the 85th percentile.
- Teachers being ranked 'minimally effective' (the second lowest rank) who stayed in the system improved the fastest of any groups of teachers this gain was equivalent to moving a teacher from the 10th percentile of effectiveness to the 15th percentile, or half the total gain expected from average teachers during their first three years of practice.

- 82 Helen Ladd, "The Dallas school accountability and incentive program: an evaluation of its impacts on student outcomes" Economics of Education review vol 18(1), 1999
- 83 Thomas Dee and Benjamin Keys "Does Merit Pay Reward Good Teachers? Evidence from a Randomized Experiment" Journal of Policy Analysis and Management, Vol.23, No.3, 2004
- 84 Ludger Woessmann, "Cross-Country Evidence on Teacher Performance Pay", University of Munich, Ifo Institute CESifo and IZA, Discussion Paper No. 5101, July 2010
- 85 Roland Fryer, Steven Levitt, et al, Enhancing the Efficacy of Teacher Incentives Through Loss Aversion: A Field Experiment, National Bureau of Economic Research, July 2012
- 86 Dee and Wyckoff, "Incentives, Selection, and Teacher Performance: Evidence from IMPACT" Stanford University Center for Educational Policy Analysis, October 2013

• Low performing teachers were also much more likely to voluntarily exit the system – around 20% of 'effective' teachers (middle ranking) left in an average year, compared to 31% of minimally effective.

The authors comment that

"A key part of what makes these results compelling to us is our ability to credibly rule out alternative explanations. Our research design compares outcomes among teachers whose performance in the prior year happened to place them just above or just below the score thresholds that separate IMPACT's rating categories...in short, our study identifies the differences in outcomes between teachers who face sharp differences in performance incentives but who are essentially identical in all other respects. Thus, this research design allows us to isolate the effects of the incentives in IMPACT from the effects of differences in prior performance."

Although field experiments remain important in trying to understand how teachers will respond to a particular system, the literature has begun to focus on cross-country studies that allow us to see the longer-term effects of performance-related pay, which include labour market equilibrium effects in attracting different types of people into teaching and within-system selection bias. The latest of these studies, by Ludger Woesmann, shows that the effect of performance-related pay is positive: approximately 25% of a standard deviation improvement in maths and reading, and approximately 15% of a standard deviation improvement in science. The conclusion of the paper states that, "The results of cross-country education production functions that extensively control for student, school, and country background factors suggest that students in countries that make use of teacher performance pay perform significantly better in math, science, and reading than students in countries that do not use teacher performance pay". 88 Woesmann's is one of the first truly global comparisons of performance-pay in schools.

The studies presented here provide an interesting set of data that increasingly suggests performance-related pay may improve outcomes – and furthermore, tend to suggest at worst that no benefit (or no measurable benefit) occurs, rather than evidence of negative or perverse results. Furthermore, there are a number of authors who, despite finding no evidence of improvement, believe that this relates to potential design flaws such as the complexity of metrics which may be necessary to effectively assess teachers. Fryer highlights this in his 2007–2010 study of teachers in New York City citing that the majority of performance-pay schemes have been too complex for teachers to understand, thus negating any positive effects they could have had if the metrics and scheme were properly understood. ⁸⁹ Given that, the next step in research must be identify the key systemic features which make some schemes more successful than others.

"It will distract Heads from focusing on teaching and learning"

It is argued that implementing a new, more robust, performance management system will be time-consuming and may distract Heads from other activities. The importance of this objection depends entirely on the impact of the reforms.

87 http://news.stanford.edu/ news/2013/october/dee-teacherassessments-101713.html

88 Ludger Woessmann, "Merit Pay International," Education Next, April 2011, http:// educationnext.org/merit-payinternational/

89 Roland Fryer, "Teacher Incentives and Student Achievement: Evidence from New York City Public Schools", Journal of Labor Economics, Vol. 31, No. 2 (April 2013), pp. 373–407 A robust performance management system that drives teacher improvement and provides incentives to respond to formative feedback and that, ultimately, improves the overall quality of teaching and learning is worth diverting time and energy to – a flawed system that merely adds bureaucracy is not. Indeed, assuming the system will be effective, it is hard to argue what could be more important for a head to do. The scope of improving school leadership to manage this process is covered briefly below, where it is acknowledged that more support will likely be needed in the shorter term, but in principle, this report argues that an objection that such reforms will waste Heads' time has no merit.

Capability of Heads

Related to this is the question of priorities: is a new pay and performance management system the top priority for the school system right now? Given the mixed evidence on the impact of performance-related pay, this is a fair challenge. However, as we note above, almost every other lever for improving schools has been tried, also with mixed results. Performance-related pay may or may not be the most pressing reform for schools right now, but we believe that it is as well-evidenced as other reforms and represents the only politically and financially viable way to increase teacher pay at the present time.

To support the ways in which Heads and Governors apply PRP correctly, this report recommends that government review the Ofsted procedures for assessing leadership and management. Ofsted and the government should review how schools with strong performance evaluation and performance-related pay can be relieved of some of the compliance burden associated with the current inspection regime. The full extent of this recommendation goes beyond the immediate scope of this research but is an area of focus for future work by Policy Exchange

"Performance-related pay is divisive"

Former TUC general secretary Brendan Barber argued that performance-related pay is a "kind of individualised pay that will lead to division within staff rooms as teacher is set against teacher". 90 In one sense, a certain amount of division is, of course, the point of performance-related pay: there will be differentiation between teachers within a school. However, this report argues against 'divisive' being used in a pejorative sense as it is by some opponents — and there is a difference between differentiation and morale. Other professions that use performance-related pay to differentiate salary are able to maintain high levels of morale among employees, and maintain collegiality — including when pay awards are given out. Several studies show higher job satisfaction relating to performance pay systems — for example, a study by Heywood et al across a number of occupations and workers in the US found that "both individual performance pay and profit sharing are routinely associated with higher job satisfaction...when earnings are held constant" and another study by Kennedy found that a chance of a profit share can boost worker morale.

A supplementary objection that falls within this category is a reprise of one raised when the Upper Pay Scale was introduced – that, in a zero sum game, if one teacher is to be paid more, another must be paid less. This, however, is a flawed analogy. Depending on how schools structure their performance system, there is

- 90 'Teaching unions attack plans to introduce performance-related pay,' Union News, December 2012, http:// union-news.co.uk/2012/12/ teaching-unions-attack-plans-for-performance-related-pay/#sthash. wUXOA1BR.dpuf
- 91 Heywood, et al, "Performance Pay and Job Satisfaction", *Journal* of Industrial Relations, 2006 48: 523
- 92 Peter Kennedy, "Performance Pay, Productivity and Morale", Economic Record, 71: 240–247

no reason why this might necessarily occur. Heads can structure their pay budget so that (theoretically) everyone can afford to be given an uplift, assuming the performance justifies it. Equally, provision could be made for everyone in school to be awarded a bonus – it simply means available funding being divided across more people. This is certainly more problematic when budgets are flat, but, in principle, it can certainly be delivered.

Secondly, what this objection misses is the flexibility that exists within a current budget to switch between pay and non-pay costs, or even switch within pay costs, depending on the natural movement of staff. It is theoretically possible, for example, for a Head to make an active choice to dedicate more of their budget towards teaching staff, and less towards non-teaching staff, or other

areas of non-pay spend. Heads will also have flexibility, over time, to manage their workforce as teachers and other staff move on – making decisions as to who to replace and how, or potentially restructuring positions.

None of this is new - it is the type of decisions that schools and Heads

66 Other professions that use performancerelated pay to differentiate salary are able to maintain high levels of morale among employees, and maintain collegiality 99

make every year as they look to manage their budgets effectively. What this report argues is that a performance-related pay system may lead, in any one year, to some teachers being given pay increases, and some remaining on their current salary levels — and, in effect, receiving a real terms pay cut. But the level at which any headroom — funded through cash increases or efficiency savings — is distributed remains a matter for Heads, and need not become a zero sum game.

"Performance-related pay will push teachers away and create local labour market issues"

Submissions by teachers' unions and other organisations to the School Teachers' Review Body ahead of their 21st Report stressed that not only is performance-related pay divisive, but it will ultimately push current and potential teachers away from the profession. The NUT made this claim in their April 2012 School Teachers' Review Body submission stating that "Local pay would create national and local teacher supply problems. Nationally, it would send a signal to graduates that if they seek jobs with coherent pay structures they should look elsewhere. Locally, it would create severe recruitment and retention problems in areas of lower pay as teachers sought higher pay in other parts of the country". NASUWT contended that recommendations by the School Teachers' Review Body to move towards performance-related pay would cause "turbulence" to the system, removing "transparency" and, ultimately, leaving teachers feeling that the system was unfair and, as a result, cause them to leave. 94

Performance-related pay and the wider set of reforms to teacher pay are sufficiently complex that it is almost impossible to forecast the short-term labour market implications — positive or negative. For some teachers, performance-related pay will make the profession less attractive; for others, it could be more attractive. How performance-related pay plays out will depend on a range of factors that are not being considered alongside performance-related pay, such as how much more money, net for net, that teachers might be able to make in a

^{93 &#}x27;Submission to the School Teachers' Review Body,' National Union of Teachers, April 2012, pp 2

^{94 &#}x27;NASUWT Submission to the School Teachers' Review Body,' NASUWT, June 2013, pp 2

year and over the course of a lifetime of teaching. It will also interrelate strongly with other factors that affect the desirability of some schools and local schooling areas — including cost of living (which affects real disposable income) and non-pay factors, such as workload, discipline, overall attractiveness of an area to

66 Schools are best able to judge how to deal with their local labour market issues, through managing their own payscales – just as small businesses do 99

live in and so forth. But, importantly, the response to this is not to pretend there is a national labour market and have a subsequent pay scale (even with flexibilities for London). The response, as argued in this report, is to recognise that schools are best able to judge how to deal with their local labour

market issues, through managing their own payscales – just as small businesses throughout the private sector do when setting initial salaries.

Moreover, to take an objection against labour market distortions at face value would be to argue that, at the moment, all schools are equally attractive, and there are no local labour market issues – which is a demonstrably false assertion:

- This report has already referred to specific well known shortages in particular (STEM) subjects.
- Alison's Wolf work showed that schools in more deprived neighbourhoods face significant recruitment difficulties⁹⁵
- The existence of London pay bands recognises the specific labour market costs of that area and the need for schools to compensate. This draws on wider work undertaken by the Office of Manpower Economics (which advises the STRB on regional labour markets for teachers). In their 2010 analysis, for example, they summarised the economic literature to substantiate the intuitive conclusion that in areas where there was the greatest differential between private sector wages and school teacher (national) wages, there was the highest vacancy rate in schools, and the greatest number of hard to fill vacancies (defined as vacancies that had been advertised for over 90 days but remained unfilled on the day of the research). 96
- Further work by Propper and Britton in 2012⁹⁷ showed that national pay scales actively harm pupils in high cost areas. This research finds that, controlling for a wide range of factors, a 10 per cent increase in an area's average wages leads to a one exam grade loss at GCSE level which the authors ascribe to the wage premium attracting more highly skilled people away from teaching and into more financially rewarding occupations.

As the current Secretary of State for Education has said, "reforms to pay progression will mean that, from this year, the best teachers will have the opportunity to access greater rewards even earlier in their careers. And school leaders... have more autonomy to attract, retain and reward those teachers who have the greatest impact on their pupils' performance". 98 This report does not dismiss this objective but has concerns that, in practice, there may remain areas that are less attractive for teachers, and other local labour market issues. But it does argue that in principle, the introduction of greater pay flexibility may help, rather than hinder, such an issue.

95 Wolf, A, 'More than we bargained for', Centre Forum

96 Office of Manpower Economics, "Local pay differences and vacancy rates for school teachers in England and Wales: regional differences in teachers' rates of pay and teacher vacancy

97 Propper C, Britton B, 'Does Wage Regulation Harm Kids? Evidence from English Schools', Centre for Market and Public Organisation, Bristol University 2012

98 Speech to Policy Exchange September 2013, op cit Overall, this report does find evidence that unions appear more concerned about performance-related pay than teachers, who are mainly concerned with the implementation risks and bureaucracy of the system. One of the starkest findings in the YouGov survey of teachers was that they were highly dissatisfied with the level of bureaucracy in their role generally, and that if a performance-related pay system could ease this burden, then teachers who were previously somewhat indifferent to performance-related pay would become significantly more in favour.

This report argues that a well-designed performance management system that is focused on outcomes (e.g. student progress, value-added) means that schools should devote less resources and time to inputs (e.g. compliance activities). This means that teachers can reduce their administrative burden by being allowed to spend more time where they think it will be most effective. To the extent that teachers continue to achieve good outcomes, they can also reduce their administrative burden. This kind of practice reflects many other professions, where those individuals that are shown to be competent are trusted to deliver, until their performance measures begin to decline – while those who are not performing or are new to the profession are more closely monitored.

Veteran teacher and former President of the Washington Teachers' Union (WTU), George Parker witnessed this difference between unions and teachers when Washington introduced performance-related pay under Michele Rhee's leadership in 2009/10. In Washington D.C., it was the unions who gave the greatest pushback as opposed to an individual teacher level. Parker explained that "unions are opposed to stuff that looks like the labour market. They don't want teachers in the same staff room being paid different amounts." He continued, "But teachers are more concerned with what they might get paid and how it will be determined. 'Will only 10 teachers at my school be eligible?' was a common thought process for a teacher. They care about the design of the system." It is these design questions that the next Chapter will now examine.

99 Interview with George Parker,

4

Designing an Effective Performance-Related Pay System

It is important to note that the government starts from a principle that it is not for them to structure a system for schools, and that it should be up to individual Heads and Governors to design a system that works for them. In principle, this report echoes that approach. However, given the clear existing lack of understanding at school level, this report does argue that it is simply practical to argue that the government ought to help take a lead – in effect, shape the market (or at least outline the options). To help this approach, this chapter considers the evidence behind some of the key elements of an effective model and summarises some case studies.

An effective performance-related pay system should be based on the following principles:

- It should have an evaluation system that is transparent and credible to teachers. If teachers do not understand the system, then it is hard for them to respond to the incentives to improve performance. In addition, teachers should play a role in tailoring the system locally as this lends the system credibility and teachers can have confidence that their evaluations are both honest and meaningful.
- Schools also need to drive their own performance management systems and want to see results if the schools do not want to differentiate between their staff members, make difficult calls and have potentially difficult conversations then performance-related pay will have little effect. Schools need to have simple options for design and implementation that will make performance-related pay easy to carry out. The system must also incentivise schools to want to undertake the task of creating a culture of performance management; otherwise the system will not change.
- The system must motivate all teachers to progress in their performance, ultimately improving pupils' learning. The impact of performance-related pay is directly related to the number of teachers that genuinely want to understand how they are progressing in the profession. Teachers must want to strive to improve and strive to have greater impact on their students. The system itself must minimise, or avoid entirely, adverse effects or perverse incentives. Designing a system free of perverse incentives will be difficult but is absolutely necessary for performance-related pay to succeed.
- A performance pay system should be able to affect the overall labour market dynamic in regards to recruitment and retention of desirable candidates into teaching, encourage the best teachers to stay in teaching and give clear messages

to under-performers to improve or exit the profession. Ultimately, if recruitment improves and good teachers stay in the profession, then performance-related pay will have been a success. Performance management and then compensation based on that performance should weed out the under performers, help those who want to improve and keep the best in the profession.

The challenges in successfully meeting these criteria should not be underestimated, and getting them wrong could make the reform ineffective or even counterproductive.

An evaluation system that is transparent and credible to teachers

Improved performance evaluation of teachers should be a huge prize in itself, even without the new rewards in terms of pay. In a survey, the OECD's Teaching and Learning International Survey (TALIS), 2009 showed that teachers across the globe typically find their evaluations to be fair (83.2% of teachers surveyed) and that more than three-quarters found the evaluations to be helpful in their professional development; teachers value knowing where they excel and where they need to improve.

Perhaps because it seems such an obvious point, there appears to be little research demonstrating the link between pupil achievement and teacher evaluation. Taylor and Tyler (2012) noted that "there are good reasons to expect that well-designed teacher-evaluation programs could have a direct and lasting effect on individual

teacher performance. To our knowledge, however, ours is the first study to test this hypothesis directly". ¹⁰⁰ They assessed the impact of observation-based teacher evaluation in middle schools in Cincinnati Public Schools. What they found was that "teachers are more effective at raising pupil achievement

66 Lack of faith in the evaluation (rather than opposition in principle) is by far the most significant objection to performance-related pay that is raised by teachers 99

during the school year in which they are being evaluated than they were previously, and even more effective in the years after evaluation". Furthermore, they found the largest post-evaluation improvements in the poorest performing teachers.

In addition to being an important lever for improving teacher quality and pupil performance in its own right, high quality performance evaluation is an absolutely necessary prerequisite for the successful adoption of a performance-related pay model. This is especially true in teaching, which has two features that are more pronounced than in most other professions: risk aversion, and mistrust of senior managers. This report has noted the risk aversion of teachers above, and so focuses on the trust issues in this section.

From the YouGov survey questions and comments for this report, lack of faith in the evaluation (rather than opposition in principle) is by far the most significant objection to performance-related pay that is raised by teachers. Approximately one-third of teachers expressed low confidence in the various methods of assessment used in schools.

The issue of mistrust is endemic to teaching and appears to be particularly strong compared to other professions according to HR expert and Director of Towers Watson's Talent and Reward Practice, Jim Crawley. In an August 2013 interview for

100 "Can Teacher Evaluation Improve Teaching?," Education Next, Fall 2012, http:// educationnext.org/can-teacherevaluation-improve-teaching/ this report, he contended that while mistrust in evaluation does exist in private organisations, employees largely overcome the mistrust as those organisations display a level of consistency and expertise in the evaluative process.¹⁰¹

George Parker also witnessed this first hand in Washington D.C., saying that "especially in low income/high poverty areas, it is hard to get your best possible people to even come to the area. Sometimes, you get less than stellar Principals. And when you have a less than competent Principal, that Principal will not have the capacity to effectively deploy a performance management system." In his view, there were reasons for teachers to be suspicious — individual school Principals were not always fair and sometimes consciously biased. "You have to introduce mechanisms like external appeals to stop the bias," he said, "There's always unconscious bias and there's not much you can do about it. But we're talking about protecting the good teacher that's maybe standing up to a Principal on an issue. That has to be possible." ¹⁰²

Russell Hobby of the NAHT corroborates the idea that schools across the country may have mixed abilities for effective teacher assessment saying that "There is no doubt that schools have different levels of capability in conducting strong performance assessment. For many schools, a strong performance progression and feedback system will be reasonably simple to accomplish well, while as for others there is a risk it will be implemented poorly." However, he expresses general confidence in schools overall: "Teachers are right to demand judgements should be objective, transparent and fair. But Heads are clear that their staff are their greatest asset and must be rewarded, developed and encouraged appropriately. There is no more important thing to spend their budgets on." 103

As the polling and further qualitative survey for YouGov found, there is some general support for the principle of PRP, but questions around implementation, underpinning the importance of having clarity and transparency.

Box 2: Teachers' views on performance-related pay

[The] central issue is that I do not trust this government to introduce a FAIR system of performance-related pay... but do not disagree with the general ideal of performance-related pay.

The problem with performance-related pay is precisely in the assessment of performance. When and if someone devises an objective measure of performance then it might be acceptable.

[The] performance of teachers cannot be measured easily and there is [no] impartial and objective measurement.

We are professionals and if management do not believe we know what we are doing they should take other action.

I support the strike but do not disagree with the general ideal of performance-related pay.

I have said "makes no difference" for several questions, not because this is a neutral thing (i.e. has no impact) but that the methods used to judge performance appear highly subjective.

It is difficult to see how performance-related pay could work fairly in teaching where criteria for success and failure are hard to pin down. I hate the idea of the extra admin which would detract from the core of the job, i.e. teaching pupils.

101 Interview conducted in August 2013 with Jim Crawley, Director, Talent and Reward Practice, Towers Watson for this paper.

102 Interview conducted in August 2013 with George Parker, former president of the Washington Teachers Union, current Senior Fellow at Students First, for this pager.

103 From NAHT press release responding to 2013 Populus survey on performance-related pay in schools, July 2013

Schools that want to see results

The unions claimed that performance-related pay was not of interest to their members. However, this report has found some evidence that senior managers are engaging with performance-related pay, even if they are doing so from a low base of expertise. Russell Hobby reports that "head teachers are starting to think about performance-related pay, but a significant number have not yet outlined a clear performance evaluation system and its link to pay for their school". 104 The Ten Group, who operate The Key, the UK's leading professional support service for school leaders, had more than 6,000 requests between April and July 2013 specifically on the topic of pay and progression. 105 The number of requests directly related to pay and performance also doubled from the 2013 spring to summer term. The majority of these requests have come from head teachers. Some common questions being asked of The Key in this area are:

- Are there courses on implementing performance-related pay for teachers?
- Has an up-to-date policy been produced to cover the requirements for implementing performance-related pay?
- Are there any model criteria for judging performance at different levels of the teachers' Main Pay Scale?

Head teachers are clearly thinking about performance-related pay, but not quite sure where to turn for help on design and implementation.

The ASCL have written some excellent guidance for members that make clear that they are supportive in principle to what they describe as the "reasonable" proposals set out by the government. The organisation notes that "the concept of pay progression, based almost entirely on length of service, rather than explicitly linked to performance, is difficult to justify with the general public. Currently, the movement from one point to the next, on the main pay spine, represents an increase of around 7.5 per cent each year. Such an increment is high relative to pay more generally and, in particular, under the present economic circumstances."

The guidance also notes that "the implementation of the proposals brings significant challenges to headteachers and governors, not least of which is a very challenging timescale". 106

As well as school management wanting to see results, expertise to deal with performance-related pay is a major concern in relation to design and implementation. Contrast the experience and support of a Head with a private sector manager. In addition to their own personal experience of performancerelated pay, private sector managers have the support of professional HR managers and external expertise to guide them in the design, communication and implementation of performance-related pay. Heads have little support - some have a 'business manager' role but this is typically a financial or commercial role rather than an HR one. Unsurprisingly, Russell Hobby of the NAHT acknowledges that the skill levels within the cadre of Heads are mixed. Given the complexity of the issues, the lack of training in performance-related pay and the almost total absence of experience of performance-related pay, it is entirely to be expected that capability will stand as an obstacle to sound implementation.

104 In person interview with Russell Hobby, August 2013.

105 The Key, Data and Insight department, obtained 6 September 2013

106 ASCL guidance paper 94, "Summary of changes to the STPCD 2013 and ASCL guidance on developing a pay policy" http://www. ascl.org.uk/resources/ library/guidance papers/ guidance_papers_76_100/94_ guidance_on_pay_policy_2013 The potential problems here are plentiful. Failure to adequately assess teachers, failure to win the confidence of teachers in the assessments, awarding the wrong balance of base pay and annual bonuses, failure to take into account particular issues like variations between cohorts, inadequate coaching, unnecessarily demotivating new teachers through inadequate support, overawarding performance-related pay and breaking the budget or not addressing longer-term under-performers. However, the lack of ability in implementing a successful performance evaluation system is the single biggest implementation issue. Heads are meant to have been doing this for years, at least since the introduction of the Upper Pay Scale. 107 Yet few Heads have done so, and, as a result, Heads and senior managers have developed almost no expertise. Heads and governors should consider carefully their abilities and capacity when introducing the new system, to manage this risk. It should also be a priority when investing in school wide improvement support.

An additional capacity constraint could be school governing bodies. For Heads to implement new evaluation and pay systems, they will need support and even expertise from their governors. Currently, very little consideration is made in terms of the types of expertise a governing board should possess. Governor expertise in human capital and pay systems would be a huge support to any Head teacher implementing a pay-for-performance scheme.

The system must motivate all teachers to progress in their performance

Incentives and incentive structures are notoriously difficult to get right. The tighter and clearer (more mechanistic) they are, the more likely they are to lead to unintended consequences. The more scope for human interpretation, the more scope there is for bias and lack of rigour. Jim Crawley at Towers Watson argues that

"Performance-related pay has been in the headlines for a long time, but it is not an easy thing to do.While it may be obvious that most organisations will have limited funds and will want to allocate those funds to the people that have contributed the most, it can be difficult to do fairly and consistently. Most corporates do not get performance management right". 108

Justifiably, one concern with any incentive system is the risk of incentivising the wrong behaviours – perverse incentives. If a performance-related pay system is designed in such a way that schools and teachers can easily "game" the system, then these incentives may well be enacted upon. Performance-related pay does not introduce perverse incentives into schools for the first time; but a poorly designed performance-related pay system is a potential additional source of poor incentives.

The Parthenon Group, when working with school districts in the US, noted that any incentive system must be clear to teachers and directly linked to the evaluation system – teachers must see a clear link between assessment and pay. If the incentive structure is focused in areas that are not important to raising student achievement or based on arbitrary cut-off targets then response to incentives will not serve the overall goal of raising student achievement for both good and poor students. Additionally, if the incentive structure and evaluation criterion are not easy for teachers to understand, then they will not respond in

107 In DfE guidance, in order to access the Upper Pay Scale, a teacher must have sound evaluation of performance by his/ her Head.

108 August 2013 Interview with Jim Crawley the ways envisaged – hence systems must be both as free from complexity as possible and leave teachers with a clear message for how to improve.

The YouGov polling for this report shows that teachers are cautious at present about the implications of performance-related pay. However, as described

elsewhere, this is perhaps unsurprising given the messages that have been given out, largely from unions, about the deleterious effects of its introduction. The polling also shows that, in principle, teachers are motivated by performance, and want to be assessed as such, with

formance, and want to be assessed as such, with 89% favouring a pay award based on the quality of their teaching

89% favouring a pay award based on the quality of their teaching, and only 6 out of 10 favouring an award based (as was the case) on length of service.

The system must positively impact the overall labour market dynamic

This report has summarised the current state of play with regards to current dynamics in the labour market and various shortages. Current recruitment and retention incentives are very little used – latest figures show just 2.7% of full time and 1.2% of part time classroom teachers are in receipt of the financial incentives that exist. Vacancy rates across the system are relatively stable at 0.5% but vary by subject, with STEM subjects reporting higher vacancy rates. There are also what might be termed 'hidden vacancies' within the data, where some secondary subjects are taught by teachers without what is termed by the DfE as a 'relevant post A level qualification' in the subject they teach – which is the case for 23% of maths teachers, and 34% of physics teachers, for example. Although in some instances the teacher will be expert in their subject more broadly, there are also very likely to be some best case matches done by schools in order to deliver their curriculum, which pay flexibilities might allow them to address

One argument that has been raised at the present time is around budgets, and whether the lack of additional funding is another obstacle for successful implementation - or, as the ASCL guidance puts it, "The budgetary planning instability that this process introduces is potentially problematic". This, like other issues, will be addressed below.

What the evidence says is the best approach for meeting these principles

One of the most comprehensive recent studies into teacher effectiveness is the Measures of Effective Teaching (MET) project undertaken over three years in the US through the Bill and Melinda Gates Foundation. By randomly assigning pupils to teachers, and then assessing pupil progress, they examined a number of different ways of evaluating teacher performance, focusing on three main evaluation techniques: pupil achievement in standardised tests, pupil feedback, and classroom observations. Their findings provide an important evidence base for designing teacher evaluation. Richard Murphy at the Sutton Trust examined evidence from this and other studies to provide guidance in a UK context. ¹⁰⁹ The findings outlined below are summarised from this and other research undertaken by Policy Exchange for the writing of this report.

109 "Testing Teachers: What works best for teacher evaluation and appraisal", Sutton Trust, March 2013, http://www.suttontrust. com/public/documents/ teacherevaluationreport.pdf

1. Measure teacher performances over a basket of measures, rather than a single one (particularly external exam scores).

The MET study looked at achievement gains on state tests, pupil surveys and classroom observations to build four different models for measuring effective teaching. The model that placed the greatest weight on gains on state tests (81% of the total weighting) had the highest correlation with teacher performance. Furthermore, progression tests used to evaluate teachers is also matched in other tests, implying that this is not 'teaching to the test', but a more generalised learning driven by increased teacher effectiveness. Other summarises of the research, such as those by RAND, ¹¹⁰ also conclude that, in areas where student are examined, progress made by students against what might be predicted allow for statistically robust calculations of teacher value added.

However, there are several caveats to add to this analysis. The first is a purely practical one — which is that, for many students in different years and subjects, they will not always have any form of test or examination, particularly public ones (this is sometimes known in the debate as the "what if I don't any exam classes?" argument). Much of the US evidence is drawn from the annualised standard testing that many states introduce. This can be countered, however, by setting internal tests, or baselining student performance at the beginning of the year and then measuring progress at the end of the year, either through teacher self assessment that is then moderated, or through using an test such as those issued by Durham University CEM centre, to measure student progress. This is how schools such as the Durand Academy measure their teacher value add. 111 The forthcoming abolition of National Curriculum levels may complicate this slightly.

Another caveat is around the statistical reliability of the student tests and the value added calculations. There is debate in the academic community and among teachers in England about the reliability of measuring value add, particularly in small sample sizes. There is also some evidence that seems to suggest that even student growth or value add is differentiated, and that higher performers will make faster progress as well as starting from a higher base¹¹² (this is the "what if I have a bottom set?" argument).

Thirdly, teaching is a complex activity, which seeks to instil a range of knowledge and skills into young people. An overly restrictive focus on exams could, it is argued, drive perverse incentives such as a downgrading of the teaching of softer skills and character that most schools, government Ministers and parents would agree are important to a truly high quality education (this is the "it's all about teaching to the test" argument).

Given all these caveats – and given the importance, as noted above, of bringing the teaching profession into a system of performance pay – this report argues that a single metric of an exam score – even if done on a value added basis – would be a mistake. Instead, schools ought to consider using a basket of measures to assess overall performance. The MET study, for example, showed that the most accurate predictor of future pupil test score progress blends three types of assessment: past pupil test score gains, pupil feedback, and classroom observations. Interestingly, it also found that pupil surveys of teachers were 50% more strongly correlated with long term teacher success than classroom observation scores. The other major variable to consider is use of teacher objectives (which, of course, will include, as a subset, pupil progress measures, as well as classroom observations to assess

110 RAND Education, "Measuring Teacher Effectiveness" http:// www.rand.org/education/ projects/measuring-teachereffectiveness.html

111 Sir Greg Martin interview, September 2013

112 RAND Education say "many things outside a teacher's control – such as neighborhood (sic), family, and health factors – influence learning, and even growth measures are subject to these influences"

113 Having a correlation of 0.37 for pupil surveys versus 0.24 for classroom observation.

quality of teaching). Schools may wish to simply measure teacher performance against their objectives on a variable basis - ie moving from pass/fail to a series of grades such as Exceeded, Fully Met, Partly Met and Not Met – to determine pay awards. This would be both more transparent and credible, and avoid many of the arguments from opponents commonly heard and referred to above.

In the specific circumstances of the introduction - both the speed but also the relatively tight financial circumstances for many schools - schools may also want to consider how best they can introduce a system that has credibility and rigour but also teacher buy in. One way of achieving this would be for schools that are less advanced with their plans to adopt a phased implementation approach, operate a 'shadow system' that shows the implications of differential awards, but does not have immediate financial consequences until the end of Year 2. Such an approach would allow schools to iron out any difficulties in the first year, ensure consistent data is collected for two years (reducing evaluation error), give teachers time to understand the new system and build trust in the reliability of the evaluations.

2. Consider making assessments over more than one year of data

One of the ways of increasing reliability in an assessment system is to look for multiple data points - hence the point on basket of measures. Another is to look over a longer time span. One area that schools may wish to consider is only making pay awards on the basis of two years worth of data rather than one. This would take current practice from the Upper Pay Scale, where teachers are assessed against the old set of post threshold teacher standards, but are not normally recommended to move up the scale more than once every two years. The evidence shown in the table below suggests that here is a large amount of noise in any single year of assessment. Indeed, the variance is such that only half the teachers assessed as being in the lowest quintile of performance in one year are in the lowest two quintiles the following year - and a third of those assessed as being in the top quintile in one year have moved to the lowest two quintiles as well!¹¹⁴

Table 1: Comparing teacher	effectiveness	between	two
different years			

	Teacher effectiveness ranking by quintile						
		1 (lowest)	2	3	4	5 (highest)	
Teacher	1 (lowest)	30%	20%	19%	18%	13%	
effectiveness ranking by	2	23%	25%	13%	21%	18%	
quintile in	3	18%	29%	25%	24%	13%	
previous	4	15%	15%	25%	20%	23%	
year	5 (highest)	13%	17%	16%	19%	35%	

However, further evidence suggests that that "stability increases by 40-60% when aggregating data across two years and by a further 18-23% when a third year is included". 115 This suggests that measuring teacher effectiveness over this period is a far more accurate judgement.

Under such a model, schools could still choose to make an incremental pay rise in intermediate years (e.g. moving all salaries up by inflation, or a fixed increase of say

¹¹⁴ Koedel and Betts "Re-Examining the Role of Teacher Quality In the Educational Production Function" quoted in Sutton Trust, op cit

¹¹⁵ McCaffrey, Sass, Lockwood and Mihaly, "The Inter-Temporal Variability of teacher effects estimates", as summarised in Sutton Trust, op cit

1%, depending on what financial circumstances will allow). Schools may also wish to make assessments based on a single year of data, and those judgements are unlikely to be invalid, but they are likely to be most valid when identifying real outliers (e.g. the highest and lowest performing 5–10%), and least valid when making finely tuned judgements about teachers of around average effectiveness. Schools could therefore consider the weight that they wish to place on these judgements. As MET puts it: "we have demonstrated that a single year contains information worth acting on. But the information would be even better if it included multiple years".

3. Make increases in base pay not bonuses

For the teaching profession, material changes to base pay resulting from sustained performance is the likely route to see material impact from a performance-related pay system. There are several reasons this report recommends base pay uplifts as opposed to a purely bonus system.

- The incentives in a performance pay system should be aligned to the types of practices that the school wishes to foster. In the case of schools, those should be practices that lead to long-term sustained performance by teachers. A year-end bonus encourages performance within a very distinct (and short) time period whereas an impactful base pay rise that results from several years of proven performance would signal to teachers that a school is looking to reward its teachers for continued excellence and genuine improvement in their abilities. Also, many bonus systems that have been used in performance-pay systems for schools tend to be over complicated and 'black box'. Teachers may receive a bonus check at the end of the year, but cannot articulate what they did to get there, and don't know what practices to replicate the following year in order to get the bonus again.
- The evidence for performance-pay based solely on bonuses for individual teachers is mixed. Springer et al. (2010) evaluated a 3 year bonus-pay system in Nashville, Tennessee. The conclusion of the study indicated that the treatment and control group showed no discernible differences and that teaching practice did not change. A similar study of New York City's Schoolwide Performance Bonus System conducted by the RAND Corporation found no effects on student achievement based solely on a bonus (though it should be noted that this was a voluntary scheme and difficult to control for some selection bias). 117 Year-end bonuses are not enough to incentivise teachers to perform better; teachers need to be able to see a longer-term impact on their salaries.
- Bonus systems in other professions tend to have very high levels of variable pay from 50%-100% or more of base salary. As noted previously, teachers are generally more risk averse than other professionals. This means that very high performance-related pay (e.g. the commission structures seen in sales forces) would probably be unattractive to (at least existing) teachers and may encourage exits from the profession even from mid-high performers. Although teacher base pay is reasonable by international standards, it is relatively low compared to many graduate professions with high variable pay (e.g. financial services, consulting). Therefore, significant variations in annual pay could eat materially into living standards, ability to secure mortgages etc. The current pay scales for full-time qualified teachers, including payment

116 Matthew Springer, et al,
"Teacher Pay for Performance
Experimental Evidence from the
Project on Incentives in Teaching",
RAND Education Foundation,
2010, http://www.rand.org/
content/dam/rand/pubs/
reprints/2010/RAND_RP1416.pdf

117 http://www.rand.org/ content/dam/rand/pubs/ monographs/2011/RAND_ MG1114.pdf

118 From August 2013 interview with Jim Crawley

for additional Teaching and Learning Responsibilities cover salary variations from £21,804 to approximately £70,000, 119 which is an increase of 221%. 120 If an outstanding teacher could aspire to climb that scale in 5–8 years, then this would be a substantially stronger financial motivation than a year-end bonus. Base pay promotions would help to signal that teachers should focus on demonstrating mastery of the profession over time.

4. Link PRP to mechanisms that can help teachers improve

The YouGov polling for this report showed clearly that the biggest determinants for teachers supporting PRP was if it was linked to either a reduction in workload or greater professional development. 34% of teachers said that they would be more likely to want to work in a school, all bring equal, where professional development was linked to their overall performance.

The evidence base on what makes effective CPD is strong – as is the (vast) anecdotal evidence as to the poor quality of much CPD in schools in England – and is summarised by the Teacher Development Trust – including the need to identify teacher development needs based on the learning needs of their students; for CPD to be collaborative rather than being imposed from above; to be sustained over a period of time rather than a brief immersion; and to include external input to challenge groupthink.¹²¹

The evidence from IMPACT in Washington DC, referred to above, makes clear the importance for teachers to be able to understand how they were assessed, and have opportunities to improve for next year's rating. The authors note that "perhaps the most important [factor] is the implementation details that were coupled with these incentives... IMPACT appears to have been comparatively successful in defining what teachers need to do in order to improve their scores and providing corresponding supports. Evaluations and incentives are likely to have little effect if teachers lack the knowledge and support to act on the information the evaluations provide" 122

This report therefore argues that PRP schemes will be most effective when teachers have opportunities to improve on their assessments – through a clear set of standards for good performance and some form of CPD to allow them to improve collaboratively against those standards (which need not, as TDT make clear, be an expensive external course – and which, moreover, is often counterproductive). Indeed, this report argues that the single biggest impact from PRP is through the creation of these positive feedback loops within schools. If teachers know they are going to be assessed rigorously on their performance, then they will demand a high quality and transparent system for this, and the opportunities – including time and money – to improve themselves against it.

5. Consider using pay flexibilities to recruit and retain teachers in shortage subjects, or for schools in areas of higher deprivation

The evidence quoted above showed a general shortage in the teacher labour market for specific skills, particularly around STEM subjects. The recent Alan Milburn led Social Mobility and Child Poverty Commission also demonstrated that the distribution of teachers is not even across the deprivation of schools. The table below shows the proportion of schools ranked Good or Outstanding for quality of teaching, and for leadership, by the level of deprivation of the school. It shows that

119 This does not include London

120 Teacher salary and benefits, Department for Education, September 2013

121 http://www. teacherdevelopmenttrust.org/ what-makes-effective-cpd/

122 http://news.stanford.edu/ news/2013/october/dee-teacherassessments-101713.html there is a widespread quality gap by the level of deprivation in the school (with the exception of Leadership quality in the South West, and in London).

Table 2: Proportion of schools with teaching and leadership rated Good or better, by level of deprivation

	% of teaching rated Good or Outstanding			% of leadership rated Good or Outstanding		
	Least deprived schools	Most deprived schools	Gap	Least deprived schools	Most deprived schools	Gap
London	91	77	14	91	86	5
West Midlands	83	65	18	88	76	12
North West	93	63	30	94	75	19
East Midlands	83	59	24	87	70	17
East	80	55	25	85	60	25
South West	92	54	38	93	92	1
South East	89	53	36	93	80	13
Yorkshire and Humber	78	41	37	84	51	33
North East	85	29	56	85	36	49

The evidence quoted earlier in the report also shows a correlation between higher salaries and attractiveness of a position to teachers, all else being equal. So one area which this report recommends is considering the extent to which performance pay can be used to attract and retain high quality teachers, or those with shortage subjects, to areas in which they are needed. This could be combined with greater use of Pupil Premium funding – so that, for example, schools in receipt of high levels of PP funding use it to recruit teachers through a performance pay metric (which could, for example, include use of a joining bonus, a long stay incentive, a higher starting salary, or the opportunity – through a school wide performance pay scale – to earn significant base pay increases through continuing demonstration of high performance).

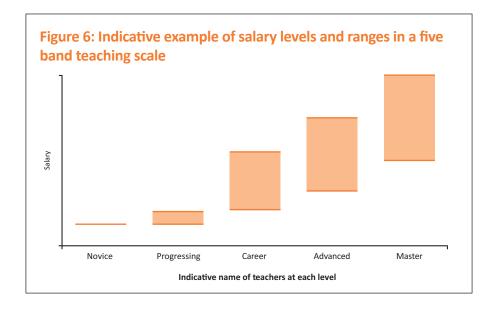
6. Do not use PRP as a way of controlling the pay bill, but have a system which doesn't allow for fudging – which might include simplifying pay bands

One of the major concerns about the introduction of PRP is that it will be used to hold down pay – that heads will not give teachers deserved pay rises. There is no evidence that this will be the case: headteachers should be looking to attract and retain the best teachers to their school, so there is no incentive for headteachers to withhold performance-related pay bonuses or pay rises which would attract those top performers to stay. The choice that faces headteachers is in determining the levels of differentiation between the highest and lowest performers in a school that would determine any elements of performance-related pay. There is no evidence in the research examined for this report that sets out what the correct level of differentiation should be. The level of differentiation, therefore, needs to be determined pragmatically based on factors such as local labour market, shortage subjects and other school needs. Some schools may

choose to differentiate sharply; some may look to reward the majority of teachers if performance merits such rewards. The ethos and reward structure will differ depending on how schools distinguish low or high performers.

It is beyond the scope of this report to explore this fully, but there is a very good argument for thinking more widely about the scope for a reform to pay scales within - which would, of course, need to be consulted on widely at a school level and introduced over time. The current system of pay bands has too many levels. Reducing the 25 or more bands to around five achieves two things. First, it makes the jumps in pay associated with moving between bands much larger and more meaningful and removes the expectation of annual increases in base pay (beyond any funded uplifts due to inflation). Second, it allows the bands to be identified with changes in underlying performance and quality of pedagogy. For example, the first band may simply be 'Newly Qualified Teacher', the fifth might be 'Master Teacher'. The titles are not important, but the idea is that sustained better performance is the trigger to move between bands. The dummy graph below shows one approach that could be taken in terms of nomenclature and how the salary bands would look depending on performance. Such an approach would also go in hand in hand with a wider change of approach towards assessing teacher standards. Early moves between bands may be narrowly focused on classroom competence whilst more advanced teachers may be required to demonstrate the ability to coach other teachers or have an impact on the wider community (e.g. supporting parents in teaching their children). The full extent of this approach goes beyond the scope of this report but is an area of focus for future work by Policy Exchange.

Moreover, this could go hand in hand with a wider degree of change towards the overall model of teaching standards that teachers in England currently are assessed against. For example, within the teaching track in Singapore, there are five levels: basic teaching track, senior teacher, lead teacher, master teacher and principal master teacher. Such an approach, or a variant of it, is currently actively under consideration in the profession through discussions as to the introduction of a (Royal) College of Teaching, which could include some form of reformed structure of teaching standards and career progression along the lines of some of the medical specialties.¹²³



123 See, for example, "Towards a Royal College of Teaching: Raising the status of the profession" http://www. teacherdevelopmenttrust.org/ In order to support schools in implementing these principles, this report recommends that the government take a more active position and issue non-statutory guidance on how to structure and implement performance-related pay, covering performance evaluation, base salary progression and annual bonus payments. This report has identified that the lack of senior leader experience in implementing performance-related pay, especially in the accelerated timetable expected by the government is a major risk. 124 As mentioned earlier, enquiries to 'The Key' school information service over the summer of 2013 were heavily focused on "where do I find information about pay and performance?" 125

This report recognises the government reluctance to be seen to centrally design or manage a performance system, and believes that the government is right to leave the operation and decision at school level. However, given clear lack of understanding at school level at present, it is simply practical to argue that the government ought to help take a lead – in effect, shape the market (or at least outline the options) – through issuing non-statutory guidance to help Heads design and implement performance-related pay. If guidance is not issued, there is a risk that the system will remain stagnant and performance-related pay will have little or no effect. This guidance should receive the widest possible consultation, and should contain a number of options that offer different benefits for different contexts. This guidance will give school leaders and governors a basis on which to make decisions suitable to their school. This guidance should include:

- The evidence base on performance-related pay.
- A statement of the core principles by which performance-related pay can be successfully implemented. This should address:
 - A solid performance evaluation system that teachers support.
 - Performance evaluations conducted over more than one year.
 - Performance-related rewards by increases in base salary that are a result of sustained performance.
 - An element of variable pay (no more than 20%) and fewer salary bands leading to more meaningful promotions.
- A number of worked-through options for schools that highlight the choices available to schools and the pros and cons of the various options. For example, these might cover:
 - A small rural primary school that has decided to award 10% of pay as variable based on performance metrics from Ofsted inspections.
 - A large urban secondary school with 50% variable bonus pay based on metrics determined by the school's teachers.
 - A suburban secondary school with no variable bonus pay, but high starting salaries and teachers are only eligible for promotion if they are rated in the top 10% of teachers at the school.
- Importantly, these options should include the ability for non financial experts (ie governors and busy Heads) to use a template to quickly assess the financial consequences of their policy proposals, rather than needing to ask for detailed modelling from their finance team. This will aid quick and informed decision making.

124 TES/NGA survey, op cit 125 The Key, Data and Insight Department, obtained 6 September 2013

Conclusion and Recommendations

This report has argued that performance-related pay could be a highly successful reform and that oppositions in principle are without foundation. It also stresses, however, that there are significant challenges to its successful implementation and that an effective system will critically depend upon the design of the scheme in accordance with key principles.

What is critical is for action to be taken now. At present, discussions with schools and other external findings¹²⁶ show that Heads and governors are not sure where to turn or how to move forward toward implementing performancerelated pay at their school. There is a danger of schools continuing to do exactly what they have been doing - teachers may continue to get regular increments (though perhaps smaller due to the current pay freeze) and schools may not really put the time and energy into the performance evaluations necessary for performance-related pay to work. Change must be incentivised, or else the radical, and much needed, recommendations by the School Teachers' Review Body will be for naught.

With that in mind, this report sets out clear recommendations for schools, the government and agencies that will materially improve the probability of the success of performance-related pay in schools, and ultimately, lead to improved pupil outcomes.

126 TES and NGA survey of school governors (August 2013) reported that 20.8% of schools in England had not decided how to introduce a new performance-related pay system, and a further 18.3% were unsure if their school had changed their pay policy. Report at http://www.tes.co.uk/article. aspx?storycode=6352744; The Key, August 2013



Everyone agrees that teacher quality is a major driver of performance in schools. But rather than treat teachers as professionals, all too often they are treated as widgets in a system – including in how they are paid.

The introduction of performance-related pay for teachers in English schools offers a potential opportunity for reversing this widget effect. A well designed system and implemented system of PRP will boost the quality of teaching by attracting more high performing graduates into the profession, by improving the quality of performance management and development of existing staff, and by incentivising some teachers to become more effective in return for a financial reward.

This report draws on evidence from the UK and internationally to suggest why so many of the objections in principle to performance-related pay are without merit, and how a series of design principles can allow Heads and governors to design a well crafted system that can maximise the benefits to pupils.

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Reversing the 'Widget Effect'



The introduction of performance-related pay for all teachers in English schools

Matthew Robb

Edited by Jonathan Simons

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