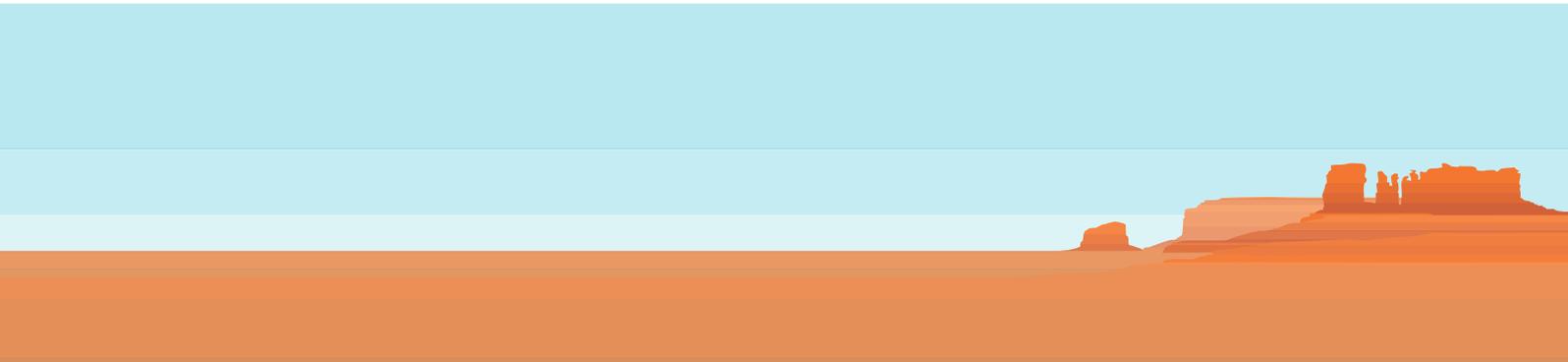


REPORT

BEYOND THE PLATEAU



THE CASE FOR AN INSTITUTE FOR ADVANCED TEACHING

Matthew Hood
Edited by Jonathan Clifton

July 2016
© IPPR 2016

Institute for Public Policy Research

ABOUT IPPR

IPPR, the Institute for Public Policy Research, is the UK's leading progressive thinktank. We are an independent charitable organisation with more than 40 staff members, paid interns and visiting fellows. Our main office is in London, with IPPR North, IPPR's dedicated thinktank for the North of England, operating out of offices in Manchester and Newcastle, and IPPR Scotland, our dedicated thinktank for Scotland, based in Edinburgh.

Our purpose is to conduct and promote research into, and the education of the public in, the economic, social and political sciences, science and technology, the voluntary sector and social enterprise, public services, and industry and commerce.

IPPR

4th Floor

14 Buckingham Street

London WC2N 6DF

T: +44 (0)20 7470 6100

E: info@ippr.org

www.ippr.org

Registered charity no: 800065 (England and Wales), SC046557 (Scotland).

This paper was first published in July 2016. © 2016

The contents and opinions in this paper are the author(s) only.

IDEAS to
CHANGE LIVES

CONTENTS

Summary	3
Foreword	6
1. Introduction	7
The challenge	7
Love the one you're with: building teacher capacity in a school-led system	8
2. The importance of teaching	10
Expert teachers in every classroom	10
Unlocking expertise: developing teachers once they have qualified.....	12
3. Three challenges facing teacher training and development	15
Challenge 1: Participation fails to transform classroom practice.....	15
Challenge 2: Incentives to participate are poor	16
Challenge 3: The environment is poor	18
Current provision	19
4. Lessons from around the world	21
Graduate schools of education, US.....	21
Master teachers, Singapore	23
A training and development culture, Hong Kong	23
5. An Institute for Advanced Teaching	24
Who would study at the IAT?	25
Who would teach at the IAT?	26
What would the course look like?.....	26
How would participants be assessed?	27
What would happen after graduation?	27
Where would the IAT be located?.....	27
How would the course be accredited?	28
6. Conclusion and next steps	29
References	30

ABOUT THE AUTHOR

Matthew Hood has been leading the Institute for Advanced Teaching project since February 2015, alongside a part-time role on the leadership team at Heysham High School. He started his career as an economics teacher on the Teach First programme, before moving on to hold posts at the Department for Education, Teach First and Achievement for All.

Matthew is also a founding trustee at the Brilliant Club, an award-winning non-profit organisation that exists to widen access to top universities for outstanding pupils from non-selective state schools.

ABOUT THE EDITOR

Jonathan Clifton is associate director for public services at IPPR.

ACKNOWLEDGMENTS

The author would like to thank the following people for their support and contributions to this report: Brent Maddin, Randall Lahann, Philippa Cordingley, Brett Wigdortz, Lord Adonis, Lord Knight, Steven Farr, Dame Sue John, Ed Fidoe, Harry Fletcher-Wood, Nick Hassey, John Blake, Josh MacAlister, Kristopher Boulton, Laura McInerney, Matt Lloyd, Jared Eisenberg, Sarah Meek, Tessa Kerrich-Walker, Valarie Everington, Louis Boyd, Charly Fox, Rowan Pearson, Caroline Rwatschew, Loic Menzies, Jonathan Simons, Robert Peal, John Bosselman, Peter Hyman, Carly Mitchell, Paddy Mcgrath, Luke Sparkes, Ed Vainker, Lynne Isham, Drew Duncan, Marie Hamer, Max Heimendorf, Michael Clark, Mike Slavinsky and Natasha Porter.

We would also like to thank the below schools for the funding of this report.



Download

This document is available to download as a free PDF and in other formats at:

<http://www.ippr.org/publications/beyond-the-plateau-the-case-for-an-institute-for-advanced-teaching>

Citation

If you are using this document in your own writing, our preferred citation is:

Hood M (2016) *Beyond the plateau: The case for an Institute for Advanced Teaching*, IPPR.

<http://www.ippr.org/publications/beyond-the-plateau-the-case-for-an-institute-for-advanced-teaching>

Permission to share

This document is published under a creative commons licence:

Attribution-NonCommercial-NoDerivs 2.0 UK

<http://creativecommons.org/licenses/by-nc-nd/2.0/uk/>

For commercial use, please contact info@ippr.org



SUMMARY

Every education system around the world faces two major challenges: closing the stubborn achievement gaps between disadvantaged children and their wealthier peers, and ensuring that young people leave compulsory education with the knowledge, skills and characteristics they need in order to thrive in the modern world. Failure to address these challenges is morally indefensible and economically unsustainable.

While the underlying causes of achievement gaps are complex, and require similarly complex solutions, the world's highest performing education systems are making good progress by improving the quality of classroom teaching, which we know has the biggest impact on pupil progress. This is especially significant for pupils from disadvantaged backgrounds, where the difference between a good teacher and a bad teacher can represent a whole year's worth of extra learning in any given academic year.

Yet a shortage of expert teachers in the stands is frustrating our ambition to close this attainment gap. This problem is particularly acute in certain areas of the country that struggle to attract, develop and retain members of staff. The government has acknowledged this problem and recently pledged to try to address it by spreading 'educational excellence everywhere'.

In order to improve teaching expertise through existing channels, three barriers must be overcome.

1. Courses, programmes and workshops are often poorly designed and delivered.
2. Incentives to participate in training and development are often poor.
3. The environments in which training and development takes place are often poor.

As a result of these challenges, too much training and development benefits neither teachers nor their pupils, failing to transform the knowledge and craft needed for expert teaching; indeed, it often lacks the incentives required to encourage participation in the first place. Some development does benefit pupils, but those benefits are often locked within a single school. Likewise, many current university master's courses offer good incentives – they're portable, and give those who undertake them a sense of status and progression – but their focus is often on research rather than on transforming classroom practice.

If we are to improve teacher training and development, we need to address all three challenges – poor design and delivery, poor incentives and poor environments.

We need a well-incentivised, transformative training and development offer, delivered within a supportive environment.

This paper draws on examples of successful, innovative school-led teacher development programmes in the US and Singapore. It argues for the creation of a new school-led, higher education training institution – an Institute for Advanced Teaching (IAT) – that could address each of the three barriers to effective teacher development described above, and deliver well-incentivised, transformative training and development within a supportive environment.

As a dedicated not-for-profit social enterprise with a mission to build a movement of expert teachers who will ensure that all children get an excellent education, the IAT would accomplish the following.

1. Recruit high-potential, qualified teachers who work in challenging schools.
2. Develop them into expert teachers.
3. Build them into a movement for change in education.

Figure 1.1

There is a significant gap in England's teacher training and development provision
 The strength of incentives to participate in teacher training and development provision, and the degree to which they transform classroom practice

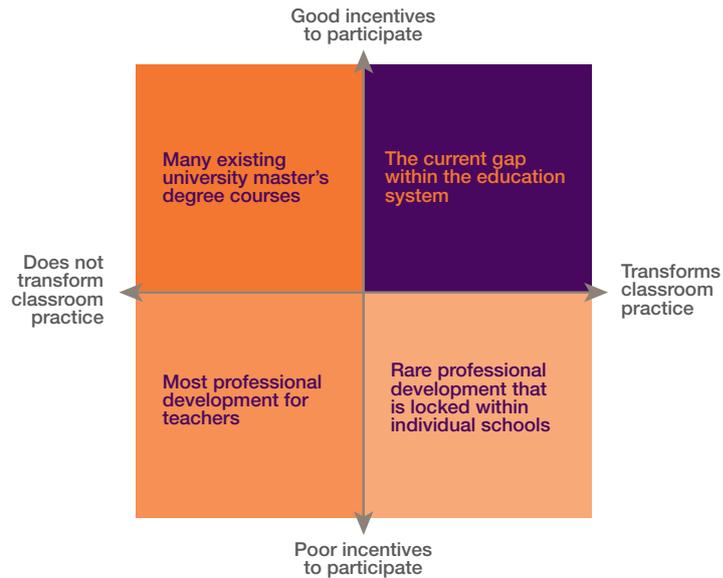
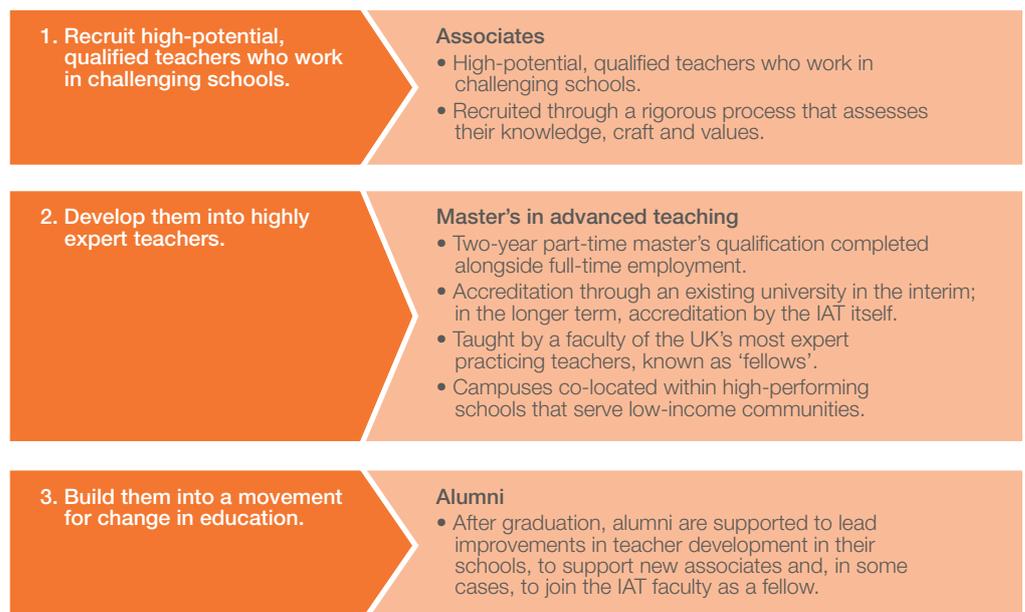


Figure 1.2

The IAT's three-step plan

The Institute for Advanced Teaching's objectives, and how they will be achieved



Through careful design, it could meet three objectives that will be vital to addressing England’s teacher training and development needs.

Objectives	How IAT will achieve them
Transforming classroom practice	<p>A master’s degree in advanced teaching, designed by global experts and informed by rigorous international education research.</p> <p>A faculty made up of England’s highly expert practising teachers (see boxed text below) leading the delivery of the course (and developing themselves as expert facilitators).</p> <p>Advised by a steering group of high-performing schools that serve low-income communities.</p>
Incentivising participation	<p>The creation of a prestigious institution that draws credibility from founding schools, high-calibre faculty, the quality of its course and its demonstrated outcomes.</p> <p>Portable master’s-level course accreditation.</p> <p>Opening a progression route for the most expert teachers to join a prestigious faculty of experts.</p>
Providing teaching within a supportive environment	<p>Associates (those who are enrolled in or have graduated from the programme) will be grouped into larger cohort and smaller cross-school units, thereby mitigating the risk of poor in-school development cultures.</p> <p>The course will equip associates with the knowledge and craft required to support a culture of development within their own school.</p> <p>The development process will be separated from performance management within schools, in order to maximise engagement from associates.</p>

Defining ‘expert teacher’

Defining the term ‘expert teacher’ is the subject of debate, in part driven by an individual’s view of what outcomes our education system should aspire to. For the purposes of this paper, we will use Hattie’s definition. He identifies five major dimensions of expert teachers: they have high levels of knowledge and understanding of the subjects they teach; they can guide learning to desirable surface and deep outcomes; they can successfully monitor learning and provide feedback that assists students to progress; they can attend to the more attitudinal attributes of learning (especially developing self-efficacy and mastery motivation), and can provide defensible evidence of positive impacts of their teaching on student learning. Here in, Hattie says, lies the difference between ‘expert’ and experienced.

The next stage in the work of the nascent IAT will be to outline the practical elements of this institution. It will shortly be drawing up more detailed plans for the content and composition of the course, the design of the social enterprise, and the cost involved in creating the scheme. As leader of the IAT project, the author would welcome any feedback on this proposal as it is taken forward.

FOREWORD

We believe that children who are most vulnerable to underachievement deserve the very best teachers. We know that if they get them, we can close the stubborn achievement gaps that exist between disadvantaged children and their wealthier peers; gaps that are worse in the UK than almost any other developed country. Our pursuit of this vision, while difficult, is part of a growing challenge to a status quo that is economically unsustainable and morally unacceptable.

As a group of schools, and as a country, we are making progress but we have a long way to go – particularly when it comes to getting beyond the plateau and developing teachers throughout their careers. We know that expert teaching is the best way to close the gap, but we face a chronic shortage of expert teachers – due in part to the absence of a transformative, incentivised development offer beyond initial training.

We believe that a new institution – an Institute for Advanced Teaching – inspired by a US model and founded by a partnership of schools who work together to pool their expertise, can change this. Its purpose would be to build a movement of expert teachers who ensure that all children get an excellent education.

This paper makes the case for such an institution and how we could take the lead in establishing it. We look forward to hearing your thoughts and comments.

Ed Vainker, Reach Academy Feltham

Lynne Isham, Lampton School

Max Heimendorf, King Solomon Academy

Carly Mitchell, Oasis Academy South Bank

Luke Sparkes, Dixons Trinity Academy

Drew Duncan, Mosley Hollins High School

Peter Hyman, School 21

Paddy McGrath, London Academy

1. INTRODUCTION

The challenge

Every education system around the world faces two major challenges: closing the unacceptable and stubbornly high achievement gaps between disadvantaged children and their wealthier peers, and ensuring that young people leave compulsory education with the knowledge, skills and characteristics they need in order to thrive in the modern world. Continued failure to address these challenges is both morally indefensible and economically unsustainable.

The Programme for International Student Assessment (PISA) has demonstrated that an achievement gap between rich and poor pupils exists in all OECD countries. Students from more socioeconomically advantaged backgrounds outperformed students from average backgrounds by around 38 points – the equivalent of one year’s worth of education (OECD 2010).

In England, this relationship is particularly strong: the OECD’s research shows that England’s school system is more unequal than many of the world’s top performing countries, and that this is holding our country back (ibid). These divergences start very early in life: the difference in ‘school readiness’ between three-year-olds in the most and least disadvantaged families is the equivalent of one full year of development (George et al 2007). Differences in pupils’ levels of attainment continue to grow throughout their schooling, with children from poorer postcodes performing just over half as well as those from wealthier neighbourhoods, and fewer going on to university as a result (Clifton 2013).¹ In turn, this iniquity is perpetuated in the jobs market, with the top professions such as law and finance dominated by those who went to private schools and selective universities.

England faces a particular challenge in terms of ensuring that opportunity is spread evenly across the country. While in some areas, including many London boroughs, pupils from disadvantaged families perform *above* the national average, in other areas of the country – including many isolated rural and coastal towns – pupils from poorer households have relatively very low attainment. In Hull, for example, 40 per cent of pupils end up in the ‘tail of low achievement’, compared to 9 per cent in Rutland (Leunig and Wyness 2013). Many large northern cities are also struggling to close the attainment gap. In Leeds, Bradford and Liverpool, less than a third of disadvantaged pupils achieve five good GCSEs including English and maths (Clifton et al 2016). It is unacceptable that where, and into what circumstances, a child is born has such a large impact on their educational attainment and future prospects.

The government has acknowledged this challenge. Its recent white paper, *Educational Excellence Everywhere*, has a series of maps which identify areas of the country that have low exam results and a limited capacity to improve. It has promised to target more resources to these ‘Achieving Excellence Areas’ to help create a school-led model of improvement.

It is essential that this achievement gap is closed, because education provides significant benefits to both individuals and society. Individuals with higher levels of education tend to earn more and live longer, happier and healthier lives. More educated populations have also been shown to be more civic-minded (in terms

¹ See Clifton 2013 for a detailed discussion of the attainment gap in England’s secondary schools.

of engaging in volunteering, voting and blood donation) (OECD 2013a), and less likely to require state support or be involved with the criminal justice system (Levin et al 2007, cited in William 2008: 183).

Educated populations also drive economic growth and international competitiveness (Higgins et 2008). Improving educational attainment is important for our changing economy, which increasingly requires high levels of education and skill. As some jobs are outsourced or replaced by technology, and as competition between countries increases, there is a growing premium for highly skilled individuals (Hanushek and Woessman 2010).

South Korea has, in the space of a generation, moved from having a low rate of secondary-school completion to being one of the most highly educated countries in the world, with over 60 per cent of its young people completing tertiary education (OECD 2014). Countries that were historically seen to be competing with Britain on cheap exports are now competing in areas such as highly skilled manufacturing and high-value services.

As the structure of our economy evolves, it is likely to create more skilled jobs. The UK Commission for Employment and Skills has made projections of how jobs will change between 2012 and 2022 as a result of business growth. These projections show highly skilled professional jobs increasing by 19.6 per cent over this period; mid-skilled technical jobs increasing by 2.4 per cent; and a small decrease in the number of low-skilled jobs (Wilson et al 2014, cited in Clifton et al 2014: table 2.1). Around 20 million jobs are expected to be created in high- and medium-skilled occupations by 2022 as a result of business growth and economic restructuring (ibid).² These jobs will require a mixture of high-quality academic and vocational training. If all of the UK's young people are to leave compulsory education with the knowledge, skills and character they need in order to thrive in a modern economy, our education system must keep pace.

Love the one you're with: building teacher capacity in a school-led system

While the underlying causes of low educational attainment are complex and require similarly complex solutions, the world's highest-performing education systems are making good progress. A number of studies have shown that the key to success lies in improving the quality of classroom teaching that disadvantaged pupils receive. While policymakers are often tempted to tinker with funding systems and school structures, it is what goes on inside the classroom that really drives up standards. World leaders such as Singapore, Hong Kong and Canada ensure that all pupils – regardless of where they are born – receive high quality classroom instruction (Barber and Mourshed 2007).

The key challenge for England is therefore to build the expertise and capacity of the teacher workforce – especially in more isolated and remote areas of the country. While a number of positive steps in this direction have been taken – such as the expansion of Teach First and the creation of a National Teaching Service – a lot more remains to be done. Within a decade there will be 800,000 more students in our education system than there are now, yet the number of new teachers entering the profession dropped by 17 per cent between 2009/10 and 2013/14, and continues to fall (Ofsted 2014: 19). This is compounded by a relatively high number of teachers leaving the maintained sector – in the 2010 school workforce census 46 per cent were found to have left it after five years (DfE 2011). Furthermore, many teachers – particularly those outside of the big

² There will still be a large number of low skilled jobs created as a result of 'replacement demand' when people retire from the workforce. See Clifton et al 2014.

cities – do not receive the support and training they need in order to become experts in their profession: they are cut off from networks of support, and can struggle to make the transition from newly qualified teacher to expert professional.

Successful policy must therefore help to boost teacher capacity within the schools system. Many programmes have focussed on recruiting new graduates into the profession, but this is only one piece of the jigsaw. Reliance on the recruitment of new graduates fails to address the challenge of how to retain and build the capacity of teachers who are already working in our schools. To increase system capacity we need to achieve the dual and complementary aims of increasing teachers' expertise and retaining those teachers who are already in the system. Professor Dylan Wiliam has labelled this the 'love the one you're with' strategy (Wiliam 2013).

Any strategy for increasing the number of expert teachers working in disadvantaged schools also needs to reinforce recent policies that aim to create a 'school-led' education system. Policymakers have given schools more power to purchase their own improvement services, recruit and train their own teachers, develop their own distinctive approaches to education, and innovate and design programmes that are targeted to their specific needs.

In this context, rather than relying on top-down professional development programmes driven by policymakers in Whitehall, schools need to take ownership and develop their own programmes and institutions for creating a cadre of expert classroom teachers. The majority of schools and academy chains, however, are not big enough to develop their own programmes, or to guarantee that good practice is spread to those areas of the country that need it most. The majority of academies are part of small chains with a handful of schools, and only operate in particular towns or local areas.³ They will therefore need to pool their expertise and resources in order to create a genuinely 'school-led' solution to the professional development challenge. Teaching schools can also provide some support for professional development, but as the recent white paper noted, their coverage is patchy across the country, and they have to focus on a wide range of activities, including initial teacher training, deploying National Leaders of Education and disseminating research.

A 2010 McKinsey report identified the means by which the world's leading school systems are able to build professional capacity in a school-led system (Mourshed et al 2010). The report ranked England's education system within its 'good to great' category, and suggested three areas that we must focus on if we are to join the education systems of Ontario, Singapore, Hong Kong and Saxony in their 'great to excellent' category. These three areas of focus were:

- cultivating peer-led learning for teachers and principals
- creating additional support mechanisms for teachers and principals
- system-sponsored experimentation across schools (ibid).

This report sets out how England can respond to the challenge laid down by McKinsey. It argues for the creation of a new school-led institution that is able to support and train teachers who are already working in disadvantaged schools. If implemented successfully, it could create a movement of expert teachers to address the problem of low educational attainment in this country.

3 At the start of April 2016, there were 973 multi-academy trusts in operation across England. Over two-thirds (681) of these trusts have fewer than four schools (CentreForum 2016).

2. THE IMPORTANCE OF TEACHING

Expert teachers in every classroom

Improvements in the volume and quality of global education research, and greater innovation, are giving educators a better understanding of the drivers of improvement within the education system. A number of influential studies have highlighted the importance of classroom teaching to improving outcomes, and have made clear that if policies do not influence what goes on inside the classroom, they are unlikely to lead to improvements in educational attainment. As McKinsey's famous 2007 study put it, 'the quality of an education system cannot exceed the quality of its [teaching]'⁴ (Barber and Mourshed 2007).

John Hattie has undertaken one of the most comprehensive studies of interventions aimed at raising achievement, gleaned from over 1,100 meta-analyses involving 250 million students (Hattie 2015a). Almost all of these strategies have *some* positive impact on student outcomes, but some have a more significant impact than others. When the challenge is urgent and the resources are limited, these more successful strategies are the ones that should be prioritised.

However Hattie's study identified a number of interventions that policymakers often make, despite the fact that they have relatively modest 'effect sizes' (below 0.4)⁵ (ibid: 1). As table 2.1 shows, policymakers tend to focus on the following five types of 'popular fixes' because they are often easier to achieve than trying to influence classroom practice.

1. **Appease the parents**, in terms of choice of school and smaller class sizes.
2. **Fix the infrastructure** (the curriculum, assessment formats, school buildings and so on).
3. **Fix the students** (early intervention, and focussing on learning styles, for example).
4. **Fix the schools** (creating new types of school, promote heroic and/or transformational leaders, promise greater autonomy).
5. **Fix the teachers** (through initial teacher training, performance-related pay, technology, more adults in schools) (Hattie 2015a: 8–32).

Hattie is clear that if there is no change in teaching, student outcomes will not be affected. He argues that 'if students are not learning, then it is because we are not using the right teaching strategies; and we have to make the changes to those strategies' (Hattie 2015b: 18). Table 2.2 shows the top 20 influences on students' achievement, ranked by effect sizes: the overwhelming majority of them (around 80 per cent) are dependent on expert teaching.

4 In a 2013 blog, Chris Husbands made the argument, accepted by the authors of the report, that it is in fact teaching, not the teacher, that is the decisive factor (Husbands 2013).

5 The 'effect size' is a statistical measure that calculates pupils' average improvement relative to a comparison group, and is presented in a standardised way to allow comparisons between different interventions. An effect size of 0.5 or above would be considered good for an education intervention, and would be roughly equivalent to an additional six months of learning.

Table 2.1

Impact of some examples of ‘popular fixes’, by effect size and fix type (see above)

Key	
1	Appease the parents
2	Fix the infrastructure
3	Fix the students
4	Fix the schools
5	Fix the teachers

Influence	Effect size
Inquiry-based methods	0.31
Summer school	0.23
Finances	0.23
Individualised instruction	0.22
Class size	0.21
Co-/team teaching	0.19
Within-class grouping	0.18
Matching style of learning	0.17
Mentoring	0.15
Problem-based learning	0.15
Ability grouping	0.12
Teacher education (quality of degree)	0.12
Changing school calendars/timetables	0.09
Charter schools	0.07
Whole language	0.06
Diversity of students	0.05
Multi-grade/age classes	0.04
Volunteers/teacher aides	0.03
Open vs traditional	0.01
Welfare policies	-0.12

Source: Adapted from Hattie 2015a: table 5

Table 2.2

Top 20 influences on student achievement, and those among them that are influenced by highly effective teaching, ranked by effect sizes

Key	
Influenced by highly effective teaching	
Not influenced by highly effective teaching	

Influence	Effect size
Self-reported grades/student expectations	1.44
Piagetian programmes	1.28
Response to intervention	1.07
Teacher credibility	0.9
Providing formative evaluation	0.9
Micro-teaching	0.88
Classroom discussion	0.82
Comprehensive interventions for learning-disabled students	0.77
Teacher clarity	0.75
Feedback	0.75
Reciprocal teaching	0.74
Teacher–student relationships	0.72
Spaced vs mass practice	0.71
Meta-cognitive strategies	0.69
Acceleration	0.68
Classroom behaviour strategies	0.68
Vocabulary programs	0.67
Repeated reading programs	0.67
Creativity programs on achievement	0.65
Prior achievement	0.65

Source: Adapted from Hattie 2012

We know, therefore, that the strategy that will consistently and substantially raise student achievement is ensuring that we have **expert, inspired and passionate teachers in every classroom**. This is consistent with a number of other studies that have demonstrated the large impact that a high-quality teacher can have on his or her students' outcomes.⁶

What's more, improving teaching has a particularly large benefit for pupils who are vulnerable to underachievement. Over a school year, these pupils gain 1.5 years' worth of learning when taught by expert teachers, compared with just 0.5 years when taught by poorly performing teachers – in other words, for poor pupils the difference between a good teacher and a bad teacher is a whole year's worth of learning (Sutton Trust 2011). Studies in both primary and secondary schools have found that the best teachers benefit lower achievers more, so they are likely to help close achievement gaps (Hamre and Pianta 2005 and Slater et al 2008, cited in Wiliam 2013). Of course, this strategy will only work if teachers are also deployed effectively – to the schools and classrooms that need them most. As McKinsey has argued, improving the quality of teaching is a three-step process:

1. 'Get the right people to become teachers.'
 2. 'Develop these teachers into effective instructors (the only way to improve outcomes is to improve instruction).'
 3. 'Put in place systems and targeted support to ensure that every child is able to benefit from excellent instruction (the only way for the system to reach the highest performance is to raise the standard of every student).'
- (Barber and Mourshed 2007: 13)

Unlocking expertise: developing teachers once they have qualified

The growing evidence on teacher quality has rightly been used to justify efforts aimed at increasing the quality of recruits to the world of teaching. The majority of workforce-related policy solutions and third sector innovations have focussed on improving the quality of entrants into teaching and improving their initial teacher training. For example, the government has raised the bar for entry to PGCE programmes to a 2:1 degree minimum, and has invested heavily in the Teach First programme.

While efforts to raise the quality of entrants to the profession are important, they will take a long time to filter through the system, and they ignore the vast majority of teachers who are already working in classrooms. They should therefore be seen as the first step in a longer process. If we are to continue to improve outcomes for pupils, we must now broaden this focus to include developing teachers *after* they have qualified, so that they can move from being proficient to expert – something Dylan Wiliam has termed the 'love the one you're with' strategy (Wiliam 2013).

To realise the ambition of having an expert teacher in every classroom, we first need to understand how teachers improve over time – from the start of their initial teacher training through to mastery of the necessary knowledge and craft associated with expert teaching. Successive studies have attempted to map this improvement journey. They show that, on average, teachers improve rapidly in their first three years, but improvement then slows between years three and five, and plateaus beyond that point (Chingos and Peterson 2011). One US study by TNTP, which involved 20,000 teachers, found that the average fifth-year teacher's

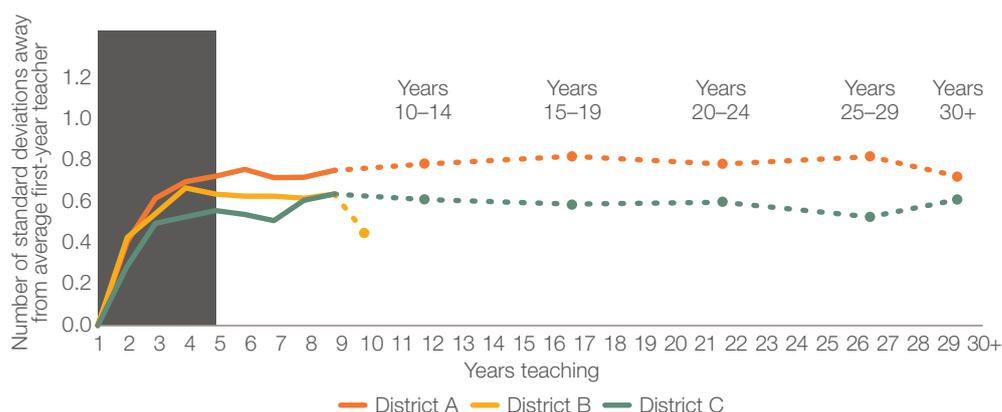
⁶ See for example Hanushek E A (2011) 'The economic value of higher teaching quality', *Economics of Education Review* 30(3): 466–479; and Slater H, Davies N and Burgess S (2009) 'Do teachers matter? Measuring the variation in teacher effectiveness in England', working paper no. 09/212, Institute of Public Affairs, University of Bristol

performance looks very similar to the average teacher's performance after 10 or 15 years (TNTP 2015).

Figure 2.1

'The average fifth-year teacher's performance looks very similar to the average teacher's performance after 10 or 15 years'

Average teacher performance by number of years' experience (by number of standard deviations away from average first-year teacher)



Source: Adapted from TNTP 2015: 15

If this plateau occurred after the point at which teachers master the core knowledge and craft required to become expert, it would be less problematic; if it were the result of a significant lack of investment in the training and development of teachers, it would be more understandable. However, neither appears to be the case. For too many, the plateau occurs while there remains plenty of scope for improvement (TNTP 2015), and within contexts in which there is a reasonable level of investment of resources.

The same US study looked at spending on teacher training and development, and found that the average per-teacher spend in this area each year was US\$18,000. When aggregated, this totalled to \$8 billion for the 50 largest school districts alone (ibid: 8).

This was found to far exceed what many other industries spent on support and development for their practitioners.

'For example, the average large government/military organization (defined as 10,000 employees or more) spent a little more than \$2 million on staff training in 2013. By comparison, a school district we studied, with a similar number of teaching staff, spent more than \$90 million on teacher training and support in the same time period, excluding the costs of teachers' salaries for the time they spent in training, additional investments like salary bumps for improved performance and school leader time beyond meeting directly with teachers for support. Even using this more conservative estimate, on average, the districts we studied spent anywhere from nearly two to four times more of their budgets and four to nearly 15 times more per employee on support and development, compared to other industries.'

TNTP 2015: 10

Although no similar study has been conducted in England, our estimates suggest a similarly significant annual investment over £1 billion per year, or £2,500 per teacher (although it is worth noting that it is difficult to identify exactly what activity actually takes place in mandatory inset [in-service training] time). This estimate includes only the continuing professional development (CPD) lines within school and the time that teachers spend on mandatory and other development opportunities each year.⁷

It is, therefore, hard to make the case that the extent of investment of resources in staff development is a significant barrier to supporting teacher development. This means that in order to increase the number of expert teachers we must address this plateau in performance by changing the improvement trajectory of individual teachers, making better use of the resources that already exist within the system. This will ensure that more teachers continue to develop – ideally throughout their career, but at least until they have mastered a core set of instructional techniques.

⁷ This figure was calculated assuming staff time costs of £850 million and course fees of £200 million. Staff time was calculated on the assumption that there are 400,000 teachers in England completing 12 days of CPD per year and being paid an average salary of £34,600. The course fees are based on analysis of the CPD line within school budgets by the National College for School Leadership (for more details see <http://tdtrust.org/2012/05/>).

3.

THREE CHALLENGES FACING TEACHER TRAINING AND DEVELOPMENT

There are three challenges when it comes to changing the improvement trajectory of teachers' training and development. This chapter will consider each in greater depth, and suggest possible means of addressing them.

Challenge 1: Participation fails to transform classroom practice

Courses, programmes and workshops are often undifferentiated, and poorly designed and delivered. They fall short of the requirements necessary for effective training and development, and as a result – despite the investment of time and resources that they entail – have little impact on teacher effectiveness.

Challenge 2: Incentives to participate are poor

While teaching's attractiveness as a career choice for graduates has increased over the last 20 years, due in part to the work of organisations like Teach First, there are few incentives to continue as a classroom teacher. Compared to middle leadership, classroom teaching lacks a clear progression route to mastery; it is lower status and pay progression is poorer. Teachers also leave the classroom for better incentivised careers in other sectors.

Challenge 3: The environment is poor

The culture and ethos of an individual school, and the effectiveness of colleagues, can make a significant contribution to, or significantly detract from, an individual teacher's ability to improve. It can be frustratingly difficult for a teacher to attempt to improve his or her practice within a challenging school – which, frustratingly, is where that improved practice is most needed.

Challenge 1: Participation fails to transform classroom practice

In order to be effective, teacher development needs to be expertly designed and delivered. Too often it is neither. A 2011 study by CUREE estimated that just 9 per cent of teacher training and development in England results in teachers being able to embed new ideas, and only 1 per cent of it enables teachers to transform poor practice into more effective teaching (CUREE 2011).

The majority of teacher training and development, which fails to meet these standards, often shares a number of common features.

- **It lacks continuity and rhythm:** training is often provided as a one-off session on a particular topic, which has no discernible impact on student achievement. These one-off sessions are often not connected to each other, which results in similarly ineffective hour-long sessions repeated over and over.
- **Its focus on craft is limited:** development often assumes a 'knowledge deficit' that needs to be addressed (William 2010). While improving subject, pedagogical, theoretical and contextual knowledge is important, it is only part of effective teacher development. A focus on craft – that is, how to combine this knowledge in order to best enable students to learn – is essential, yet too often absent.
- **It is not delivered by credible, expert facilitators:** the perceived and actual expertise and credibility of facilitators is often poor because those leading training are not currently highly expert classroom teachers or facilitators.

- **It does not give teachers a clear understanding of their performance against a clear, evidence-informed, ‘expert’ standard:** this has two negative consequences. First, development can have a negative rather than positive impact on pupil outcomes, as teachers are encouraged to make wrong or superficial changes to their practice that makes them worse as a result. This is particularly important when it comes to discredited educational ideas (such as Learning Styles) that still feature in a number of training and development programmes. Second, teachers can come to believe that they are better than they are, and so conclude that they require less development in future (Weston 2012).
- **It is not informed by the needs of pupils:** development for its own sake is a poor use of scarce resources. Training and development should be connected to a clear pupil need. Too often, input focuses on generic knowledge, and is not designed to help teachers contextualise their learning either for subjects or for specific groups of pupils.
- **Its impact is not evaluated:** as few as 7 per cent of schools evaluate their training by focussing on its impact on pupil progress. As a result, schools and providers have been unable to gather evidence about the relationship between development and issues such as changes in practice, gains in knowledge and student outcomes (Teeman and Pyle 2009). This leads to poor choices in the future, and poor incentives for providers to improve their offer.

What we need

A significant step-change in quality is essential. Teachers need well-designed training and development that is demanding, sustained over time and has a clear rhythm. They need it to be delivered by credible, well-qualified practicing experts. And they need it to be free from discredited educational ideas (such as learning styles) and packed with rich content on what we know to be effective (such as how to give effective feedback, the importance of committing knowledge to long-term memory, and metacognition).

Challenge 2: Incentives to participate are poor

As well as being high-impact, teacher development should also be attractive to those who may choose to take part in it. Too often, little thought is given to how teacher development opportunities are incentivised for individual teachers themselves. Our education system does not consider how these individual opportunities connect to a credible progression pathway distinct from school leadership: we rarely increase the status or pay of those who have improved their knowledge and craft as a result of development activities; we fail to link all development to clear outcomes for pupils; and, when an award of some kind is given, it is difficult to transfer any such recognition between schools.

Progression

Beyond their newly qualified year, classroom teachers (as distinct from middle leaders) lack a clear progression route towards ‘teaching mastery’. Aspects of such a pathway (advanced skills teachers, lead teachers, excellent teachers) have been introduced, but they have been developed for disparate purposes and to increasingly loose standards, expectations and frameworks. As a result, any teacher looking to understand what their progression route beyond initial teacher training might look like, unless they aim to become a middle leader, will be left wanting.

In the course of our research we investigated the possible career paths open to a newly qualified teacher, and were unable to find any guidance that set out a clearly defined route, and very little that placed value upon or incentivised teachers’ development as a means of pursuing that route. While outstanding practice might open up opportunities for promotion to school leadership positions, this model fails to meet the needs of the majority of teachers: a good teacher is not necessarily a competent manager,

and it may indeed have an adverse impact upon the quality of teaching in schools by removing outstanding teachers from the classroom (OECD 2013b).

Status

Becoming a teacher is now a more prestigious career choice than at any time in the last two decades. For top graduates, teaching is the fourth most prestigious career option for graduates – in part due to the work of charities such as Teach First (Times 2015).⁸ This is a remarkable and welcome change.

However, there is an important difference in the level of recognition that comes from *training* to be a teacher, and from actual classroom teaching once qualified. For teachers, recognition from peers and self-actualisation is mainly linked with promotion to middle leadership – that is, managing more and teaching less – rather than classroom teaching.

Portability

Much of the development undertaken by teachers in schools is informal. While this kind of development, when designed and delivered as outlined in the previous chapter, is essential for improving outcomes for pupils, it is rarely portable *between* schools and systems. As most teachers do move between schools, and on occasions between education systems, a lack of a clear marker of quality or achievement for a new employer, makes it difficult for an individual to demonstrate their expertise. Simply listing their most recent training sessions reveals more about their previous school's policies than the teacher's learning and progress, and so carries little sway.

Link to pupil needs

What motivates teachers to learn is the belief that it is helping their pupils, and evidence that it has done so (Higgins et al 2015). A portable, high-status qualification is not, in itself, enough. Experience from previous centrally funded master's in teaching and learning programmes suggests that completion rates were low largely because teachers did not see the benefits in much of the activity they were expected to undertake. While teachers were happy to complete the pupil facing inquiry, literature reviews and write-ups were left incomplete because the direct link to pupils' outcomes was absent. Improving pupil outcomes must therefore be the primary purpose of any teacher training and development activity, each of which should be explicitly linked to that outcome (CUREE 2011).

What we need

While the primary focus of our efforts should be on the positive impact that any teacher development opportunity will have on pupils, they should also deliver the significant secondary benefit of ensuring that an attractive offer is made to individual teachers. High-status, accredited (and therefore portable) opportunities that link together to form a clear progression route to attaining expert status will better incentivise teachers to engage with those opportunities that will most benefit their pupils.

A stronger focus on progression for classroom teachers in particular would bring teaching into line with other high-status professions like medicine and law (Toop 2013). Progression within medicine, for instance, is clearly mapped out: five years at medical school; a two-year generic foundation programme; and five years of specialist training, ultimately working towards leading a GP practice or becoming a consultant.⁹ By its very nature this path encourages medical professionals to consider their career in the longer term, but also offers a significant variety of specialisms to pursue once basic training is completed.

8 See: <http://www.top100graduateemployers.com/>

9 See: <http://www.medschools.ac.uk/Students/careers/Pages/Career-Pathway.aspx>

Challenge 3: The environment is poor

Even with a high-impact, attractive development offer, improvement is not guaranteed. The environment in which development takes place has a significant impact on the rate of teacher improvement. A recent report that analysed the effect of environments on teacher development found that after 10 years, teachers working in schools at the 75th percentile of environment ratings (that is, towards the higher end) improved 38 per cent more than teachers in schools at the 25th percentile (Kraft and Papay 2014). As a result, the lowest-performing schools, which by their nature are likely to have less supportive environments – struggle to sustain improvements in teacher expertise – the factor that, as we know, is most likely to improve outcomes for their pupils.

Factors that contribute to less supportive environments include the following.

- **Other teachers' mindsets:** the extent to which other teachers are open to development, feedback, and the expectation of continuous improvements in practice. Poor teachers depress the expectations of their colleagues, and prevent a full understanding of what might be possible.
- **The unreliability and poor execution of performance management and appraisals** (particularly graded observations – the most common methods used for evaluating teacher performance). In the case of observations, in one study, videos of lessons were distributed to experienced teachers and headteachers. They were asked to match the teachers depicted in the videos to a value-added assessment of their being either 'effective' or 'ineffective' over time. Despite the professional experience of these observers, the results of these assessments were less accurate than would statistically have been achieved by chance (Strong et al 2011). At this level of accuracy, over half of observation judgments were wrong, which undermines trust in the process.
- **The potential benefits of effective feedback are often not realised,** due to time pressures, a lack of trust, a lack of effective coaches and mentors within schools, and power issues between staff and management – each of which are often factors when a school is most in need of more highly effective teachers (Goldstein 2015).

What we need

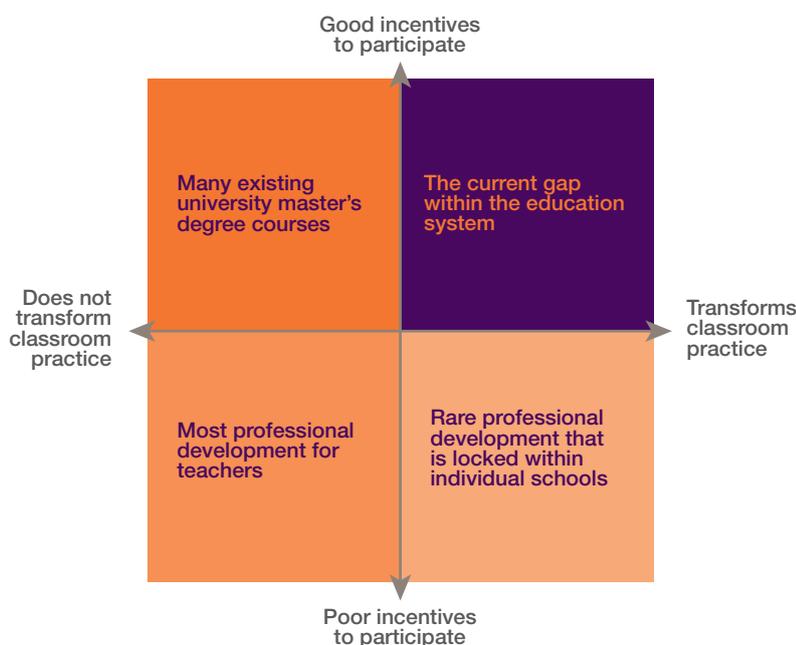
Changing cultures takes time and considerable effort. For those teachers currently working in challenging schools, we must explore alternative solutions. Where there are individual teachers working in unsupportive environments, there is the potential for collaboration between individuals across schools. While this is less preferable than collaboration within the same environment, technological advances mean that teachers have the means to identify like-minded peers, seek out experts, share their teaching and receive ongoing formative feedback. Such approaches could offer some of the improvement and retention benefits associated with more supportive environments, and indeed contribute to the longer-term cultural changes that needed, by increasing the numbers of expert teachers who can lead that change – especially if their work and role is harnessed to the task of making advanced practice visible.

Current provision

The current provision of teacher development opportunities varies in approach, cost, time, curriculum and effectiveness. From structured single sessions to continuous learning, some are delivered in-house and others by bought-in public, private and third-sector providers including, increasingly, other schools. Some are delivered on-site, and some in other schools or institutions. Some are well-designed and result in improved outcomes for pupils, yet most are not and do not. Similarly, some aim to be attractive to teachers – in terms of giving them status, a sense of progression and a portable qualification, as well as providing means to enhance pupil learning, which is every teacher’s core priority. But again, most do not.

Figure 3.1

There is a significant gap in England’s teacher training and development provision
An illustrative grid indicating the strength of incentives to participate in teacher training and development provision, and the degree to which they transform classroom practice



As illustrated in figure 3.1, we argue that there is a significant gap: namely, an offer that is both attractive to teachers – supporting progression, status and qualification portability – and high-impact, leading to improved outcomes for pupils.

We found too much teacher training and development provision that is both low-impact and unattractive – and thus of no benefit to either teachers or pupils. Poorly designed, one-off training and development sessions and one-day external conferences all too often make up the lion’s share of the development offer. Skilled teachers may glean some learning from this offer, but for most it simply dampens their expectations of what could be achieved.

Truly transformative CPD is, however, occurring within the system – although rare (CUREE [2011: 34] found that just 1 per cent of provision meets this standard), it does exist. This is often due in part to high expectations and specific expertise from a small number of exceptional teachers and school leaders. However, despite the positive impact that such provision can have on

pupil outcomes, we found little evidence of good incentives to participate in it, or a robust mechanism through which its benefits can be shared.

We found some opportunities that provide clear benefits to teachers, but little in terms of follow-through to improved outcomes for pupils. Master's in education (MEd) courses at universities fell into this category. Despite teacher perceptions that they 'would improve their teaching', they are mainly designed with a knowledge-creation or research purpose in mind rather than teaching, and so lack most of the features set out in chapter 2. Research spanning different countries and education systems has found only a weak relationship between teachers gaining existing master's degrees and improved student outcomes (see for example OECD 2009, Buddin and Zamorro 2009).

We also found some 'badges' to identify expertise. Lead practitioners (successors to 'advanced skills teachers') were created in 2013, and go some way towards addressing the status and progression aspects of the problem by offering teachers who exemplify effective teaching skills a role in which they are responsible for improving teaching and learning, and which entails a leadership role in developing, implementing and evaluating policies that lead to school improvement. While lead practitioner accreditation rewards expert teachers through increased pay and status, it is largely a badge that rewards professionals who are already performing at a high standard – it is not in itself a development programme to help teachers improve their practice.

In summary, while we have found examples of training and development that is either well incentivised or well designed, we were unable to find an offer that met both criteria. Those offers that showed most promise were usually created by high-performing schools and relied heavily on the environment within these schools, and so were not usually available to teachers in lower-performing schools.

4. LESSONS FROM AROUND THE WORLD

There are a number of global ‘bright spots’ that are taking the lead in efforts to improve teachers’ training and development. This section aims to set out how these exemplars are addressing some or all of the challenges outlined in chapter 3, and what lessons we can learn from their successes.

Graduate schools of education, US

Independent graduate schools of education (GSEs) are growing in size and reputation in the US. These teacher-led (as opposed to academic-led) institutions have the objective of creating a movement of expert teachers by providing demanding, high-impact courses in advanced teaching through an established university-level but practice-orientated institution.

The three independent GSEs – Relay GSE, High Tech High GSE and Sposato GSE – have a great deal in common in terms of their ethos and purpose, though they are pedagogically quite different.

Relay GSE

Relay GSE¹⁰ offers development opportunities for aspiring teachers, experienced teachers, and leaders. Some states in the US require teachers to complete a master’s degree in order to fulfil the credential system, which teachers often say are time-intensive, expensive and do little to develop their impact in the classroom. To solve this problem, Relay created an initial teacher training (ITT) programme that was designed to better fit the needs of both teachers and students, while continuing to meet the states’ teacher credentialing requirements.¹¹ During the two-year programme, residents experience a structured and gradual introduction into the profession, complete a master’s degree, and earn a full-time teaching position at a high-performing school. Its ITT is based around constant practice of the theory learned.

As well as the ITT strand, Relay also offers an MA in education as a CPD opportunity for experienced teachers. This programme uses a continuous cycle of practice, feedback and improvement that centres on student growth and achievement.

Finally, Relay promotes their National Principals Academy as a support network for school leaders to help them ensure that they are meeting the needs of their students. (*Sources: Arnett 2015, and author’s conversations with Relay GSE staff.*)

High Tech High GSE

High Tech High GSE¹² in San Diego was created as response to an inability to recruit industry expert teachers who suited its project-based curriculum but also met the state of California’s teacher credentialing requirements. Its ITT programme involves coursework, supervised teaching, mentor support and a substantial culminating assessment project.

10 See: <http://www.relay.edu/>

11 Relay GSE has eight campuses across five states.

12 See: <http://gse.hightechhigh.org/>

To ensure that highly effective teaching continues beyond the first years of a teacher's career, High Tech High GSE also offers CPD for existing teachers in the form of its MEd and educational leadership programmes. The MEd has two strands, both designed for experienced educators.

- The first, the teacher leadership strand, is designed for those who are interested in exploring pedagogy that promotes deeper learning and equity in schools.
- The second, the school leadership strand, is designed for those who aspire to lead an innovative school focussed on deeper learning and equity.

High Tech High's reflective, exploratory training is rooted in workshops, observations, 'teach-meets' (which bring teachers from across a certain area together). It also looks to provide a balance of current best practice, as well as an imaginative space for more forward-thinking approaches to education. Rather than creating more High Tech High schools, GSE participants are encouraged to find opportunities in their own schools to take risks, reflect on practice and, over time, shape their own visions of effective teaching, learning and leadership. The GSE gives experienced educators opportunities to reflect and refine new ways of teaching. (Sources: Arnett 2015, and author's conversations with High Tech High GSE staff.)

Sposato GSE (part of the Match Charter Management Organization)

Unlike Relay GSE and High Tech High GSE, Sposato GSE¹³ only offers ITT opportunities. The Boston-based programme explicitly identifies itself as a 'third way' into teaching, and looks to clearly differentiate itself from both traditional teacher training and Teach for America (TFA) pathways. In specifically targeting high-achieving graduates, Sposato GSE looks to engage ambitious individuals who have an obsession with detail and will be relentless in their pursuit of the best results in challenging circumstances. Match Education's founder, Michael Goldstein, also wanted to create a teacher-training course that suited the needs of the teachers and students in Massachusetts. Sposato GSE asks participants in their first year to work full-time as a tutor or teaching assistant in a high-performing, high-poverty school, and to participate in evening classes, Saturday drills and teaching simulations. This first year culminates in residents receiving a Massachusetts teaching license. During the second year of the programme, participants' first full year of teaching, they also work towards an MA, a component of which requires them to partake in multiple cycles of reflection, feedback and coaching. (Sources: Arnett 2015, and author's conversations with Sposato GSE staff.)

Summary

The key elements of these case studies can be summarised as follows.

Objectives	How these objectives are met by GSEs
Transforms classroom practice	<p>Master's degree in advanced teaching designed by global experts and informed by the latest international education research.</p> <p>GSEs are 'school-led', with governance provided by steering groups of high-performing charter management organisations serving low income communities (for example, Relay GSE was founded by KIPP, Uncommon Schools and Achievement First).</p>
Incentivises participation	<p>GSEs are prestigious institutions that draw credibility from their founding schools and the quality of their courses.</p> <p>They provide portable masters-level course accreditation.</p>
Taught within a supportive environment	<p>Participants are grouped into larger cohorts and smaller cross-school units, thereby mitigating the risks associated with poor in-school development cultures.</p> <p>Development processes are separated from performance management within schools in order to maximise engagement from participants.</p>

13 See: <http://www.sposatogse.org/>

Master teachers, Singapore

A model for career progression for classroom teachers is well established in Singapore through its Academy of Singapore Teachers.¹⁴ This academy houses sixteen ‘master teachers’, who sit at the top of their profession and are tasked with building a teacher-led culture of professional excellence (Crehan 2014).

The key features of this approach are:

- an entitlement to significant amounts of training and development each year that all teachers can access according to their own development needs
- school timetables that are flexible in order to allow this development, and ‘manpower grants’ from central government to fund it
- a seven-stage career ladder linked to development as a classroom teacher, with the clear ultimate goal of becoming a ‘master teacher’ at the top of the profession
- careful consultation on, and pilots of, any policy changes (ibid).

A training and development culture, Hong Kong

Hong Kong is consistently ranked as having one of the highest-performing education systems in the world. One of the reasons for this is believed to be the emphasis placed on high-quality training and development for teachers.

Teachers in Hong Kong are expected to engage in 240 hours of training and development within the first five years of their career. The CPD policy is guided by the following principles.

- Like most other professionals, teachers are responsible for their own professional growth through lifelong learning.
- Teachers have a responsibility to participate in CPD in order to refresh, enrich and broaden their knowledge, skills and experience, for the benefit of their students.
- Teachers work as members of the school community, and their CPD contributes to the collective intelligence of the whole school.
- Contributing to colleagues’ training and development also enhances a teacher’s own development.
- Teachers’ CPD caters for both personal and school developmental needs; the prioritisation of CPD is a matter of agreement between individual teachers and their schools.
- CPD opportunities need to reflect teachers’ unique professional and personal interests, as well as the stages of development they have reached in their careers (OECD 2012).¹⁵

¹⁴ See: <http://www.academyofsingaporeteachers.moe.gov.sg/>

¹⁵ The author is also indebted to Lucy Crehan and Philippa Cordingley for their expert advice which informed this section.

5. AN INSTITUTE FOR ADVANCED TEACHING

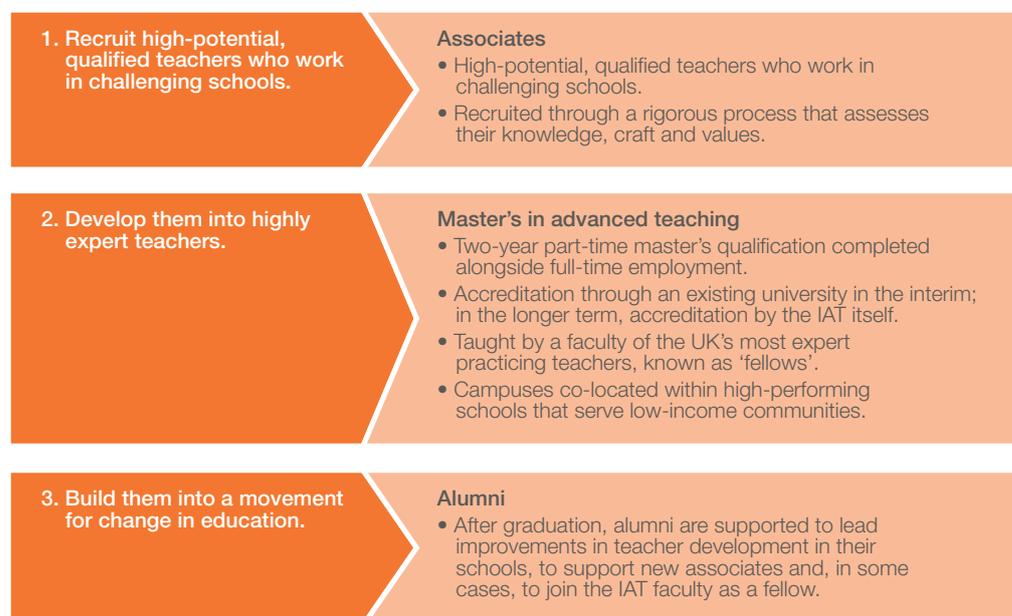
Chapter 1 set out the benefits to individuals and society of ensuring that no child’s educational success is limited by their socio-economic background; chapter 2 made the case for why creating a movement of expert teachers would make an important contribution to realising these benefits; chapter 3 described the barriers that are preventing us from achieving this; and chapter 4 offered lessons from around the world on how those barriers can be overcome.

This chapter argues for the creation of a new higher education training institution focussed on advanced teaching – an Institute for Advanced Teaching (IAT) – which could address each of the three barriers to effective teacher development in England, and deliver well-incentivised, transformative training and development within a supportive environment.

Figure 5.1

The IAT’s three-step plan

A flow-chart of the Institute for Advanced Teaching’s objectives, and how they will be achieved



As a dedicated not-for-profit social enterprise with a mission to build a movement of expert teachers who are able to ensure that all children have an excellent education, the IAT would:

- recruit high-potential, qualified teachers who work in challenging schools¹⁶
- develop them into expert teachers
- build them into a movement for change in education.

Through careful design it could address the three barriers described above in the following ways.

Challenges	How IAT will overcome them
Transforms classroom practice	<p>A master's degree in advanced teaching, designed by global experts and informed by rigorous international education research.</p> <p>A faculty made up of England's most expert practicing teachers leading the delivery of the course (and developing themselves as expert facilitators).</p> <p>Governance conducted through a steering group of high-performing schools that serve low-income communities.</p>
Incentivises participation	<p>The creation of a prestigious institution that draws credibility from founding schools, high-calibre faculty, the quality of its course and its demonstrated outcomes.</p> <p>Portable master's-level course accreditation.</p> <p>Opens a niche progression route for the most expert teachers to join a prestigious faculty of experts.</p>
Taught within a supportive environment	<p>Associates grouped into larger cohort and smaller cross-school units mitigating the risk of poor in-school development cultures.</p> <p>The course will equip associates with the knowledge and craft required to support a culture of development within their own school.</p> <p>Development process separated from performance management within schools in order to maximise engagement from associates.</p>

Who would study at the IAT?

IAT should work with teachers employed in challenging schools who have the potential to become expert. These teachers would be identified through a rigorous recruitment and diagnostic process. Each applicant, in addition to the minimum requirements of having completed their newly qualified teacher (NQT) year and holding a teaching post in a challenging school, would be assessed in terms of their mindset and values, their knowledge (subject, pedagogical, theoretical and contextual) and their craft before an offer is made.

The most successful diagnostic processes are multi-stage; increase in depth at each successive stage; and rely on a range of assessments. For a place at the IAT, applicants would complete a self-assessment, an initial application form, an online 360-degree feedback process (which could use information gathered from pupils, parents, their colleagues and headteacher) or even return video submissions of their teaching.

Those who are successful at this stage would go through to an assessment centre, where they could be assessed on their current basic pedagogical and content knowledge, on giving and receiving feedback in a group setting, and on their willingness to engage in discussions focussed on classroom artefacts and pupil value-added data. Only if an individual is successful at this assessment centre stage would an offer be made; this offer would require the support of the applicant's headteacher in order to be accepted.

¹⁶ Teach First, Teaching Leaders, Future Leaders and others have clearly defined metrics for identifying schools that meet their 'challenging' criteria. They primarily focus on metrics of deprivation, and we expect to use a similar metric.

Who would teach at the IAT?

Teacher development should be led by expert facilitators who have specialist pedagogical knowledge, and an in-depth understanding of effective training and development processes, evaluation and monitoring (Cordingly et al 2015). Courses at the IAT should therefore be primarily led by a faculty of the UK's most expert practicing classroom teachers, who will be skilled in adult facilitation and specialists in particular areas of knowledge or craft such as phonics, formative assessment, metacognition, literacy, numeracy, oracy and so on. Seconded to the faculty for roughly one day per week, their role should be focussed on leading curriculum design, course delivery, assessment, and connecting with leading education researchers.

Faculty members should be recruited according to the same basic diagnostic process as participants, albeit with higher expectations of effectiveness at each stage. Once recruited, there should be a significant development programme for each faculty member. These programmes must provide opportunities to develop even deeper expertise in course content and facilitation.

Each school would be compensated for the time that faculty members spend working for the IAT and, subject to funding, the ambition should be to provide an additional payment, paid via the school to the faculty member, by way of additional remuneration and recognition for their efforts and expertise.

Once graduated from the course, the most promising associates could work towards and eventually join the faculty themselves, thus creating a clear progression route for those teachers who wish to develop their teaching rather than their management expertise.

What would the course look like?

The master's in advanced teaching (MAT) degree should be a two-year, part-time accredited master's-level (level 7) qualification. Its focus should be on improving the knowledge (subject, pedagogical, theoretical and contextual) and craft (that is, the combining of this knowledge in a given moment into well-practiced 'moves') of proficient teachers, moving them towards 'expert' status. The MAT's design, informed by the latest research, should be delivered in a way that allows associates to complete it alongside a full-time teaching role. It should:

- require sustained engagement over two years
- establish a regular rhythm of activity
- consistently link development to individual pupil needs
- blend online and face-to-face delivery
- combine expert and peer-led instruction
- be well-differentiated in order to meet the needs of each teacher.

The MAT should include four key components.

- **An intensive summer school** designed to introduce participants to the content of the MAT, introduce them to their peers and faculty members, and lay the groundwork for building them into a broader movement for change.
- **Recall days** at one of the IAT's campuses. Sessions would focus on immersive learning in high-performing schools, the teaching of pedagogical and theoretical knowledge, and on the development of teaching craft through deliberate practice, observation and feedback. These recall days would also be an important opportunity for all participants to come together as a cohort.
- **Classroom coaching** with participants' faculty fellows. These sessions would give participants an intense one-to-one session with an expert teacher.

- **Peer collaboration** through small groups of teachers who regularly practice, observe and feed-back together. This should involve fortnightly sharing of teaching through an online platform, and subsequent feedback from peers within the group.

The MAT's curriculum should focus on particular approaches to teaching that have been shown to consistently deliver results (such as focussing on subject knowledge, phonics, effective feedback, metacognition and so on).

How would participants be assessed?

An assessment against clear criteria at the end of the two-year course would determine whether or not a participant has successfully completed the course.

Their knowledge could be assessed through examination, exhibition and vivas. Although currently rare or even taboo in teacher training, these methods are effective means of assessing whether participants have gained the level of knowledge required to improve their teaching. It is worth noting their wide use in other professions like accountancy and medicine.

By contrast, craft should be assessed through feedback from faculty members and peers, and by providing evidence of engaging in the *process* of observation and formative feedback within a unit.

All participants should pass this summative assessment in order to be awarded the MAT qualification.

What would happen after graduation?

A two-year period of study will not be sufficient. The IAT must create a movement of expert teachers who continue to improve beyond their graduation, and through their own practice – setting an example that changes the practice and ultimately the culture around them. This will involve teachers taking ownership of the movement and becoming champions of it, and a continued focus on co-construction, depth and sustainability (Cordingly and Bell 2007).

Those completing the course should be encouraged to stay connected to the IAT by participating in further development opportunities, observing and giving feedback to new participants, and continuing to work within their well-established groups. They should, through those groups, continue to have access to the IAT's online platforms. They should also be encouraged to use the adult education knowledge and craft they have developed throughout their MAT to take a leading role in their own in-school CPD programmes.

Where would the IAT be located?

Teaching at IAT could take place across a network of 'campuses', co-located within a group of founding schools and, in time, other partner schools. It is essential that these campuses are dispersed around the country, and not solely concentrated in urban areas like London.

As well as ensuring that MAT is immersive by design – rather than taught in institutions that are largely remote from schools – this model would allow for easy scalability, better use of existing public infrastructure and lower overheads, and lend credibility to campus schools.

How would the course be accredited?

IAT's ambition should be to secure degree-awarding powers. We believe that the ability to recognise the teachers' expertise through degree-awarding powers held within the teaching profession is an essential driver for improving outcomes for pupils, raising the status of teaching and the prestige associated with staying in the classroom, improving the value for money of training and development, and advancing the move towards a school-led system. This is a natural extension of the policy changes that have allowed school-based initial teacher training providers (SCITTs) to award qualified teacher status. Having degree-awarding powers also proved important to the success of organisations such as Relay in New York.

This is consistent with the government's commitment to open up the higher education system to alternative providers. The chancellor first outlined the government's plans in 2015:

*'To enable the best new providers to compete on a level playing field with established universities, the government will introduce a clearer and faster route to degree awarding powers for those assessed to offer the best quality education. As part of the review of validation arrangements, the government will explore options to allow the best providers to offer degrees independently of existing institutions before they obtain degree awarding powers.'*¹⁷

HM Treasury et al 2015: 28

The government has subsequently published a whitepaper and started the process of legislating to turn this ambition into reality. While there are risks to bringing private providers into the university system, not for profit organisations such as the Institute for Advanced Teaching would make ideal candidates for encouraging innovation in this way.¹⁸

We are, however, also aware that it may be necessary, and indeed helpful, in the medium term to partner with an existing university provider who will accredit IAT programmes on an interim basis.

17 There are also some risks to this approach, especially if the government were to allow lots of profit-making providers to enter the HE system without robust quality controls. This debate is beyond the scope of our report. However, we believe that not-for-profit and sector-led professional bodies that are subject to strict quality regulations – such as the one being recommended in this report – would be ideal candidates for taking on degree-awarding powers in their particular specialist fields.

18 See Clifton 2016 for a discussion of what makes a good or bad private provider in higher education.

6. CONCLUSION AND NEXT STEPS

Ensuring that every child, regardless of his or her background, has an excellent education will require a renewed focus on building capacity within our education system – particularly among teachers. Successful school-led policy must therefore achieve the dual and complementary aims of improving system capacity through increasing teachers' expertise, *and* through retaining those teachers who are already in the system. Great training and development has the potential to fulfil both aims.

To improve teaching through training and development, three challenges must be overcome:

- addressing the design and delivery flaws, common to most development opportunities, that limit the capacity of training and development to transform classroom practice
- encourage participation by providing better-quality incentives
- improving the contexts in which development takes place.

This paper argues that the creation of a new training institution focussed on advanced teaching – an Institute for Advanced Teaching – can address all three challenges, and has made the case to both the profession and to government for the creation of a dedicated not-for-profit social enterprise to test and evaluate the concept.

The IAT's purpose will be to build a community of expert teachers who will ensure that all children have an excellent education.

The next stage in our work will be to outline in detail the practical elements of this institution. We will be drawing up more detailed plans for the content and composition of the course, the design of the social enterprise, and the costs involved in creating the scheme. We would welcome any feedback on this proposal as we take it forward.

If you would like to comment on the proposals in this paper, please contact the author, Matthew Hood, at mhood@heyshamhigh.co.uk.

REFERENCES

- Arnett T (2015) 'Fixing teacher education', blog, Clayton Christensen Institute for Disruptive Education website, 26 May 2015. <http://www.christenseninstitute.org/fixing-teacher-education/>
- Barber M and Mourshed M (2007) *How the world's best-performing school systems come out on top*, McKinsey & Company. https://mckinseyonsociety.com/downloads/reports/Education/Worlds_School_Systems_Final.pdf
- Buddin R and Zamarro G (2009) 'Teacher Qualifications and Student Achievement in Urban Elementary Schools', RAND Corporation. http://www.rand.org/content/dam/rand/pubs/reprints/2010/RAND_RP1410.pdf
- Centre for the Use of Research and Evidence in Education [CUREE] (2011) *Evaluation of CPD providers in England 2010-2011: Report for School Leaders*. [http://www.curee.co.uk/files/publication/\[site-timestamp\]/CPD%20providers%20report%20-school%20leaders%20final.pdf](http://www.curee.co.uk/files/publication/[site-timestamp]/CPD%20providers%20report%20-school%20leaders%20final.pdf)
- CentreForum (2016) written evidence to the multi-academy trusts inquiry, Education Committee, House of Commons. <http://centreforum.org/live/wp-content/uploads/2016/05/32347.pdf>
- Chingos M M and Peterson P E (2011) 'It's easier to pick a good teacher than to train one: Familiar and new results on the correlates of teacher effectiveness', *Economics of Education Review* 30(3): 449–465
- Clifton J (ed) (2013) *Excellence and equity: Tackling educational disadvantage in England's secondary schools*, IPPR. <http://www.ippr.org/publications/excellence-and-equity-tackling-educational-disadvantage-in-englands-secondary-schools>
- Clifton J (2016) 'Could for-profit "challenger institutions" improve higher education?', *Prospect*, 31 May 2016. <http://www.prospectmagazine.co.uk/politics/for-profit-challenger-institutions-higher-education-universities>
- Clifton J, Round A and Raikes L (2016) *Northern schools: Putting education at the heart of the northern powerhouse*, IPPR North. <http://www.ippr.org/publications/northern-schools-putting-education-at-the-heart-of-the-northern-powerhouse>
- Clifton J, Thompson S and Thorley C (2014) *Winning the global race? Jobs, skills and the importance of vocational education*. <http://www.ippr.org/publications/winning-the-global-race-jobs-skills-and-the-importance-of-vocational-education>
- Cordingley P and Bell M (2007) *Transferring learning and taking innovation to scale*, the Innovation Unit. <http://curee.co.uk/files/publication/1236960866/Transferring%20learning%20and%20taking%20innovation%20to%20scale%20-%20think%20piece.pdf>
- Cordingley P, Higgins S, Greany T, Buckler N, Coles-Jordan D, Crisp B, Saunders L and Coe R (2015) *Developing Great Teaching: Lessons from the international reviews into effective professional development*, Teacher Development Trust. <http://tdtrust.org/about/dgt/>
- Crehan L (2014) 'Teacher-led professional development in Singapore', blog post, Inside classrooms project, 6 June 2014. <http://www.insideclassrooms.com/blog/teacher-led-professional-development-in-singapore>
- Department for Business, Innovation and Skills [BIS] (2015) *Fulfilling Our Potential: Teaching Excellence, Social Mobility and Student Choice*. <https://www.gov.uk>

- government/uploads/system/uploads/attachment_data/file/474266/BIS-15-623-fulfilling-our-potential-teaching-excellence-social-mobility-and-student-choice-accessible.pdf
- Department for Education [DfE] (2011) *A profile of teachers in England from the 2010 School Workforce Census*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/182407/DFE-RR151.pdf
- Department for Education [DfE] (2016) *Educational Excellence Everywhere*. <https://www.gov.uk/government/publications/educational-excellence-everywhere>
- George A, Hansen K and Schoon I (2007) 'Child development', in Hansen K and Joshi H (eds) *Millennium Cohort Study: Second Survey: A User's Guide to Initial Findings*. <http://image.guardian.co.uk/sys-files/Society/documents/2007/06/11/MCS2.pdf>
- Goldstein A (2015) *Teachers' Perceptions of the Influence of Teacher Collaboration on Teacher Morale*, Walden University
- Hanushek E A and Woessman L (2010) *The high cost of low educational performance: The long-run economic impact of improving PISA outcomes*, Organisation for Economic Cooperation and Development
- Hattie J (2012) *Visible learning for Teachers: Maximizing impact on learning*, Routledge
- Hattie J (2015a) *What doesn't work in education: The politics of distraction*, Pearson. http://visible-learning.org/wp-content/uploads/2015/06/John-Hattie-Visible-Learning-creative-commons-book-free-PDF-download-What-doesn-t-work-in-education_the-politics-of-distraction-pearson-2015.pdf
- Hattie J (2015b) *What Works Best in Education: The Politics of Collaborative Expertise*, Pearson. https://www.pearson.com/content/dam/corporate/global/pearson-dot-com/files/hattie/150526_ExpertiseWEB_V1.pdf
- Higgins C, Lavin T and Metcalfe O (2008) *Health Impacts on Education: A review*, Institute of Public Health in Ireland
- Higgins S, Coe R and Cordingley P (2015) *Developing Great Teaching: Lessons from the international reviews into effective professional development*, Teacher Development Trust. <http://tdtrust.org/about/dgt>
- HM Treasury, Department for Business, Innovation and Skills, Osborne G and Javid S (2015) *Fixing the foundations: creating a more prosperous nation*, the Stationery Office. <https://www.gov.uk/government/publications/fixing-the-foundations-creating-a-more-prosperous-nation>
- Husbands C (2013) 'Great teachers or great teaching? Why McKinsey got it wrong', IOE London blog, UCL, 10 October 2013. <https://ioelondonblog.wordpress.com/2013/10/10/great-teachers-or-great-teaching-why-mckinsey-got-it-wrong/>
- Kraft M A and Papay J P (2014) 'Can Professional Environments in Schools Promote Teacher Development? Explaining Heterogeneity in Returns to Teaching Experience', *Educational Evaluation and Policy Analysis* 36: 476–500
- Leunig T and Wyness G (2013) 'TOWIE: the answer to regional inequality', in Marshall P (ed) *The Tail: How England's schools fail one child in five – and what can be done*, Profile Books
- Mourshed M, Chijioke C and Barber M (2010) *How the world's most improved school systems keep getting better*, McKinsey & Company. <http://mckinseysociety.com/how-the-worlds-most-improved-school-systems-keep-getting-better/>
- Ofsted (2014) *The Annual Report of Her Majesty's Chief Inspector of Education, Children's Services and Skills 2013/14*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/384699/Ofsted_Annual_Report_201314_HMCI_commentary.pdf

- Organisation for Economic Co-operation and Development [OECD] (2009) *Evaluating and Rewarding the Quality of Teachers: International Practices*. http://www.oecd-ilibrary.org/education/evaluating-and-rewarding-the-quality-of-teachers-international-practices_9789264034358-en
- Organisation for Economic Co-operation and Development [OECD] (2010) *PISA 2009 Volume II: Overcoming Social Background: Equity in Learning Opportunities and Outcomes*. <http://www.oecd.org/pisa/pisaproducts/48852584.pdf>
- Organisation for Economic Co-operation and Development [OECD] (2012) 'Hong Kong-China: Student performance (PISA 2012)', Education GPS portal. <http://gpseducation.oecd.org/CountryProfile?primaryCountry=HKG&treshold=10&topic=PI>
- Organisation for Economic Co-operation and Development [OECD] (2013a) 'Education indicators in focus: What are the social benefits of education?'. [http://www.oecd.org/education/skills-beyond-school/EDIF%202013--N%C2%B010%20\(eng\)--v9%20FINAL%20bis.pdf](http://www.oecd.org/education/skills-beyond-school/EDIF%202013--N%C2%B010%20(eng)--v9%20FINAL%20bis.pdf)
- Organisation for Economic Co-operation and Development [OECD] (2013b) *Teachers for the 21st Century: Using Evaluation to Improve Teaching*. <http://www.oecd.org/site/eduistp13/TS2013%20Background%20Report.pdf>
- Organisation for Economic Co-operation and Development [OECD] (2014) 'Education at a glance 2014: Country note: Korea'. <http://www.oecd.org/edu/Korea-EAG2014-Country-Note.pdf>
- Strong M, Gargani J and Hacifazlioglu Ö (2011) 'Do We Know a Successful Teacher When We See One? Experiments in the Identification of Effective Teachers', *Journal of Teacher Education* 62(4): 367–382
- Sutton Trust (2011) 'Improving the impact of teachers on pupil achievement in the UK – interim findings'
- Teeman D and Pyle K (2009) *NFER Teacher Voice Omnibus: June 2009 Survey*. <https://www.nfer.ac.uk/nfer/teacher-voice-omnibus-survey/tdacpdjune09.pdf>
- The New Teacher Project [TNTP] (2015) *The Mirage: Confronting the Hard Truth About Our Quest for Teacher Development*. http://tntp.org/assets/documents/TNTP-Mirage_2015.pdf
- Toop J (2013) 'Career progression and talent management', in Leslie C (ed) *Towards A Royal College of Teaching: Raising the status of the profession*, the Royal College of Surgeons of England: 48–59. <http://www.teachingleaders.org.uk/wp-content/uploads/2013/05/Towards-a-Royal-College-of-Teaching.pdf>
- Weston D (2012) 'How effective is the professional development undertaken by teachers?', *Guardian*, 26 March 2015. <http://www.theguardian.com/teacher-network/teacher-blog/2012/mar/26/teacher-training-development>
- William D (2008) 'Content Then Process: Teacher Learning Communities in the Service of Formative Assessment', in Reeves D B (ed) *Ahead of the Curve: The Power of Assessment to Transform Teaching and Learning*, Solution Tree
- William D (2010) 'Teacher quality: how to get more of it', speech delivered at the *Spectator Schools Revolution* conference, March 2010. http://www.dylanwilliam.org/Dylan_Williams_website/Papers_files/Spectator%20talk.doc
- William D (2013) 'The importance of teaching', in Clifton J (ed) *Excellence and equity: Tackling educational disadvantage in England's secondary schools*, IPPR. <http://www.ippr.org/publications/excellence-and-equity-tackling-educational-disadvantage-in-englands-secondary-schools>