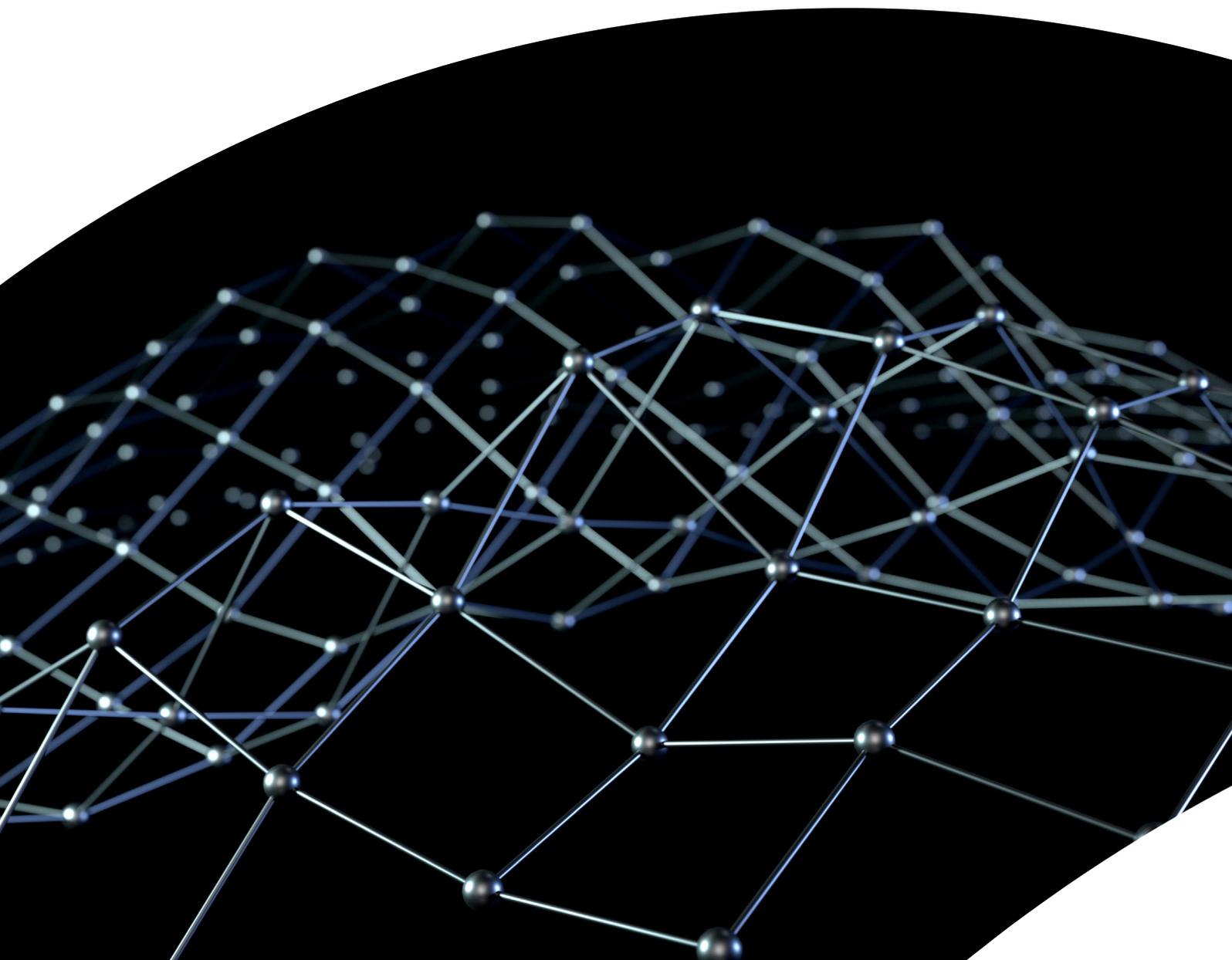




Confederation  
of School Trusts

# Knowledge-building - School improvement at scale

Part of the CST 'A Bridge to the Future' series



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We are governed by a Board of Trustees and are subject to the regulations of the Charity Commission and accountable to our members.

We are strictly apolitical. We work with the government of the day, political parties and politicians across the spectrum to advance education for public benefit.

CST’s mission is to build an excellent education system in England, with every school part of a strong and sustainable group in which every child is a powerful learner and adults learn and develop together as teachers and leaders.

**Our vision is a system which holds trust on behalf of children.**

**Published February 2021  
By Ian Bauckham CBE and  
Leora Cruddas**

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# Knowledge-building - School improvement at scale

A Bridge to the Future Paper <sup>1</sup>

## Introduction

A School Trust is an education charity. It has a single legal and moral purpose - to advance education for public benefit. The strongest Trusts facilitate knowledge building through professional development, with a view to improving curriculum, pedagogy and the quality of teaching. They bring professionals together in ways that are supported by proper strategic oversight and accountability.

Much has been written about school improvement. In the ground-breaking volume, *The Routledge International Handbook of Educational Effectiveness and Improvement*,<sup>2</sup> the authors propose that research into education effectiveness and improvement emerged first in the 1970s. In the last three decades, there have been three distinctive disciplines:

- **School effectiveness research** which has attempted to analyse what makes schools 'good'
- **Teacher effectiveness research** which investigates the characteristics and behaviours of 'good' teachers; and
- **School improvement research** which focuses on schools and teachers

Over time, the authors suggest, these three disciplines have merged to encompass some common perspectives about methodology, orientation and purpose. All three however, take the individual school as the unit of improvement and work on the assumption that improvement or effectiveness 'expertise' resides outside the school.



1 Cruddas, L. and Rollett, S. (2021) [A Bridge to the Future](#) ©, CST.

2 Chapman, C. D Muijs, D. Reynolds, P. Sammons, and C. Teddlie. (2016) *The Routledge International Handbook of Educational Effectiveness and Improvement: Research, Policy and Practice*. London: Routledge.

This concept of school improvement posits specialists from outside the school – from external school improvement services – coming in to advise on what a school should do to improve. And sometimes ‘experts’ with different remits have different views on what to do to improve. The job of the head teacher or principal becomes to triage this often-conflicting advice to produce an improvement plan for execution. This paper argues that this is a legacy model of school improvement.

School improvement at scale across a group of schools has also been much discussed in recent years, but often the discussion, while helpful, remains at the generic level. For example, [Sustainable improvement in multi-school groups \(DfE, 2018\)](#)<sup>3</sup> [↗](#) offers a list of things (which the report suggests are five school improvement ‘fundamentals’) that school groups can do:

1. Establish school improvement capacity.
2. Undertake forensic analysis of school improvement needs.
3. Support and deploy leadership.
4. Provide access to effective practice and expertise at classroom and department level.
5. Monitor improvements in outcomes and reviewing changes in the quality of provision.

In this short paper, we offer a view of school improvement as *deliberate and intentional knowledge building*. We make four propositions:

1. The goal is for every teacher in every classroom to be as good as they can be in what they teach (the curriculum) and how they teach (pedagogy).
2. For this to happen, we need to mobilise for every teacher the best evidence from research.
3. There is no improvement for pupils without improvement in teaching, and no improvement in teaching without the best professional development for teachers.
4. Strong structures (in groups of schools) can facilitate better professional development and thus better teaching and improvement for pupils.

This is not to dismiss the procedural processes of building capacity, undertaking a forensic analysis of need, supporting and deploying leadership, providing access to effective practice and monitoring improvements in the quality of provision. Indeed, these are essential. But without the intentional practice of knowledge building, improvement is not sustainable. It may not result in an enduring change in practice.



<sup>3</sup> Greany, T. (2018) [Sustainable improvement in multi-school groups](#) [↗](#) DfE Research Report.

# Four Propositions on School Improvement

**Proposition one: The goal is for every teacher in every classroom to be as good as they can be in what they teach and how they teach.**

The curriculum is fundamentally important. How to teach (pedagogy) follows from what to teach (the curriculum). Not the other way around.

We need to consider a number of factors when determining what to teach. Some content is of obvious practical use for many or most people in adult life. While important, that is not the whole story. Other content is foundational for future learning, even if not itself of obvious immediate practical use.

The curriculum also has a wider social purpose. A strong curriculum inducts young people into knowledge which is shared by our wider society and is thus a driver both of equity and of societal cohesion. It is essential to school improvement, but it is also greater than school improvement. It is a social imperative, which is at the heart of the wider purposes of education.

Michael Young argues that knowledge is the creation of specialist communities, bound by epistemic conventions (conventions about the sources of the knowledge they include). Subjects are universally recognised and the most reliable tools we have for enabling students to acquire knowledge. The curriculum should be the best knowledge we have – the most powerful knowledge.

Importantly, Young distinguishes between powerful knowledge and knowledge of the powerful. He says:

“Simply put, ‘knowledge of the powerful’ focuses on those people or groups with power in society or organisation to define what knowledge is. In the case of the school curriculum, the concept of the ‘knowledge of the powerful’ refers to what knowledge is included and what is not and by whom”<sup>4</sup> (Young, 2015 p. 72)

Young says that powerful knowledge “**is not concerned with who defines or creates knowledge. Knowledge is ‘powerful’ if it predicts, if it explains, if it enables you to envisage alternatives**” (ibid, p. 74).

Young goes on to describe powerful knowledge as:

- Distinct from the ‘common-sense’ knowledge we acquire through our everyday experience.
- Systematic in that its concepts are systematically related to each other, which we refer to as subjects.
- Specialised, in that it is developed by specialist communities.

In recent months, curriculum content has itself become highly contested.

It is perhaps not particularly contentious to say that the knowledge on which maths as a GCSE subject is based is not a ‘cultural arbitrary.’ However, this may be more contentious to claim for history. Young’s view is that the criteria for powerful knowledge are concerned with epistemology and truth. This goes both ways – history cannot be reduced to a convenient story serving the interests of any particular group. As Christine Counsell puts it, we must keep returning to the scholarship within our subject domain in order to make good curricular decisions.

In Young’s analysis, skills are the application of knowledge – it is a serious error to assume that skills can be taught independently of knowledge. One cannot be ‘creative’ in the absence of thinking about something. For example, one is very unlikely to be able to be creative in the domains of science if foundational scientific knowledge is simply not secure. In any case, as Irenka Suto has shown, a focus on so-called ‘21st century skills’ is entirely misjudged – for a start many of the ‘skills’ identified are in fact ancient, ubiquitous and enigmatic.<sup>5</sup>

<sup>4</sup> Young, M.; D. Lambert and C. Roberts (2015) *Knowledge and the Future School: Curriculum and Social Justice*, Bloomsbury.

<sup>5</sup> Suto, I. (2013) [‘21st Century skills: Ancient, ubiquitous, enigmatic?’](#)  Cambridge Assessment, January 2013 (Accessed on: 1st August 2019).

Leesa Wheelahan argues compellingly that disciplinary knowledge needs to underpin vocational education and training programmes as well, because “abstract, conceptual knowledge is the means societies use to think “the unthinkable” and “the not-yet-thought””. Too often competency-based training locks participants out of disciplinary knowledge development. It cannot then prepare participants to shape wider conversation about their domain, and thus inhibits their ability to lead and innovate. As well as being economically disastrous, such an approach represents a social injustice for those who follow such training.<sup>6</sup>

In an uncertain world, it is essential that we equip our young people with the best knowledge we have. Of course, we need our young people to be literate and numerate. But this cannot be the sole purpose of education. Education must engender an appreciation of human creativity and achievement.

This entitlement should not be limited on grounds of perceived ability, ethnicity, class or gender. We must not exclude pupils from discipline-based knowledge because,

as Basil Bernstein argues, ‘disciplinary knowledge is a public form of understanding through which society has conversations about itself and its future’ (cited in Young, 2015, p. 30). In this aspect, knowledge has a purpose beyond education. And access to it is an entitlement – a first principle of social justice. This kind of schooling liberates – it enables pupils to think beyond their lived experiences. It is not mechanistic or utilitarian, or the rote learning of facts. Knowledge itself is expansive. It is joyful. It helps us to imagine alternatives. And as we have seen with the development of the Covid-19 vaccine, it can save the world.

It is also about creating a sense of belonging. As Ben Newmark says so beautifully: “Our curriculum should whisper to our children, ‘you belong. You did not come from nowhere. You are one of us. All this came before you, and one day you too might add to it.”<sup>7</sup>

All our children need to hear that whisper.



6 Wheelahan, L (2007) How Competency-Based Training Locks the Working Class out of Powerful Knowledge: A Modified Bernsteinian Analysis *British Journal of Sociology of Education*, v28 n5 p637-651 Sep 2007

7 Newmark, B. (2019) 'Why Teach?' [Bennewmark Blogpost](#) , 10th February (Accessed on: 1st August 2019).

Possibly the strongest school improvement lever we have is the curriculum. So, what are some of the practical features of a strong curriculum?

1. Clarity about knowledge content selected – what it is and why it is there.
2. Organised by subject domain because this is the best for learning and progress.
3. Understanding that skill is the practised and fluent application of knowledge – skills are not acquired ‘naturally’ in the absence of knowledge.
4. The importance of sequencing – foundational knowledge is given special attention so that there is sufficient knowledge for the next stage of learning.
5. What we teach is inherently interesting so that learning is the primary motivator.
6. Clarity about purpose of tasks and activities: to practise and embed new knowledge in long term memory, enabling knowledge to be integrated and applied with increasing fluency and independence.
7. The curriculum is the progression model – progress in learning does not happen outside of a carefully sequenced curriculum.

**Proposition two: For this to happen, we need to mobilise for every teacher the best evidence from research.**

We cannot call ourselves a profession if our practice is not connected to the evidence. What good research evidence tells us makes effective practice, must govern how we train and develop teachers. The evidence is closer than it has ever been to a consensus on this and we now need to reshape our training and development to align with the best evidence at every stage, from initial training through to advanced leadership.

**The Early Career Framework**<sup>8</sup> [↗](#) takes an important step in this direction. The evidence underpinning the framework, curated by the Education Endowment Foundation, begins to build the body of knowledge that underpins teaching.

Other parallel frameworks are now coming on stream in England which similarly codify the best research. These include the Core Content Framework for use in initial teacher training, and the frameworks which will underpin the new generation of National Professional Qualifications.



<sup>8</sup> DfE, (2019) [Early Career Framework](#) [↗](#), Her Majesty's Stationary Office (HMO).

Professions are typically shaped by a shared body of expertise. While both globally and in the UK education research has broken important new ground, research findings have been slow to work their way into the body of expertise shared by all educators. Instead, 'folk' conceptions of pedagogy have often held sway and in the absence of a coordinated approach to initial and on-going teacher development have often proved difficult to dislodge in favour of evidence-based approaches. As Torff describes, "competition between folk and expert pedagogies emerges, and temporary or permanent shifts to the default mode seem difficult to resist"<sup>9</sup>. This has seriously limited the improvement of teaching.

While the benefits of shaping evidence-based expertise for the teaching profession seem unquestionable, there are likely to be challenges as the profession aligns itself with this expertise. Strong Trusts have a significant role to play here. It is highly likely that change can happen more reliably and at greater pace in a system which is characterised by a smaller number of larger organisations, once these align themselves with evidence-based professional expertise, and take responsibility for the development of their workforces.

***Proposition three: There is no improvement for pupils without improvement in teaching, and no improvement in teaching without the best professional development for teachers.***

Professional development is both overlooked and misunderstood. In successive decades, we have believed that professional development is the same as INSET days or days out of school. As Peps Mccrea says, "I fear that teachers grasp an idea (or nearly do) and then, thrown into the maelstrom of school, they lose sight of it immediately – or try it and fail."<sup>10</sup> Other research similarly has found that teachers experience significant difficulty in converting theory, even when grounded in evidence, into practice in their classrooms.<sup>11</sup>

So, what we are in fact trying to create is expert teaching. Mccrea says:

***"Teaching quality ... is arguably the greatest lever at our disposal for improving the life chances of the young people in our care (John Hattie, 2015), particularly for those from disadvantaged backgrounds (Dylan William, 2016)."***

Professional development is our way to get there. But what counts as professional development is crucial. Simply introducing some programmes and hoping teachers will develop expertise will not work.

Like school improvement, teacher development is often categorised by design features, such as programme duration or the use of specific techniques such as coaching, but rarely by how it works: the programme's underlying purpose or premises about teaching and teacher learning. Mary Kennedy offers an analysis of professional development by how it improves teaching.<sup>12</sup> Kennedy's review seeks to define programmes according to their underlying *theories of action*, where a theory of action includes two important parts. First, it identifies a central problem of practice that it aims to inform, and second, it devises a pedagogy that will help teachers enact new ideas, translating them into the context of their own practice (Kennedy, 2016 p. 946).

Kennedy's primary concept is one of 'enactment' – in other words a strategy for helping teachers enact new ideas within their own ongoing systems of practice. She identifies four different approaches to facilitating enactment:

- **Prescription:** typically presented as universal, reducing the amount of flexibility or personal judgement teachers will need to enact the idea.
- **Strategies:** typically define the 'goals' of a professional development programme.
- **Insight:** where programmes foster new insights by raising provocative questions that force teachers to re-examine familiar events and come to see them differently.
- **Body of knowledge:** knowledge that is organised into a coherent body of interrelated concepts and principles and that can be summarized in books, diagrams, and lectures, which gives teachers maximum discretion regarding whether or how teachers would do anything with that knowledge.

Kennedy concludes that we need to replace our current conception of "good" professional development as comprising a collection of particular design features with a conception that is based on more nuanced understanding of what teachers do, what motivates them, and how they learn and grow. The differences shown by Kennedy's review of professional development methods of facilitating enactment

9 Torff, B. (1999). Tacit knowledge in teaching: Folk pedagogy and teacher education. In R. J. Sternberg & J. A. Horvath (Eds.), Tacit knowledge in professional practice: Researcher and practitioner perspectives (pp. 195–213). Mahwah, NJ: Lawrence Erlbaum Associates

10 Mccrea, P. (2018) [Expert teaching - what is it? And how might we develop it?](#) Institute for Teaching. (Accessed on: 16th February 2021).

11 Feldon, D. (2007) Cognitive Load and Classroom Teaching: the Double Edged Sword of Automaticity (Educational Psychologist July 2007)

12 Kennedy, M. (2016) 'How does professional development improve teaching?' in Review of Educational Research (86) pp 945-980.

strongly suggests the importance of intellectually engaging teachers with professional development content, rather than simply presenting prescriptions or presenting bodies of knowledge (2016, p.974). She concludes that we need to ensure that “professional development promotes real learning rather than merely adding more noise to teachers’ working environment” (2016, p.974).

**Proposition four: Strong structures can enable strong practice to exist in all schools.**

In other words, structures matter. They matter deeply, but not just for the sake of the structure.

The overriding purpose of School Trusts must be to create the conditions for teachers to build powerful mental models through deliberate and evidence-informed approaches to professional development.

The global pandemic has highlighted the role of public service and the value of education in society. School Trusts have been shown through the pandemic to be the most robust of school structures.

Robustness can be defined as “a system’s ability to maintain its functions or characteristics in a relatively controlled

and reliable manner in the face of external shocks or perturbations” (Campano and Woo, 2018).

If we look back over the last ten years (and before that), very little education policy has met the test of robustness. For example, Ofsted, in its January 2020 evaluation report [Fight or flight? How ‘stuck’ schools are overcoming isolation](#) <sup>13</sup>, lists the sheer number of school improvement initiatives over the last twenty years.

Ofsted concludes that there was too much advice and that this advice was ‘thrown’ at schools without enough thought. They found that the quality of those providing advice and support was too variable. Ofsted found two circumstances which were perceived to work well and one of those is where designated leaders from staff within a Trust rather than outside it worked in a sustained way to improve a school.

The strategic oversight and accountability inherent in the Trust structure can drive evidence-informed school improvement. Other forms of school improvement (e.g. local authority services, former teaching schools, other external sources of advice on school improvement) have little direct accountability and therefore limited impact.



<sup>13</sup> Ofsted, (2020) [Fight or flight? How ‘stuck’ schools are overcoming isolation](#)

Perhaps the biggest external shock to the education system within the last decade has been the shock of the global pandemic. It has been remarkable how groups of schools working together in School Trusts have been able to withstand the perturbations of the pandemic and will be able to withstand future shocks as we recover from the educational, social and economic legacies of Covid-19.

In its Autumn 2020 'interim visits' to schools, CST asked Ofsted to open an additional evidence card to find out whether and how schools in Trusts had been supported by the Trust. The evidence is overwhelming. Professor Daniel Muijs and Karl Sampson have set out their findings in an article, [The trust in testing times: the role of multi-academy trusts during the pandemic](#)<sup>14</sup> 

Muijs and Sampson state: "For the school leaders we spoke to, the support of their trust was crucial. They told us about support with safeguarding, interpreting COVID-19 guidelines, developing remote learning and integrating this with the curriculum."

They conclude: "One of the aims of bringing schools together in Trusts is to provide them with levels of support and collective learning that would not be achievable for any school on its own. These findings show how important this can be to

schools' resilience in the most challenging of circumstances, and how being part of a greater whole builds that resilience."

And it is Trusts that have the capacity to drive school improvement through a relentless focus on improving the quality of teaching through evidence-led teacher development supported by proper strategic oversight and accountability.

This is much less clear in the maintained system, where the quasi-legal separation of the school from the authority is muddled. When a maintained school fails, who is accountable? The school? The head teacher? The governing board? The local authority and its school improvement service? A local authority director of education has extremely limited powers. While for most (but not all) maintained schools, they act as the agent of the employer, they do not have the authority to implement an approach to curriculum or professional development or improvement. They can intervene, but typically only when things have gone wrong. By contrast, when a Trust understands the power of the curriculum and evidence-based teacher development to transform teaching quality, and owns the task of doing so, real system improvement becomes possible.



14 Muijs, D. and Sampson, K. (2021) [The Trust in testing times: the role of multi-academy trusts during the pandemic](#) , Ofsted.

# Concluding thoughts

In this short paper, we have proposed an approach to improvement that is focused on knowledge-building. We believe that without the intentional practice of knowledge-building, improvement is not sustainable. Our four propositions on school improvement are a theory of enactment, or, if you like, a theory of action. We make no apology for making the case that strong structures can enable strong practice to exist in all schools. We also believe mobilising the best research and evidence, and the best professional development improves the quality of teaching through enduring changes in teachers' practice. This is at its most powerful when it runs seamlessly through all stages

in a teacher's career, from early initial formation through to advanced leadership, and owned and driven by trusts and groups of schools at all stages.

It is in this way that we will leverage quality in the school system and enable the vastly more powerful and sustainable school system to be born.

It is the way that we will become the best education system at getting better.