

Improving teaching quality to compensate for socio-economic disadvantages: A study of research dissemination across secondary schools in England

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Abstract

Since 2011, schools in England have received funds designated for improving the educational outcomes of students facing socio-economic disadvantages (SED). In response to concerns regarding the effective expenditure of these funds, school leaders have been increasingly required to justify their spending decisions and to demonstrate how decisions are informed by research evidence. As a consequence, schools appear to be increasingly attempting to reduce SED attainment gaps by improving the quality of teaching across the school. This article reviews this endeavour to bring research evidence to bear on classroom practice. It draws upon data from a large qualitative study of interviews with 167 school staff and a survey at 285 schools. In addition, I report on a review of 100 school policy documents, a review of the evidence, and a study of examination data and teacher attitudes at one school. I argue that the mechanisms to put research into practice are failing in this case. A wide variety of practices are being justified by a small number of studies of questionable relevance. In some schools, attempts to be guided

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by research have not had the expected positive impact, which has caused weariness and frustration. I also present evidence that, in some contexts, certain kinds of improvements to teaching may widen SED attainment gaps. I conclude that there are bureaucratic and linguistic faults in the mechanisms to disseminate research evidence in this case and argue that education researchers should incorporate these mechanisms more comprehensively into their field of study.

KEYWORDS

evidence-based, pupil premium policy, quality first teaching, teacher effectiveness

Context and implications**Rationale for this study**

This study was conducted in the context of increasing pressures to make use of evidence in education and rising demands on school leaders to use research evidence to justify school policies and spending decisions. It examined the consequences of these pressures in secondary schools as leaders attempt to improve the educational outcomes of students facing socio-economic disadvantages.

Why the findings matter

This study illustrates how formal systems to encourage the use of research evidence in schools can fail to do so effectively. It demonstrates how research messages can become severed from the insights of the original research through the simplification and summarisation of research during dissemination and policy enactment. Resulting research messages can be interpreted in multiple ways that are not necessarily supported by research evidence. The study highlights the unwanted and unintended consequences of school leaders' attempts to use research evidence to reduce attainment gaps. These findings matter because they reveal the challenges of putting research evidence into use in schools.

Implications for policy and practice

The findings from this study imply that researchers and policy makers should be wary of simplifying and generalising research findings. They imply that formal requirements to ask school leaders to justify decisions using research evidence can turn into time-consuming, bureaucratic tasks that do not bring evidence to bear in classrooms effectively. They reveal the need for more recognition of the challenges of putting research evidence into use and for more attention to be paid to the processes and evaluation of research dissemination.

INTRODUCTION

The pupil premium is an annual government grant received by state schools in England since 2011 to improve the educational outcomes of children and young people (aged 4–16) facing socio-economic disadvantages (SED). As a condition for receiving the pupil premium, school leaders are required to demonstrate how their spending decisions are informed by research evidence (DfE, 2021b, 2021c). In the 2021–22 school year, this amounted to using research evidence to justify an expenditure of £2.5 billion (approximately 5% of school budgets) (Sibieta, 2020). To date, this is the largest government-driven undertaking of its kind in England. To support those making research-informed decisions, the Department for Education directs school leaders to materials produced by the Education Endowment Foundation (EEF) (DfE, 2021b, 2021c). Since 2019, these materials have advised that 50% of a school's pupil premium is spent on improving the quality of teaching across the school (EEF, 2019b, 2021a). I report here on the findings of a two-year, mixed-methods study into the effectiveness of this endeavour to bring education research to bear on practice.

The study was part of the 'Against the Odds' research project into the progress of secondary school students facing SED (Riordan et al., 2021). It was prompted by the findings of an exploratory survey of school staff that was conducted in the summer of 2019 to determine the direction of the larger project. High-quality teaching was the most common theme in the responses ($n = 360$) to the open-ended item, 'What is the most effective way to support students facing disadvantage?' Around 50% of both school leaders ($n = 261$) and classroom teachers ($n = 99$) indicated that they believe high-quality teaching to be the most effective way to support students facing SED. The survey responses suggested that, immediately prior to the outbreak of COVID-19, improving teaching quality was a preferred approach to tackling SED in secondary schools. On average, the survey schools that were reported to be using the pupil premium to improve teaching had larger SED attainment gaps than those that were not and the difference could not be easily accounted for. Another interesting feature of the survey responses was that a quarter of staff who had articulated the importance of high-quality teaching for tackling SED had done so by using the term 'quality first teaching'. For nine respondents, this was the entirety of their answer. It was not clear whether all respondents meant the same thing by this phrase.

I therefore selected 'high-quality teaching to tackle SED' as one of the topics to investigate in a series of follow-up interviews ($n = 101$) conducted with school staff (167 participating support staff, classroom teachers, and school leaders) at 32 state secondary schools. I was supported in this work by a team of interviewers (Riordan et al., 2021). The purpose was to challenge, substantiate and otherwise explore the emergent findings of the initial survey:

- To what extent are state secondary schools focusing their pupil premium policies on improving whole-school teaching?
- Are school leaders responding to research evidence when setting pupil premium policy?
- What practices are being implemented as part of pupil premium policy to improve the quality of teaching across a school?
- What has been the impact of these practices, most especially on the size of SED attainment gaps?
- How successfully has research evidence been put into practice in this case?

The study provided an overview of how research evidence has been brought to bear on practice in order to address SED attainment gaps at a school level. In addition to the initial survey and follow-up interviews, I reviewed school policy documents from 100 randomly selected schools. I conducted a second round of interviews at four schools and at one of these schools, I administered a survey to all staff and analysed students' examination and

postcode data for the years 2016 to 2019. Finally, I conducted a review of the evidence that is being used to justify the implementation of pupil premium practices.

As a result of this study, I use the term ‘quality first teaching’ as shorthand for the premise that, ‘high-quality teaching is the most effective way that schools can support students facing SED’. It was a finding from the interviews that this is the most common (although not only) meaning of the term ‘quality first teaching’ (QFT) when used by school staff in SED contexts, such as discussing pupil premium policy. It is the primary meaning of ‘QFT’ in this paper. The term has other interpretations, and I trace its evolution from other contexts on the basis of interviews with long-serving members of staff and recourse to relevant literature. I argue here that the term is less precise when used in SED contexts and that this linguistic imprecision has resulted from the nature and design of the mechanisms disseminating education research to schools in England.

I share here then the findings that QFT is a commonly held belief amongst school staff and there has been a rise in the use of principles of this kind to justify pupil premium policy and practice in the last ten years. I estimate that in the school year 2019 to 2020, a minimum of £175 million of secondary school budgets was explicitly justified by principles of QFT and I argue that this figure is likely to have risen since. I give evidence that the UK government's current strategy to disseminate educational research across England is one cause of the rise in the justificatory use of QFT. I trace back to the original studies that are indirectly cited by school leaders as supporting their pupil premium decisions and demonstrate that they bear little resemblance to the practices they are being used to justify. These studies do not provide strong evidence that improving the quality of teaching across a school reduces SED attainment gaps.

Principles of QFT are being used to justify a startlingly wide variety of practices. Examples include purchasing software to share seating plans, offering bonuses for new staff, requiring students to attend after-school lessons, sending weekly briefings on teaching and learning, conducting learning walks around the school, and hiring external consultants to lead staff training days. Some practices implemented are well supported by research and others are not. There is a significant body of literature regarding the improvement of teaching across a school and I do not argue that this is a hopeless endeavour. Nor did this study demonstrate that the variation in QFT practices is problematic in itself. What I point out here is the extent of the challenge to put research evidence into practice effectively. In the first place, there is an issue of futility and waste: a bureaucratic regime has been established that sometimes only operates to give education the appearance of being rationally guided by research evidence. A school leader may implement a successful initiative to improve teaching and reduce SED attainment gaps, but the success cannot truly be attributed to the machinery in place to justify school practice with research evidence. On examination, the research cited does not give support to the practices implemented. As a result, the education community may be misled about the impact of research evidence in comparison to other drivers of good decision making in schools.

Secondly, I argue that there is a linguistic failure of research dissemination in this case. Schools have been provided a blank cheque: school leaders can implement any initiative they believe may improve teaching and believe their decision to be backed by research regarding SED. This raises the concern that the processes in place to connect research with practice may encourage the rise of superficially appealing initiatives that are later revealed to be ineffective, repeating the failures of the brain gym and individual learning styles, amongst others (Gudnason, 2017; Kroeze et al., 2016). I believe this is primarily a failure of the simple language into which the findings of education research have been translated, in this case epitomised by ‘quality first teaching’. Expecting initiatives to work, school staff have been left frustrated or wearied by their prolonged efforts to reduce SED attainment gaps. I present the case of one school in which it appears that a focus

on high-quality teaching has improved academic outcomes overall, but increased SED attainment gaps.

This paper thus raises a series of concerns regarding the increasing use of QFT to determine or justify approaches to tackling SED in schools. I argue that two seemingly sensible drivers of educational change—the determination to base school practice on research and the political motivation to improve social mobility—are failing to deliver their intended consequences because we lack understanding of how to use, translate and implement educational research into practice successfully. The process of putting research into use is being treated administratively and bureaucratically instead of being recognised as the art and creative challenge that it truly is. The issue described here is also a linguistic one: simplicity in language has been wrongly identified as a virtue of machinery to disseminate education research. The message that the quality of teaching should be improved for the sake of students facing SED does not summarise research accurately, is being interpreted in contradictory ways, and is too simple to be meaningful. It may—in certain circumstances—be causing harm, if only through the misdirection of resources and the draining of teachers' energy. Counterintuitively, one potential unintended consequence of driving school policies by QFT is an increase to SED attainment gaps: students from affluent backgrounds may benefit more from certain kinds of high-quality teaching than those facing SED.

POLITICAL BACKGROUND

Against the Odds was conducted against the backdrop of a prolonged (and continuing) two-sided endeavour by the UK government to tackle the negative educational consequences of SED through targeted school funds and evidence-backed practice. In 2011, state-funded schools received the first 'pupil premium' payments to support the education of children and young people facing SED. At the same time, the Educational Endowment Foundation (EEF) was established to support schools in their efforts to reduce SED attainment gaps. It was originally envisaged as a source of funds that schools could bid for to raise standards for students facing SED (DfE, 2010). The EEF inherited a toolkit from one of its founding partners, the Sutton Trust, that was targeted for pupil premium students (Higgins et al., 2011). It developed the toolkit into a more generic school improvement resource and evolved into an organisation that commissioned research, promoted randomised controlled trials, and disseminated education research (Higgins & Major, 2019).

The pupil premium is calculated according to the numbers of children (aged 4 to 16) qualifying in each of three categories: a child in the care of the local authority (or ever has been) brings in the largest sum; a smaller premium is awarded for children who receive free school meals (or have done so in the last six years); the smallest award is made for children belonging to military families. Because eligibility for free school meals is by far the most common qualifying criterion, it constitutes the far greater part of the grant for most schools. In this regard, schools received £20.8 billion in the first 10 years of operation of the pupil premium. By 2021, this amounted to approximately £1150 per year for each pupil premium student (around 30% of the school population) (DfE, 2020). In a similar period (2009–2019), the Institute of Fiscal Studies (IFS) estimated that school budgets have been reduced by 9% per student, amounting to a loss in real terms of approximately £600 per student per year (Britton et al., 2020). Under these circumstances, it is perhaps best to view the pupil premium as a reallocation of school funds, both across schools (towards those with more pupil premium students) and within schools (targeting the needs of pupil premium students).

Since its establishment, pupil premium qualification has become a standard marker of childhood SED in England and is commonly used to measure SED attainment gaps, both in schools and nationally. These 'gaps' are the differences between the academic outcomes

of students facing SED and their peers. In 2014, pupil premium was chosen as the basis for the (unfortunately named) 'Disadvantaged Pupils Attainment Gap Index', developed by the Department for Education to measure two national SED attainment gaps: in examination results of children aged 10–11; and in the examination results of young people aged 15–16 (Hill, 2014). Against the Odds was commissioned by the Social Mobility Commission to consider a hitherto less scrutinised SED attainment gap. In 2016, the Department for Education introduced the 'Progress 8' measure, which indicates student progress through secondary school by comparing a student's examination results across a range of subjects at age 15–16 with those of their peers who scored similarly in tests conducted in mathematics and English at age 10–11. The study asked: what are schools with small progress gaps like and what are they doing that works for pupil premium students?

Schools themselves have been encouraged to ask questions of this kind. The UK government provides the pupil premium on the basis that accountability conditions are met. In the first place, schools are required to be transparent about their pupil premium expenditure 'so governing bodies can see evidence-based practice so they can consider the rationale behind all pupil premium-related decisions' (DfE, 2019). Most schools address this requirement by publishing a 'pupil premium statement' on their website that presents justifications for their pupil premium expenditure. Since 2021, schools have further been required to demonstrate 'how their spending decisions are informed by research evidence' (DfE, 2021a). To support schools in meeting these conditions, the Department for Education's website provides templates for writing pupil premium statements and directs schools to materials produced by the EEF.

This explicit demand is an example of the growing pressure on education practitioners to ensure their practices are supported by evidence (of many kinds). The calls to use research evidence more effectively in school policy and practice in England are usually traced back to the late 1990s (Biesta, 2010; Gorard et al., 2020). Arguments arose from the academic community that teaching would be more effective if based on research evidence (Davies, 1999; Hargreaves, 1996; Pring, 1996). In 1998, a study conducted by the Institute for Employment Studies (IES) and commissioned by the Department for Education and Employment (DfEE) concluded that the decisions and actions of practitioners in education are 'insufficiently informed by research' (Hillage et al., 1998). The study had elicited the views of researchers, policy makers and practitioners, including representatives from funding bodies, local education authorities and trade unions. Its conclusions were based on the viewpoints gathered from these stakeholders and are perhaps best viewed as revealing opinions held amongst these groups at this time: there was a sense of a disconnect between research and practice.

In addition, the same researchers described the failings of education research itself. Concerns included the small scale of most work in education (Hillage et al., 1998), the need for systematic review (Davies, 1999; Slavin, 2002), and its irrelevance to practitioners (Hillage et al., 1998). David Hargreaves' (1996) lecture to the Teacher Training Agency led directly to a study by the Office for Standards in Education, Children's Services and Skills (Ofsted), which concluded that much published research was 'at best no more than an irrelevance or a distraction' (Tooley & Darby, 1998). There was then, from the beginning, an underlying inconsistency in the desire to put education research into practice whose quality was controversial in the first place: this was always a double-edged initiative to improve education research *and* to bring the best of it to bear in the classroom. It was perhaps, however, generally not foreseen how challenging it would be to put research into practice effectively, even if it is of a high standard. One early critique of the evidence-based movement discussed the complex nature of the relationship between research and teaching (Atkinson, 2000). Since then, the complexities hidden beneath the requirements to 'inform', 'support' or 'justify' practice by research evidence are being increasingly recognised (Gorard et al., 2020).

This paper presents an example of school strategy—improving the quality of teaching to tackle SED—in which it appears that evidence-based practice is taking place. A literature chain connects pupil premium practices in schools today to studies into teacher effectiveness in the 2000s and a critical data collection of children's test scores in the early 1970s. School staff believe that high-quality teaching reduces SED attainment gaps and that their belief is backed by research evidence. This is a study of how research evidence has come to be put to use in schools in this case.

METHODS

In the first place, this study draws upon two national data collections that were part of the 'Against the Odds' project: a national online survey of staff at 285 state secondary schools in England; and 101 face-to-face interviews with 167 staff at 32 of these schools. Against the Odds also included a case study at one school, which consisted of a whole-staff survey and an analysis of four years of student data. These findings prompted an extension of the study beyond Against the Odds to review the processes that had led to the current situation. There were two components of this wider review: an analysis of pupil premium statements from 100 schools; and a review of the evidence supporting pupil premium policy regarding the quality of teaching. There are therefore six distinct data sources that contributed to this study, which are discussed in the subsections that follow: the national survey and interviews are more generic; the school survey and data analysis are specific to one school; the wider review consisted of an analysis of policy statements and finally a review of the literature used by school leaders to justify pupil premium policy. Some comments are also made on the overall methodology of this study. This section outlines the methods used; further details regarding the collection and analysis of the data, as well as the challenges posed by these methods, are presented in Appendix A.

More generic data sources

Two of the methods employed during the study (the national survey and interviews with staff) were employed to investigate a wide range of topics regarding the academic progress of students facing SED, including setting and streaming, transition from primary school, classroom behaviour, staff turnover and student attendance. Thematic analysis of the survey data demonstrated that high-quality teaching is a common focus of pupil premium policy. Staff were asked how the school supported pupil premium students. Schools were identified as having a focus on high-quality teaching if responses included the terms 'high-quality teaching', 'good teaching', 'outstanding teaching', 'excellent teaching', 'best teaching' and 'quality first teaching'. Because there were multiple respondents to the survey at 65 schools, it was possible to compare responses from the same school to verify whether staff had the same opinion of their school's pupil premium policy. Regarding the role of high-quality teaching in pupil premium policy, there was agreement in 89% of cases.

Analysis of variance tests were conducted to compare the academic outcomes of students at schools taking a particular approach to pupil premium policy with those that were not. Where associations were found, care was taken to consider whether other differences between samples (regarding school size, school type, admissions policy, and percentage of students in receipt of free school meals) were contributing to the association.

The interviews were used to probe the themes that had arisen from the survey in more depth. Interviewers explored the meaning of 'quality first teaching' if this term was introduced by interviewees (by 14 staff at 8 schools). As a result, I use 'QFT' in this paper as

shorthand for the idea that high-quality teaching is the most effective way to tackle SED in schools. This idea arose during interviews at almost all schools (26 out of 32). During these interviews, staff discussed the reasons why the school was taking this approach to pupil premium policy, how it was being put into practice, and whether there was evidence of its impact on academic outcomes. The negative side-effects of QFT emerged as a theme during the data analysis, although interviewees were not asked directly about this.

There were several limitations of these generic research methods, most especially that the survey schools were self-selecting (see Appendix A). The interviews were conducted at a subset of these schools, chosen to create two comparison groups with similar characteristics for the purpose of the wider study, and not for exploration of the issues raised regarding QFT (Riordan et al., 2021). This raises the question of whether correlations found in the survey data are representative of the school population in general. Correlations were only taken as prompts for further study and care has been taken to present them in this way. Other findings from the survey and interviews are less reliant on the representative nature of the data; for example, the claim that schools are implementing a wide variety of QFT practices and the discovery that at some schools, attempts to follow the research evidence have caused frustration and weariness amongst school staff.

All data collected about schools was self-reporting; there were no direct observations taken to establish whether the practices reported were taking place. This was not considered problematic because the study was exploring the attitudes of staff and the mechanisms by which research evidence was being taken up by schools. It was beyond the scope of the study to establish whether the practices that had been selected, that had been intended or believed to be implemented, actually were.

More specific data sources

The first round of interviews shed little light on the correlation found between QFT practices and a school's progress gap. I conducted second round of interviews at four schools to investigate this relationship in more detail. The schools were selected because of their strong focus on QFT and their larger-than-average SED attainment gaps. They included a grammar school, a high performing academy, a school with average academic outcomes, and a school facing considerable contextual challenges. The purpose was to seek out causal connections between the school's attainment gap and its focus on QFT. At the first of these schools, it was not possible to draw any conclusions on this matter. At another, it was reasonably clear that the focus on improving teaching across the whole school had been implemented only after a long history of low academic outcomes for pupil premium students. At two schools, a second round of interviews indicated that the opposite causal mechanism was at play.

At one of these schools, I was able to conduct further investigations. I administered an online survey to the school's leaders, classroom teachers and support staff ($n = 113$). Staff were asked about the school's priorities for supporting pupil premium students and their views about what the school had done to improve academic outcomes for these students in recent years. In addition, I analysed four years of student data to investigate the impact of changes to the school's policy on students' examination results. The data included students' postcodes which enabled the examination data to be analysed by index of deprivation, a finer-grained measure than pupil premium status. This turned out to be critical: for this school, student postcodes were better predictors of academic outcomes than pupil premium status.

This case study is presented as an example where it appears that a focus on high-quality teaching has improved academic outcomes at the same time as widening SED attainment

gaps. The school is unusual in several respects, but the case is not anecdotal. It was selected through a research process that was designed to identify schools that might either corroborate or challenge the working hypothesis that QFT and SED attainment gaps are causally linked. Further, the picture drawn here of the school is not based on the reports of a few staff but is the shared and dominant viewpoint of the staff: 95% of staff responded to the survey. I do not generalise from this case and no attempt has been made to quantify how common this scenario is. It is presented as an illustration of the potential negative impacts of disseminating a message as simple as QFT and an indication that the message may not be as reliable as school staff have assumed it to be.

Review of pupil premium statements

The purpose of reviewing schools' pupil premium statements was to estimate the extent to which QFT practices are being implemented in schools as part of pupil premium policy, to find out more about these practices, and to corroborate or refute previous findings regarding the influence of the EEF on pupil premium policy. To this end, 100 mainstream secondary schools in England were selected at random (details in Appendix A). Their pupil premium statements were searched for references to high-quality teaching—43 statements included the phrase 'quality first teaching' and a further 11 included the phrase 'quality teaching for all'; 15 more statements used similar phrasing when describing the rationale for the school's pupil premium expenditure (see Appendix A). Commonly, a series of initiatives would be listed beneath the heading 'Quality First Teaching' or 'Quality Teaching For All'. These initiatives were collated and classified (see Appendix B). The statements were also searched for references to 'evidence', 'EEF' and 'Education Endowment Foundation' to investigate the impact of the EEF's work on pupil premium policy.

Of the 69 pupil premium statements that contained explicit references to QFT, 60 included a breakdown that indicated how much had been spent on initiatives designed to improve the quality of teaching. This provided an estimate of pupil premium expenditure on QFT practices. Details are given in Appendix A why this estimate is a conservative one and therefore why it gives strong support to the finding of the interviews and survey data that QFT is a leading approach to pupil premium policy in state secondary schools today.

The data collected in the analysis presented several challenges, most especially that not all schools had uploaded a recent pupil premium statement and that for eight schools, no statement was available at all. The steps that were taken to deal with these issues are described in Appendix A. The analysis of pupil premium statements was able to robustly confirm survey and interview findings regarding the use of principles of QFT to justify pupil premium policy, the wide variety of ways in which QFT is being implemented, and the role of the EEF in disseminating these principles.

Chain review of the evidence

Because school leaders cited the same references to research evidence to justify very different policies and practices, I conducted a review of the literature that led to these citations. The purpose was to identify the research evidence that is being used to justify QFT approaches to pupil premium policy. I also assessed the extent to which this research evidence supported the practices that are being justified by it. I call this a 'chain review' to highlight that I worked backwards from the evidence cited by school leaders in pupil premium statements and interviews. It is not a literature review to set the scene for the research, but an element of the research itself. The process traces the path by which research findings have

been summarised, shared, built upon, understood and put into practice. It enables a researcher to take a wider view of the research dissemination process and to contrast details of research studies that are being disseminated with the practices that have been justified by those studies.

This aspect of the study focused on the research evidence available for the generic message that high-quality teaching is the most effective way to support students facing SED. It did not review or critique the many studies of particular interventions, initiatives and programmes designed to improve the quality of teaching. There is no suggestion made here that school leaders cannot or should not improve the quality of teaching across a school or how to do so. One of the interesting findings of this study is that school leaders are receiving and responding to a generic message. The review considered the research evidence being cited in support of this message and the impact of its dissemination. I did not intend to assess whether there happened or not to be strong research evidence for QFT, but to find out whether, through dissemination mechanisms, there was a causal link between strong research evidence and the implementation of QFT in practice.

Methodology

This was a reflective study that draws from a variety of data sources to establish the extent to which high-quality teaching has become the focus of pupil premium policy and the extent to which this is the result of government efforts to put research evidence into practice and to reduce SED attainment gaps. It presents a series of claims regarding the status, impact and implementation of QFT in schools that are supported in various degrees by various data sources. The work of this study was to determine how to bring these data together and when to seek new data to challenge and corroborate these claims. In each case, care was taken to ensure that the force of any conclusion drawn is proportional to the strength of the evidence. The work undertaken towards this end (to consider potential biases and alternative explanations, to account for missing data, and to acknowledge and attend to other limitations of the data) is critical to the reflective nature of this study and is described in Appendix A.

THE EMERGENCE OF A NEW PRINCIPLE OF QFT

Figure 1 shows the rising appearance of the phrase ‘quality first teaching’ in digitised books written in English over the last 20 years. In this section, I describe how the use of this term has evolved in this period and how it is being used today in association with pupil premium policy. To begin, I argue that QFT was initially most usually associated with an inclusive ideology to keep students in the classroom who might otherwise be taught separately from their peers, most especially students with special educational needs and disabilities (SEND). This remains an important association with QFT. In recent years, however, QFT has been increasingly used in SED contexts (for example, when discussing the needs of pupil premium students). In these contexts, I argue that QFT has taken on a more diffuse meaning and has come to be used to justify a wide variety of disparate practices. I then turn to consider the reasons for these changes in the following section.

Quality first teaching as an approach to SEND

The compelling and intriguing phrase ‘quality first teaching’ was first popularised by its use in resources produced by the National Strategies, a change management programme for

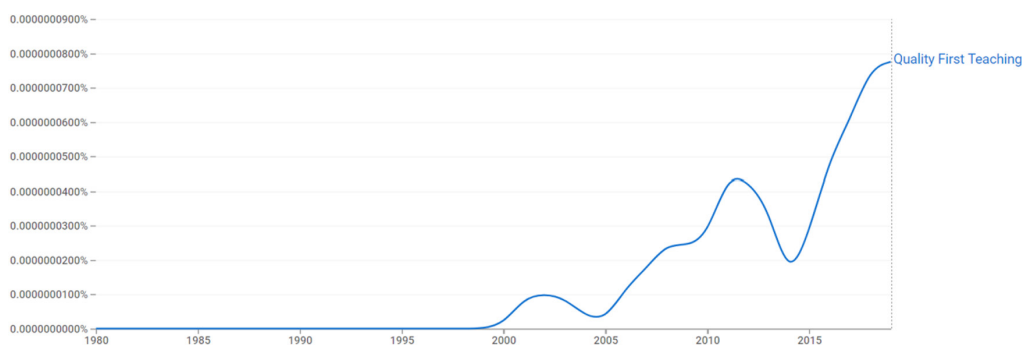


FIGURE 1 Google ngram for 'Quality First Teaching', 1980–2019, smoothing = 0. The development of the ngram and its meaning is described by Michel et al. (2011)

schools initially led by the Department for Education and Employment in 1998, and later—until its wind-down in 2011—by its successor bodies (DfE, 2011). The National Strategies promoted the 'wave of intervention model', in which students who are underperforming academically are provided with three layers of support (Ofsted, 2009). Quality first teaching is the first of these waves: the teaching that a child receives *in the classroom* should be appropriate to their learning needs. Only if this is insufficient should a child receive additional support through targeted group intervention (the second wave) and finally highly individualised intervention (the third wave). During this time, quality first teaching was understood as an inclusive and universal teaching philosophy, which aimed to keep all children in the classroom where possible. It was therefore associated with personalisation and differentiation, as far as these are considered as techniques to be applied *within* the classroom:

So called 'quality first' teaching seeks to engage and support the learning of all children and young people. (DCSF, 2008, p. 9).

The National Strategies promoted the wave of intervention model as a way to improve the academic achievements of students from ethnic minorities (DCSF, 2009b) and as a way to extend strategies originally designed for high-attaining students to all students (DCSF, 2009a), but the notion perhaps most firmly took root when related to the education of students with SEND. In this context, the first wave of the model was understood as the process of meeting the needs of children who have SEND in the classroom, instead of providing specialised support outside of it. The idea is missing from the original SEND code of practice (DfSE, 2001), but is central to its replacement:

High-quality teaching, differentiated for individual pupils, is the first step in responding to pupils who have or may have SEND. Additional intervention and support cannot compensate for a lack of good quality teaching. (DfE, 2015, p. 99)

The new code of practice was responding to changes in SEND policy in England brought about by the Children and Families Act 2014. The act required leaders of mainstream schools to ensure that children with SEND take part in school life alongside children who do not (Children & Families Act, 2014). Commentators have summed up the change in mindset that occurred during this time of SEND reform by 'Every teacher is a teacher of SEND', now a well-heard phrase in education (Bowen, 2017; Corby, 2017; Reeve, 2016; Wespieser, 2019). This is one connotation of 'quality first teaching', and possibly a successful one: there is evidence that teachers agree in the main with the ideology behind the recent changes to SEND policy (Coates et al., 2020). When applied in SEND contexts, 'quality first teaching' has a reasonably clear practical

interpretation: where possible, the learning needs of students with SEND should be met in the classroom; teachers should therefore be trained in specific techniques to support these students in the classroom (Whittaker & Hayes, 2018). In comparison, we shall see that when translated into SED contexts, principles of QFT have not retained this clarity.

The interpretation of QFT ideology in SED contexts

Almost one third of Against the Odds interviewees raised the topic of high-quality teaching when asked about the practices of their school to support students facing SED. Interviewees largely (but not entirely) agreed on what 'quality first teaching' means in this context. The majority take the 'first' as a matter of emphasis: good teaching is the 'most important', the 'best thing to do' and their 'focus' when deciding how to tackle SED. For these staff, it is reasonable to articulate their belief in quality first teaching (QFT) as:

High-quality teaching is the most effective way to support students facing SED.

This is one of many possible principles of QFT but I conjecture from the interview data that it is the most common way that QFT is being interpreted in SED contexts. For this reason, it is the primary meaning of 'QFT' in this paper. For some teachers, however, the 'first' in 'QFT' is better interpreted as an emphasis on 'in the classroom'. This original association with inclusivity was more likely to be emphasised by staff with SEND backgrounds and assistant teachers. In these cases, staff still agreed that their commitment to QFT in SED contexts included prioritising the quality of teaching, but it was perhaps better interpreted as:

High-quality teaching in the classroom is more beneficial to students facing SED than their peers.

There is significant agreement in theory for this second principle from practitioners, but QFT is usually a more fitting justification for the practices being implemented. An analysis of the pupil premium expenditure of 100 schools found that, of the 43 pupil premium statements that included the term 'quality first teaching', 30 could be more appropriately justified by QFT. This is because, at these schools, efforts were being made to provide high-quality teaching to students beyond the standard timetable and, on average, a third of the pupil premium was being spent on QFT practices. In comparison, the statements of five schools were more appropriately justified by the second principle: all improvements to teaching were focused on standard lessons; spending on QFT amounted to less than 10% of the pupil premium in these cases. In the remaining eight schools, neither principle was better matched to the expenditure outlined in the school's pupil premium statement. Together, I refer to these two premises as 'principles of QFT'. Each is a way of expressing the importance of high-quality teaching for students in SED contexts. Schools that are justifying practices by reference to ideas of this kind are referred to as taking a 'QFT approach' to pupil premium policy and I refer to the practices explicitly justified in this way as 'QFT practices'. Appendix A contains details of the terms used to identify these schools and practices.

The implementation of principles of QFT

Although there is agreement that high-quality teaching is important to tackle SED, principles of QFT are nevertheless being implemented in a myriad of ways across secondary schools in England. Amongst other initiatives, staff are being trained in metacognition techniques,

mandatory after-school lessons have been introduced for pupil premium students, pupil premium students have been placed together in the same classes, teachers are required to direct more questions to pupil premium students during lessons, new staff are receiving recruitment bonuses, and performance targets for teachers are based on pupil premium students' examination results. I do not argue that this profusion of QFT practices is necessarily problematic in itself. It raises concerns because schools are operating in a wider climate in which they have been encouraged to take this approach, believe they are acting on research evidence, and have high expectations of their efforts. Before turning to these concerns below, I establish here that principles of QFT are being actioned in a variety of ways to tackle the negative educational consequences of SED. I present here a picture of what is happening in schools. I draw particularly on two independent data sources: the national survey of school staff; as well as an analysis of pupil premium statements (both detailed in Appendix A).

The national school survey of 2019 asked school staff what practices they have in place to support students facing SED (Riordan et al., 2021). Of the 285 schools at which staff responded to the survey, 48 were identified as having a QFT approach to pupil policy. When asked what practices they have put in place to support students facing SED, staff at these schools used the terms 'quality first teaching', 'outstanding teaching and learning', 'high-quality teaching' or equivalents (see Appendix A) to describe their current pupil premium practices. At 16 schools, respondents gave little detail of how this QFT approach was implemented. A typical answer of this kind came from a school leader who wrote that her school was using, 'A variety of strategies targeting improving the quality of Teaching and Learning'. The responses at the remaining 32 schools showed remarkable diversity in their practices, on average putting forth 2.5 practices each, and together raising 26 ways that QFT can be enacted in a school (see Table 1). The classification of practices is not clear-cut (as discussed in Appendix B) and the same practice may be described in two different ways. A CPD session might be used to instil questioning techniques throughout the school, for example. Nevertheless, we see that a focus on high-quality teaching to reduce SED attainment gaps means very many things in practice.

Only one school was implementing teaching and learning techniques that were specifically designed to support students facing SED. More usually, it was not clear that 'good teaching' was understood to be anything different for students facing SED than their peers, as it may be for students with certain categories of SEND. This means that the association between high-quality teaching and personalisation plays out differently in SED and SEND contexts. Table 1 shows that one of the most common practices associated with QFT in a SED context is small-group tuition. One middle leader explained that her department considered this to be a QFT practice because teaching can be personalised to students more easily outside standard lessons. Thus, principles of QFT are having an opposite effect on classroom practice in comparison to their application in SEND contexts, where personalisation is used to ensure children stay in the classroom. Although the terminology has carried over to debates in SED, the original interpretation of avoiding intervention has not. In particular, principles of QFT have not been used to argue for the retention of students facing SED in the classroom, as they have for students with SEND, despite the fact that there is a tradition of removing these students from the classroom, albeit primarily through exclusion (Graham et al., 2019).

To independently confirm that principles of QFT are commonly being used to justify pupil premium policy, I analysed the pupil premium statements from 100 randomly selected secondary schools. The details and limitations of this analysis are presented in Appendix A. All local authority schools and most academies (depending on their funding agreements) are required to publish a document that sets forth their pupil premium expenditure, including their rationale for these spending decisions (DfE, 2019). The analysis showed that 47% of pupil premium statements use the term 'quality first teaching'. A further 28% of statements

TABLE 1 QFT approaches to supporting students facing SED

Approach to QFT	No. of schools
Personalisation of teaching and learning, of which	7
Staff share effective practices for individual students	1
Small group tuition or intervention for students facing SED, of which	7
In maths and English	2
In support of literacy	2
With the best teachers	2
Literacy programmes, of which	7
Whole-school orientated	1
To improve vocabulary gap	2
Continuing professional development (CPD)	6
High expectations in teaching and learning	5
Coaching students, of which	5
Coaching in study skills	1
Effective feedback/marking	4
Engaging curriculum	4
Place students with the best teachers in lessons	4
Questioning strategies	4
Prioritise students in teaching and learning, of which	3
Marking books first	2
Considering seating plans	2
Apply strategies from the EEF toolkit	2
Differentiation	2
Positive teacher-student relationships	2
Praise in the classroom	2
Recruitment of the best staff	2
Teaching to raise aspirations	2
Assessment for learning	1
Clear classroom routines	1
Mastery	1
Modelling	1
Performance management objective for staff	1
Positive teacher-home relationships	1
Retention of the best staff	1
Teaching and learning practices for students facing SED	1
Tracking students and data sharing	1

included justifications of pupil premium expenditure by reference to improving the quality of teaching for all (see Appendix A). A few pupil premium statements described their commitment to QFT that was not associated with specific practices: in one case it was contained in an introductory paragraph; in eight cases specific practices were not described. In the majority of cases, however, particular practices were associated with principles of QFT, most commonly by being listed under the heading 'Quality First Teaching'. Of the £23.5 million pupil premium budget of the 100 schools, 23% was explicitly allocated to QFT practices. If

replicated nationally, this corresponds to a national spend on QFT (in secondary schools) of £175 million each year. As explained in Appendix A, this was a very conservative calculation and represents a confident, *minimum* spend attributed to QFT.

Every initiative listed in Table 1 also featured in at least one of the randomly selected pupil premium statements, but in many cases more detailed information was provided. Many more QFT practices were described, the most common being increasing quality assurance measures such as observations and learning walks (11 schools) or scrutiny of students' work (9 schools), using retrieval practice in lessons (8 schools), improving lesson planning and structure (5 schools) and focusing on seating plans (4 schools). Literacy initiatives were more often described as whole-school initiatives such as cross-curricular vocabulary learning (14 schools) or improvements to the school library (3 schools). The full list (of more than 100 initiatives) is presented in Appendix B to demonstrate the scattergun approach to pupil premium expenditure on QFT. This, then, is the situation we have arrived at in England's secondary schools today. I turn next to consider how this came to be.

ESTABLISHING HIGH-QUALITY TEACHING AS ENGLAND'S FOREMOST STRATEGY TO TACKLE SED

So far, I have shown that principles of QFT are increasingly being used to justify pupil premium expenditure on a wide variety of practices. This section discusses two contributory causes to the rising use of QFT that were identified in this study. On the one hand, high-quality teaching has been promoted by the Educational Endowment Foundation (EEF) as their primary message regarding pupil premium spending; on the other, staff find principles of QFT plausible and are receptive to them. Both reasons emerged from interviews with school staff, exemplified by a head of mathematics:

My personal belief is that probably above all else, quality teaching for all is the best thing that you can do for pupil premium students ... I think it's the findings of the EEF, for instance, that high-quality teaching ... has a big impact on pupil premium students.

Considering the interview data, I propose that it is the appealing nature of QFT that has led to its widespread acceptance and not the strength of its evidence base. This is a significant concern for the dissemination of research evidence in education. I also clarify in this section that although the belief in high-quality teaching for pupil premium students is more commonly articulated in formal discourse than it was 10 years ago, we may suspect, but cannot firmly conclude, that staff attitudes have changed in this time. I have been unable to establish how far the rise in the use of QFT to justify practices reflects an underlying change in belief or practice.

The dissemination of QFT by the EEF

The Education Endowment Foundation (EEF) was established in 2011 by the Sutton Trust and the Impetus Trust with a £125 million founding grant from the Department for Education. It describes itself—together with its parent charity, the Sutton Trust—as 'the government-designated What Works Centre for Education' (EEF, 2021b). It aims to raise attainment in England's schools, especially of students facing SED, and thus reduce SED attainment gaps. It expects to do this by 'summarising the best available evidence *in plain language* for busy, time-poor teachers and senior leaders' (EEF, 2021b, emphasis added). It is one of many initiatives in England, as well as elsewhere, in what has been called the

'evidence-based movement': the call to base school strategies and approaches on research evidence (Gorard et al., 2020). The Institute of Education Sciences (IES) plays a similar role in the US, promoting evidence-based practice in schools.

The notion that quality teaching is the most effective way in which schools can tackle SED is advanced by the EEF's guide for pupil premium spending, which provides a clear articulation of QFT:

Good teaching is the most important lever schools have to improve outcomes for disadvantaged pupils. (EEF, 2019b)

The guide advises schools to spend 50% of their pupil premium on improving the quality of teaching and to split the remaining 50% equally between targeted academic support (such as individual tuition) and wider strategies (such as attendance initiatives). The same advice has been retained in the latest edition of the guide (EEF, 2021a). In the 2020–2021 year, this amounted to a £1.08 billion proposal for spending based on QFT. The analysis of pupil premium statements (see Appendix A) revealed that many QFT practices require relatively little funding (examples include weekly newsletters or turning faculty time over to improving subject knowledge), raising the question of why quality first teaching should take the largest slice of available funding. There is no detailed advice in the guide regarding how to improve teaching quality, only that spending 'might include professional development, training and support for early career teachers and recruitment and retention' (EEF, 2019b). The EEF publishes information regarding more specific approaches to improve teaching and learning in its Teaching and Learning Toolkit (TLT), which includes an estimate of each approach's cost and impact (EEF, 2018). One reason that the pupil premium guide was published to complement the TLT was to encourage school leaders to focus on whole-school improvements to teaching instead of short-term gains through interventions (Higgins & Major, 2019).

By 2019, most school leadership teams were aware of EEF resources. The EEF estimates that up to two-thirds of school leaders were using the TLT at this time (EEF, 2019a). The Against the Odds study corroborated this figure: more than three quarters of school leaders surveyed in the West Midlands ($n = 32$) reported having engaged with EEF resources at least 'a little bit', although only 14% were using them significantly (Riordan et al., 2021). A similar pattern was revealed by the interview data: 55% of senior leaders ($n = 70$) mentioned the EEF (without prompting); at 4 (out of 32) schools, the toolkit was being used intensively. I found that 17 (out of 92) of randomly selected pupil premium statements cited the EEF. In each of these statements, practices were justified by reference to 'quality first teaching' or the importance of high-quality teaching across the school. A further 12 schools reported that they were aware that evidence existed for QFT approaches, without referencing the EEF explicitly:

Facilitating the best teaching for disadvantaged pupils as evidence shows that these pupils will gain greater benefits from this. (School pupil premium statement, 2018–2019)

The analysis was conducted on pupil premium statements that were not required to reference research evidence. In March 2021, the Department for Education changed the reporting obligations on schools for the pupil premium. It now requires schools to reference research evidence as part of their justification of pupil premium expenditure and encourages schools to cite the TLT:

From academic year 2021 to 2022, schools must demonstrate how their spending decisions are informed by research evidence, making reference to a range of sources including the Education Endowment Foundation's toolkit. (DfE, 2021c)

We might therefore expect to see a rise in the justificatory use of principles of QFT in pupil premium documentation. The concerns raised in this paper provide reasons to doubt that these additional accountability requirements will ultimately have a positive impact for students facing SED.

The role of plausibility

The promotion of principles of QFT by the EEF is one cause of their rising visibility in educational discourses regarding SED. I also found that teachers find the application of QFT to SED sensible, plausible, and intuitive: 'We support PP [pupil premium students], *obviously*, through QFT'; 'The priority *has* to be quality first teaching'; 'High-quality first teaching is what they *need*' (emphasis added). From interviews with 167 school staff exploring a school's support for pupil premium students, I found just one voice of doubt in this respect:

But yeah, the other thing, though, is that I don't really want all of our teachers teaching the same way. So I think, you know, if you want your kids to be individuals, and to come out as the best version of them, you've got to acknowledge that in your teachers as well. So we haven't done a huge amount of, 'This is the best way to teach'. (Head teacher)

Although many school staff (and particularly school leaders) are aware of the EEF resources and believe that there is evidence supporting principles of QFT, no interviewee described this evidence in any further detail. When asked *why* QFT works, staff reasoned intuitively. The line of reasoning that can be reconstructed from their replies is independent of the research evidence. In the first place, interviewees pointed out that high-quality teaching benefits *all* students:

If in every lesson, you teach the best of your ability, they will all make progress. So if you teach everyone better, disadvantaged pupils get taught better. (Assistant principal)

In the second place, staff pointed out that a lack of high-quality teaching causes more harm to pupil premium students. Teachers described students from more affluent homes as having access to more—and deeper—avenues of support to compensate for poor quality teaching: they 'can get a tutor, or whatever, they are keyed up to it' (classroom teacher). This means that a lack of high-quality teaching, 'although that does affect all children, it disproportionately affects those at a disadvantage' (MAT education advisor). As it stands, this reasoning suggests that what is important, regarding SED attainment gaps, is that pupil premium students do not receive poor teaching. It says much less about the impact of improving teaching that is already good, which is the more widespread aim of many QFT initiatives. The argument is less relevant in contexts where teaching is recognised to be good because it does not allow for the possibility that there are many aspects of good teaching. Not all of these aspects may be more beneficial to students facing SED than their peers. We have very little evidence regarding which teaching approaches, attitudes or strategies (if any) are most critical to pupil premium students. For example, teachers of modern foreign languages believe that language curricula disadvantage pupil premium students (NALA, 2020). If educational structures and practices are biased in ways like this, we might suspect that certain improvements within these structures would only exacerbate SED attainment gaps. A case study of a school in which this seems to have occurred is presented below.

This intuitive argument, reasoned by school staff, is limited but I do not challenge its validity. The main point here is that this line of reasoning does not reflect the research

evidence (which is described in detail below ‘The weakness of the evidence for QFT’). It is not the strength of the evidence base that has convinced school leaders to implement QFT practices. This highlights the importance of the psychological aspects of bringing research evidence to bear on practice. It also raises the possibility that a message was disseminated that was already widely believed. I turn to this bureaucratic concern next.

Rising belief in QFT in SED contexts

On the face of it, it appears that school staff have stronger beliefs in the use of QFT to tackle the negative educational consequences of SED than they did 10 years ago. One half of participants in the survey ($n = 360$) described high-quality teaching as the most effective way to support students facing SED (Riordan et al., 2021). Compared to earlier studies, these findings indicate a marked change in attitudes to tackling SED in the last decade. In a series of surveys commissioned by the Sutton Trust between 2010 and 2013, the National Foundation of Education Research (NFER) found that schools’ priorities for supporting students facing SED were reducing class sizes, employing assistant teachers and support staff, early interventions, one-on-one tuition and student feedback (Ager & Pyle, 2013; Cunningham & Lewis, 2012; Lewis & Pyle, 2010).

There are, however, challenges in making comparisons between these various surveys (see Appendix A), so we must interpret apparent changes cautiously. In the early years following the introduction of the pupil premium, there was certainly no explicit widespread drive to improve the quality of teaching across schools in order to reduce SED attainment gaps. On the contrary, early studies of the pupil premium revealed that some school leaders believed they were not authorised to spend it on whole-school initiatives (Carpenter et al., 2013). The increased explicit focus on QFT as part of pupil premium policy may have merely resulted from an increasing awareness that such spending is permitted, and not from an underlying, increasing belief in its use to reduce SED attainment gaps.

Similarly, it is not clear that practices taking place today in the name of QFT are very different from those practised 10 years ago without such justification. There has been an expansion of initiatives implemented using the pupil premium, but the initiatives listed in the early studies are still commonly in place today (see Appendix B). Thus, apart from increasing the variety of practices implemented, we cannot be sure how the turn to research evidence has changed practice. In particular, it has not addressed the concern that pupil premium was promoting short-term strategy in schools: the majority continue to implement interim practices such as interventions in the run-up to national examinations. In some cases, the requirement to justify pupil premium decisions is not undertaken authentically. At one school, a leader described the pupil premium statement as a ‘tick-box task’, something that must be done, but that is not in itself useful. At another, the pupil premium was recorded as funding a member of support staff who had been working in the same position at the school for 18 years. When analysing pupil premium statements, I suspected that at a minority of schools, pupil premium expenditure was being justified retrospectively: one statement gave quality of teaching as the reason for purchasing library books; in another it was used to justify purchasing musical instruments. Because there is widespread use of templates for pupil premium plans (based on EEF materials), we might suspect that initiatives like these were not chosen to improve the quality of teaching, but that this served as a placeholder to record decisions made for other reasons.

Although the teachers interviewed are receptive to principles of QFT, it has therefore not been possible to ascertain whether beliefs of this kind are more strongly held now than 10 years ago. It is also not clear how far the underlying practices have changed in this time, although the message is certainly getting across to schools that they are expected to be

acting on QFT principles and there has certainly been an increase in the use of these principles to justify their decisions. This paper raises concerns regarding the dissemination of education research whether or not behaviour and beliefs have changed as much as the rise in QFT discourses suggest they have. If there has been little change in this time, schools are facing needless bureaucratic tasks to justify what they have always done and there is only a superficial anchoring of practice to research evidence. If there has been change, however, it is not clear that it has resulted in better practices or outcomes. As we shall see, practitioners erroneously believe they are acting on research evidence and have higher expectations of the results of their actions, thus experiencing disillusionment and confusion when what is supposed to work does not.

THE WEAKNESS OF THE EVIDENCE FOR QFT

We have seen so far that in practice QFT is being implemented in varied (and even contradictory) ways with the aim of reducing SED attainment gaps. School leaders believe their approach is backed by evidence and some cite the EEF as the source of this message. They also argue for QFT independently of the research evidence, raising the question of whether principles of QFT need to be disseminated in the first place. Because of the variety of ways in which QFT is being implemented, we must now wonder whether all practices justified by it are equally backed by research evidence. This is what I turn to now. In the first subsection, I consider the evidence behind the general principles of QFT. Just five studies are being relied upon to disseminate the message that high-quality teaching is the most effective way to reduce SED attainment gaps. I argue that the studies cited provide very little evidence for QFT. Nor do these studies provide evidence for the practices implemented in the name of QFT (listed in [Table 1](#) and [Appendix B](#)). Finally, I also point out in this section that although some QFT practices are indeed well evidenced, this research evidence is not 'doing the work' of supporting and informing classroom practice in these cases.

Five studies that led to the promotion of QFT

The EEF's pupil premium guide references one summary research report in its explanation of why it promotes QFT (2019):

A key factor for attainment and progress is effective teaching, as highlighted by the Sutton Trust's 2011 report, which revealed that the effects of high-quality teaching are especially significant for pupils from disadvantaged backgrounds.

In turn, this Sutton Trust report (2011) references five studies in support of QFT (Aaronson et al., 2007; Hanushek, 1992; Rivkin et al., 2005; Rockoff, 2004; Slater et al., 2012). Each probes teacher effectiveness and variability: how much of the variation in students' test scores can be attributed to their teachers? These studies estimate that an increase of one standard deviation in teacher effectiveness corresponds to an increase of 5–20% of a standard deviation of a student's test scores. Even at the lower end of the range, this flurry of research in the 2000s concluded that having a good teacher matters. This amounted to a significant contribution to the long-standing debate in education research regarding the importance of school effectiveness and leadership in comparison to the importance of teachers in the classroom. In some (but not all) of these studies, a comparison was made with school-level factors, indicating that having a 'good teacher' has a larger impact on test scores than being at a 'good school'. One of the more secure conclusions that can be drawn from this body of work, I believe, is that traditional

measures of teacher skill (including experience, qualifications and teacher test scores) appear to explain very little of the differences between students' test scores.

It is a stretch, however, to set pupil premium strategy across England on the basis of these five studies referenced indirectly by the EEF's pupil premium guide. There are several reasons for this: the limitations of old data and the difficulties of designing and interpreting statistical models in this case; the lack of comparison between students in different socio-economic circumstances; and the chasm between the questions asked by these studies and those facing school leaders as they determine their pupil premium policies. Most crucially, although these studies indicate the value of a good teacher, they do not show how to put this into use: not one investigated the impact of an intervention on SED attainment gaps.

Four of these studies use data from school regions in the USA: from the early 1970s in Indiana (Hanushek, 1992); from Texas in the early 1990s (Rivkin et al., 2005); from Chicago in the late 1990s (Aaronson et al., 2007); and from New Jersey between 1989 and 2001 (Rockoff, 2004). The issue here is that teacher variability depends on local and national factors, such as the quality of teacher training and levels of teacher shortages. Teacher variability may also depend on subject or stage of schooling: this literature is focused on the literacy and mathematics skills of younger children. Teacher variability studies have long struggled with data quality issues and these five studies were an important step forward because they overcame the critical challenge of linking students with their teachers. In addition, the study of Slater et al. has the advantage of using data from high-stake exams in the UK. The researchers recognised, however, that other issues remained: most especially, they are unable to distinguish between school-factors and teacher-factors in their effects on students' exam scores (Slater et al., 2012).

Not one of these studies compares the impact of good teachers on students from low-income homes with their more affluent peers. Four do not discuss the socio-economic background of their students. To conclude that good teaching is more important for students from low-income homes from this literature, as the Sutton Trust report does, it is therefore necessary to compare effect sizes that have resulted from different studies, using different statistical models. Hanushek's study is critical in this sense, because the 996 children included in his analysis of teacher effectiveness are mostly from low-income homes. The report relies on this single study to estimate the impact of good teaching on students facing SED, which is larger than the estimates from the four other studies (The Sutton Trust, 2011):

The effects of high-quality teaching are especially large for pupils from disadvantaged backgrounds, who gain an extra year's worth of learning under very effective teachers compared to poorly performing teachers.

The primary focus of Hanushek's work, however, was the impact of family size and birth order on the reading ability and vocabulary of children in grades 2 to 6 (aged 7 to 12). It uses data originating from an experiment conducted in the early 1970s with low-income, Black families in Gary, Indiana, to assess the impact of negative income tax schemes (Kehrer et al., 1979). No comparison was made with children from high-income homes. Hanushek noted that the data supported the theory that teachers have a large impact upon academic outcomes but was cautious when interpreting the results. He argued that there are signs that teachers perform consistently across time and classes and that the difference between a good and a bad teacher 'can be more than one grade-level equivalent in test performance' (1992, p. 107, emphasis added). He described the attempt to identify the influence of a teacher from other factors as 'the first direct investigation' of its kind (p. 109). The statistical model by which Hanushek tentatively concluded that teachers account for 0.5 of variance in student performance has been updated since and expanded to account for more factors, in particular school-level factors. It is not correct to compare statistical correlations from different research

studies, using data in different contexts and 20 years apart, as well as different statistical models, to conclude that good teachers have a higher impact on students from lower-income homes. It is even more peculiar that the determination of national pupil premium policy in the 2020s should put such emphasis on an early and emerging analysis of teacher effectiveness conducted 30 years earlier, using one specific dataset almost 50 years old.

The further challenge of applying these studies to pupil premium policy is that none of these studies measured the impact of an educational intervention. They do not consider how to improve the quality of teaching in a school; they do not demonstrate that the positive impact that some teachers have is possible to recreate in others. These studies are not measuring the effect of staff training or other strategies that are being pursued in their name. In fact, these studies give us some reason to think the opposite: they demonstrate that there are teacher characteristics that contribute to students' academic outcomes that are very difficult to bring about in teachers that do not have them. One study found that female teachers were associated with higher student test scores (Slater et al., 2012); another found that Black teachers were associated with higher test scores for Black students (Hanushek, 1992). Even if we can agree that a significant proportion of the variation of students' test scores is accounted for by the qualities of the teacher, we have no insight from these studies what these qualities consist in, whether they can be nurtured in teachers that do not possess them, and how to do so. In this research genre, a 'good teacher' is defined as one whose students achieve higher test scores, when as many other factors as possible are taken into consideration. We do not know why students facing SED achieve higher results with some teachers than others and cannot deny that a teacher's own background, empathy and understanding of poverty is critical: our response nevertheless is to provide staff with training in metacognition, ask pupil premium students more questions in class, or conduct frequent checks across the school on the work of pupil premium students.

Guidance based on these studies therefore lacks depth: promoting 'good teaching', based on this research, is nothing more than asking teachers to get better results. This reveals another assumption underlying principles of QFT: when we say that quality first teaching is the *most important* thing, we mean from the perspective of academic outcomes. If we have other aims, such as getting students facing SED onto the best career track for them, or supporting their mental health, or giving them self-esteem, or preparing them for life, then achieving higher academic results may not be our first focus. In any case, it is incorrect to interpret the research as saying that good teaching is the 'most important lever' available to schools, because no lever was considered in these studies, let alone comparing different levers. Even if statistical models suggest that school-level factors have less impact than teachers on students' outcomes, it may be more effective to support students by improving school-level factors, if they are more easily manipulated.

Alternative evidence for QFT in SED contexts?

The research base cited by the EEF in its promotion of QFT does not support the view that high-quality teaching should be the primary focus of a school's pupil premium policy. In particular, it gives little reason to think that any of the approaches listed in [Table 1](#) or [Appendix B](#) would be effective at reducing SED attainment gaps. There are a multitude of other studies, however, that are relevant to supporting these initiatives. Most obviously, the EEF's pupil premium guide only provides a plan for pupil premium expenditure at the highest level and schools commonly turn to its Teaching and Learning Toolkit (TLT) for more detailed guidance. Some of the most common QFT practices implemented by schools are featured in the TLT (most especially, feedback, metacognition, homework, mastery learning, one-to-one tuition, small group tuition, reducing class size, and aspiration interventions). Some QFT

practices are indeed backed by research evidence, albeit *not* evidence that supports QFT as a high-level strategy (promoting the idea that *any* improvement to teaching will reduce SED attainment gaps). This is perhaps true of all the available evidence to date. For example, the work of Daniel Muijs and colleagues is perhaps the most thorough and careful attempt to date to summarise teacher effectiveness research, but it would not be correct to describe this in a principle such as QFT (Muijs et al., 2014). There is insufficient evidence for us to generalise at this level.

One problem here is that the two EEF resources—the pupil premium guide and the TLT—do not align from an evidence perspective. Of the 27 initiatives presented in the TLT (2019 edition), 14 are not obviously QFT practices and it is not clear that the QFT practices listed are the most impactful—the ‘*most important lever*’ available to schools—those that demand the bulk of pupil premium expenditure (EEF, 2018, EEF, 2019b, emphasis added). The use of digital technology, one-to-one tuition and behaviour interventions, for example, are rated highly on the EEF’s scale of impact, but are not obviously ways to improve the quality of teaching in a school. There are two different methods here available to generalise the research evidence into a single approach about how best to reduce SED attainment gaps. In the first case (the pupil premium guide), the research from teacher effectiveness is summarised. In the second case (the TLT), comparisons are made on the impact of various initiatives. The two methods do not converge: the principle of QFT that is advocated by the EEF’s pupil premium guide does not summarise the evidence of the TLT.

A possible cause of the mismatch is that the studies underlying both methods are not generally asking about the impact upon students from different socio-economic backgrounds. Given the evidence presented for metacognition in the TLT, for example, it is not known whether metacognition initiatives will benefit students facing SED more than those from more affluent backgrounds. It is reasonable, of course, to take research from one arena (How do metacognition initiatives impact students’ outcomes? How important is a teacher to outcomes?) and to apply it to another (What is the best way to support pupil premium students?) To a certain extent, this is always true of putting research into practice. It is important, however, to recognise and assess the resulting insecurity. The most obvious way to address this is to gather evidence of the impact of putting research into use. One particular question remains outstanding regarding the use of evidence in the case of QFT: what impact does following the EEF’s pupil premium guide have on a school? In the next section ‘When high-quality teaching may increase SED attainment gaps’, I give an example of a school where staff do not believe the guide has had an overall positive impact.

Finally, although perhaps most importantly, notice that the vagueness of principles of QFT when applied in a SED setting means that they can be used to justify perhaps *any* initiative. A significant number of practices implemented in the name of QFT are not clearly direct attempts to improve the quality of teaching: reducing class sizes; employing a data analyst; purchasing revision materials; installing smartboards; running a boxing club after school; welcoming motivational speakers to assembly (to name but a few). Some of the QFT practices presented by school are indeed supported (to various degrees) by research evidence, but many have no peer-reviewed, published studies of support. Examples include introducing the six-part lesson, taking care on the seating of pupil premium students, providing music lessons, and creating pupil premium passport documents (amongst others). Even in the cases where there *happens* to be evidence, the purported mechanism by which the evidence is bestowed is a sham: a school selects *anything* they would like to do and reports that it is attempting to improve the quality of teaching, which is *therefore* backed by research evidence. The results may be brilliant, because schools may be best at selecting the best course of action for their students, but it is a farce to say that any success is a result of a connection with educational research. The problem is potentially not just of false attribution, I turn now to the more serious harm that may be caused to staff and students.

CONTRARY INDICATIONS REGARDING THE BENEFITS OF QFT

One kind of concern regarding the rise in QFT approaches to SED is the potential harm that results from the misdirection of energy and time of school staff. Interviews provided evidence of fatigue, bewilderment and frustration amongst staff given responsibility to improve outcomes for students facing SED. One pupil premium lead, for example, felt lost in her new role and confused at how she was going to make a difference. An assistant principal described the bewilderment:

I've just been going through all our case studies. When you look at the case studies of the students, and I think, my God, we did... we did that, we did this, we did... And how did they still don't get the outcomes? So, we're at a real loss really, as to what to do.

Another senior leader described the pressure to conform to the policies promoted by the EEF, despite his belief that this was not the best course of action for his (relatively unusual) school context. He felt he needed more evidence for the course of action his school was looking to take: the senior management team was considering placing the pupil premium students in each year group in the same class, in order to assign the best teachers to them.

A second kind of concern is that QFT initiatives are not having the expected impact on SED attainment gaps. To demonstrate this, consider the 48 schools that I identified from survey data as employing QFT practices in 2019. Illustrations of these schools' QFT approaches to pupil premium policy are summarised in [Table 1](#). In comparison, most survey participants gave answers that could not clearly be associated with QFT approaches (in many cases, despite describing QFT as the best way to support students facing SED). On average, however, the progress gap (0.61) for QFT-practising schools was 0.15 larger than non-practising schools (0.46). It was non-practising schools that shared a progress gap profile that matched the national average (0.47). The larger gap for QFT-practising schools was

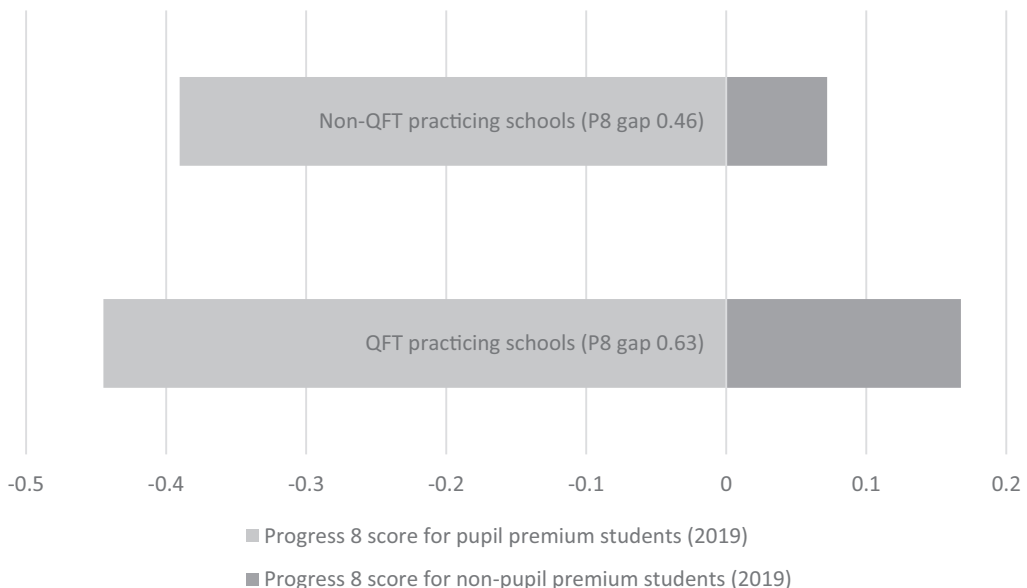


FIGURE 2 Comparison of the Progress 8 (P8) gap between schools that implement QFT practices as part of their pupil premium policy and those that do not ($n = 285$; $p = 0.005$)

due to both lower progress scores for pupil premium students as well as higher progress scores for non-pupil premium students (see [Figure 2](#)). Statistical analysis indicates that this difference would be unlikely if 48 schools were selected at random from the survey sample (see [Appendix A](#) for details). The two samples showed no significant difference in school size, school type, admission arrangements, or percentage of students in receipt of free school meals. Therefore, this correlation was not caused by a difference in these factors.

There are many possible causes of the correlation depicted in [Figure 2](#). It may (at least partly) be a result of students from more affluent backgrounds benefiting from QFT practices more than pupil premium students. It may result from schools with large attainment gaps being more likely to undertake a QFT approach to the pupil premium. It may be a consequence of the self-selecting nature of the survey: schools with positive results from QFT approaches may have been less interested to respond than schools with positive results from other approaches. It is not possible to draw strong conclusions from this single piece of quantitative evidence; it merely raises a concern regarding the effectiveness of high-quality teaching to reduce SED attainment gaps. To explore the potential causes of the correlation further, I conducted a second round of interviews at four schools with large attainment gaps and a strong focus on SED.

At one school, there was insufficient evidence to form a confident hypothesis about how the school's focus on QFT and its large attainment gap were connected. The school was in an affluent area and had a low proportion of pupil premium students. It had good attainment scores but low progress scores for all students and Ofsted had described it as 'coasting'.

A second school stood out as providing support for the hypothesis that schools with large attainment gaps are more likely to employ QFT practices. This school had received two successive 'Requires Improvement' ratings from Ofsted. The latest of these had identified the quality of teaching as an area for improvement. The school serves many students in extremely challenging circumstances: it has one of the highest proportions in England of students who have been eligible for pupil premium throughout their school careers. Its examination results are classified by the Department for Education as, 'well below average'. I conducted interviews with four senior leaders during the second round of interviews. It was more accurate, they believed, to say that their focus on QFT was a result of their large attainment gap rather than the other way round.

At two other schools, the second round of interviews suggested that QFT had been implemented to reduce large SED attainment gaps but was having the opposite effect. One of these schools was willing to support further research and was therefore selected as a case study. This illustration of a case in which high-quality teaching appears to have increased SED attainment gaps is presented next.

WHEN HIGH-QUALITY TEACHING MAY INCREASE SED ATTAINMENT GAPS

I describe here the case of a school from which it appears that attempts to improve the quality of teaching are contributing to a large attainment gap. A mixed-methods study was conducted at this school between November 2019 and June 2020, which included five interviews with senior and middle leaders, a focus group of six classroom teachers, an online survey of 113 staff (95% response rate), and an analysis of four years of students' Progress 8 scores by postcode deprivation. Although it is not possible to generalise from this illustration, it is not anecdotal. It resulted from a research process designed to uncover causal mechanisms (as described in the section above). It also reports the dominant view shared by the school's staff regarding its struggle to improve the academic outcomes of pupil premium students. The school has unusual characteristics, but it is potentially because of these that the impact of certain kinds of high-quality teaching comes to light.

Case study school context

By all standard measures (exam results, status as a teaching school, local reputation, staff opinion and Ofsted ratings), the case study school is a place of excellent teaching and learning. It is consistently one of the highest performing schools in its county for both attainment and progress at GCSE, and in the top 10% in national league tables. Successive Ofsted reports since 2010 have noted 'strong' and 'good' teaching and learning, as well as recognising improvements during this time. Because the progress gap is the school's only measure of the school that is known to be below the national average, it is a focus of the school's improvement plan. The school has a wealth of 'hidden resources' available to it, that is, beneficial contextual factors such as high parental engagement, which are not immediately identifiable from standard characteristic school data (Riordan et al., 2021). It is oversubscribed, and staff report that it competes with nearby prestigious private schools: some parents with the means to pay for private education choose to send their children here instead. This means that many parents are highly engaged with the school, although on occasion staff feel the resulting pressure: 'Our parents are very vocal, if there's things that they don't like'.

Senior leaders pointed out that it has less difficulty attracting and retaining good staff than schools elsewhere, and that it has benefitted historically from collaboration with a highly rated university teacher training programme. Teachers reported that the school is innovative regarding its teaching and learning, being happy to embrace large structural and curriculum changes, as well as encouraging teachers to try out new ideas in the classroom: 'We are constantly scrutinising and tweaking our practice instead of resting on our laurels'. There have been many initiatives to shape and extend the curriculum, helping students to make cross-curricular and cultural links. Teachers have responded positively and there is a general sense amongst staff that teaching and learning in the school is now excellent:

I've only worked in a couple of other schools ... but the kind of schools that I've been into, I just find this staff extremely passionate, in terms of the passion and commitment and dedication to learning, and the progress for all students I think is kind of what it prides itself on.

As this teacher explained, the focus is on teaching and learning for *all* students. When asked to describe the school, staff referred to the inclusivity of the school first and foremost: the school is 'inclusive', 'welcoming for all' and 'for everyone'. This is supported by a pervasive shared belief, revealed by the staff survey, that high-quality teaching is the best way to support all students, including those facing SED. One typical response to a survey item read, 'Teaching and learning is excellent, and this supports PP students to learn'. Another staff member pointed out that identifying pupil premium students would not be necessary if the teaching and learning were right in the first place: 'Quality first teaching should mean that it doesn't matter'. One teacher suggested that other pupil premium strategies should be reduced to give more time to concentrate on improving teaching and learning more directly:

My current feeling is that we waste a lot of time tracking these [pupil premium] students with the extra data drops. We could spend more time improving subject knowledge and planning lessons, as Quality Teaching seems to be the most significant determiner of PP students' progress.

From a list of generic strategies commonly found in pupil premium statements (see Appendix B), the pupil premium lead selected 12 that she believed to be most relevant to the school. These included 'quality first teaching', 'whole-school pastoral support', 'increasing students'

cultural capital', and 'providing alternative courses to GCSE'. The survey presented these 12 options (plus an 'other' option) to survey respondents, who were asked which were the school's top strategies for supporting pupil premium students. The most commonly selected by teaching staff was 'quality first teaching': 77% of teaching staff reported that there was 'lots of focus' on this (compared with 16% who reported there was 'some focus', 1% reported 'no focus', and 6% did not know). The next commonly selected strategies were 'after-school interventions' and 'provision of resources.' The staff agreed that the focus of school's pupil premium policy is high-quality teaching. The main themes in teachers' responses to describing high-quality teaching were 'strong curriculum/lesson planning', 'subject knowledge/specialist teachers' and 'high GCSE results'.

The emphasis on the quality of teaching across the whole school has aligned with an improvement in attainment. However, although overall attainment increased in this time, the progress gap has widened. Staff have been left confused and frustrated. A senior leader who has observed this struggle described the resulting sense of unexplained failure:

Well, as I say, when you look at all of the stuff that says teaching and learning, CPD, all of those things, then we do all of that ... You know, you name it, I bet we do it. I'd be really surprised if there was something that you named that we don't do. And yet, this year, we got our worst outcomes for pupil premium students in the last four years. But our best results overall.

The view that the gap does not fairly reflect the efforts of the school was shared by classroom teachers. When asked whether the school's pupil premium policy was working, they widely reported that it was not:

Results suggest we are ineffective despite our focus on PP.

The data suggests we have quite a significant gap between pupil premium students and non pupil premium students—I think that this is not a fair representation as what we provide for our pupil premium students.

Our interviewees were unable to offer explanations of why the school's progress gap was large and widening. I suggest that, in the particular context of this school, the high-quality teaching provided to students is benefitting those from the most affluent backgrounds the most (detailed in the next subsection). The school's particular concentration on cultural curriculum and subject knowledge appears to be working for the majority of students. Yet, the school serves an unusually high proportion of families living in the very richest postcode areas of England (see [Figure 3](#)). Teachers are perhaps not aware of the extent of this affluence—one teacher was surprised to view [Figure 3](#) for the first time—although they are certainly aware that the school serves families with widely different socio-economic backgrounds:

We've got quite predominantly middle-class students with parents with quite high-paying jobs. But then we also have a chunk of more disadvantaged students, who come from [placename], which is renowned for being quite high levels of poverty.

This results in a stark difference between the financial situation of students in the school:

The student population includes students from hugely diverse backgrounds—a student who may have little food in the cupboard to a student who has an indoor swimming pool.

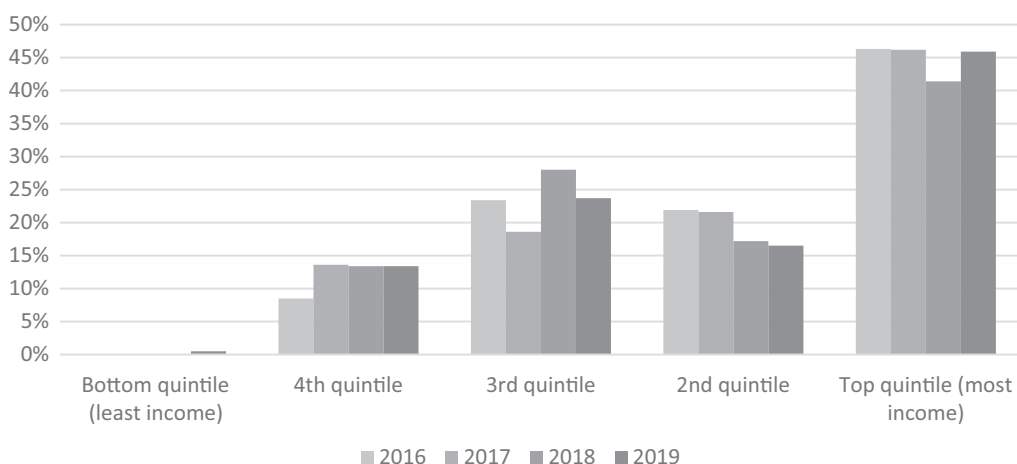


FIGURE 3 Socio-economic profile of students at the case study school: proportion of students living in each quintile of income postcode

Case study school outcomes

It is by turning to a more refined measure of SED that we find evidence that the school's innovations in teaching and learning over the last five years have benefitted its most affluent students most of all. It is currently understood that academic attainment varies with SED at all points in the SED spectrum: an increase in social and economic standing, even at the highest levels, is associated with an increase in academic outcomes (Shaw et al., 2017). The use of a binary marker for SED (such as eligibility for pupil premium) fails to capture and account for this. In this analysis, each student's Progress 8 score was matched with the index of income deprivation of the student's postcode. Although more refined, this is a less reliable measure for individuals; I use it here only when averaged over at least six students (see Appendix A).

As a result, we can see that there is a large disparity between the students who have *not* qualified for the pupil premium at our case study school. Considering just these students, we find that the progress gap between the most and least affluent halves averaged 0.6 between 2016 and 2019. This is an important point in unravelling the widening progress gap in this school. Students here outperform their peers nationally at all points in the SED scale, but it is students in the very highest income postcodes who do so most (see Figure 4). In the four years up to and including 2019, students in the highest quintile of income postcodes outperformed the Progress 8 scores students in the highest quintile nationally by 0.6. In comparison, students living in the lowest income postcodes outperformed the Progress 8 scores of their peers by 0.3.

Furthermore, in recent years there has been an increase to the Progress 8 scores of children in the postcode areas of highest income, most especially the second quintile, but a stagnation (or small decrease) to those living in the poorest postcodes. This suggests that improvements at the school have only had a positive impact on students living in the richest 40% of neighbourhoods. This story does not emerge from pupil premium data because a significant proportion of the school's pupil premium students live in the highest income postcode quintile and achieve Progress 8 scores (0.6) that are closer to their non-pupil premium peers (0.8) in the highest income quintile than their pupil premium peers not living in the top quintile areas (-0.2). There is a further issue that pupil premium data are variable because there are low numbers of pupil premium students. The proportion of students eligible for free school meals is very low, averaging around 6% in the four years under consideration (in comparison to a national average of 13%). Staff are aware that pupil premium eligibility is not

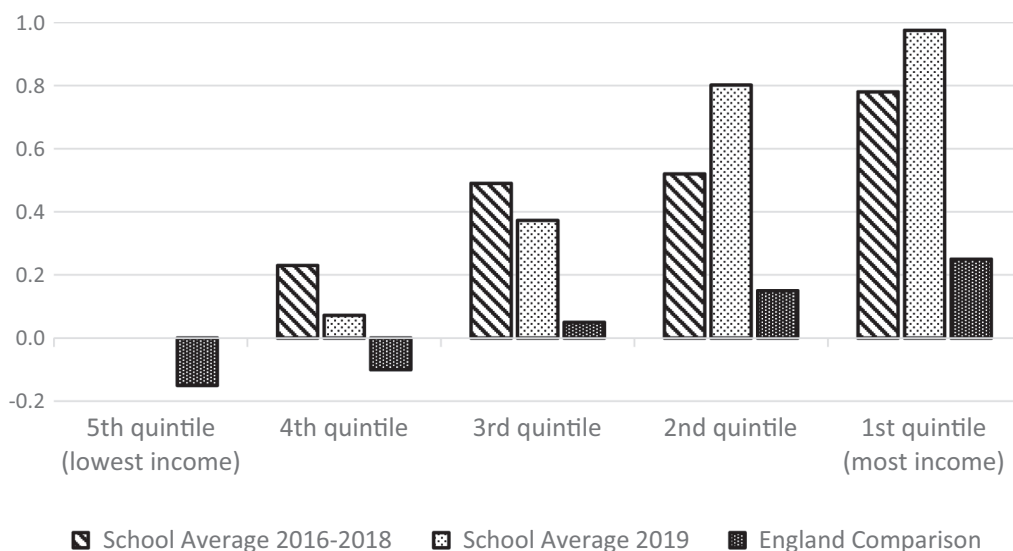


FIGURE 4 Progress 8 scores of students by each income postcode quintile. NB. The school has no students living in postcodes in the lowest quintile. The national averages are taken from Shaw et al. (2017, p. 3)

a reliable indicator of students facing the most severe SED: the school serves a significant number of ‘working poor’ families who do not qualify.

There are characteristics of this school that are important to point out. (1) The school has been attempting to further improve teaching and learning that is already recognised to be good. The concern that drives the plausibility argument for QFT (described in the section ‘The role of plausibility’)—that students facing SED are more likely to suffer from bad teaching—does not apply here. (2) There are few pupil premium students and this results in a relatively low pupil premium budget. (3) Each year, the school has a high proportion of students entering Year 7 with high prior attainment. To obtain high progress scores for these students, staff explained that they are often faced with the challenge of converting a (predicted) grade 7 or 8 into a grade 9. I propose that this requires particular teaching qualities, such as depth and confidence of subject knowledge, ability to take the students beyond the examination syllabus, in-depth knowledge of the course specification and typical examination questions, and the ability to support students learning to apply knowledge in new contexts. These are the kinds of skills that were described by staff at the school as features of high-quality teaching (‘subject knowledge’, ‘specialist teachers’, ‘getting high grades’, ‘strong curriculum’). It is perhaps possible to be a good teacher in these respects without having a focus on—or empathy with—pupil premium students.

In this environment, I suggest that advances to teaching are aligning with and working alongside the cultural capital of the most affluent students. The many excellent qualities and middle-class outlooks of its staff are perhaps working best for these students. The channeling of QFT messaging to the school has only left it floundering in its attempts to reduce a large progress gap. The research evidence this messaging is based on has very little to say about what kind of good teaching (if any) works better for students facing SED.

There are alternative hypotheses to explain why the school's progress gap has widened as it has been attempting to improve the quality of its teaching. In a similar timeframe, for example, the school has been implementing extra-curricular and cultural capital initiatives. The fieldwork also gave some preliminary indications that staff are more likely to have reservations about the pupil premium than staff at similar schools with small progress gaps, suggesting that staff attitudes may be contributing to the school's large SED attainment gaps.

What is clear, however, is that QFT is not working here. At the very least, it has not withstood other pressures to widen the gap and this failure has created fatigue and confusion amongst staff precisely because they believe QFT to be supported by evidence and the best strategy available to reduce SED attainment gaps.

The counterargument: it is not the gap that matters

In the case study school, pupil premium students performed better than pupil premium students nationally (although not as well as the national average for all students). If we raise their academic outcomes, does it matter that we raise those of others more at the same time? The thought was expressed occasionally in interviews (although not in the case study school itself):

Why do we need to close the gap, what's the issue with this gap?

The one thing I've always said to staff is that ... I don't expect the gap to close. I expect it to keep going. I don't expect it to get wider but expect it to keep going up because I expect the work that we do here, if we get it right for these guys, we're getting it right for everyone. So therefore, non-PP go up and PP should go with them. So I'm never gonna aim to close the gap because I don't think you can.

I do not express a judgment on this matter. My argument is not that practices that widen the gap are wrong, but that schools deserve to be given accurate descriptions of the research evidence and the potential impact of their strategies as far as possible.

CONCLUSION

In this paper, I have followed an evidence trail that begins in the city of Gary in Indiana in the early 1970s. A team of researchers conducting a randomised controlled test of a social welfare programme collected young children's reading test scores and happened to retain the names of the children's teachers. When an education economist analysed the data 20 years later to investigate the relationship between birth order and academic achievement, he discovered that 150 teachers were associated with the scores of at least three children and that there was a large difference between the average scores of these teachers. In the following years, a series of studies confirmed that there is a significant variability between teachers' effectiveness, as measured by their students' academic outcomes. The variability was less in later studies and one influential interpretation of the difference was that the children of the original study were from lower-income households. This conclusion has been summarised and disseminated in England as the idea that high-quality teaching is the best lever available to schools for supporting pupil premium students. Teachers commonly summarise this by the phrase 'quality first teaching', which in SEND contexts tends to refer to the different idea of adjusting teaching practices to ensure all children are retained in the classroom. Senior leaders at state secondary schools have commonly come to cite the EEF's articulation of QFT, and thus unknowingly reference the 1970s research evidence from Gary, when they set pupil premium policy. At the start of the 2019–20 school year, it was used to justify the retaining of all year-7 pupils in after-school classes at a large, successful academy in Central England. The school leadership team of a small state secondary school in rural East Anglia used it to justify the implementation of daily learning walks in the Spring term of 2019. This study raises concerns about the role evidence chains of

this kind are playing as the education community attempts to bring research to bear on classroom practice.

It is obviously a good thing to improve the quality of teaching at a school and there are many research-informed ways of going about this. This study has not considered the impact of implementing any of these particular practices. It has reviewed the wider picture in which school leaders are choosing to implement (or at least justifying the implementation of) particular practices based on a generic message instead of the specific research supporting those practices. The problem here is that the mechanisms operating to connect research with practice are too crude to acknowledge the richness and messiness of social science research. The message, 'high-quality teaching is the most effective way to support students facing SED', is too simple to be meaningful. It does not carefully summarise or correspond to any particular piece or collection of research. It is not a conclusion that researchers have come to after extended efforts to answer the question, 'What is the most effective way to support students facing SED?' It is possible to cite studies—themselves addressing different questions—that lend support to principles of QFT. There has been no research that has established, however, that QFT practices are more likely to raise the academic outcomes of students facing SED than, for example, purchasing personal laptops, providing one-to-one tuition, or funding extra-curricular activities. We do not know whether, in the long term, students facing SED are better supported by (amongst other things) mental health, pastoral or career initiatives, rather than academic ones. There has been no research on questions of this kind. Yet the messages of QFT are being interpreted by school staff as providing answers to them.

One of the reasons why QFT has been promoted by the Education Endowment Foundation was to increase the long-term vision of school's pupil premium policies. This was both a sensible aim and a sensible strategy to achieve it. It turns out that many schools are now justifying short-term interventions and initiatives by reference to QFT. This study does not indicate that any step along our evidence chain was at fault, but simply that we have much to learn about complexities of bringing education research to effectively bear on practice. Most especially, there are unintended side-effects of dissemination efforts that are not scrutinised in education as much as they should be. Although studies into teacher effectiveness have suggested that QFT is a promising approach to pupil premium policy, there is currently a lack of evidence of how this could be put into practice effectively. That is likely to require a more nuanced message than those currently driving pupil premium policy. The main implication for researchers is to resist the tendency to generalise research findings, and instead to retain a sharpness to our concepts and details of our research contexts when reporting our work. This will bring clarity about what remains to be done to put the research into use elsewhere.

One of the consequences of disseminating a message as vague as QFT has been that school leaders are employing a wide array of initiatives in its name for which there is very little research evidence (such as sharing seating plans, conducting learning walks or issuing staff newsletters). Because school staff believe that their actions are supported by evidence, they feel pressure to conform to a standard plan and are sometimes left disheartened, frustrated or confused when it does not work in their school context. It came as both a surprise and a relief to staff at our case study school to hear that there is very little evidence that quality first teaching reduces SED attainment gaps. School staff know the importance of good teaching, they turn to the research community for the answers to more difficult questions: Are there successful examples of improving teaching in schools? Why do students facing SED not progress as well as their peers? What kinds of CPD are effective? Do students facing SED benefit from different teacher characteristics? There are many different aspects to good teaching and many ways in which teachers contribute to the lives of their students. This study raises the possibility that students facing SED may not be able to capitalise on certain

kinds of good teaching as well as their more affluent peers. I have presented evidence that in certain contexts, particular kinds of good teaching may therefore uphold and increase SED attainment gaps.

The concern raised here is that the pressure to disseminate a simple message across the education sector has become stronger than the pressure to get the message right. We need to communicate and work with more nuanced hypotheses if we are to accurately reflect the best research and understanding in the education sector today. The pressure is high: the nation's efforts to reduce SED attainment gaps stalled in the years before COVID-19 and these gaps are predicted to get worse (DfE, 2021d). There is no simple answer to this challenge, and no reason to think that telling schools to teach well is any improvement on telling them to reduce attainment gaps in the first place.

NOTES ON TERMINOLOGY

I avoid using 'disadvantaged students' because interviews with sixth-formers during the Against the Odds study revealed their distaste for this phrase. They were happy to be referred to as 'pupil premium students'.

I use 'socio-economic disadvantages' (SED) in the plural to acknowledge the many facets of disadvantage. Similarly, there are many ways to measure differences in the academic outcomes of students from different socio-economic backgrounds. I use the plural 'SED attainment gaps' to refer to any such binary measure, of which the 'progress gap' is just one (commonly measured as the difference in Progress 8 scores between students who have qualified for the pupil premium and those who have not).

I make a difference between 'students facing SED' (when discussing concepts and theory) and 'pupil premium students' (when discussing data). The latter is a (poor) indicator of the first, being the more critical concept.

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CONFLICT OF INTEREST

The author is unaware of any conflict of interest.

DATA AVAILABILITY STATEMENT

Quantitative data sets are available from the author on reasonable request. The data sets used and/or analysed during the current study are available from the corresponding author on reasonable request.

ETHICAL APPROVAL

This study was approved by the Ethics Panel of the Faculty of Education, Health and Wellbeing at the University of Wolverhampton.

PARTICIPANT CONSENT STATEMENT

All participants in this study consented to the use of the data they provided in research publications.

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SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

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