

## **How to recruit and retain teachers in hard-to-staff areas: A systematic review of the empirical evidence**

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### **Introduction**

Attracting and retaining suitably qualified teachers in some subjects and geographical areas is a challenge common to the school staffing policies of many developed countries. More than half of the countries in Europe and almost all school districts in the US report problems, and shortages and oversupply can coexist because of the uneven distribution of teachers across phases, subjects and regions. In Germany and England, for example, there is an oversupply in some subjects and a shortage in others (European Commission/EACEA/Eurydice 2018). In Greece, there is a shortage on some remote and small islands while there is a general oversupply of teachers in the rest of the country. Teacher shortages related to the remoteness of some regions are mentioned in half of the countries that participated in the European Commission survey. In other countries, it was the high cost of living and high proportion of disadvantaged pupils in some large urban cities (such as Brussels and London) that reportedly made it difficult to attract and retain teachers.

In England, less affluent areas have had greater difficulties in attracting qualified teachers than many other parts of the country. The North East, West Midlands and East of England are less likely to have teachers with a relevant degree teaching shortage subjects compared to London. For example, only 17% of physics teachers in poorer schools outside London have a relevant degree, compared with 52% in affluent areas in the rest of the country (Sibieta 2018). In coastal rural areas, which can be highly deprived, 7% of secondary teachers are unqualified, compared with 4.6% in more affluent inland rural areas. (Social Mobility Commission 2017). In the House of Commons (2017) 5<sup>th</sup> report on teacher recruitment and retention, the government acknowledged that there were wide regional variations in teacher supply. While there have been plans to encourage more teachers to work in areas most in need, these have not been very successful. The pilot for a National Teaching Service, for example, which was set up to get teachers to teach in areas most struggling to recruit, had to be abandoned after managing to recruit only 54 of 1,500 intended teachers.

To tackle these challenges, many education systems have offered incentives and implemented a range of programmes to attract potential teachers to, and retain existing teachers in, difficult-to-staff regions and for some high demand subjects. Some of these programmes have been evaluated and tested but there is, so far, no synthesis of the research findings, so the evidence of their effectiveness is still unclear. Many of these incentives and programmes are expensive and it would be a waste of taxpayers' money and the country's resources to continue using them if there is no evidence that they work. There is also an opportunity cost as the money used for these incentives could be otherwise channelled to more effective programmes. If they show promise it is important to know how they can best be implemented, and the extent to which they can be deployed in other countries facing similar challenges. It is therefore crucial that these strategies are robustly evaluated and tested before more money is spent on them worldwide.

As far as we know, there has been no large-scale comprehensive single-study review of the evidence on teacher recruitment and retention policies with a view to addressing the recurring problems in teaching supply. Previous reviews have taken a narrower focus and have not taken into account the quality and design of research in each study (see e.g. Wheeler and Glennie, 2007). This chapter presents the findings of a systematic review of international empirical research to identify the most promising approaches in attracting and retaining teachers in hard-to-staff schools and areas.

## Method

### *Identification of studies*

Our review began with a broad search for studies that address teacher recruitment and retention issues in general, and from these the studies relevant to hard-to-staff areas were identified and analysed separately for this chapter. The list of search terms included substantive terms about teacher supply, teacher recruitment or retention, and any causal term (or a synonym) or any research design that would be appropriate for testing a causal model, such as experiment, quasi-experiment, regression discontinuity and difference-in-difference. These were applied to 13 educational, psychological and sociological electronic databases, plus Google and Google Scholar. The results were supplemented by further studies already known to us, or referenced in studies discovered. Programmes or strategies mentioned in this literature were also followed up via reference lists to see if they had been evaluated elsewhere. The search was limited to studies published in the English language. We intentionally did not set any date limiters to keep the search open. To avoid publication bias, the search included any material published or unpublished that mentions both substantive and causal terms. We included any empirical studies with at least some type of comparative design, many of which will have low ratings for trustworthiness in terms of causal claims. A total of 6,708 research reports were identified and exported to EndNote for screening.

Each identified study was screened to remove duplicates, and for relevance on the basis of title and abstract. Only studies that related specifically to recruitment and retention for hard-to-staff areas were retained. This process removed 6,161 studies, leaving 547 which were read in full. Of these, only 52 were retained further, deemed to be relevant to the research question and at least partly concerned with staffing in hard-to-staff schools and subjects.

### *Data extraction*

Information from these papers was summarised, including details on research design, cases used, allocation to groups, outcome measures, missing data, and, the results. A further 17 studies were excluded when it became clear that they were not evaluations but narrative discussions of previous research or suggestions of strategies. Of the remainder, 13 studies were excluded because they merely involved asking respondents such as headteachers which strategies they thought worked, or were important to them. Three reports were of different approaches to evaluating the same intervention by the same set of authors, and are treated as being one report here. The remaining 20 reports were passed through a quality assessment 'sieve', judging the trustworthiness of each to address a causal question, ignoring its source, and allocating a score between 1\* (the minimum standard to be given any weight, including some kind of comparison) and 4\* (Gorard et al 2017). The study outcomes are classified as relevant to recruitment and/or retention. Approaches with the most highly rated studies showing positive effects are considered the most promising.

## The results

We found 20 studies of interventions relevant to staffing in difficult areas, which had 26 outcomes relevant to either or both the recruitment and retention of teachers (Table 1). Perhaps the first thing to note is that none of these studies is of the highest quality of design and trustworthiness (4\*). Most involved some kind of financial incentive to teach in hard-to-staff schools and, on balance, such approaches appear to work. Many are from the US, and very few are from England.

Table 1 – Overall

Quality of study	Positive outcome	Unclear outcome	Negative or neutral outcome
4*	-	-	-
3*	2	-	1

2*	7	-	2
1*	8	4	2

### *Improving recruitment*

There were nine studies in our review dealing with recruitment that met at least our minimum quality for a causal claim. Overall, their results are mixed. The highest quality study (3\*) had positive outcomes for recruitment (Table 2), but not for retention. Hough and Loeb (2013) assessed the effect of awarding higher salaries/bonuses to teachers teaching shortage subjects in schools with a high proportion of poor and ethnic minority students, in the San Francisco Unified School District. Teachers were given a rise of \$500 to \$6,300 (depending on the salary scale), and a \$2,000 bonus for teaching in hard-to-staff schools, a retention bonus of \$2,500 if they stayed on after the 4th year, and \$3,000 after the 8<sup>th</sup> year. Using a difference-in-difference approach the authors compared the recruitment and retention of 1,611 applicants with teachers in different school districts before and after the introduction of the policy (a comparison made more difficult because of the economic downturn in 2008). There was an increase in the number (from 49% to 54%) and proportion (27% to 37%) of shortage subject teachers in hard-to-staff areas. However, there was no difference in the retention rates of targeted and non-targeted teachers. Over 90% of teachers stayed on in the district and over 85% stayed in their school, in both groups. The authors suggested that a policy aimed at retaining teachers in a competitive labour market when the economy is doing well may not be necessary when unemployment is higher.

Table 2 – Recruitment

Quality of study	Positive outcome	Unclear outcome	Negative or neutral outcome
4*	-	-	-
3*	Hough and Loeb 2013	-	-
2*	Steele et al. 2010 Glazerman et al. 2013	-	-
1*	Clewell and Vegas 2011 Waters-Weller 2009	Gordon and Vegas 2005 Goldhaber et al. 2010 Fowler 2003	Dwinal 2012

The next two strongest pieces (2\*) also have positive results for recruitment but not for retention. Steele et al. (2010) evaluated the Governor’s Teaching Fellowship (GTF) scheme, involving a \$20,000 incentive to attract and retain new teachers to low-performing schools for four years after becoming licensed. The teachers had to repay \$5,000 for each year that they did not meet the commitment, at a period when the average starting salary for California teachers was \$33,121. An instrumental variable design was used, based on 718 GTF teachers, excluding those who could not be tracked, were missing data, or not enrolled at recognised institutions. GTF recipients were not randomly selected, and so may have had a predisposition to teach in low-performing schools. More teachers were enrolled during GTF, around twice as many as in the years before and after, and 28% more taught in low performing schools. So it seemed that money was an attractor. However, there was no difference in retention rates (75% over four years) between recipient and non-recipients, despite the penalty clause.

Glazerman et al. (2013) examined the impact of the Talent Transfer Initiative, which offered bonuses to the highest performing teachers (those ranked in the top 20% in terms of raising student attainment from year to year using a value-added approach for each grade and subject) for agreeing to move to and stay in low-performing schools. The incentive was \$20,000 paid in instalments over a two-year period. Some teachers were already teaching in low-performing schools, and they received a \$10,000 retention stipend if they remained in the school over the two-year period. The participants included 85 teacher pairs matched on school characteristics and randomised to intervention or not, across 114 elementary and middle schools. Because the teacher pairs changed their personnel between randomisation and the start of the school year, the two groups were no longer equivalent at the beginning of the study. Of the vacancies assigned to the scheme, 88% were filled, compared to 44% the year before, and 71% in the

comparison group. Retention after one year was 93% (70% in the comparator group), and 60% after two years (compared to 51%). The results suggest while the transfer incentive may have had a positive impact on teacher recruitment and then retention rates during the payout period, the effect did not last once the payment stopped.

The weaker studies (in terms of design for a causal question) are more mixed in results. Fowler (2003) examined the Massachusetts Signing Bonus Program for New Teachers, offering a \$20,000 bonus for highly qualified people switching careers to teaching. Initially, recipients began teaching after seven weeks of training, although this was changed to a year-long programme in 2002, before being assigned to high-need schools, and provided with further training, support and mentoring. There was no explicit comparison group. The programme failed to recruit candidates from outside the area, and despite advertising across states only seven candidates outside Massachusetts were recruited over four years. This may be partly because other states were also experiencing severe teacher shortages, and some offered higher salaries. The programme also failed to place all teachers, mostly from Massachusetts, in high-need schools (only 71% from the first cohort, 48% and 35% in following years). Dropout among bonus recipients was higher than the national average (46% by the third year), and highest in the high-need districts (55%). A survey of head teachers suggests that bonus recipients on the scheme were more attracted to the fast-track scheme and not the bonus incentive (Churchill et al. 2002). Evaluation of signing bonus incentives in general suggests that any effect tends to be short-lived (Choi 2011).

Gordon and Vegas (2005) analysed the impact of the Fund for the Maintenance and Development of Basic Education and Teacher Appreciation - a funding reform in Brazil which stipulated that at least 60% of additional funds be allocated to teacher wages. It has been linked to increased positive trends in student enrolment, and reduction in grade retention and dropout (World Bank 2002, Castro 1998). For this review we considered only the impact of funding on teacher numbers and qualification. The study was a longitudinal retrospective cohort study. Because the intervention coincided with major education reform in Brazil, such as increased economic changes, educational resources for some municipalities and the legislation that all teachers must be qualified, it is difficult to attribute any causal effect. Many of the patterns reported were present before the intervention, which was linked to an increase in the number but not the qualification of teachers, and a reduction in student: teacher ratios in some areas, but not the poorest.

In America, Goldhaber et al. (2010) compared salaries in private and public schools using data from the 1999-2000 School and Staffing Survey, the 2000 Common Core of Data, and the 2000 Census. The survey contains responses from 56,354 teachers in 5,465 public schools and 10,760 teachers in 3,558 private schools. Findings showed that private schools tended to pay slightly more for more qualified and experienced teachers than public schools, for teaching large classes, longer hours, and in more disadvantaged schools with a high proportion of ethnic minority pupils. For example, private schools with a high proportion of poor students paid their teachers 17% higher salaries than schools with an average number of poor students. This is more than in public schools, which often have similar schemes, and despite teachers working in public schools with a high proportion of ethnic minority students being paid a slightly higher salary. There are other differences between the two sectors, and teachers expressed concerns about working conditions, but one implication, as Goldhaber et al concluded, could be that teachers will need to be paid more to get them to teach and stay in challenging schools.

Dwinal (2012) conducted a case study of Teach for America (similar to England's Teach First scheme) in the rural Mississippi-Arkansas Delta region, where there is a teacher shortage, geographical isolation and a heavily ethnically segregated school population. The programme recruited potential school leaders from university graduates and professionals, through an intensive selection process, and they committed to teach for at least two years in state schools. The low response rates (under 20%) to interviews with principals, and a comparison between regions over time using the weaker measure of vacancy rates rather than number of teachers recruited, made it difficult to establish the impact of recruitment. There was no decrease in vacancy rates relative to other areas, partly because the programme imposed limits to the number of participants in each district (so directing them elsewhere). Other studies suggest that Teach for America teachers tend to leave teaching after a couple of years

(e.g. Glazerman et al. 2006, Decker et al. 2004, Raymond et al, 2002, Clark et al. 2017, Henry et al. 2014).

Clewell and Villegas (2001) reported a six-year evaluation of the Pathways to Teaching Careers programme, including the paraprofessionals and noncertified teachers, and the Peace Corps Fellows strands. The paraprofessional and noncertified programmes involved identifying non-qualified staff already working in schools and offering them scholarships as well as other support services to help them obtain qualified teacher status, after which they are committed to continue teaching in the schools for a specified period. The Peace Corps Fellowship identifies and supports potential teachers from returning Peace Corps volunteers (similar to the Troops to Teachers programme in England). Fellows are placed in schools on a full-time contract and paid a salary where they work towards a teaching qualification. The study was largely based on self-report, with a high level of missing data. Only 44% reported where they were teaching initially, and only 31% after three years. Pathway teachers reported higher completion rates than traditionally certified teachers (75% to 60%). A high proportion (84%) ended up teaching in hard-to-staff schools, and had better retention rates over three years compared to national average (81% to 71%). They were also perceived to be more effective than typically qualified teachers.

Waters-Weller (2009) explored the relationship between improvement in working conditions (which they defined as reduction in class size and teaching load, more planning time), retention bonuses, and teaching and staying in high poverty schools. This was an exploratory cross-sectional study looking at the relationship between school intakes and attrition rates, the attitudes of teachers towards low socioeconomic status schools, and the kind of incentives likely to increase retention. The survey of 3,525 teachers in two urban districts only had a 29% response rate. The majority of teachers indicated that they would stay in their current school for the next year, including those who were in high poverty schools. They generally indicated that extra money for salaries and bonuses were not necessarily needed to keep them if the school had an excellent administrator, but money was an inducement to transfer to a poor school.

### *Improving retention*

The strongest study (3\*) by Hough and Loeb (2013) suggests no lasting benefit from financial incentives for retention of teachers in hard-to-staff schools. Other studies discussed in the section on recruitment, also indicated no effects on retention (Steele et al. 2010 and Glazerman et al. 2013, Fowler 2003). There were a further 11 studies that dealt solely or mostly with retention of teachers in hard-to-staff schools (Table 3). Almost all of these reported positive effects, but these were largely very weak studies.

Although Clotfelter et al (2008), a 3\* study, indicated positive effect of financial incentives on retention, it concurred with the other studies above that incentives work only as long as they are available and once removed, they have no lasting effect. Clotfelter et al. (2008) examined the impact of the North Carolina annual bonus scheme on the retention of qualified maths, science and special education teachers in high poverty and challenging schools, using a difference-in-difference approach. Teachers received the bonus (\$1,800 per year) for as long as they stayed in the eligible school. This was a reasonably well-conducted study, using administrative data for four years on public school teachers to estimate the likelihood of teachers leaving a particular school. The research compared hazard rates before and after the implementation of the bonus programme, eligible and ineligible teachers in the same schools, teachers in eligible schools and those in schools that narrowly missed out on being eligible. Teachers receiving the bonus were 15% less likely to leave at the end of the school year compared to other teachers in the same schools.

Table 3 – Retention

Quality of study	Positive outcome	Unclear outcome	Negative or neutral outcome
4	-	-	-
3	Clotfelter et al. 2007	-	Hough and Loeb 2013

2	Fulbeck 2011, Fulbeck and Richards 2015, Fulbeck 2014 Fitzgerald 1986 Falch 2010 Feng and Sass 2018 Gold 1987	-	Steele et al. 2010 Glazerman et al. 2013
1	Goldhaber et al. 2010 Lyons 2007 Anthony 2009 Helfeldt et al. 2009 Colson and Sattelfield 2018 Fuller 2003	Fowler 2003	Waters-Weller 2009

Five further studies in this section were rated 2\*. Gold (1987) evaluated the New York City Retired-Teachers-as-Mentors Program by comparing mentees with a comparison group of non-mentored teachers. The programme recruited retired teachers as mentors for new inservice teachers. Mentors attended a four-day workshop conducted by staff at a training college, were paid for 66 hours a year for each of three mentees, and assigned to schools with the highest attrition rate among new teachers. The study used Board of Education records and questionnaires completed by teachers, mentors and principals. Retention rates went up for all, but the rates were higher for the mentored teachers (85% and 80% in the second year). It is not clear that mentors were randomised to new teachers in eligible schools, and no account was taken of missing data.

Fitzgerald (1986) looked at offering an annual stipend (of between \$500 and \$2,000) to encourage teachers to teach in schools with a high proportion of pupils eligible for free or reduced lunches, in high priority areas in the US. The study used a difference-in-difference approach to compare the retention rates of teachers in 25 high priority schools with 25 high poverty control schools not receiving the stipend. The groups were similar in terms of pupil and teacher characteristics. Vacancies dropped in treatment schools in the first year, and the drop in retention rates was lower than for control schools (ES = +0.39).

In Norway, Falch (2010) examined the impact on the retention of teachers in high-vacancy schools of paying teachers differential wages, using a difference-in-difference approach. In the period 1993/4 to 2002/3, Norway had a central wage system, but teachers in schools with high vacancies received a wage premium of between 7.5% and 12%. Over the nine years, schools were initially eligible if they had 20% more “shortages” than the previous year. This increased to 30% for the 1996/7 and 1997/8, and then back to 20% for the last four years. In total, 161 schools received the wage premium at least once, and in these schools the attrition rate of teachers was lower than comparison schools by 6%. The reporting of this, however, was not clear, and the number of schools and teachers included varied considerably over time.

Feng and Sass (2018) considered the effects of the Florida Critical Teacher Shortage Program 1986 to 2011, on the retention of teachers in shortage subject areas (maths, science and special education). Loan forgiveness of up to \$10,000 to pay off their student loan was offered to beginning qualified teachers, if they taught in a shortage subject for at least 90 days. There was a recruitment bonus for new teachers, of up to \$1,200 (to cover removals or equipment), and a retention bonus of up to \$1,200 if teachers continued to teach a shortage subject the next year, and had favourable performance appraisal. These two were only available from 2000/1 to 2001/2. Since subjects designated as shortage changed over time, the teachers eligible for these incentives also changed over time. These variations were used to compare bonus recipients with non-recipients, in terms of recruitment and attrition using a proportional hazard model, taking into account student demographics, pupil prior behaviour, prior achievement, class size, teacher gender, race/ethnicity, salary base and experience. There is no report on attrition rates from the study. Loan forgiveness had a positive effect on the likelihood of teachers staying in teaching the

following year, reducing attrition by 12%, but not once funding was removed. The one-time retention bonus for shortage subject teachers also reduced the likelihood of teachers leaving by 25%.

The next three studies have common authors and all examine the same intervention, and so they are treated as one complex study for this review. Fulbeck (2011) evaluated the impact of ProComp (Professional Compensation for Teachers) - a teacher incentive programme in Denver – including 10 financial incentives (seven individual, three school level). School-based incentives were awarded to teachers who teach at schools serving low-income students and high performing schools and schools that make the most progress in maths and reading. Eligibility was restricted to those who were members of teacher unions not working in Charter schools. The total number of teachers included in the retention analyses was 4,145, representing 91% of all Denver Public School District teachers. Retention figures exclude those who retired or whose service was terminated and those made redundant due to reduction in teaching posts. The study used interrupted time-series and difference-in-difference regression models. The average change in retention rate was -0.06% before ProComp and +1.5% afterwards, and participation in ProComp increased retention rates by 2.1 percentage points. It was more effective in hard-to-staff schools (ES 0.25) compared to others (ES 0.08). Retention was higher in high-poverty schools where teachers were eligible to receive a financial incentive to stay.

Fulbeck and Richards (2015) looked at all 7,333 public school teachers in Denver from 2006 to 2010 who were eligible for the ProComp incentive (regardless of whether they did receive it) and who made at least one voluntary move within the district (989). The incentive tended to attract teachers to high growth and high performing schools, and was less successful for schools with high proportion of low income pupils. A limitation of the study is its inability to take account of other factors that may over-estimate the effect of financial incentives, such as principal's hiring preferences and the actual school vacancies advertised.

Fulbeck (2014) looked at participation in ProComp and teacher mobility in high poverty areas, using longitudinal teacher-level data from 2001/2 to 2010/11, and comparing teachers who received ProComp with those who did not, and those who taught in high poverty schools with those who did not. Teachers working in high poverty schools were more likely to move but the odds of leaving the district (and so losing the incentive) were lower for ProComp teachers than for others. The study suggests that the incentive alone was not enough to compensate for poor working conditions, issues with school leadership and school climate.

A further five studies were rated 1\*. Lyons (2007) considered a teacher preparation programme where participants were volunteers, selected for their commitment to the goals of the programme. Unfortunately, much of the reporting is unclear. Findings suggest that teachers exposed to all programme components were less likely than the national average to leave classroom teaching after a year in a high-poverty school.

Anthony (2009) considered the impact on teacher retention of a mentoring system for new teachers in a rural school district in North Carolina. All new teachers were given a two-week intensive session to help them adjust to the school, community and the teaching profession, and were assigned to a trained mentor for three years. The State Board of Education also required all new qualified teachers to complete a three-year induction period to obtain a continuing Standard Professional 2 licence. Both mentors and mentees were given training. Data on retention, measured as a proportion of teachers returning each year to the school system, was taken from the school system database. The proportion of teachers returning to the school system increased each year from 84% in 2005/6 before the programme to 92% in 2007/8. There was, however, no counterfactual as part of this study, and it is therefore a very weak study for a causal question.

Fuller (2003) examined the Texas Beginning Educator Support System on the retention of beginning teachers - a statewide comprehensive program offering instructional support and mentoring. Although this was a state-wide programme, participation was selective, and it is unclear how selection was organised. Using the state personnel database, the study compared the retention rates of beginning

teachers who participated in the scheme with those not participating, from 1999/00 to 2002/03. The participants had higher retention, but this could be at least partly due to the prior selection process.

Helfeldt et al. (2009) described a four-year internship programme aimed at retaining new teachers in high-need urban schools. In this university-school partnership programme, interns were paid, with full teacher benefits, and worked as full-time regular teachers in the classroom. They were assigned an approved trained mentor, and \$8,000 from the intern's salary was paid towards this mentoring scheme. The sample only included 38 interns and 8 mentors, and the bulk of the analysis concerned participant perceptions of the programme. The programme was reported as effective in retaining teachers in high need urban schools with 100% of teacher staying on in teaching one year later, compared to state retention of 81%.

Colson and Satterfield (2018) tested the effects of a teacher compensation plan, known as the Innovation Acceleration Fund, on the retention of SEN, maths, science and language teachers in a small rural district. This was a merit pay system, paying teachers deemed effective based on the contentious Tennessee Value-Added Assessment System. The total potential population was reported as 134. Of these, 93 volunteered for the compensation scheme. Teachers who did not want to have individual teacher effect results were excluded. Only 56 of these were deemed effective. Around 80% of teachers who participated in the compensation scheme were retained compared to 70% who did not participate. The report does not include effect sizes, and the design means that volunteers were compared with non-volunteers.

## **Conclusion**

Most of the work here concerns financial incentives of some kind. In summary, financial incentives appear to work. Offering remission of student loans, higher salaries or premiums for teaching in hard-to-staff areas and schools is effective in attracting teachers. However, it is not clear that such external motivation is desirable, or attracts the best teachers, and it is quite clear that the attraction is not lasting.

While most studies considered retention as teachers staying within their current school, in others retention referred to teachers staying within the school district, the state, state-funded schools, or even within teaching as a profession. The same mix appears in claims about teacher wastage in England (See and Gorard 2019).

The lasting impact of financial incentives on retention is less clear, even though some of the financial incentives used in the US involved a kind of a tie-in, where teachers are committed to staying on in the school or district for a specified period or else incur a penalty. To retain teachers in challenging schools or in difficult areas would require offering more than financial gain. Survey responses from teachers suggest that they are prepared to stay in less attractive schools or regions if they have supportive leadership and good working conditions (Waters-Weller 2009, Goldhaber et al. 2010, Fulbeck 2014).

There is little evidence that any approaches other than financial incentives work for recruitment, and no good evidence yet of anything else that works for retention, in high need areas. Most of the research we found was very weak, and all of the higher quality work involved easier-to-measure, more concrete strategies (such as financial incentives). More research with the kind of designs needed to address causal issues is urgently required to cover mentoring, support, training for teaching in difficult schools, and a host of other alternative approaches that could be combined with financial interventions to recruit good teachers and then keep them where they are needed most. In the medium to longer-term a more comprehensive approach would be to change school allocation and economic policies so that there were no longer such clearly defined schools and areas with high levels of poverty (Gorard 2018), meaning that these schools would not be as hard to staff, even though some would remain geographically isolated.



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