Recruiting and retaining teachers: what works?

Beng Huat See, Rebecca Morris, Stephen Gorard and Nada El Soufi

Increasing teachers' pay and working conditions does not make teaching more attractive, or does it?

Whenever faced with a shortage of teachers, the standard response of governments all over the world is to throw in more money, such as bonus incentives and higher wages, and/or to propose lighter workload, light touch inspections, and reducing marking to make teaching attractive. This is probably because previous studies have often blamed the poor working conditions and relatively poor pay of teachers for the shortage of teachers. But these studies are usually based on surveys or interviews asking existing teachers about their intention to leave and why or, worse, asking teachers why they think their colleagues have left or are thinking of leaving. These may not give a reliable picture of the situation.

So, to find out whether improving pay and working conditions can increase the number of people in teaching, we scrutinised international research and synthesised their findings. But unlike any previous work, we looked specifically for studies that are rigorous and scientifically sound.



What works in attracting teachers to the profession?

The only approach that seems to work at all is the offer of monetary inducements, but there are caveats. First, it works only in attracting those who are already interested in teaching (Gorard et al., 2020). Second, such incentives have to be large enough to compensate for the relatively challenging working conditions and competitive enough to offset the opportunity costs of not being in better paid jobs. Monetary incentives can also attract teachers to challenging schools, but only for high performing schools with lower proportions of disadvantaged children (Morris, Gorard & El Soufi 2020). Such incentives are more successful in attracting young female

teachers, but less so for older or male teachers. Also, the impact of monetary incentives is temporary, that is, it lasts only while the incentive is still active – there is no residual benefit. Once the money stops, teachers leave at the same rate as before. Finally, we need to consider the negative impact of such incentives on other schools. Where incentives are used to try and attract teachers to specific local areas or schools this could be at the expense of other schools, so may not benefit the system as a whole.

We found no evidence that widely advocated approaches, like 'Grow Your Own' where teachers are trained and recruited from the local community, actually increase the number teachers in hard-to-staff schools. This does not mean that such ideas do not work. It is just that almost all of the relevant studies are based on teachers' or principals' anecdotal reports of successful practice in their own school or district. Therefore, we cannot say for sure if this strategy leads to increasing number of teachers, or if something else is happening. For example, economic events like a rise in unemployment can encourage people to go into teaching, which has nothing to do with any concurrent initiative to attract teachers.

We also found no good evidence that making it easier for people to enter into teaching by offering different pathways helps improve recruitment. The only programme that has shown to be successful in attracting highly qualified teachers to teach in challenging schools is the Maths Immersion Programme. However, these teachers were more likely to leave teaching than their college trained peers. Therefore, we would be hesitant to say that this is an effective way to solve the teacher shortage problem.

What works in retaining teachers?

The offer of monetary incentives can also work in retaining teachers, especially in challenging schools and areas, but the effect is also short-term. Teachers start to leave in the usual numbers when the incentive ceases.

There is little evidence that teachers who are trained via alternative routes are more likely to stay in teaching than their traditionally trained colleagues. This is largely because there is so much variation in the different routes in terms of who they are targeted at, and the extent to which they are actually different from the 'traditional' route on offer.

Providing professional support to teachers and mentoring novice teachers may help improve retention, but the results are complex. Mentoring is more effective if mentors are in the same subject area, and is effective only in retaining mentees but not mentors.

How is our study different to other studies on teacher shortages?

Our study collects all known research on ways to attract and retain teachers, and we synthesise and summarise their findings. However, to be sure that our evidence is reliable we focussed primarily on studies that are scientifically sound. We then ranked each piece of research in terms of the trustworthiness of its findings based on the research design, the size of the sample,

whether there is any bias or threats to the validity of the study. To do this we used a quality appraisal tool, also known as the 'Gorard sieve'. We do not want to go into details about the sieve as it will detract from the objective of this article, but as an example of how to apply Gorard's sieve, it might be useful to refer to Neelan & Kirshener's (2020) review of PwC's study of the effectiveness of Virtual Reality training.

We ignored studies that simply used surveys or interviews to get participants' feedback, with no clear counterfactual. Although such studies are interesting, they cannot establish causal links as they are based on individuals' perceptions. For example, it is very common to see studies that ask teachers their intention to leave or why they think teachers want to leave. Those who intend to leave may not actually leave. Therefore, studies that use administrative or panel data to track the movement of teachers in and out of schools or the teaching profession itself carry more weight than those that rely on teachers' self-report.

Our initial search found over 6,000 potentially relevant studies. But only 120 satisfied our minimal criteria for robustness. The majority of these studies were about the use of financial incentives to improve recruitment and retention. While other approaches, such as mentoring, induction programmes, leadership support, flexible working, professional development, and improved workload, may seem promising, they are often not robustly evaluated. This makes it difficult for us to tell if they work or not in improving teacher recruitment and retention.



So: 'best bets' for improving recruitment and retention of teachers?

In conclusion, the best evidence is that money works, while it lasts. However, the picture is distorted by the fact that so much work has been done on financial incentives (and so little on anything else). There is no good evidence that alternative routes into teaching are effective for either recruitment or retention. This does not mean that this approach does not work, merely that we do not know yet. Improving conditions, and induction/mentoring both have promise but, as in so many areas of education, the evidence base is not yet clear enough.

Authored by:



Beng Huat See, Professor See is based at the Durham University Evidence Centre for Education



Rebecca Morris Dr Morris is based at the University of Warwick, Department of Education Studies



Stephen Gorard Professor Gorard is based at the Durham University Evidence Centre for Education



Nada El Soufi Dr Nada El Soufi is based at the Durham University Evidence Centre for Education