

Does money motivate teachers?†

Joshua J. Fullard‡

Labour economists have long been interested in investigating how wages affect worker productivity. Specifically, does paying a worker a higher wage make them work harder, or more productively, in some quantifiable way?

Empirical research demonstrates that higher salaries do improve labour productivity in a variety of settings. One of the [most famous examples](#) is when Henry Ford (founder of Ford Motor Company) introduced the ‘five-dollar day’ in 1914 which, in the process of more than doubling wages, resulted in an increase in productivity of up to 70 percent.

It is true that teaching is a vocational occupation and personal motivations are, almost certainly, the main reason why many people enter into, and remain in, the profession. However, this does not necessarily mean that teachers would not respond to a salary increase in some way that is beneficial to their pupils. After all, it is well documented in other public sector occupations that workers do respond to higher salaries (e.g. [the police](#)).

[My research](#), published this week, shows that teachers pay affects teachers’ effort and motivation which impacts their pupils cognitive attainment, measured by test scores. Specifically, over an academic year, a 10 percent increase in teachers’ wages has roughly the same affect that existing evidence has found for a [one pupil reduction in class size](#) in Project STAR and found for a [one hour increase in weekly instructional time](#) using PISA.

As teachers play an important role in the development of a wide range of their pupils’ skills, it is important to understand the role teachers’ wages have on other skills developed in school. Indeed, [my research](#) shows that teachers’ wages also affect their pupils’ well-being, measured by the enjoyment of learning.

While there are a range of other factors that are likely to affect teacher motivation (e.g. senior leadership and work life balance) my results indicate that money does matter. In a wider context this means that salaries are not only important for the recruitment and retention of excellent teachers but also helps ensure that teachers feel valued and are motivated.

†This blog was accepted for publication by British Educational Research Association on the 21st of September 2021. Source: <https://www.bera.ac.uk/blog>.

‡University of Essex: jjfull@essex.ac.uk

The pandemic has impacted teacher motivation

[A survey](#) of more than 2,000 teachers across the UK, fielded in January this year, reported that 52 percent of classroom teachers are less motivated to teach because of the pandemic. [My research](#) suggests that this will adversely affect students' cognitive attainment and wellbeing.

In addition, the government has frozen teachers' pay this year (September 2021) and it is almost certainly true that many in the school workforce are going to feel that they have been treated unfairly. While this could have serious ramifications for recruitment and retention, my research shows that it will also adversely impact the effectiveness of current teachers – reinforcing the negative effects from lost learning.

The £30,000 pay boost could create more problems

The government has previously committed to increasing teachers starting salaries to £30,000 by September 2022, with more experienced teachers getting a more modest increase. Due to the budgetary pressures of the pandemic, this increase has been pushed to September 2023.

While giving a significantly higher pay rise to less experienced teachers makes sense from a recruitment and retention perspective, to many more experienced teachers this will not seem fair. After all, some would argue that it's the teachers who have remained committed to the profession who deserve be rewarded the most, not the new entrants.

This could have serious implications as my research shows that concerns over the equity and fairness of salaries affects the outcomes of pupils. Furthermore, the effect is stronger among more experienced teachers.

Conclusion

Discussions about teachers' pay are often focused on recruitment and retention. My research suggests that policymakers should also consider the effects on teacher motivation. Given the pressures that the school workforce has faced for the duration of the pandemic, policymakers should consider a more equitable pay rise that doesn't risk alienating a large proportion of the school workforce.

References

- FULLARD, JOSHUA (2020): "Teacher Supply and Covid-19," <https://epi.org.uk/publications-and-research/teacher-supply-and-covid-19/>: Education Policy Institute.
- FULLARD, JOSHUA (2021a): "The Pandemic and Teacher Attrition: An Exodus Waiting to Happen?," <https://epi.org.uk/publications-and-research/the-pandemic-and-teacher-attrition-an-exodus-waiting-to-happen/>: Education Policy Institute.
- FULLARD, JOSHUA (2021b): "Relative Wages and Pupil Performance, Evidence from Timss," *ISER Working Paper*.
- KRUEGER, ALAN B (1999): "Experimental Estimates of Education Production Functions," *The Quarterly Journal of Economics*, 114, 497-532.
- LAVY, VICTOR (2015): "Do Differences in Schools' Instruction Time Explain International Achievement Gaps? Evidence from Developed and Developing Countries," *The Economic Journal*, 125, F397-F424.
- MAS, ALEXANDRE (2006): "Pay, Reference Points, and Police Performance," *The Quarterly Journal of Economics*, 121, 783-821.
- RAFF, DANIEL MG, and LAWRENCE H SUMMERS (1987): "Did Henry Ford Pay Efficiency Wages?," *Journal of Labor Economics*, 5, S57-S86.