

in brief...

Top of the class

How much impact does where your child ranks in primary school have on their later confidence and exam results?

Richard Murphy and **Felix Weinhardt** outline their findings for schools in England – and explore its potential significance in other settings.

Conventional wisdom suggests that it is always best to place children with higher-performing peers. Our research, which looks at their later outcomes, indicates that this is not necessarily true.

Imagine two pupils of the same high ability: one is top of their class but the other is in the middle because their school attracts many high-ability children. We find that the pupil who was top of the class becomes more confident and performs better in secondary school than the pupil who had the same test score in primary school but a lower rank.

These rankings are inferred by the pupils themselves as it is not standard practice for teachers to discuss rankings. We find that being highly ranked during primary school has a positive effect on later test scores that is equivalent to being taught by a highly effective teacher for one year. And being ranked in the top quarter of your primary school peers as opposed to the bottom quarter improves later test scores by twice as much as being taught by a highly effective teacher for one year.

Similar effects apply across subjects. For example, a primary school pupil who got the same score in English, maths and science but happened to be ranked higher in class in maths would on average achieve better secondary school results in maths than in English or science.

We also find that boys are four times more affected by being top of the class than girls. Similarly, pupils who receive free school meals gain more from being at the top, although they do not seem to suffer in terms of their later test scores from being ranked in the lower half of their class.

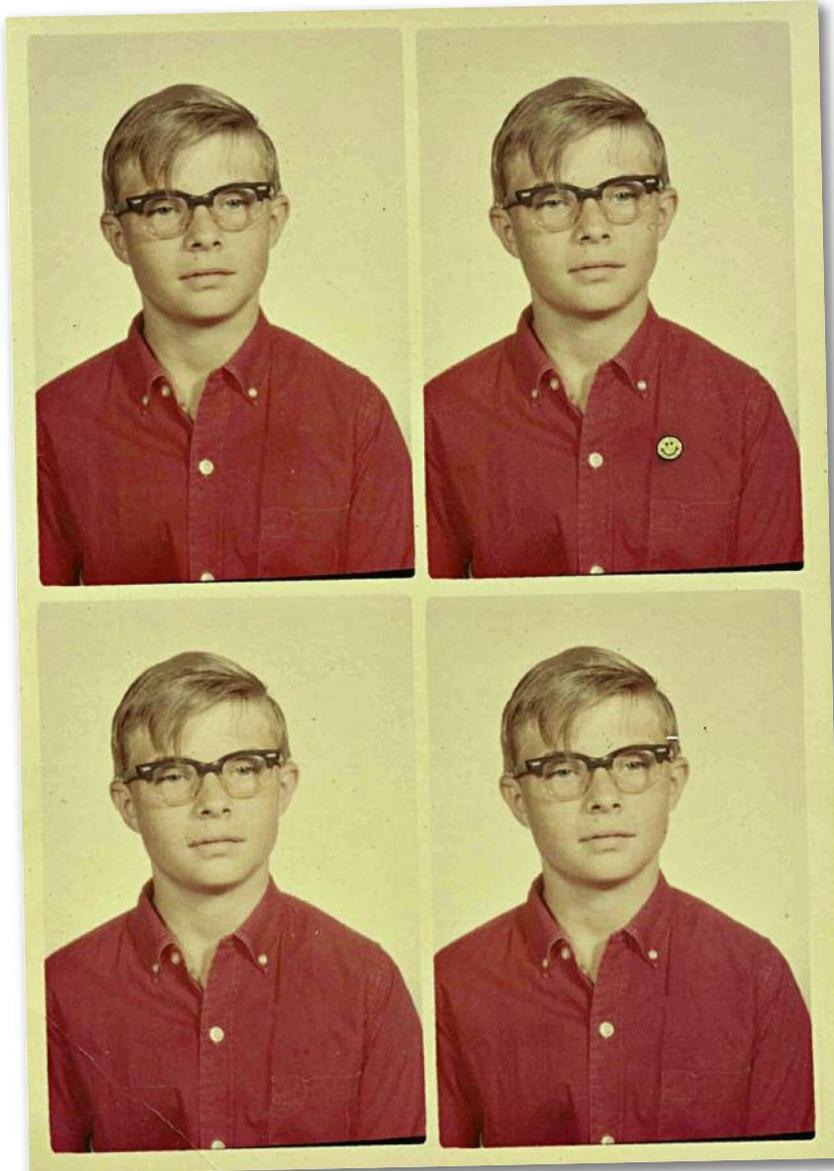
Our findings come from analysis of Department for Education records of the national exam results of all state school pupils in England. These provided us with data on more than two million pupils across five cohorts whom we could track from primary school into secondary school. We measured their initial ability using test scores in English, maths and science at the end of primary school; the outcomes were their results in key stage 3 tests in the same subjects at age 14.

So what explains the impact of ranking on later outcomes? Our hypothesis is that it emerges through pupils making comparisons between themselves and their peers, which affects their conceptions of themselves. A pupil who was top of the class in maths develops more confidence in the subject, is less likely to be put off by difficult questions and hence requires less effort to succeed. This lower 'cost' of effort in maths encourages them to invest relatively more in the subject.

To test the role of confidence, we combined the data on pupils' test scores with a survey of 15,000 pupils, which asked them directly about how confident they felt in English, maths and science. Even after accounting for actual test scores, pupils' rank among their peers is a key determinant of their confidence.

Our findings run counter to the common assumption that having better peers is always the best for children. Indeed, they suggest that there are situations where a child will be better off not going to school with high-performing peers: this is especially true for boys. While we cannot make every pupil top of the class, our research highlights the importance of confidence in order to succeed.

Boys may be better off not going to school with high-performing peers



Non-cognitive skills such as confidence, perseverance and resilience have big effects on achievement

The principle of rank improving confidence and later outcomes can be applied to many other settings. Imagine a child being the best in their street at football: they would become more confident and may enjoy the sport more. As a result, they would end up spending more time playing football and further improving their skills.

We believe these findings have implications for performance in both the classroom and the workplace. The most important one is that non-cognitive skills such as confidence, perseverance and resilience have large effects on achievement. Teachers and managers should recognise

the potential impact of rank on individuals' performance, playing it up for those of high rank who will be encouraged. For individuals who are high performers but find themselves in a high-performing peer group where they end up with a low rank, managers should emphasise their general rank.

This article summarises 'The Importance of Rank Position' by Richard Murphy and Felix Weinhardt, CEP Discussion Paper No. 1241 (<http://cep.lse.ac.uk/pubs/download/dp1241.pdf>).

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