

in brief...

# Does management matter in schools?

CEP's methodology for evaluating the quality of management practices, which is now nearly a decade old, has been applied in a variety of settings, including manufacturing firms, retailers, hospitals and universities. Here, **Renata Lemos** outlines findings about the management of schools in a range of developed and developing countries.

Over the past few years, a growing body of evidence has revealed major disparities in the quality of education across and within countries. In research with my CEP colleagues Nicholas Bloom, Raffaella Sadun and John Van Reenen, we have been investigating differences in managerial and organisational practices across schools and the extent to which these differences may be associated with educational outcomes.

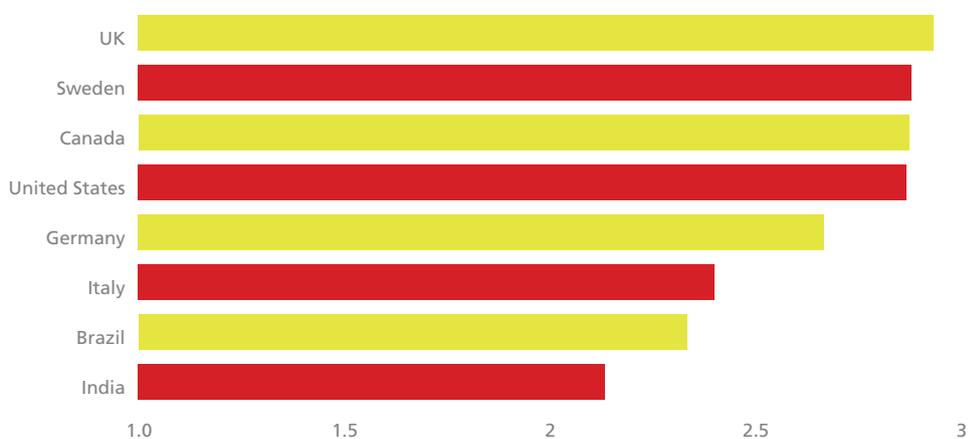
Overall, we find robust evidence that practices vary significantly across countries and are strongly linked to pupil outcomes. We base our analysis on a unique dataset measuring the quality of management practices of over 1,800 schools across eight countries.

The management survey methodology uses double-blind interviews to collect data on schools' use of operations management, performance monitoring, target setting and talent management in their day-to-day activities. From these interviews, we create a school management index of 1 to 5, which provides us with a comparable measure of the level of adoption of these basic practices across schools.

These data allow us to document a number of new stylised facts. First, we show that the adoption of basic managerial practices in schools offering education to 15-year olds is fairly limited: the average management score across all countries is 2.27. This represents a considerably lower level of adoption of many of the managerial processes included in the index than in manufacturing (where the average management score is 3.01 in firms of between 50 and 5,000 employees in these eight countries). It is slightly lower than in healthcare (where the average management score is 2.43 in general hospitals offering acute care plus cardiology or orthopaedics procedures in these eight countries).

## Better school management is associated with better pupil achievement

Figure 1:  
School management score index by country



**Note:** The management index is the simple average across all questions for a school; the country average simply averages this management score across all schools.

Second, in the school management index, the UK, Sweden, Canada and the United States are at the top of the ranking, closely followed by Germany, while Italy, Brazil and India lie at the bottom. The differences in management across countries are on average more salient in education than they are in other sectors: 55% of the variance in the school management index can be attributed to variations across countries, compared with 13% in manufacturing and 42% in healthcare across the same set of countries. This finding suggests that differences in the institutional environment may have important effects on the way that schools are managed.

Third, looking at schools within countries, we show that an increase in the average management index is associated with an increase in pupil achievement. Moving from a school in the bottom quarter of the management index distribution to a school in the top quarter, which is approximately one point in the management index, is associated with an increase in school performance of approximately 15%.

In view of the larger body of research on the effects of educational inputs on pupil achievement, we find that performance associations for management quality are between two to three times larger than for competition and teacher quality and over ten times larger than for a measured input such as class size. Although the cross-sectional nature of the data does not allow us to investigate the direction of causality behind these associations, the result reassures us that our management index is a meaningful tool to explore differences in the quality of education across and within countries.

Fourth, there are large differences in the quality of management adopted by schools both within

countries and within regions in countries. We find that school ownership and governance is a key factor associated with differences in management practices.

In particular, we find that autonomous state schools (that is, organisations that are publicly funded but governed by school-specific regulations) have higher scores on the management index relative to regular state schools, which are publicly funded and managed according to region-wide guidelines, and private schools. Autonomous state schools include 'escolas de referência' in Brazil, separate schools in Canada, 'private ersatzschulen' in Germany, private aided schools in India, friskolor in Sweden, the UK's academies, foundation schools and voluntary aided schools, and charter and magnet schools in the United States.

Fifth, the difference between autonomous state schools compared with regular state schools and private schools does not seem to reflect observable differences in the composition of the pupil body, school and regional characteristics or basic demographics of the head teachers or principals, such as their tenure and gender. In contrast, the quality of school management appears to be related to specific traits of the principals.

In particular, principals in autonomous state schools are more likely to have developed and communicated a long-term strategy for the school and to be subject to stronger governance, making them more accountable for the delivery of pupils' outcomes relative to the principals of regular state schools and private schools. Taking these leadership traits into account more than halves the managerial gap between autonomous state schools and regular state and private schools in the OECD.



The quality of school management is related to school ownership, governance and the leadership traits of head teachers

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