



## The great schools revolution

DRESDEN, NEW YORK AND WROCLAW

**Education remains the trickiest part of attempts to reform the public sector. But as ever more countries embark on it, some vital lessons are beginning to be learned**

FROM Toronto to Wroclaw, London to Rome, pupils and teachers have been returning to the classroom after their summer break. But this September schools themselves are caught up in a global battle of ideas. In many countries education is at the forefront of political debate, and reformers desperate to improve their national performance are drawing examples of good practice from all over the world.

Why now? One answer is the sheer amount of data available on performance, not just within countries but between them. In 2000 the Programme for International Student Assessment (PISA) at the OECD, a rich-country club, began tracking academic attainment by the age of 15 in 32 countries. Many were shocked by where they came in the rankings, (PISA'S latest figures appear in table 1.) Other outfits, too, have been measuring how good or bad schools are. McKinsey, a consultancy, has monitored which education systems have improved most in recent years.

Technology has also made a difference. After a number of false starts, many people now believe that the internet can make a real difference to educating children. Hence the success of institutions like America's Kahn Academy (see page 30). Experimentation is also infectious; the more governments try things, the more others

examine, and copy, the results.

Above all, though, there has been a change in the quality of the debate. In particular, what might be called "the three great excuses" for bad schools have receded in importance. Teachers' unions have long maintained that failures in Western education could be blamed on skimpy government spending, social class and cultures that did not value education. All these make a difference, but they do not determine outcomes by themselves.

The idea that good schooling is about spending money is the one that has been beaten back hardest. Many of the 20 leading economic performers in the OECD doubled or tripled their education spending in real terms between 1970 and 1994, yet outcomes in many countries stagnated or went backwards. Educational performance varies widely even among countries that spend similar amounts per pupil. Such spending is highest in the United States—yet America lags behind other developed countries on overall outcomes in secondary education. Andreas Schleicher, head of analysis at PISA, thinks that only about 10% of the variation in pupil performance has anything to do with money.

Many still insist, though, that social class makes a difference. Martin Johnson, an education trade unionist, points to Brit-

ain's "inequality between classes, which is among the largest in the wealthiest nations" as the main reason why its pupils underperform. A review of reforms over the past decade by researchers at Oxford University supports him. "Despite rising attainment levels," it concludes, "there has been little narrowing of longstanding and sizeable attainment gaps. Those from disadvantaged backgrounds remain at higher risks of poor outcomes." American studies confirm the point; Dan Goldhaber of the University of Washington claims that "non-school factors", such as family in-

### Top of the class

PISA score (and ranking), 2009

	Reading	Maths	Science
Shanghai, China	556 (1)	600 (1)	575 (1)
South Korea	539 (2)	546 (4)	538 (6)
Finland	536 (3)	541 (6)	554 (2)
Hong Kong, China	533 (4)	555 (3)	549 (3)
Singapore	526 (5)	562 (2)	542 (4)
Canada	524 (6)	527 (10)	529 (8)
New Zealand	521 (7)	519 (13)	532 (7)
Japan	520 (8)	529 (9)	539 (5)
Australia	515 (9)	514 (15)	527 (10)
Netherlands	508 (10)	526 (11)	522 (11)
Belgium	506 (11)	515 (14)	507 (21)
Estonia	501 (13)	512 (17)	528 (9)
Poland	500 (15)	495 (25)	508 (19)
United States	500 (17)	487 (31)	502 (23)
Sweden	497 (19)	494 (26)	495 (29)
Germany	497 (20)	513 (16)	520 (13)
France	496 (22)	497 (22)	498 (27)
Britain	494 (25)	492 (28)	514 (16)

Source: OECD

- come, account for as much as **60%** of a child's performance in school.

Yet the link is much more variable than education egalitarians suggest. Australia, for instance, has wide discrepancies of income, but came a creditable ninth in the most recent PISA study. China, rapidly developing into one of the world's least equal societies, finished first.

Culture is certainly a factor. Many Asian parents pay much more attention to their children's test results than Western ones do, and push their schools to succeed. Singapore, Hong Kong and South Korea sit comfortably at the top of McKinsey's rankings (see table 2). But not only do some Western countries do fairly well; there are also huge differences within them. Even if you put to one side the unusual Asians, as this briefing will now do, many Western systems could jump forward merely by bringing their worst schools up to the standard of their best.

So what are the secrets of success? Though there is no one template, four important themes emerge: decentralisation (handing power back to schools); a focus on underachieving pupils; a choice of different sorts of schools; and high standards for teachers. These themes can all be traced in three places that did well in McKinsey's league: Ontario, Poland and Saxony.

### Reform without rancour

"Ontario really is impressive," enthuses Sir Michael Barber, former head of global education practice at McKinsey (now at Pearson). The Canadian province has a high proportion of immigrants, many without English as a first language, yet it now has one of the world's best-performing schools systems, after bringing in what one of its architects calls "reform without rancour".

When Dalton McGuinty was elected Ontario's premier in 2003, he embraced "whole-system reform". Instead of directing reforms from the centre, the government encouraged schools to set their own targets and sent experienced teams to help

## Education theories

# The horse before the cart

Some experiments have failed. Others are now entering the mainstream

**I**N 1899 John Dewey, an American education theorist, published "The School and Society". He argued that schooling should reflect the lives of children, as well as what they had to be taught. His theories spawned a vogue for "child-centred learning", accelerating in the 1960s into a challenge to school hierarchies and a carelessness about exams.

That kind of laissez-faire approach to learning has receded in many places. Nowadays, everyone wants to measure outcomes. The most prominent American charter schools, strongly focused on getting poor children into college (see main story), insist that children do regular mental arithmetic between lessons. Germany has also tightened up its examination system in the past decade, to help standardise results.

In Britain Michael Gove, the education secretary, has emphasised a return to core subjects such as maths, English and sciences in secondary schools. He also wants to persuade former army officers into teaching to improve discipline in rowdy schools—boot camp, if you will.

Pam Sammons, a researcher at Oxford University who has conducted a review of successful teaching practices, says that elements of child-centred education are fine, as long as schools teach the basics first. In other words, put the horse before the cart. Problems start, she thinks, when more laissez-faire learning activities get

in the way of proper teaching.

Growing diversity in schooling in the West, however, including the rise of free schools, allows more space for those who want to try different education methods. In Britain, Montessori and Steiner Schools, which concentrate on nurturing the whole child rather than on a rigid academic curriculum, can also become state-funded free schools, and are wondering whether they should.

Most of Britain's new state-funded academies favour a more orthodox approach. At the Mossbourne Academy, in the heart of London's recently riot-torn borough of Hackney, Sir Michael Wilshire heads a school which was closed for poor discipline in 1995, but is now one of the most widely-praised academies in the country. His classrooms are basically boot-camps, with strict rules about everything from uniform onwards. "Schools that are imprecise about discipline end up with a huge amount of confusion, with staff taking different views about what's acceptable," he says. "That's when children are taught badly."

One British researcher, comparing Western reforms with Eastern practice, noted that the main difference was that in Hong Kong "the effective teacher is seen as a figure of authority, morality and benevolence". Some Western parents might like a touch of such Confucianism in their own children's classrooms.

them get there. Schools with large numbers of immigrant children could apply for special help, and could choose whether to extend the school day to do this, or work longer with the slower pupils.

The Ontario reformers made a special point of gaining full public support. Every school—even in the remotest "fly-in" places—had to be improved by the reforms, and had to show in regular inspections that it was making progress. These efforts were not cheap—since 2004, total funding for education has gone up by **30%**. And their success is debated. As Mr McGuinty faces a tight election next month, some critics claim that inner-city schools in the capital, Toronto, are "coasting", because improvements tend to come early and the intractable problems show themselves later. But Ontario has become a byword for decentralised, popular reform.

Lessons from Poland are equally impressive. The fourth-largest city, Wroclaw, cannot rival Warsaw for business buzz or Krakow for beauty; but its secondary

schools have moved it into the "significantly above average" category in the PISA rankings, well above Britain and Sweden, as well as former eastern-block rivals.

Poland, like Ontario, illustrates the virtues of decentralisation. It used its new freedom to dismantle a centralised system which had channelled roughly half its pupils into an academic education and the rest, as factory-fodder, into less well-appointed vocational schools. Funding and administration are still controlled by state bureaucrats, but heads have freedom to hire teachers and can choose which curriculum to use from a list of private providers. National exams at **12-13, 15-16** and **18-19**, and supplementary tests each year, allow local authorities to monitor carefully how the schools are doing.

At secondary School Number **12** Danuta Daszkiewicz-Ordylowska, the head teacher, is celebrating another bumper year. The school excels in sciences and languages—English is still popular, but Russian is making a comeback. "Now they don't

### Doing much better

Sustained improvement with three or more data points over five years or more

School system	Period of assessment
Singapore	1983-2007
Hong Kong	1983-2007
South Korea	1983-2007
Ontario, Canada	2003-09
Saxony, Germany	2000-06
England	1995-2007
Latvia	1995-2007
Lithuania	1995-2007
Slovenia	1995-2007
Poland	2000-06

Source: McKinsey

• have to learn it like their parents, they find it's useful," she says. She admits that pupils feel pressure ("Too much," grumbles a former parent. "We're ending up with a lot more children having to see psychologists about stress.") But Jaroslaw Obremski, the deputy mayor, exults at how well his town's pupils are doing.

Mr Obremski illustrates the power of local civic pride to improve schools. "We can do better," he says. "I'm worried we don't encourage our elites enough. How will we get an Oxford or a Polish Harvard? We're still squeamish about really pushing the best." He is sceptical of the role of national government: it has, for instance, signed agreements with the teachers' unions which, he thinks, give them too much power. He is fiercely competitive. "Look just behind us in the league tables," he says. "The regions doing best are among the poorest in the east of the country. They're snapping at our heels."

### German lessons

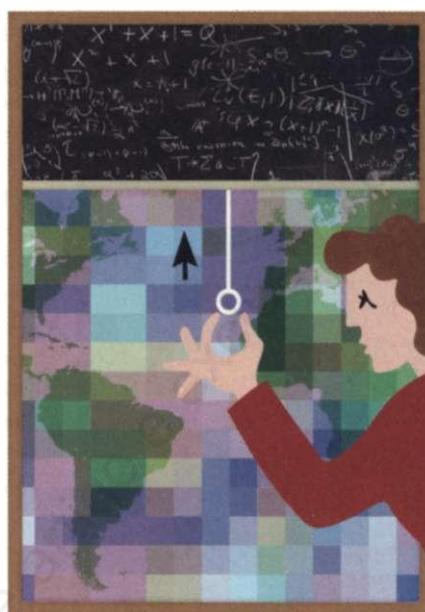
The first PISA study, in 2000, placed German pupils well below the OECD average for reading and literacy. This was "a real shock to the system", says Ulrike Greiner, a teacher in Reutlingen, in south-west Germany. The research showed a higher correlation between economic status and achievement than in any other OECD country. For this, people blamed a system which allotted pupils to schools on the basis of perceived ability at the age of ten. A race to reform among the states followed, and the victor-to-widespread surprise was Saxony, from the old east, which reached fifth place in the McKinsey table.

Since unification Saxony has restored historic cities like Leipzig and Dresden, yet they remain blighted by the uniform social housing of communist days. The old regime still influences education, too. Wolfgang Nowak, a west German Social Democrat who led the school reforms, explains: "We wanted to lose the ideology, but keep the best of the old eastern system—the selective gymnasium for the academically minded, but also a bigger focus on the 'middle schools' for other pupils." Crucially, he cut out the third-tier Hauptschulen schools for weak academic performers. "It's terrible for integration, it's terrible for results." (The best Chinese schools, adds Sir Michael Barber, have also modified their obsession with high-fliers to ensure that they address the "long tail" of under-achievement—something that hampers Britain's performance, too.)

Many parents still look back on communist East Germany as a provider of first-rate secondary education in its many good grammar schools, though few regret the ideological brainwashing that went with it. Saxony kept the selective element, but sent pupils to secondary school at 13 rather than 10. That has made a big difference to

the performance of boys, in particular. "Eleven is just too early to assess what they are capable of," says Mr Nowak.

Exams in Saxony, previously organised by the schools themselves or with loose oversight, were opened up to external regulators. At the Gottlieb Bienert middle school in Plauen, a suburb of Dresden, head teacher Gert Gorski explains that the higher up the school pupils proceed, the more they follow different paths, though they mingle for non-academic subjects. The lower performers leave school at 15 with a basic qualification, usually in practical skills. "We don't mind being a middle school with some pupils from lower academic groups," says Mr Gorski, "as long as this middle is a standard we can be proud of." This year Berlin and Hamburg have followed Saxony in abolishing the low-performing *Hauptschulen*.



In Britain, which has slipped down the PISA rankings in the past few years, examples like these are being studied closely. Michael Gove, the Conservative education secretary, pinpoints the lessons of PISA 2009 as "greater autonomy for schools; sharper accountability; raising the prestige of the profession and having greater control over discipline." In pursuit of a more diverse supply of schools, the government is expanding the number of independent academies (Tony Blair's innovation) to replace local authority-run comprehensives, and has allowed Free Schools, which are run by parents, charities and local groups.

Introducing new types of schools, however, is no guarantee of better outcomes. Sweden, admired by Mr Gove for its independent, non-selective, state-funded Free Schools, has had a sticky period in international rankings. Its drive to open new kinds of schools is not yet matched by rigorous inspections to help weaker

schools target their failings. Sceptics of America's fairly new experiment of this kind, privately funded charter schools, think that politicians are "too invested" in them to close them if they fail. Authorisation and renewal processes for innovative schools need to be robust, so that bad experiments are not prolonged and failures are not ignored.

On the whole, though, the rise of charter schools in American cities has brought dynamism to one of the tougher areas of reform. These are schools aimed at the poorest parts of society, where aspirations are often low. Letting new providers in also attracts people who are interested in education and have a talent for organisation, but no taste for bureaucracy.

A mass of data shows that both profit and not-for-profit innovations can work. Diversity of supply in schools concentrates minds on what kind of teaching is best, particularly in challenging places. It also offers the freedom to set working conditions outside the restraints of local authorities and the teachers' unions, giving heads more capacity to tailor schools to the needs of their particular pupils. In America's Aspire charter schools, which have done best in the rankings, teachers follow strict guidelines to chart each pupil's progress. Aspire's motto is "College for Certain"; higher education is made the ambition of teachers and pupils alike.

### The key to success

Of the four chief elements of schools reform, diversity of supply is by far the most striking. From New York to Shanghai to Denmark, schools free of government control and run by non-state providers are adding quality to the mix. To date, they seem most successful where the state has been unwilling or unable to make a difference. It is still not clear whether creating archipelagoes of Free Schools and charter schools will consistently drive improvement in other institutions, or whether that is wishful thinking.

What is clear, however, is that the shiniest new academy will struggle without decent teachers. An emphasis on better teacher quality is a common feature of all reforms. Countries like Finland and South Korea make life easier for themselves by recruiting only elite graduates, and paying them accordingly. Mr Gove has said that he wants to raise the degree threshold for teachers and offer "golden hellos" in areas of shortage, like science and language teaching. America has experimented at state level with merit pay and payment by results, but often in the teeth of opposition from the teachers' unions.

In schools reform, structural progress—new sorts of schools, reorganised old ones, new exams—can happen very fast. Better teachers take much longer to form. They should be made the priority. •