

PISA 2009 Study: How big is the gap?

A comparison of pupil attainment in England with the top-performing countries

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Key Findings:

Nine countries scored statistically significantly higher than England across all three strands of the PISA assessment, (listed in descending order by average reading score) these were: Shanghai-China, Korea, Finland, Hong Kong-China, Singapore, Canada, New Zealand, Japan and Australia;

We can express the gap between average pupil score in England and the countries out-performing England in the PISA assessments using the familiar national attainment measures. The table below provides this information for the attainment gap in the reading strand of the PISA 2009 assessment:

Attainment gap between England and the countries performing significantly better than England in the PISA 2009 reading assessment expressed using various measures of attainment

Comparison Country ¹	Effect size	Reading strand Difference in pupil attainment...				
		...in PISA points	...in KS4 capped point scores	...in GCSE grades	...additional % pupils achieving 5 A*-C (inc. English and maths)	...in years' progress
Shanghai-China	0.6	62	66	11	22%	1.5
Korea	0.5	45	48	8	18%	1.1
Finland	0.4	42	44	7	17%	1.0
Hong Kong-China	0.4	39	42	7	16%	0.9
Singapore	0.3	32	34	6	14%	0.7
Canada	0.3	30	32	5	13%	0.7
New Zealand	0.3	27	28	5	12%	0.6
Japan	0.3	26	27	5	11%	0.6
Australia	0.2	21	22	4	10%	0.5
Netherlands	0.1	14	15	3	7%	0.3
Belgium	0.1	12	13	2	6%	0.3
Norway	0.1	9	10	2	5%	0.2
Iceland	0.1	6	7	1	3%	0.1

1. Countries listed in **bold** are OECD member states

Source: OECD, PISA 2009 Database & additional DfE analysis (shaded sections)

For example, to match the attainment of pupils from Shanghai-China (ranked number 1 across all strands in PISA 2009) in the reading assessment:

- Pupil attainment in England would need to be improved by an effect size of 0.6;
- An across the board effect size of 0.6 translates to an increase in every pupil's Key Stage 4 capped point score of 66, which is equivalent to 11 GCSE grades higher than the pupil is currently achieving (e.g. 3As and 5 Bs instead of 8 Cs);
- The current proportion of pupils achieving 5 A* - C grades (including English and mathematics) at the end of Key Stage 4 would increase by 22 percentage points. For all maintained schools in England this would be an increase from 55% of pupils achieving the threshold measure (in 2010) to 77%;
- In terms of years of progress, pupils in England are estimated to be 1.5 years behind their peers in Shanghai-China at age 15.

Additional Information

The full report can be accessed at <http://www.education.gov.uk/publications/>

Further information about this research can be obtained from
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