

PIRLS 2016

National Report for England

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PIRLS 2016

- PIRLS, run by the IEA, is an international comparative study of the reading literacy of pupils in their 4th year of formal schooling (Year 5 in England).
- In England, PIRLS includes a paper-based reading literacy assessment, a student questionnaire, teacher questionnaire, and a school questionnaire.
- In PIRLS 2016, 50 countries took part in the main study. England has participated in all four PIRLS cycles (2001, 2006, 2011 & 2016).
- England's 2016 sample consists of 5,095 pupils from 170 schools.
- 4,846 pupils are also matched with their National Pupil Database information, including their Year 1 phonics check score and KS1 reading level attainment, as well as background characteristics, including FSM eligibility, EAL status, and ethnicity.

England's mean score in PIRLS 2016 is **559**

- A **significant increase** from **552** in **2011** and **539** in **2006**.
- Not significantly different from England's 2001 score of 553.
- Significantly above the vast majority of countries participating in PIRLS. Only seven countries have significantly greater scores:

Russian Federation - **581**

Singapore - **576**

Hong Kong SAR - **569**

Ireland - **567**

Finland - **566**

Poland - **565**

Northern Ireland - **565**

International Achievement in Reading

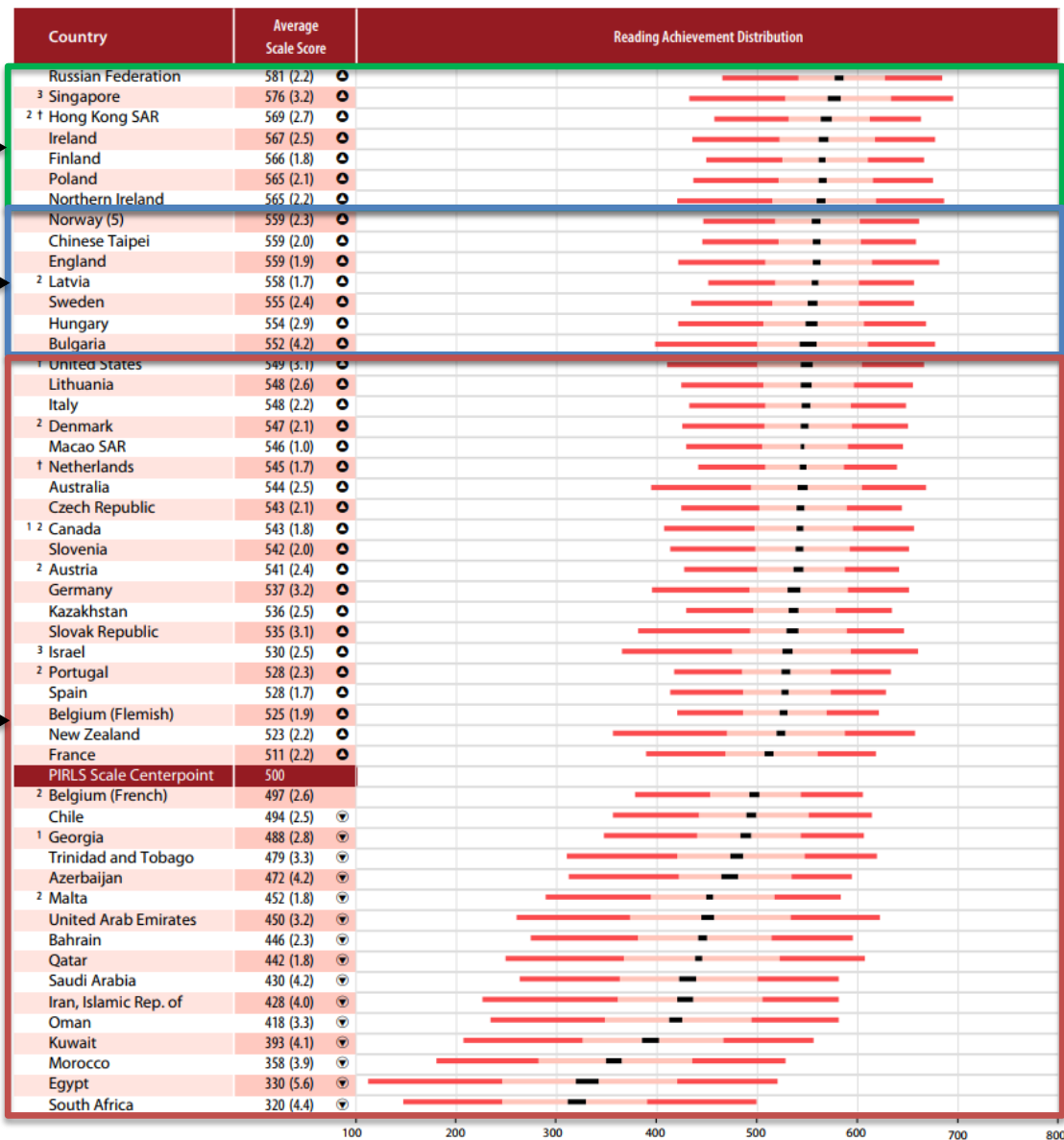
Russian Federation 581	Singapore 576	Fourth grade students in the Russian Federation and Singapore had the highest average reading achievement, followed by Hong Kong SAR, Ireland, Finland, Poland, and Northern Ireland.
Hong Kong SAR 569	Ireland 567	
Poland 565	Northern Ireland 565	
Norway (5) 559	Chinese Taipei 559	
England 559		
Latvia 558	Sweden 555	
Hungary 554		
Bulgaria 552	United States 549	
Lithuania 548		
Italy 548	Denmark 547	
Macao SAR 546	Netherlands 545	
Australia 544	Czech Republic 543	
Canada 543		
Slovenia 542	Austria 541	
Germany 537	Kazakhstan 536	
Slovak Republic 535	Israel 530	
Portugal 528	Spain 528	
Belgium (Fl) 525	New Zealand 523	
France 511	Belgium (Fr) 497	
Chile 494	Georgia 488	
Trinidad and Tobago 479	Azerbaijan 472	
Malta 452	United Arab Emirates 450	
Bahrain 446	Qatar 442	
Saudi Arabia 430	Iran, Islamic Rep. of 428	
Oman 418		
Kuwait 393	Morocco 358	
Egypt 330	South Africa 320	



7 countries with a significantly higher average score than England

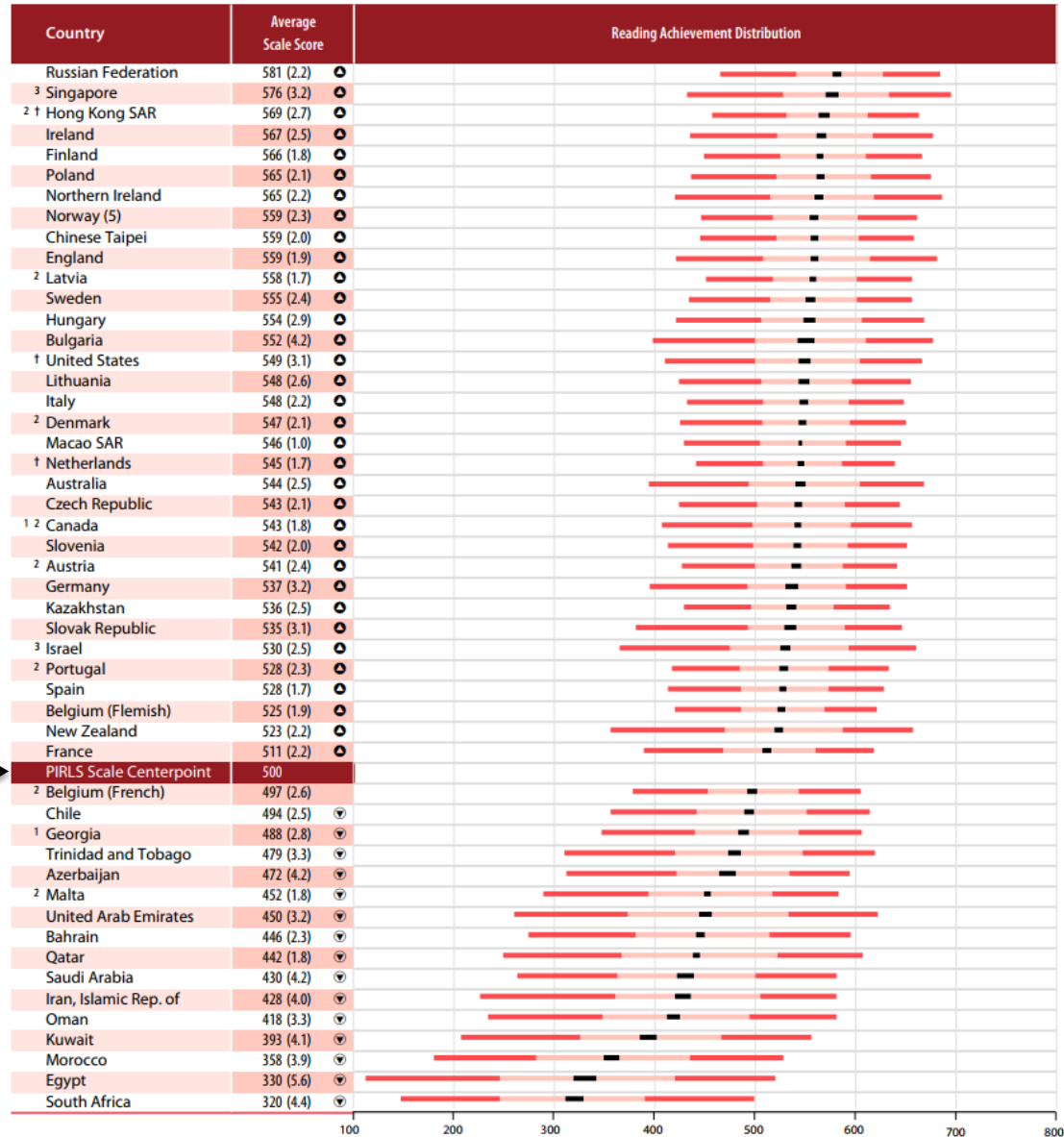
6 countries perform at a statistically comparable level to England

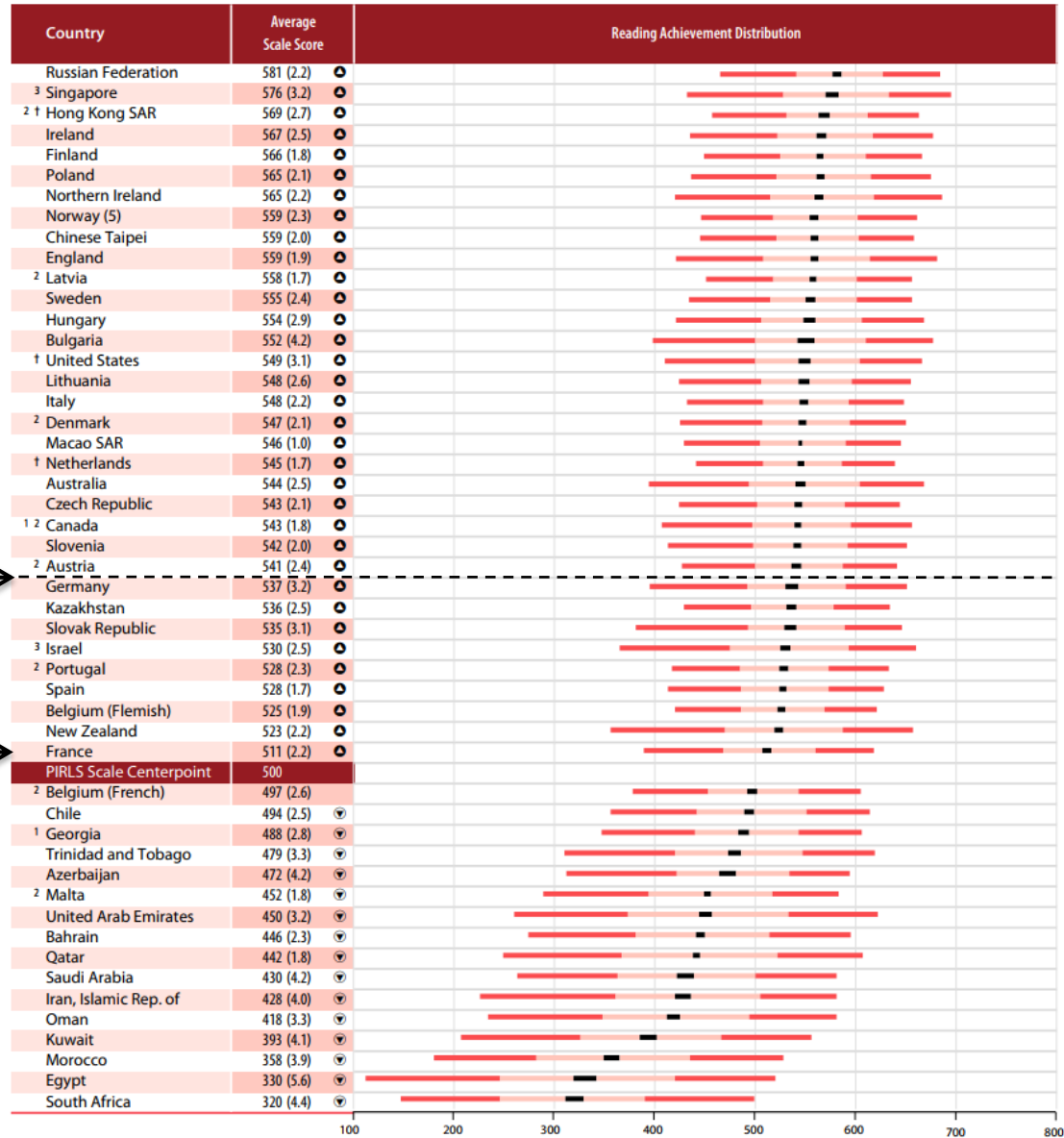
36 countries with a significantly lower average score than England



The PIRLS Scale Centrepoint of **500** reflects the International Mean in the 2001 cycle.

All subsequent PIRLS cycles are equated to the 2001 scale for trend comparisons.

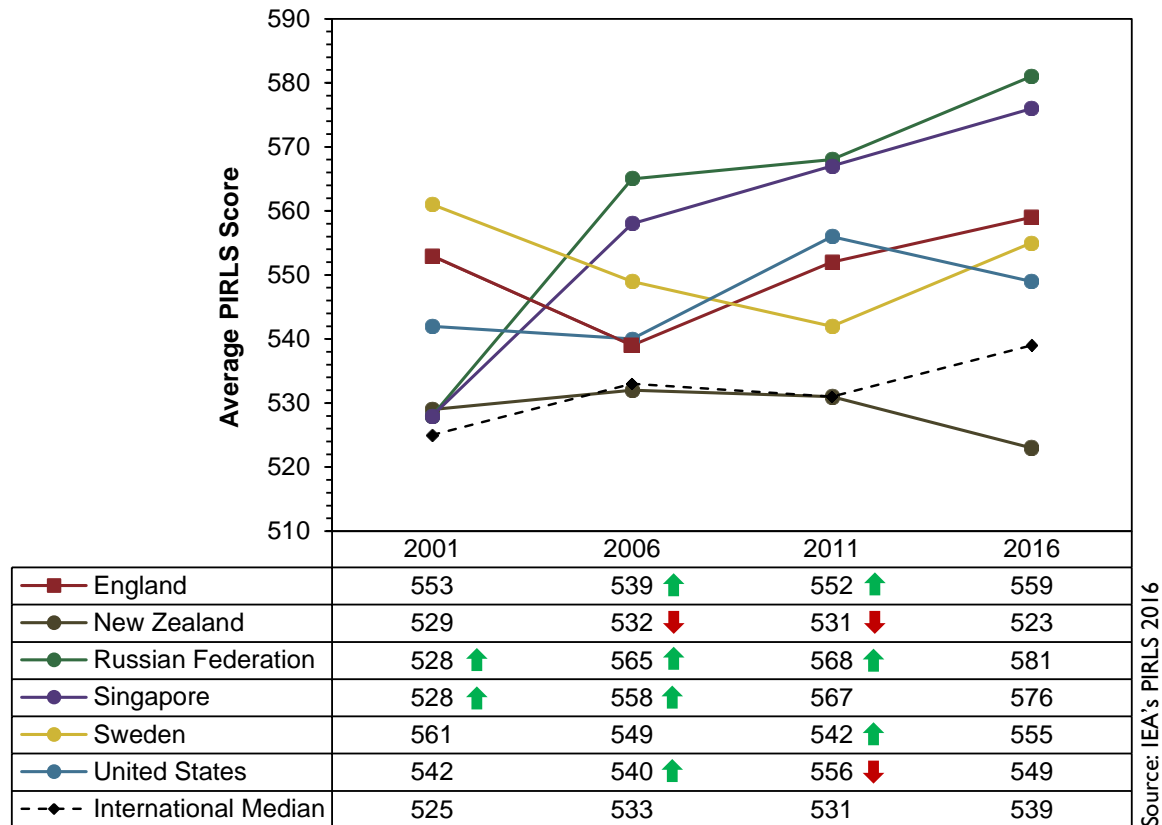




The International Median score
of PIRLS 2016 is **539**

The International Mean score of
PIRLS 2016 is **511**

Trends in average performance



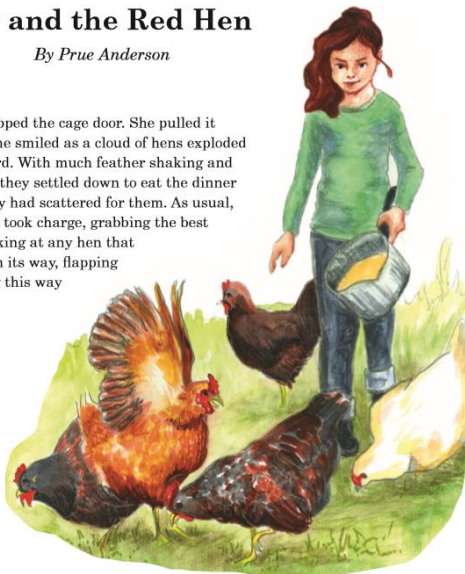
- England's average score in 2016 has **continued an upward trend** from 2006.

Purposes for Reading

Macy and the Red Hen

By Prue Anderson

Macy unclipped the cage door. She pulled it open and she smiled as a cloud of hens exploded into the yard. With much feather shaking and squawking they settled down to eat the dinner scraps Macy had scattered for them. As usual, the red hen took charge, grabbing the best scraps, pecking at any hen that dared get in its way, flapping and fussing this way and that.



"Why do the other hens let the red hen boss them like that?" Macy had asked her mother.

"Hens have a pecking order," her mother explained. "The bravest and strongest hen is in charge. She can peck all the other hens, but no one can peck her. The next hen in the pecking order can peck everyone except the top hen and so it goes all the way down, so you feel really sorry for the poor hen at the bottom. Hens like a bossy leader."

Source: IEA's PIRLS 2016

Reading for
'*literary experience*'

The Green Sea Turtle's Journey of a Lifetime

From *Turtle Travels*
By Gary Miller



Out From the Sand

It's a starry night in August. A nest of eggs lies buried in the sand more than 60cm below the surface of a Costa Rican beach. The nest holds more than 100 green sea turtle eggs, each about the size of a golf ball.

One of the baby sea turtles begins to stir and hatch from her egg. The hatchling tears at the shell of her egg with the sharp point on her beak. Still buried beneath the sand, the baby sea turtle breaks free. Soon, the whole nest is alive with motion.

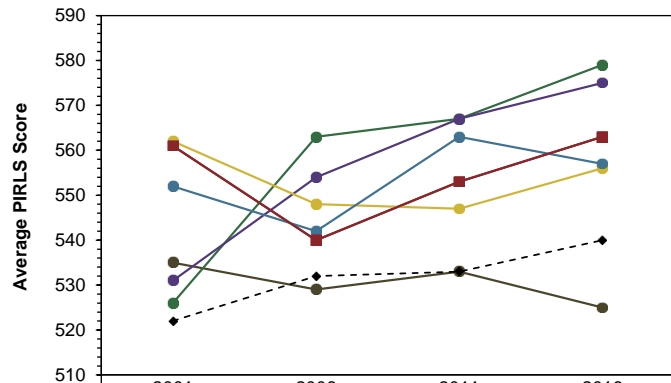
The baby turtle uses her flippers to climb up and up. It can take more than a day to reach the surface of the sand.

Source: IEA's PIRLS 2016

Reading to
'*acquire and use information*'

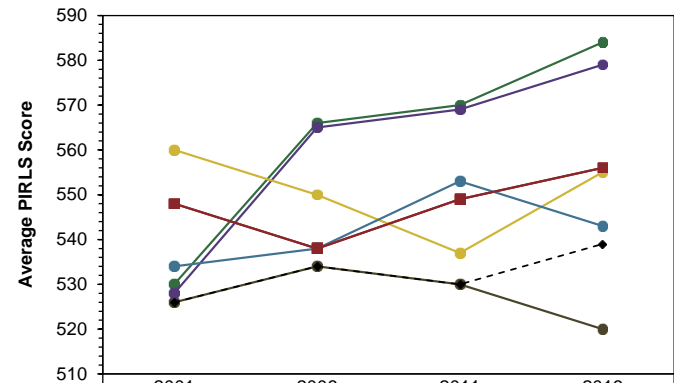
Performance on Purpose Scales

Trends in Literary Scale Scores



Source: IEA's PIRLS 2016

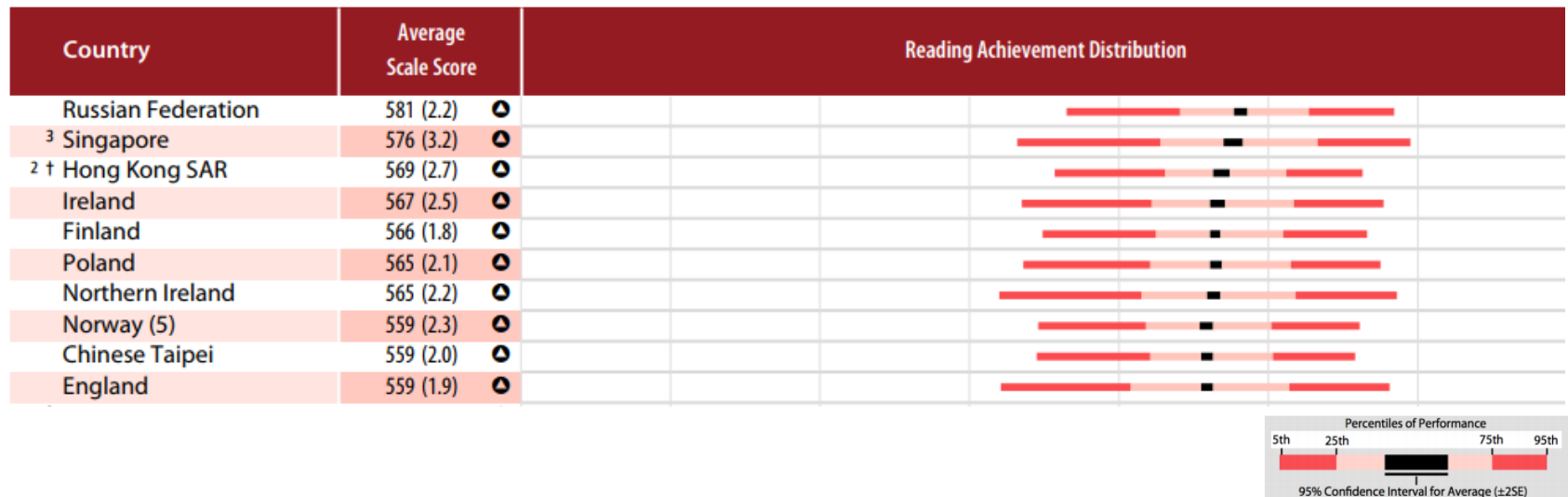
Trends in Informational Scale Scores



Source: IEA's PIRLS 2016

- In 2016, England's performance is significantly **better on the Literary Purpose Scale** compared to the Informational Purpose Scale (**563 vs. 556**)

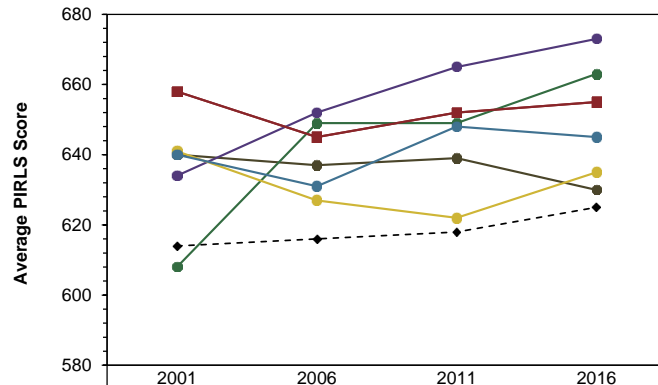
Performance distributions



- In addition to average PIRLS performance, countries also substantially differ in their distributions of performance - **England has a comparatively wide performance distribution**, which is commonly found in countries taking the assessment in English.
- England has a **long 'tail'** of performance, where the range of below-average scores is wider than the range of above-average scores in the total performance distribution.

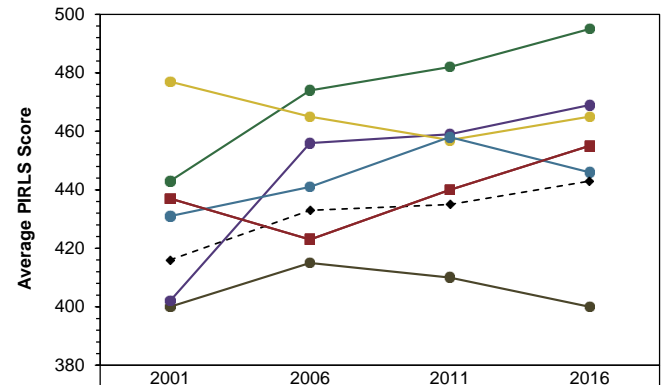
Trends for the highest and lowest performers – a shortened tail

90th Percentile Scores



	2001	2006	2011	2016
England	658	645	652	655
New Zealand	640	637	639	630
Russian Federation	608	649	649	663
Singapore	634	652	665	673
Sweden	641	627	622	635
United States	640	631	648	645
International Median	614	616	618	625

10th Percentile Scores

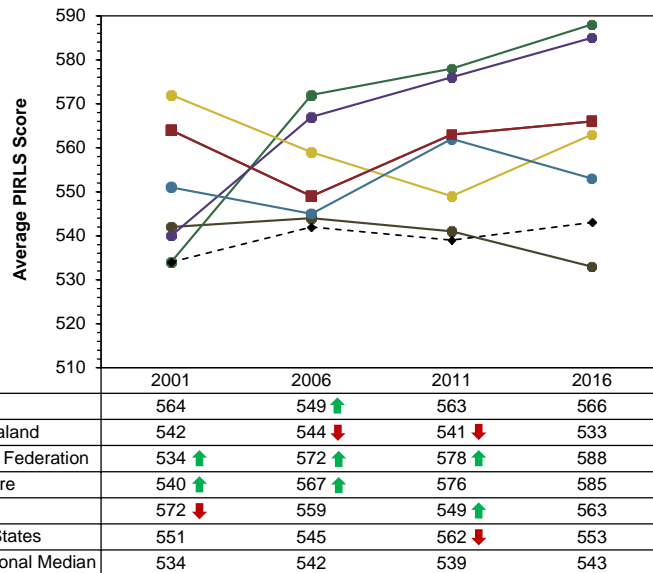


	2001	2006	2011	2016
England	437	423	440	455
New Zealand	400	415	410	400
Russian Federation	443	474	482	495
Singapore	402	456	459	469
Sweden	477	465	457	465
United States	431	441	458	446
International Median	416	433	435	443

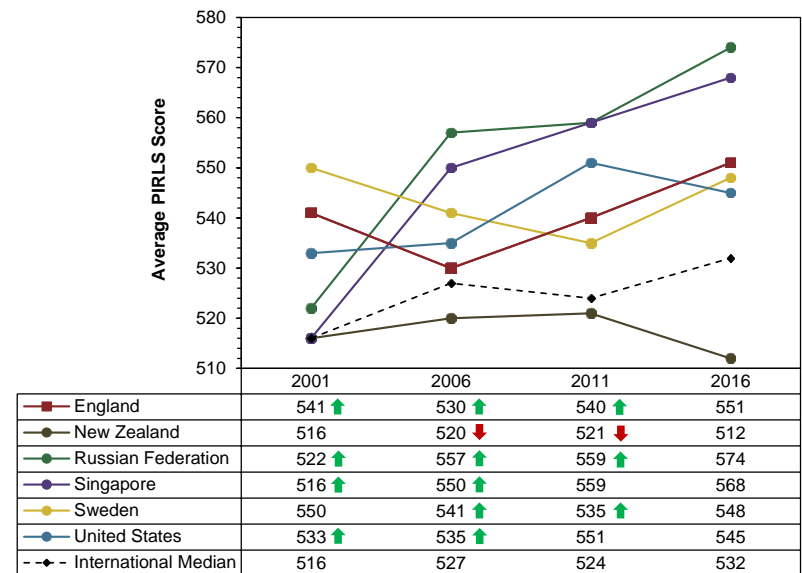
- England's highest-performers' (90th percentile) score is up 3-points from 2011
- England's **lowest-performers'** (10th percentile) score is **up 15-points** from 2011.

Performance by gender

Trends in Girls' Average Scores

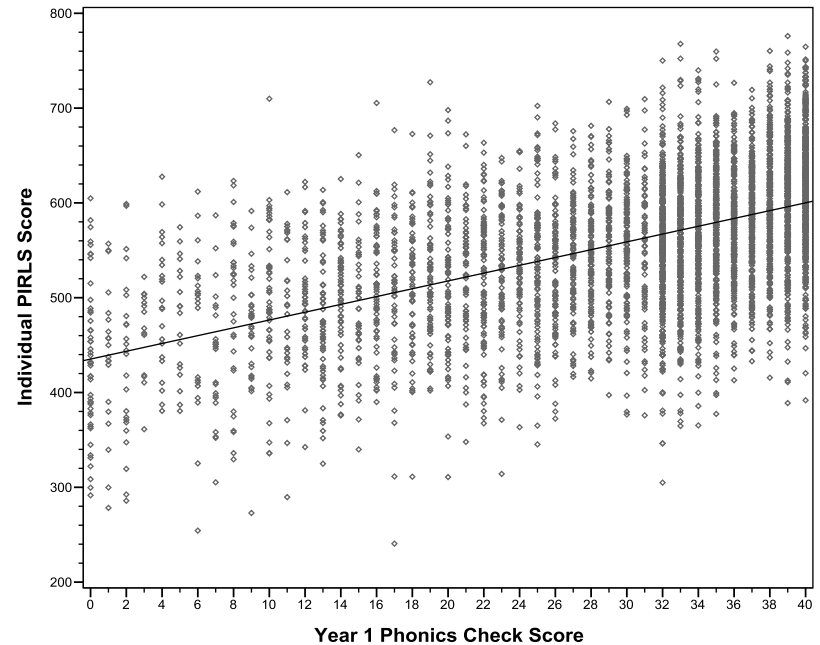
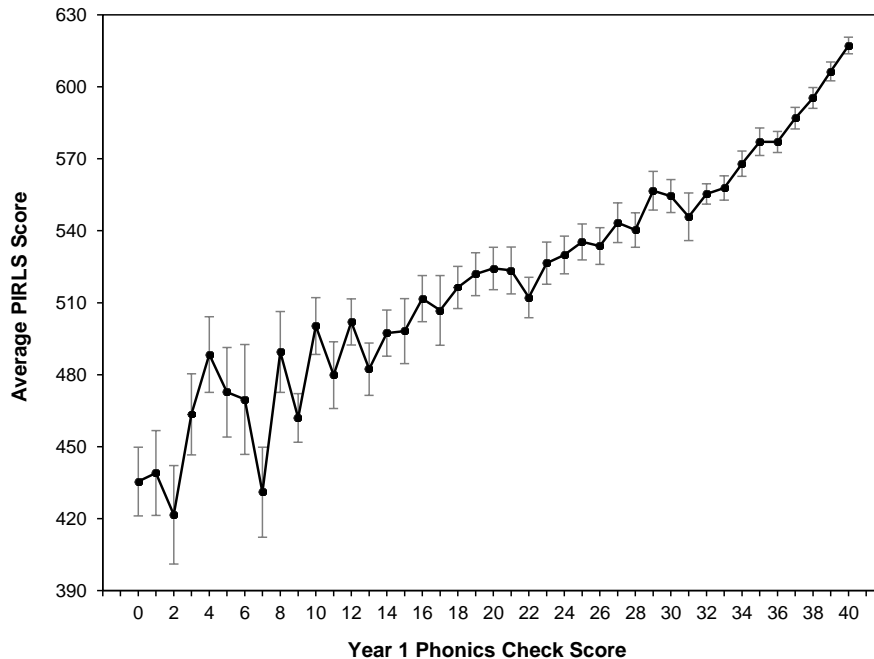


Trends in Boys' Average Scores



- Girls in England, and internationally, continue to outperform boys. The 2016 average score of England's girls is similar to 2001 and 2011.
- In England, the **gender-gap is reduced**, with boys in 2016 performing significantly better than they have in all three previous cycles.

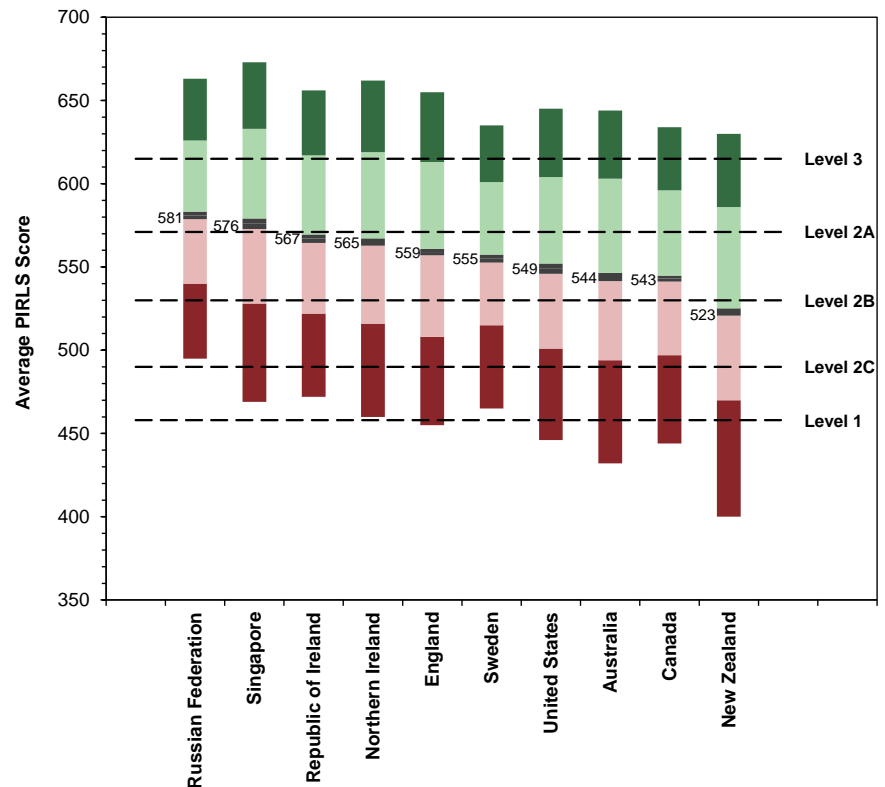
Performance by prior attainment - Phonics



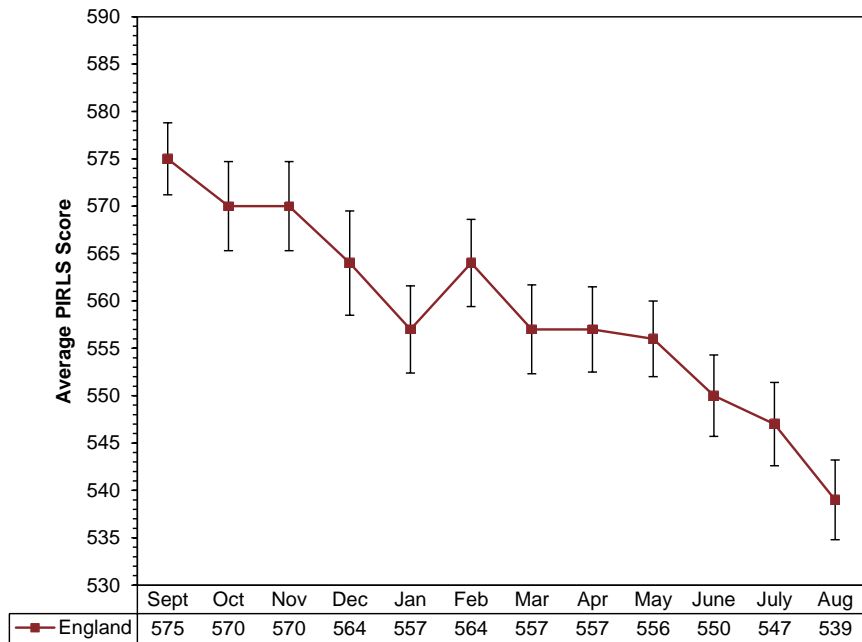
- Performance in the Year 1 phonics check has a **moderate, positive correlation** with PIRLS 2016 performance (**0.52**).
- The phonics check score is the most significant predictor of PIRLS performance.

Performance by prior attainment – KSI Reading

- Performance in the **KSI reading assessment** in Year 2 is also **positively associated with performance in PIRLS**.
- The average PIRLS performance of pupils who achieved a **Level 3** in their KSI reading is **615**.
- The average PIRLS performance of pupils who achieved a **Level 1** in their KSI reading is **458**.



Performance by pupil characteristics



- Number of books at home** – pupils who report having more than 200 books in their home score around **100-points higher** than those reporting that they have 10 or fewer books at home.
- Free school meal eligibility** – FSM eligible pupils score around **40-points less** than their non-eligible peers.
- Age** – September-born pupils (oldest) score around **36-points higher** than August-born (youngest).
- Pupil ethnicity** and **EAL status** have **no significant association** with PIRLS performance after accounting for prior attainment and other pupil characteristics.

Pupils' attitudes toward reading

- **20%** of England's pupils report that they **'do not like' reading**, which is higher than the **International Median of 17%**.
- In England, and internationally, both **higher confidence and liking of reading** are associated with **stronger performance** in PIRLS 2016.
- Although England's girls still report more positive attitudes toward reading, the **boys' attitudes have slightly improved from 2011**, particularly in terms of being assigned interesting things to read by their teacher.
- Pupils with **more than 200 books at home** report **much higher levels of confidence and liking** of reading than those with 10 or fewer books.

Performance by pupils' confidence

Country	'Confidence in Reading' Scale						
	Overall Average	Very confident		Somewhat confident		Not very confident	
		%	Av. Score	%	Av. Score	%	Av. Score
Sweden	555 (2.4)	65%	575 (2.3)	28%	532 (3.2)	8%	488 (5.2)
Republic of Ireland	567 (2.5)	55%	593 (2.6)	31%	550 (2.7)	14%	505 (4.2)
England	559 (1.9)	53%	591 (1.9)	31%	541 (2.6)	16%	488 (3.1)
Canada	543 (1.8)	51%	574 (1.6)	32%	530 (2.4)	17%	482 (3.2)
Northern Ireland	565 (2.2)	50%	598 (2.2)	33%	553 (3.0)	17%	493 (4.1)
United States	549 (3.1)	50%	583 (2.6)	32%	540 (3.4)	19%	496 (4.1)
Australia	544 (2.5)	49%	585 (2.4)	34%	526 (2.9)	16%	465 (3.7)
Singapore	576 (3.2)	48%	612 (2.6)	36%	562 (3.1)	16%	503 (4.8)
International Median	539	45%	567	34%	529	19%	483
Russian Federation	581 (2.2)	43%	609 (2.3)	38%	575 (2.4)	19%	532 (3.4)
New Zealand	523 (2.2)	35%	577 (2.5)	41%	520 (2.7)	24%	457 (3.8)

Source: IEA's PIRLS 2016

- In England, **53% of pupils are 'very confident'** readers, compared to an **International Median of 45%**.
- 'Very confident' pupils in England score, on average, **103-points higher** than 'Not very confident' pupils.

Teacher characteristics

- Teachers in England report an average of **11-years of teaching experience**, compared to an **International Median of 17-years**. In England, there is no association between years of teaching experience and the average performance of pupils.
- In England, **51%** of pupils' teachers report that they are **'very satisfied' with their careers**, which is **below the International Median of 54%**. In England, there is no association between career satisfaction and average PIRLS performance.
- England's teachers have comparatively low levels of reading-related professional development, with **18%** of pupils' teachers reporting receiving **no professional development**, which is **above the International Median of 10%**.

School characteristics

- In England, **24%** of pupils' headteachers report that their **school's emphasis on academic success is 'very high'**, compared to an International Median of just 5%.
- The majority of pupils (**82%**) in England attend **schools deemed to be very safe and orderly, and with effective discipline**, as reported by their teachers and headteachers.
- However, **15%** of pupils in England report **experiencing bullying 'about weekly'**, similar to the International Median. Pupils that report weekly bullying have an **average performance 38-points below** pupils that report almost never being bullied.

Thank you for listening!

- To access the PIRLS 2016 National Report for England, please go to:

<https://www.gov.uk/government/publications/pirls-2016-reading-literacy-performance-in-england>

- To access other materials, including a copy of this presentation, the 2-page summary of the National Report, and a podcast discussion of the main findings, please go to our website at:

<http://oucea.education.ox.ac.uk/PIRLS2016/>