



CENTER ON INTERNATIONAL
EDUCATION BENCHMARKING
LEARNING FROM THE WORLD'S HIGH PERFORMING EDUCATION SYSTEMS

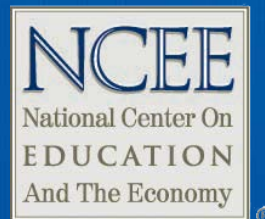
PISA 2015 Results for the US

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Overview of PISA

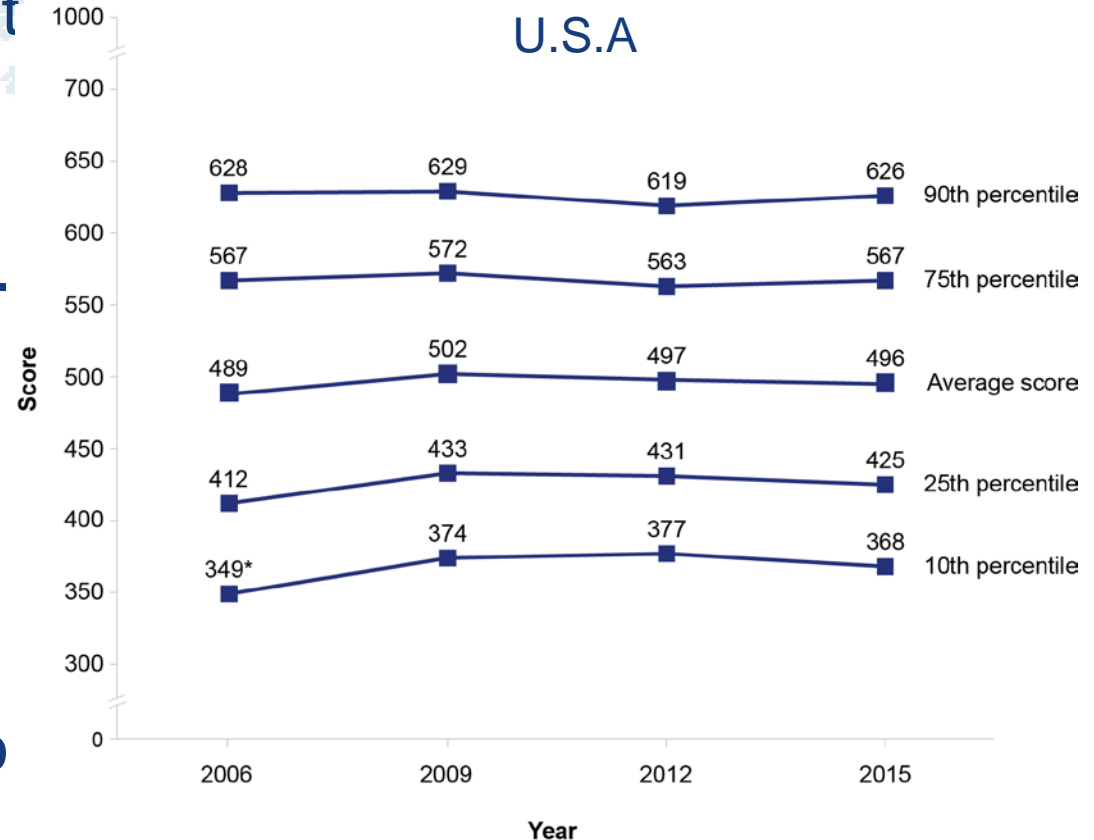
- PISA is administered every three years in
 - Reading
 - Mathematics
 - Science
- The focus for this administration of the exam was science:
 - How a student uses, applies and creatively extrapolates what they know about science in new contexts in addition to understanding the disciplines of science.



U.S. Performance on PISA

- U.S. average student performance in science and reading on the PISA 2015 assessment was flat.
- There was no significant change since 2012.
- This level of performance is at about the OECD average in those two subjects.

PISA Science Performance Trends:
U.S.A



U.S. Performance on PISA

- Top performing students in the U.S. did better in science and reading, but their performance was offset by a decline in performance of the lower performers.
- One bit of good news is the change in the right direction of the impact of socioeconomic status on performance.
- In 2006, SES explained 17 percent of a student's science score and in 2015 it dropped to 11 percent.



Is this a Sputnik Moment?

- In addition to Shanghai, three provinces in China administered PISA 2015.
- If you combine the populations of these provinces, that population would be the fifth biggest in the world.
- These four provinces' students greatly outperformed U.S. 15 year olds in math (5th) and science (9th), with their average reading score about the same as US students.



U.S. and China: Comparison

- Average GDP per capita in the US is \$53,000
- Average GDP per capita in the four provinces in China is less than \$15,000
- And, on average, Chinese labor costs are 1/5th of US labor costs



Some Other Good News

- Massachusetts moves up in the rankings
- Only Singapore did better in science
- Massachusetts tied with Singapore for first in reading
- 11 systems scored higher in math



International Top Performers

- Germany, New Zealand and the Netherlands joined the top ranks.
- Estonia, Canada, Finland and top Asian nations remain in the top of the league tables.



Singapore

- A very high proportion of Singapore students perform at the highest level on PISA.
- In math, 35% are able to successfully respond to the toughest PISA problems compared to 6% of U.S. students.



Singapore

PISA 2015 Percentage of Top Performers (Levels 5 and Above) in Science

- A very high proportion of Singapore students are also in the top ranks in science.
- 24% in Singapore compared to 9% in the US.

