Education Singapore **30 Innovation** OECD average 30 Index

Innovation in education by category



30 31



32 30



32 35



29

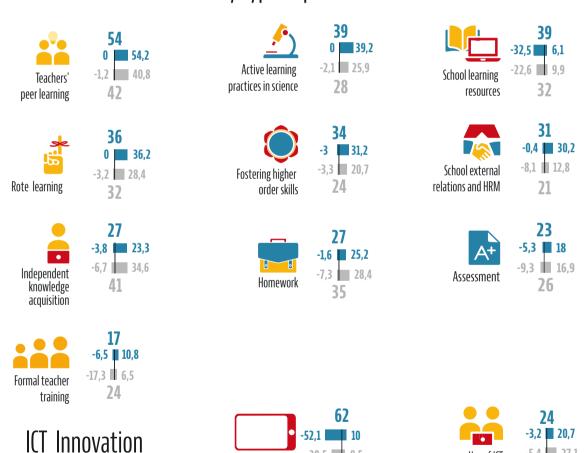


22 27

-5.4 27.1

33

Innovation in education by type of practice



The indices indicate innovation intensity from small (below 20) to large (over 40). When displayed, positive and negative values show how much of the index corresponds to a expansion and contraction of the covered practices between 2006 and 2016. Authors' calculations based on the PIRLS, PISA and TIMSS databases.

Computer availability

in schools



Singapore

Between 2006 and 2016, Singapore has experienced a moderate level of innovation in par with the OECD average. education. on Innovation has been almost equally distributed between primary and secondary education. Changes in maths and science practices were moderate (though below the OECD average in maths), and small in reading, an area where practices remained relatively stable. Access to computers in school decreased, to an even greater extent than in OECD systems, while the use of ICT spread a bit, though less than in the OECD area. Major areas of innovation lay in the spread of teacher peer learning practices and the scale up of active learning practices in science, rote learning practices, as well as practices fostering students' higher order skills.

Practices that changed the most

Primary

- **44** more students in 100 frequently observed and described natural phenomena in science lessons, reaching a 59% coverage
- 44 fewer students in 100 in maths and
- **38** less in reading had computers (including tablets) available to use during lessons, reaching a 37% and 55% coverage respectively
- 31 more students in 100 had teachers with assistance available to work with students who have difficulty in reading. reaching a 32% coverage

Secondary

- 38 more students in 100 in maths and **38** more in science systematically discussed homework in class, reaching a **68%** and **73%** coverage respectively
- 36 more students in 100 frequently observed and described natural phenomena in science lessons, reaching a 54% coverage
- **33** more students in 100 had portable laptops or notebooks available for use at school, reaching a 79% coverage

Some trends in educational outcomes



Academic outcome in primary reading Academic outcome in primary and secondary maths

Academic outcome in secondary science Student satisfaction in primary education

Student enjoyment in primary and secondary science lessons

Teachers' collective ambition for their students in primary and secondary education

Equity of academic outcomes in secondary science

Equity of academic outcomes in secondary maths



Academic outcome in primary science Student satisfaction in secondary education

Teachers' collective self-efficacy in primary and secondary education Equity of academic outcomes in

primary reading

Equity of academic outcomes in primary science

Equity of academic outcomes in primary maths





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