

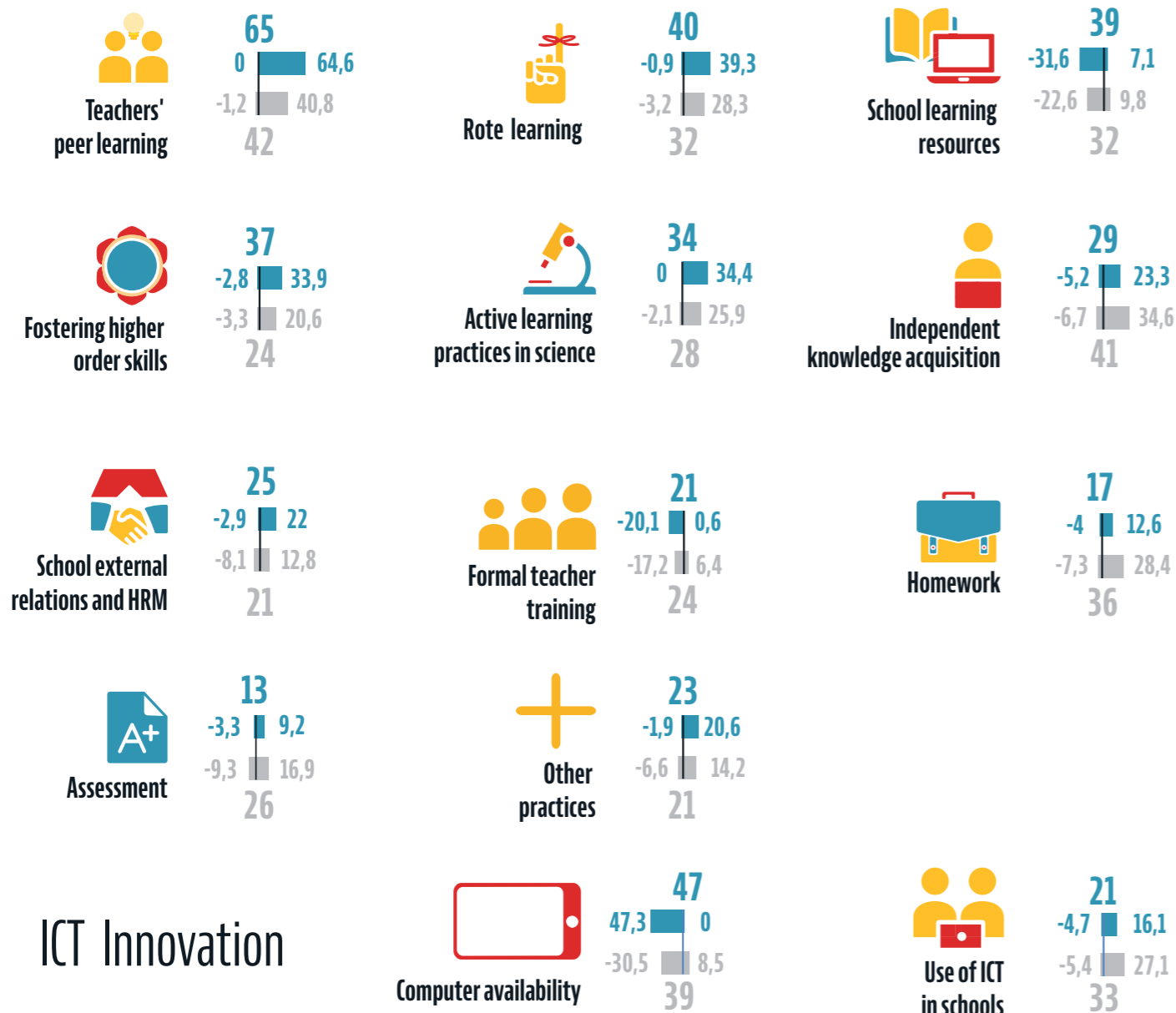
Hong Kong, China **29**
OECD average **30**

Education Innovation Index

Innovation in education by category



Innovation in education by type of practice



ICT Innovation

Hong Kong, China

Between 2006 and 2016, Hong Kong, China, has experienced moderate innovation in education, with more change in primary than in secondary education practices. Innovation has been larger in science than in reading and maths, with a different pattern than in OECD systems where innovation typically came from changes in maths education practices. As in other systems, access to computers in schools and classes has dropped a bit, but mainly the use of ICT in class has not expanded as much in comparison to the average OECD system. The main areas of innovation were the expansion of teacher peer learning, the spread of rote learning practices and of practices that foster higher order skills. Succinctly put, most educational outcomes in Hong Kong have either improved or remained stable.

Some trends in educational outcomes

- +** Academic outcome in secondary science
- Academic outcome in secondary maths
- Student satisfaction in primary and secondary education
- Student enjoyment in primary and secondary science lessons
- Teachers' collective ambition for their students in primary education
- Teachers' collective self-efficacy in primary education
- =** Academic outcome in primary science
- Academic outcome in primary maths
- Academic outcome in primary reading
- Teachers' collective ambition for their students in secondary education
- Teachers' collective self-efficacy in secondary education
- Equity of academic outcomes in primary reading
- Equity of academic outcomes in primary and secondary science
- Equity of academic outcomes in secondary maths
- Equity of academic outcomes in primary maths

Practices that changed the most

Primary

- 58 less students in 100 had computers (including tablets) available during reading lessons, reaching a **35%** coverage
- 47 more students in 100 had teachers collaborating in preparing instructional material, reaching a **70%** coverage
- 32 more students in 100 had their teachers visiting another classroom to learn more about teaching, reaching a **33%** coverage

Secondary

- 42 more students in 100 frequently observed and described natural phenomena in science lessons, reaching a **62%** coverage
- 32 more students in 100 regularly watched teachers demonstrate an experiment in science lessons, reaching a **51%** coverage
- 22 more students in 100 in science had their teachers visiting another classroom to learn more about teaching, reaching a **25%** coverage

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 an expansion and contraction of the covered practices between 2006 and 2016. Authors' calculations based on the PIRLS, PISA and TIMSS databases.



Hong Kong, China

Measuring Innovation in Education 2019

What has changed in the classroom?

Measuring innovation in education and understanding its process is essential to improve the quality of the education sector. We need to examine whether, and how, practices are changing within classrooms and educational organisations and how students use learning resources. We should know much more about how teachers change their professional development practices, how schools change their ways to relate to parents, and, more generally, to what extent change and innovation are linked to better educational outcomes. This would help policy makers to better target interventions and resources, better understand where they need to get better evidence, and get quick feedback on whether reforms do change educational practices as expected. This would also enable us to better understand the role of innovation in education.

Key findings for OECD education systems

- On average, there has been a moderate level of innovation in OECD education systems, perhaps more than one would often acknowledge, but probably less than what would be needed to really improve education systems
- Many education systems have experienced high levels of technology-related innovation, with a slight decrease in access to computers and a significant increase of the use of ICT in pedagogical practices. Furthermore, on average, access to laptops increased by 17 % points between 2009 and 2015.
- In many countries, peer learning has spread as a teacher professional development practice – increasing by 40 % points for the OECD on average.
- While many policy debates have focused on “21st century skills” in the past decade, rote learning practices have spread to a similar extent as active learning practices, increasing by 28 and 26 % points respectively.
- While in some practices there have been similar patterns across education systems, in most of them there does not seem to be an international convergence on pedagogical and educational practices.
- Innovation is not an end in itself, and some changes have not always translated into improvements in educational outcomes.

Methodology

The book examines the diffusion or contraction of about 150 educational practices from 2006 to 2016 by analysing data from three international education datasets – Trends in International Mathematics and Science Study (TIMSS), Progress in International Reading Literacy Study (PIRLS), and the Programme on International Student Assessment (PISA). Beyond identifying the areas in which each education system has demonstrated emerging or changing organisational and pedagogical practices over a decade, the book synthesises education systems’ intensity of innovation by computing composite indices for countries for which enough information is available. Based on effects sizes (multiplied by 100), the education innovation indices propose a continuum, with innovation intensity being considered as relatively small when below 20, moderate between 20 and 40, and large above 40. More details on the methodology can be found in the report.

Ask questions

Stéphan Vincent-Lancrin:
Stephan.Vincent-Lancrin@oecd.org

Find the report

<https://tinyurl.com/MIE2019>

Visit our website

<https://tinyurl.com/InnovStrategy>

The **OECD Centre for Educational Research and Innovation (CERI)** provides and promotes international comparative research, innovation and key indicators, explores forward-looking and innovative approaches to education and learning, and facilitates bridges between educational research, innovation and policy development.

Explore our data on education and skills

gpseducation.oecd.org

Read our books on line

www.oecd-ilibrary.org/education/books

Buy our books online or in print

www.oecd-ilibrary.org
www.oecd.org/bookshop

Connect with us

Education and Skills Today:
oecdeducationtoday.blogspot.fr

Twitter: @OECD_Edu

Subscribe to our newsletter

www.oecd.org/edu/newsletter.htm



Co-funded by the
European Union



Hong Kong, China

Measuring Innovation in Education 2019

What has changed in the classroom?

