Education Innovation Index

Japan 22

OECD average 30

Innovation in education by category

Secondary

26

30

Maths

22

35

Science

27

29

Innovation in education by type of practice

Teachers' peer learning

30

-5,9 23,9

-1,2 40,8

42

Rote learning

26

-2,9 24,8

-3,2 28,3

32

Independent knowledge acquisition

26

-3,2 22,2

-6,7 34,6

41

Homework

25

-0,8 23,8

-7,3 28,4

36

Active learning practices in science

21

-2,6 18,3

-2,1 25,9

28

Fostering higher order skills

20

0 19,8

-3,3 20,6

24

School external relations and HRM

17

-11,8 5,3

-8,1 12,8

21

Formal teacher training

12

-8,8 3

-17,2 6,4

24

ICT Innovation

Computer availability

46

-45,9 0

-30,5 8,5

39

Use of ICT in schools

18

-4,1 13,5

-5,4 27

33

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.

Japan

Between 2006 and 2016, Japanese students have experienced little innovation in education, much less than their OECD peers. Innovation in secondary education was higher than at the system level. While data gaps prevented the calculation of a primary education innovation index, this suggests a much lower level of innovation at that level. In terms of discipline, pedagogical practices in science education changed roughly as much as in other countries. It is mainly in mathematics education that practices remained stable while they changed moderately elsewhere. Access to computers dropped a bit, more than in other systems, while the use of ICT in school remained much more stable. Given the good learning outcomes of Japan in international assessments, it is possible that teachers felt less pressure than elsewhere to change their pedagogical practices.

Practices that changed the most

Primary

30 less students in 100 had computers (including tablets) available during maths lessons, reaching a **48%** coverage

26 more students in 100 had teachers with assistance available while conducting experiments in science, reaching a **28%** coverage

22 more students in 100 had their teachers visiting another classroom to learn more about teaching, reaching a **29%** coverage

Secondary

43 more students in 100 had teachers putting major emphasis on classroom tests in science, reaching a **94%** coverage

26 more students in 100 had teachers with assistance available while conducting experiments in science, reaching a **28%** coverage

22 more students in 100 had teachers systematically asking them to correct their own science homework, reaching a **69%** coverage

Some trends in educational outcomes

Academic outcome in primary and secondary science

Academic outcome in primary and secondary maths

Student satisfaction in secondary education

Student enjoyment in primary and secondary science lessons

Teachers' collective self-efficacy in primary and secondary education

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

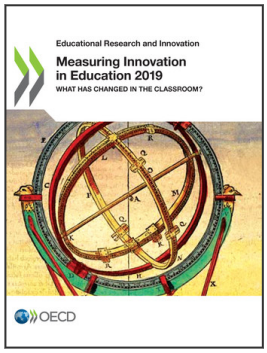
Student satisfaction in primary education

Equity of academic outcomes in primary reading

Equity of academic outcome in primary and secondary science

Equity of academic outcome in primary maths

Equity of academic outcome in secondary maths



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