Indonesia has experienced a high level of innovation in education, exceeding the level of change in the average OECD system. Innovation in secondary education was slightly lower than at the overall system level, while still being above the OECD average, showing that, while a primary education innovation index could not be computed because of data gaps, existing data point to greater changes at that level. At the disciplinary level, only a reading education innovation index could be computed for the 2006-2011 period: Indonesia experienced significant innovation, much larger than in the average OECD system. Students experienced large changes in assessment practices and in how schools relate to their stakeholders. The use of practices to foster students’ higher order skills has also spread considerably.

### Practices that changed the most

#### Primary
- 45 more students in 100 had teachers putting major emphasis on national or regional tests in reading, reaching a 76% coverage
- 38 more students in 100 frequently explained the style and structure of read text in reading lessons, reaching an 82% coverage
- 28 more students in 100 frequently discussed read text with peers, reaching a 93% coverage

#### Secondary
- 46 more students in 100 in science and 35 more in maths systematically discussed homework in class, reaching a 67% and 58% coverage respectively
- 38 more students in 100 went to schools which tracked achievement data over time by an administrative authority, reaching a 95% coverage
- 28 more students in 100 frequently studied natural phenomena through simulations on computers in science lessons, reaching a 32% coverage
Indonesia
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.