



How can professional development enhance teachers' classroom practices?

- Teacher professional development is deemed to be high quality when it includes opportunities for active learning methods, an extended time period, a group of colleagues, and collective learning activities or research with other teachers. The higher the exposure of teachers to high-quality professional development, the more likely they are to use a wide variety of teaching practices in the classroom.
- Professional development activities that focus on curriculum knowledge (rather than subject knowledge or pedagogy) and that involve collaborating with other teachers seem particularly well suited to enhancing teachers' classroom practices. However, these types of professional development are not those that are most widely used around the world.
- Not all teachers have equal access to high-quality professional development. In some countries and economies, different participation rates in high-quality professional development are observed between male and female teachers, as well as between teachers who have and have not completed initial teacher education.

What is TALIS?

TALIS (Teaching and Learning International Survey) is the first international survey examining teaching and learning environments in schools. It asks teachers and school principals about their work, their schools and their classrooms. This cross-country analysis helps countries identify others facing similar challenges and learn about their policies.

TALIS 2013 focused on lower secondary education teachers and their principals. It sampled 200 schools in more than 30 countries and 20 teachers in each school.

More information is available at: www.oecd.org/talis

Participation in high-quality professional development and classroom practices

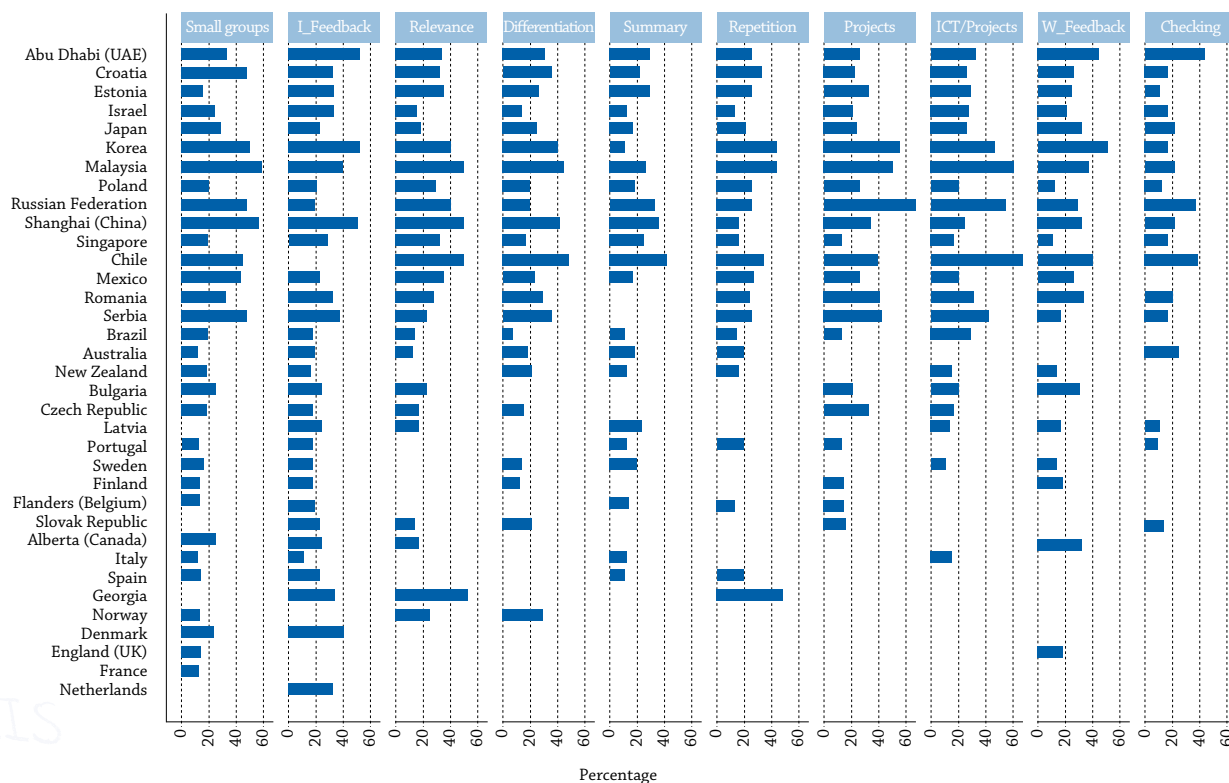
Ensuring that teachers around the world have the essential competencies they require to be effective in the classroom is key to raising levels of student achievement. Education systems, therefore, seek to provide teachers with opportunities for developing and extending their competencies in order to achieve or maintain a high-standard of teaching and develop a high-quality teacher workforce.

Teacher professional development is deemed to be high quality when it includes opportunities for active learning methods (i.e. not only listening to a lecturer), an extended time period, a group of colleagues from the teacher's school or subject group, and collective learning activities or research with other teachers. According to TALIS 2013 data from 35 countries and economies, teachers who have taken part in high-quality professional development are also more likely to use classroom practices that are known to promote student learning (see Figure 1), such as presenting a summary of recently learned content, having students work in small groups, and providing written or immediate feedback on student work - see Box 1 for a description of the ten main classroom practices identified. A positive relationship between participation in high-quality professional development and at least 5 of the 10 classroom practices is found in 13 countries and economies, while 11 countries and economies show a positive



relationship with all 10 classroom practices. TALIS results suggest that teacher participation in high-quality professional development is systematically associated with a more intense use of some of the classroom practices that are key to student learning.

Figure 1 • Relationship between participation in high-quality professional development activities and the use of classroom practices



Countries are ranked in descending order by number of significant estimates across classroom practices.

Note: Bars indicate the change in the odds of reporting the use of each classroom practice. A higher level of frequency is associated with a one standard deviation increase in the exposure of teachers to high-quality teacher professional development.

Source: OECD (2013), *Teaching and Learning International Survey (TALIS): 2013 complete database*, http://stats.oecd.org/index.aspx?datasetcode=talis_2013%20.

Box 1: Spotlight on ten key classroom practices

As part of TALIS, teachers were asked to report the frequency with which they use the following teaching and assessment practices:

1. Summary: presenting a summary of recently learned content.
2. Small groups: having students work in small groups to come up with a joint solution to a problem or task.
3. Differentiation: giving different work to students who have difficulties learning and/or to those who can advance faster.
4. Relevance: referring to a problem from everyday life or work to demonstrate why new knowledge is useful.
5. Repetition: letting students practice similar tasks until every student has understood the subject matter.
6. Checking: checking students' exercise books or homework.
7. Projects: having students work on projects that require at least one week to complete.
8. ICT/Projects: having students use ICT for project or class work.
9. W_Feedback: providing written feedback on student work in addition to a mark.
10. I_Feedback: observing students when working on particular tasks and provide immediate feedback.



How to best promote the development of teachers' classroom practices

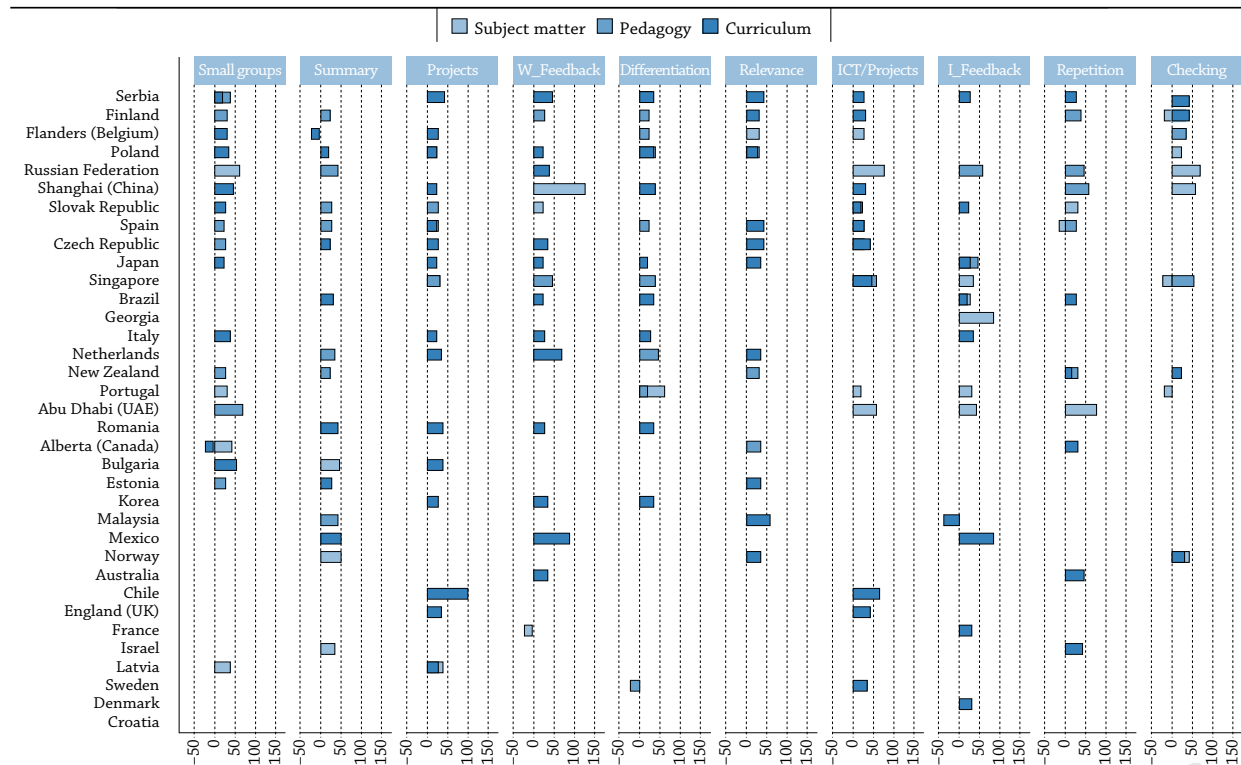
In order to understand how policy makers can meet the demand for teacher professional development so as to achieve or maintain quality education, it is important to consider the content and the delivery mode that best promote this development.

Professional development activities usually focus on three types of content: 1) subject matter, knowledge and understanding of teachers' subject field(s); 2) pedagogy, pedagogical competencies in teaching teachers' subject field(s); and 3) curriculum, knowledge of the curriculum. Teachers who have participated in professional development activities that focus on any of these types of content also tend to more frequently use often-praised classroom practices (see Figure 2). For every country and economy (with the exception of Croatia), there is one focus of professional development activities that is consistently positively related to a more intense use of at least some instructional methods.

Participating in professional development that focuses on the curriculum rather than subject matter or pedagogy makes a teacher more likely to report making an effort to enhance students' learning and means teachers are more likely to use each instructional method (with the exception of presenting a summary of recently learned content and checking students' notebooks).

TALIS

Figure 2 • Relationship between the focus of professional development activities and the use of classroom practices



TALIS

Countries are ranked in descending order by number of significant estimates across classroom practices.

Note: Bars indicate the change in the odds of reporting the use of each classroom practice. A higher level of frequency is associated with a one standard deviation increase in the exposure of teachers to high-quality teacher professional development.

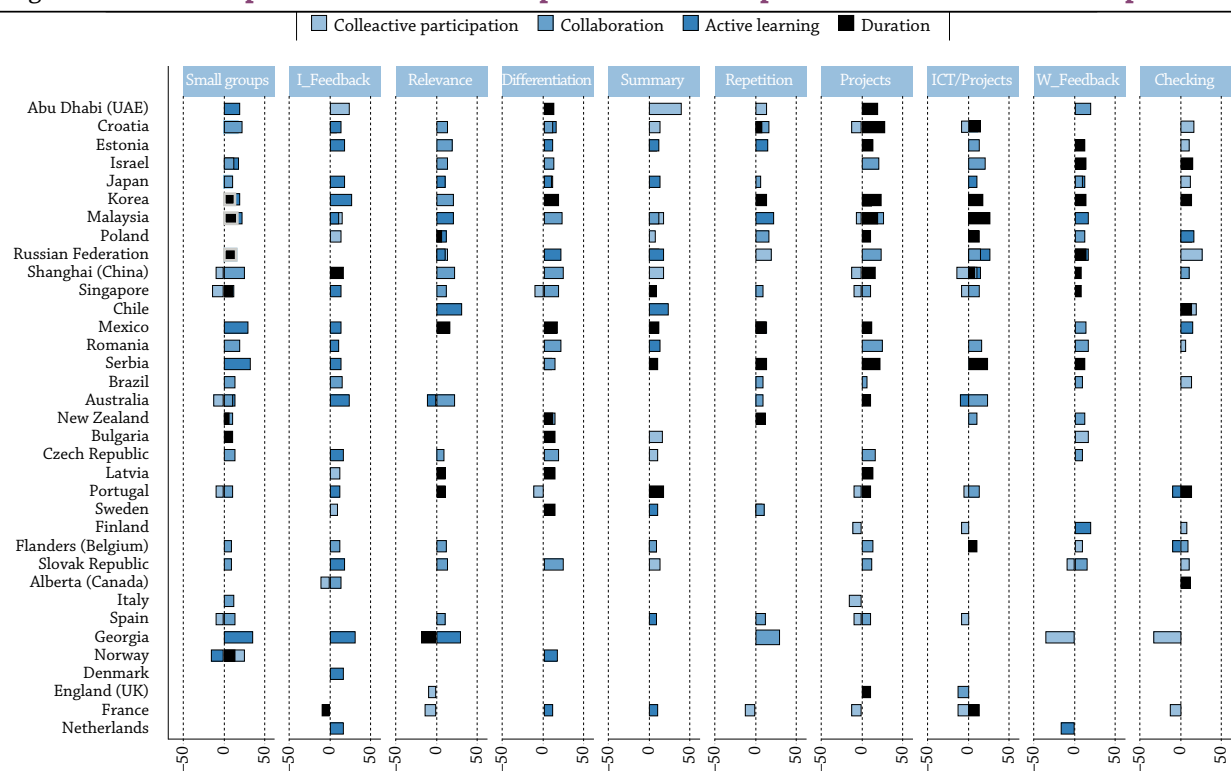
Source: OECD (2013), *Teaching and Learning International Survey (TALIS): 2013 complete database*, http://stats.oecd.org/index.aspx?datasetcode=talis_2013%20.



How to best implement teacher professional development?

Apart from the focus of teacher professional development, how it is delivered is essential for developing teachers' instructional practices. The components of professional development activities that best support teachers' work include: *active learning* – giving teachers opportunities for active learning methods apart from simply listening to a lecture; *duration* – an extended time period with several occasions for professional development spread out over several weeks or months; *collective participation* – including a group of colleagues from the teacher's school or subject group; and *collaboration* – collaborative learning activities or research with other teachers. These are all features of professional development that are, in general, positively related with a more intense use of classroom practices. Some negative associations are observed, in particular, when collective participation is involved. Collaborative learning activities or research with other teachers are the only features of professional development programmes that are consistently positively associated with teachers' instructional methods.

Figure 3 • Relationship between the features of professional development and the use of classroom practices



TALIS

Countries are ranked in descending order by number of significant estimates across classroom practices.

Note: Bars indicate the change in the odds of reporting the use of each classroom practice. A higher level of frequency is associated with a one standard deviation increase in the exposure of teachers to high-quality teacher professional development.

Source: OECD (2013), *Teaching and Learning International Survey (TALIS): 2013 complete database*, http://stats.oecd.org/index.aspx?datasetcode=talis_2013%20.

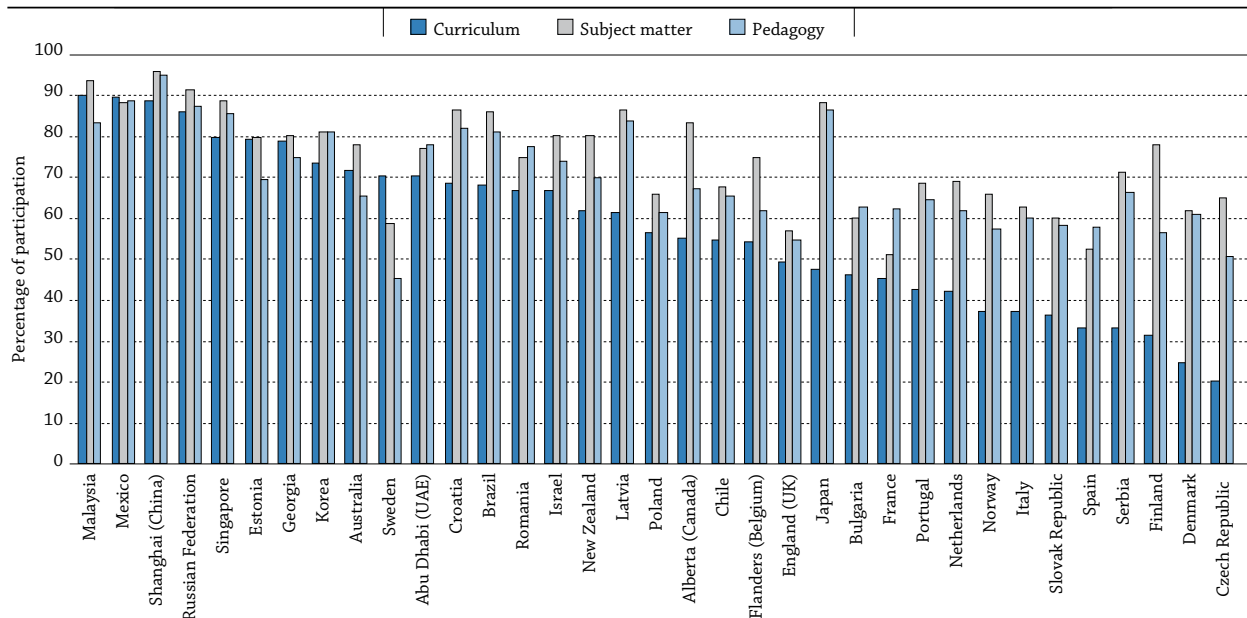
Do all teachers have access to high-quality professional development?

Providing teachers with professional development programmes that focus on knowledge of the curriculum and include collaborative learning activities or research with other teachers is an efficient way of supporting teachers' work. However, these types of professional development programmes are much less widespread than other kinds of professional development activities. In 28 countries and economies, teachers participate less often in curriculum-focused professional development than in programmes covering subject knowledge or pedagogy (see Figure 4). Similarly, in 27 countries and economies, teachers participate less often in professional development programmes that include some collaborative activities with other teachers than in programmes that include any other kind of delivery feature.



TALIS

Figure 4 • Participation in professional development activities focused on curriculum, subject matter and pedagogy



Countries are ranked in ascending order by participation in teacher professional development with longer duration.

Note: Bars indicate the percentage of teachers having participated in professional development activities in the three content areas indicated during the year preceding the TALIS.

Source: OECD (2013), *Teaching and Learning International Survey (TALIS): 2013 complete database*, http://stats.oecd.org/index.aspx?datasetcode=talis_2013%20.

The bottom line Teachers' classroom practices seem to benefit from teachers' participation in high-quality professional development activities. However, only a small proportion of teachers have participated in such programmes. Educational systems could enhance teaching quality by increasing the opportunities for professional development. In some countries and economies, different participation rates in high-quality professional development are observed between female and male teachers, with female teachers more likely to participate in high-quality professional development in Chile, Estonia, Portugal, the Russian Federation and Spain, while the opposite pattern is found in the Netherlands and in Norway. Similar differences in participation are observed between teachers who have and have not completed initial teacher education. Wherever such differences in participation exist, education systems should remove the barriers to accessing the kinds of high-quality professional development related to teacher gender or completion of initial teacher education.

Visit

www.oecd.org/talis
Education Indicators in Focus
PISA in Focus

Contact:

Fabian Barrera-Pedemonte
(fbarreraopedemonte@ioe.ac.uk)
Noémie Le Donne
(noemie.ledonne@oecd.org)

To learn more

Barrera-Pedemonte, F. (2016), "High-Quality Teacher Professional Development and Classroom Teaching Practices: Evidence from Talis 2013", OECD Education Working Papers, No. 141, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5j1pszw26rvd-en>.
OECD (2014a), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, TALIS, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264196261-en>.
OECD (2014b), *A Teachers' Guide to TALIS 2013: Teaching and Learning International Survey*, TALIS, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264216075-en>.
OECD (2013), *Teaching and Learning International Survey (TALIS): 2013 complete database*, OECD Publishing, Paris, http://stats.oecd.org/index.aspx?datasetcode=talis_2013%20.

This paper is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and the arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for commercial use and translation rights should be submitted to rights@oecd.org.

Photo credits: © Fuse/Getty Images © Image Source/Getty Images © Laurence Mouton/PhotoAlto Agency RF Collections/Imagine ltb.