

"The skills that students need to contribute effectively to society are in constant change. Yet, our education systems are not keeping up with the fast pace of the world around us. Most schools look much the same today as they did a generation ago, and teachers themselves are often not developing the practices and skills necessary to meet the diverse needs of today's learners...

Recognising that education is the great equaliser in society, the challenge for all of us is to equip all teachers with the skills and tools they need to provide effective learning opportunities for their students."



Angel Gurría
OECD Secretary-General

Note by Turkey

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Note by all the European Union Member States of the OECD and the European Union

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What's going on in class?

Lower-secondary teachers in OECD countries spend the equivalent of 47 minutes per hour of class time actually teaching. The OECD Teaching and Learning International Survey (TALIS) finds that teachers with more than five years of teaching experience spend more time on actual teaching and learning (the equivalent of 3 additional minutes per 60-minute lesson) than novice teachers (those with five years of teaching experience or less).

Across OECD countries, lower secondary teachers spend an average of 8 minutes per hour of class time keeping order in the class.

While more than 80% report that they can successfully manage their classes, more than 30% acknowledge that they have difficulty motivating students to learn, especially those students who show little interest in school work. This aspect of teachers' work is more challenging for novice teachers: 78% of them – compared with 87% of experienced teachers – report that they feel they can control disruptive behaviour in their classroom.

IN PRACTICE:

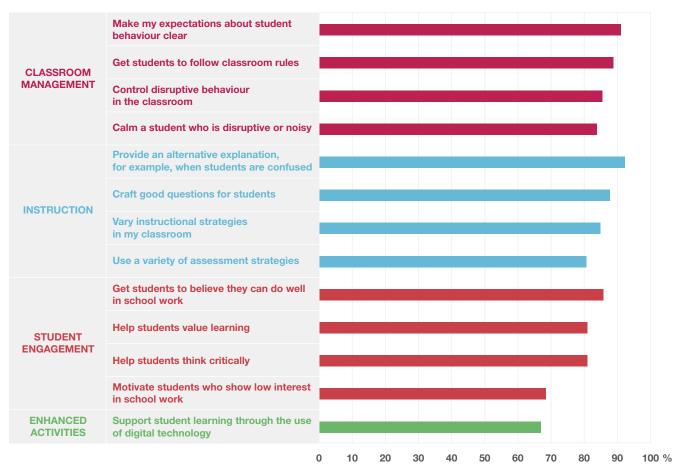
Classroom management training

School leaders can make available – and encourage their teaching staff to attend – recurring training opportunities in classroom management and in motivating students to learn. School leaders could also identify more experienced teachers to work with novice teachers who need assistance with classroom management.

Many prefectures in **Japan** have extended induction programmes over 3-5 years. These emphasise strengthening classroom management and the general pedagogical skills of new teachers. With the help of experienced "guidance teachers", new teachers receive continuous, on-site mentorship and support suited to the local context and the needs of individual schools. Such long-term programmes prioritise the basic and general competencies required to work with students first, followed by more technical learning. They can also allow teachers to have lighter workloads as they strengthen and develop a range of competencies.

Figure 1. Teachers' self-efficacy

Percentage of lower secondary teachers who feel they can do the following "quite a bit" or "a lot" (OECD average 31)



Values are ranked in descending order of teachers' self-efficacy.

Source: OECD, TALIS 2018 Database, Table I.2.20.

During class time spent on teaching, the vast majority of teachers – 70% to 90% of them – report that they frequently use "clarity-of-instruction" practices, which include explaining to students what they are expected to learn; explaining how new and old topics are related; and referring to a problem from daily life to demonstrate why the knowledge in question is useful.

A much smaller proportion of teachers – only 35% to 60% – uses "cognitive-activation" strategies with their students. With these

practices, teachers encourage students to find creative and alternative ways to solve problems, and ask them to communicate their thinking processes and results with their peers and teachers. The OECD Programme for International Student Assessment (PISA), among other studies, has found cognitive-activation teaching strategies to be positively related to student performance and achievement.

Using effective teaching strategies

School leaders can encourage their teaching staff to use cognitive-activation strategies in class, and can provide on-site training in the use and importance of these strategies. They could also allocate a certain number of hours in their teachers' work schedule to discuss and share ideas about how to implement effective practices, such as cognitive activation strategies, into their classrooms.

TeachingWorks, an organisation based at the University of Michigan (**United States**), focuses on helping teachers use effective teaching practices so that all students have access to them. It emphasises what are known as high-leverage practices – practices that represent the "best bets" among those skills that are central to foster learning and promote equity.

The **Portuguese** government launched the Project for Autonomy and Curriculum Flexibility to enable schools to promote teaching practices that facilitate better learning and holistic skills development among students. As part of the programme, schools identify student learning objectives aligned with the National Skills Strategy and student competency framework, which include 21st-century skills and cross-curricular competencies, and adapt their curriculum accordingly. Teachers and principals at the school level collaborate professionally to introduce new pedagogical approaches, interdisciplinary and cross-classroom activities aligned to these student learning objectives. The project thus promotes innovation in teaching methods at the school level, driven by educators themselves.

Nearly two in ten teachers (19%) across OECD countries are novices compared with fewer than one in ten in Viet Nam (9%), Lithuania (7%) and Portugal (3%). Novice teachers work one hour less per week than teachers with more than five years of experience, on average across OECD countries; but this is because novice teachers tend to work part-time more often than experienced teachers do.

Novice teachers represent 22% of the teacher population on average across OECD countries, but 22% of teachers in schools with high concentrations of students from socioeconomically disadvantaged homes, and 23% of teachers in schools with high concentrations

of immigrant students are novice teachers. Perhaps because they tend to work in more challenging environments, novice teachers are less likely than experienced teachers to feel confident in their teaching skills. For example, on average across OECD countries, 75% of novice teachers feel they can use a variety of assessment strategies "quite a bit" or "a lot", compared to 81% of more experienced teachers. A slightly smaller percentage of novice teachers than experienced teachers (a difference of 5 percentage points) feels confident helping students value learning and motivating students who show low interest in school work.

Figure 2. Teaching practices

Percentage of lower secondary teachers who "frequently" or "always" use the following practices in their class¹ (OECD average 31)



¹These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Note: ICT refers to information and communication technology

Values are grouped by teaching strategy and ranked in descending order of the use of teaching practices within the respective teaching strategy.

Source: OECD, TALIS 2018 Database, Table I.2.1.



Supporting novice teachers

The way novice teachers are allocated across schools needs to be reviewed, with the aim of assigning them to less challenging working environments in their first placements. If assigning novice teachers to a challenging school is unavoidable, school leaders can ease the transition of recent graduates into the profession by allocating them to less challenging classes, considering pairing them with more experienced teachers in joint teaching arrangements, or releasing novice teachers from some teaching duties to ensure that they can spend more time preparing their lessons.

The government of **New South Wales, Australia**, provides support to schools for beginning teachers' induction and professional development, guided by the Australian Professional Standards for Teachers. Under the Beginning Teachers Support Funding programme, the principals of schools receiving this special funding are responsible for ensuring, among other things, that beginning teachers have fewer responsibilities or lighter teaching loads so they can better develop their skills; that beginning teachers are provided with ongoing feedback and support; and that mentoring structures and collaborative practices support beginning teachers within the school or across a cluster of schools.

What do teachers want?

If given the opportunity to decide, how would teachers choose to allocate additional resources for their school? For the first time, TALIS 2018 asks teachers to rate the importance of a number of priorities if the education budget were increased by 5%. On average across OECD countries, according to teachers, the number one spending priority is "reducing class size by recruiting more staff" (rated of high importance by 65% of teachers). Some 55% of teachers also rate "reducing teachers' administration load by recruiting more support staff" as of high importance. These two findings indicate that teachers want to be able to focus more on the core of their work: student learning.

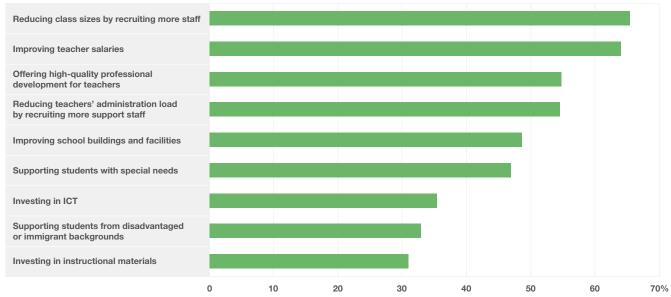
Some 64% of teachers cite "improving teachers' salaries" as of high importance. But TALIS finds that the lower the teachers' statutory salaries in a country (in purchasing power parity terms), or the lower teachers' salaries are compared to those of similarly educated workers, the more

teachers consider raising their salaries to be a priority. In a number of countries, teachers working in cities, where housing prices and the cost of living are typically higher than in rural areas, are more likely than their peers working in rural areas to consider salary increases as "highly important".

These three actions, along with "offering high-quality professional development for teachers" (also cited by 55% of teachers) are rated of high importance by more than 50% of teachers. By contrast, "improving school buildings and facilities", "supporting students with special needs", "investing in ICTs", "supporting students from disadvantaged or immigrant backgrounds" and "investing in instructional materials" are considered to be of high importance by less than a majority of teachers – although 30% to 50% of teachers consider them highly important.

Figure 3. Spending priorities for lower secondary education

Percentage of lower secondary teachers who reported the following spending priorities to be of high importance¹ (OECD average 31)



¹Respondents were not asked to prioritise; they had the possibility to attribute "high importance" to all spending priorities. Values are ranked in descending order of the percentage of lower secondary teachers who reported the above spending priorities to be of high importance.

Note: ICT refers to information and communication technology

Source: OECD, TALIS 2018 Database, Table I.3.66.



What's going on in school?

Teachers need to be prepared to handle diversity in all of its forms in their classes. For example, on average across OECD countries

- nearly 3 in 10 lower secondary teachers work in a school where at least 10% of students have special needs
- 2 in 10 work in a school where at least 30% of students are socio-economically disadvantaged.

With migration on the rise in many parts of the world, the children of immigrants are enrolled in the school systems of their host countries, often requiring specific support from their schools and teachers. TALIS finds that in schools in OECD countries:

- just under 2 in 10 lower secondary teachers work in a school where at least 10% of students have an immigrant background
- around 3 in 10 work in a school where at least 1% of students are refugees.

Teachers also need to be prepared to work with students who may not be fluent in the language of instruction. While linguistic diversity is a phenomenon related to migration flows, it can also reflect the presence of linguistic or Indigenous minorities in a country. TALIS finds that just over 2 in 10 lower secondary teachers work in a school where at least 10% of students do not speak the language of instruction at home.

Around 8 in 10 teachers who work in multicultural schools do so in a school that has integrated global issues throughout the curriculum, and teaches students how to deal with ethnic and cultural discrimination. Policies and practices promoting diverse cultures are less common: just over 6 in 10 teachers working in multicultural schools do so in a school that supports activities or organisations encouraging students' expression of diverse ethnic and cultural identities. Worryingly, around 3 in 10 teachers in OECD countries report that they cannot cope with the challenges of teaching a multicultural class (and 15% of teachers in OECD countries report that they need more training in this area).

Supporting diversity

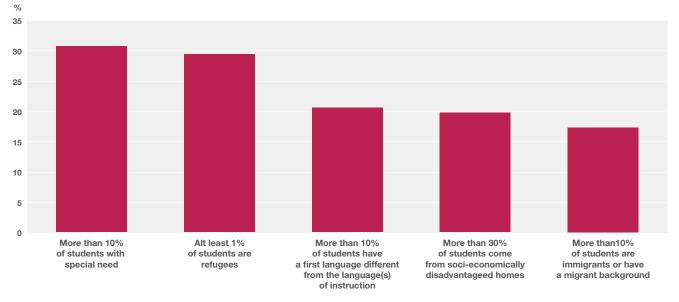
School leaders can design policies and apply practices that ensure that all students, regardless of their socio-economic and cultural origin, can learn. Teachers can take advantage of pre- and in-service training that addresses these issues.

In **Kazakhstan**, teachers visit disadvantaged households, as part of the Care programme, to identify students who are out of school or have been absent for more than ten days without a valid reason. Teachers interact with these students and their families to identify the barriers preventing them from coming to school regularly and provide assistance to help them return to school. The programme has supported more than 1.1 million disadvantaged students since 2010.

The Ministry of Education in **Austria** has implemented a programme called Mobile Intercultural Teams that offers support to schools with a large proportion of immigrant students. These teams, composed of expert counsellors and psychologists, work with teachers, principals and administrators at these schools, offering advice on issues such as working with immigrant students, and fostering an inclusive and supportive classroom climate.

Figure 4. School composition

Percentage of lower secondary teachers teaching in schools with the following composition (OECD average 30)

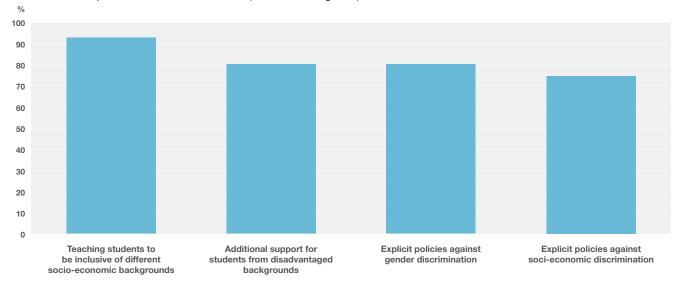


Values are ranked in descending order of the percentage of lower secondary teachers teaching in schools with the following composition.

Source: OECD, TALIS 2018 Database, Table I.3.25.

Figure 5. School practices related to equity

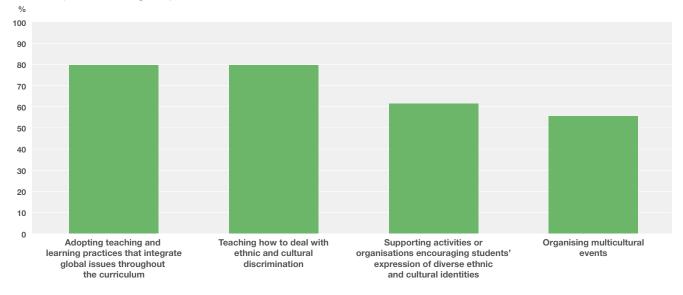
Percentage of lower secondary principals reporting that the following policies and practices are implemented in their school (OECD average 30)



Values are ranked in descending order of the prevalence of equity-related school practices. Source: OECD, TALIS 2018 Database, Table 1.3.34.

Figure 6. School practices related to diversity

Percentage of lower secondary teachers working in a school with diverse ethnic and cultural student backgrounds where the following diversity-related practices are implemented¹ (OECD average 30)

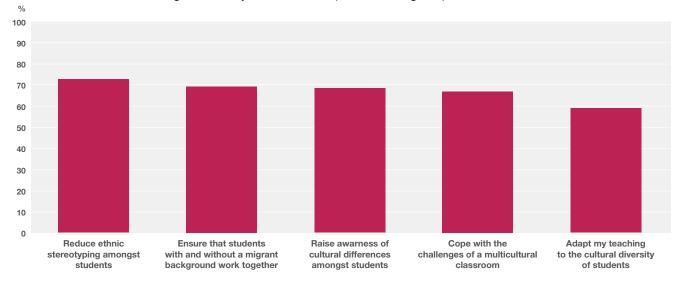


¹Data based on principals' views. Principals' responses were merged with teacher data, and weighted using teacher final weights.

Values are ranked in descending order of the prevalence of diversity-related school practices. Source: OECD, TALIS 2018 Database, Table I.3.35.

Figure 7. Teachers' self-efficacy in teaching multicultural classes

Percentage of lower secondary teachers who feel they can do the following "quite a bit" or "a lot" in teaching a culturally diverse class (OECD average 31)



¹The sample is restricted to teachers reporting that they have already taught a class with students from different cultures. Values are ranked in descending order of the percentage of teachers reporting that they feel they can do the following "quite a bit" or "a lot" in teaching a culturally diverse class.

Source: OECD, TALIS 2018 Database, Table I.3.38.

Over in the principal's office, leaders of lower secondary schools spend the largest chunk of their time (30%) doing administrative tasks and attending meetings. Only 16% of their working time is spent on curriculum and teaching-related tasks, such as developing a school curriculum, teaching, observing their teachers' classes, mentoring teachers, designing or organising professional development activities for teachers, or being

involved in student evaluations. Yet it is through instructional leadership that school leaders can have the strongest and most positive impact on the quality of teaching in their school. Indeed, the "shortage or inadequacy of time for instructional leadership" is one of the three resource issues most often cited by school principals as hindering the school's capacity to provide quality instruction "quite a bit" or "a lot" (32% of principals so reported).

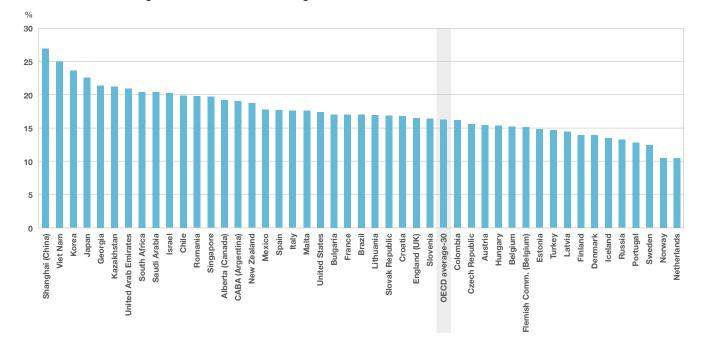


Taking time for instructional leadership

School leaders can reorganise their time so they can spend fewer hours doing administrative tasks and more hours engaged in instructional leadership activities. Where school principals have autonomy for recruitment decisions, they could create intermediate management roles. But even if school leaders do not have responsibility for these decisions, they could still devolve some management and administrative tasks to teachers who show exceptional leadership skills and are interested in building leadership capacity. School leaders can also take every opportunity to develop their instructional leadership skills by participating in professional development activities, collaborating and networking with other principals, and observing, mentoring and providing feedback to teachers.

Figure 8. Time spent by principals on curriculum and teaching

Average proportion of time lower secondary principals report spending on curriculum and teaching-related tasks and meetings¹



¹Including developing curriculum, teaching, classroom observations, student evaluation, mentoring teachers, teacher professional development.

Countries and economies are ranked in descending order of the average proportion of time lower secondary principals report spending on curriculum and teaching-related tasks and meetings in 2018.

Source: OECD, TALIS 2018 Database, Table I.2.31.

TALIS asks school principals about the frequency with which a number of incidents related to school safety (including the use or possession of drugs or alcohol at school; physical injury caused by violence among students; vandalism and theft; the posting of hurtful information about students on the Internet; intimidation or verbal abuse of teachers/staff; or unwanted electronic contact among students) occurs in their school. One issue stands out: intimidation or bullying among students occurs at least once per week in 14% of schools, on average across OECD countries.

But TALIS results also show that some countries have been successful in reducing the incidence of bullying over the past five years. Contrasting daily or weekly incidents of bullying reported in 2013 with daily or weekly incidents of either bullying or posting of hurtful information on the Internet reported in 2018 reveals that 10 participating countries and economies managed to reduce the frequency of these incidents during this period; but in 3 other countries, the incidence of bullying, including cyberbullying, increased.

IN PRACTICE:

Preventing bullying

Teachers and school staff have a crucial role to play in preventing bullying. School-level disciplinary policies can focus on monitoring and supervising all students, encouraging communication and partnerships among teachers, engaging parents and reinforcing classroom management. Incorporating social and emotional learning during regular classroom hours can improve students' inter- and intrapersonal skills, and create a healthy environment in school. Training programmes for teachers and school leaders should be updated with the most recent trends in bullying both within and outside the school environment.

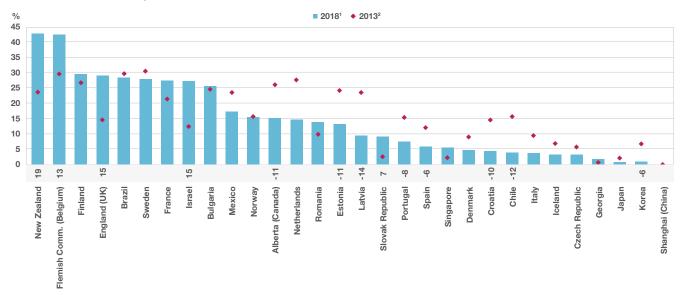
The government of **Alberta, Canada**, implements a strategic approach to help schools and teachers combat bullying among students. Teachers have access to a wealth of resources, provided by the state, to identify signs of physical, social and cyber bullying in school. Guidance is also provided on how to involve parents and care givers in plans to respond to bullying. Teachers are asked not only to observe school incidents to track bullying behaviour, but also to develop strategies promoting positive behaviour and informing students of what they can do if they witness bullying among their peers.

While student-to-student interactions can occasionally be harmful, TALIS finds that relations between teachers and their students are extremely positive. On average across OECD countries, 96% of teachers concur that teachers and students usually get along well with one

another – a larger proportion than reported so in 2008 in most countries with available data. In addition, in the vast majority of countries, teachers' belief in the importance of student well-being has strengthened since 2008.

Figure 9. Change in bullying from 2013 to 2018

Percentage of lower secondary principals reporting that the following incidents occurred at least weekly in their school



¹Data for TALIS 2018 refer to "Intimidation or bullying among students (or other forms of verbal abuse)" and/or "A student or parent/guardian reports postings of hurtful information on the Internet about students".

²In TALIS 2013, principals were asked to report on the frequency with which "Intimidation or verbal abuse among students (or other forms of non-physical bullying)" occurred in this school.

Notes: Only countries and economies with available data for 2013 and 2018 are shown.

Statistically significant changes between 2013 and 2018 (TALIS 2018-2013) are found next to the category and the country/economy name.

Countries and economies are ranked in descending order of the percentage of lower secondary principals reporting that intimidation or verbal abuse of teachers or staff occurred at least weekly in their school in 2018.

Source: OECD, TALIS 2018 Database, Table I.3.45.



How do teachers and school leaders prepare for their job?

Almost 70% of lower secondary teachers in OECD countries report that teaching was their first choice as a career. Across all TALIS-participating countries and economies, the percentage of teachers who so report ranges from 49% in South Africa to 93% in Viet Nam. Results also show that those teachers whose first career choice was teaching are also more likely to be satisfied with their job; and in two out of three countries and economies that participate in TALIS, those teachers also tend to report higher self-efficacy.

What about the profession attracted teachers in the first place? For the first time, TALIS 2018 asks teachers how important certain factors were in motivating them to become a teacher. Around 90% of teachers say that influencing the development of children and young people, and contributing to society was of moderate or high importance to them. Some 75% report that a desire to help socio-economically disadvantaged students spurred them to enter the profession. Least-often cited as motivation to enter the teaching profession are factors

related to working conditions, such as teaching schedule, salary and job security (around 60% to 70% of teachers report that these were of moderate to high importance to them).

Most teachers hold at least one higher education degree. TALIS finds that, on average across OECD countries and economies, 50% of teachers completed only a bachelor's degree or equivalent and 44% completed a master's degree or equivalent. The master's degree generally includes deeper specialisation and more complex content than a bachelor's degree, and possibly substantial research too.

During their studies, most teachers also completed a teacher education or training programme, which provides a single credential for studies in subject-matter content, pedagogy and other courses in education. In some countries, a significant share of teachers did not complete any formal teacher education programme or completed only fast-track or specialised education or training programmes.



Preparing teachers

Even if facing shortages of teachers, education authorities or school leaders in charge of human resources need to ensure that their teachers are equipped with sufficient training in subject-matter content, pedagogy and classroom practice. If teachers new to a school have not received adequate pre-service training, school leaders need to design a comprehensive programme of in-service training to compensate.

The University of Tartu in **Estonia** is a major public institution of teacher education that revised its curriculum in 2012-13 in parallel with the development of new national teacher standards. The curriculum now focuses on four core pedagogical areas: communication and feedback in school; designing learning and instruction; teaching and reflection; and teacher's identity and leadership.

In order to respond to the shortage of teachers in STEM fields in **Australia**, the state government of Queensland has opened up opportunities for professionals with STEM degrees to enter the teaching profession as a career change. While these teachers have deep subject-specific knowledge in STEM fields, the short-term Masters in Secondary Teaching programme enables these professionals to build teaching and pedagogical competencies and participate in practicum training. Teacher candidates in the programme note that such training, undertaken with the support of experienced mentors, enables them to link theory and practice.

Teachers' formal education and training most often includes student behaviour and classroom management (72% of all teachers across OECD countries and economies studied this in their pre-service training), followed by monitoring students' development and learning (70%), teaching cross-curricular skills (65%), teaching in a mixed-ability setting (62%) and using ICTs for teaching (56%). Teaching in a multicultural or multilingual setting was less often included as an element of teachers' formal education or training (35%).

TALIS findings support the idea that receiving pre-service training in a given area is associated with a higher level of self-efficacy and/or a

greater propensity to use related practices. For example, results show that in 37 TALIS-participating countries and economies, teachers who were trained in teaching cross-curricular skills (such as creativity, critical thinking, problem solving) are more likely to report higher levels of self-efficacy in teaching those areas. In 24 TALIS-participating countries and economies, teachers who were trained to teach in a multicultural setting also report higher self-efficacy.

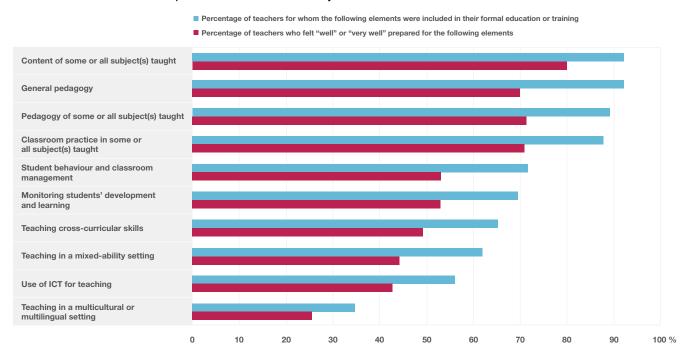
Learning to teach diverse classes

Given the challenges posed by increasingly diverse classes and schools, school leaders can organise theoretical and practical training for their staff on teaching in a mixed-ability, multicultural and/or multilingual setting, depending on their school's context and circumstances.

In the **United States**, teachers participate in cultural immersion programmes and exchanges where they can reflect on their own cultural background in order to build their competencies in teaching diverse students. In these programmes, teachers understand the importance of cultural background and also experience first-hand the pedagogy used in these sessions. This helps teachers gain confidence in using similar activities in their own classrooms to encourage a sense of agency, efficacy and empowerment among diverse students.

In **Sweden**, teachers participate in multiple peer-learning support groups to share knowledge and best practices for increasingly diverse classrooms. These peer-learning groups allow teachers to discuss their experiences with migrant children and what they have observed to be effective approaches for integrating these students in the education system.

Figure 10. Content of teacher education and sense of preparedness for teaching Results based on responses of lower secondary teachers



Values are ranked in descending order of the percentage of lower secondary teachers for whom the above elements were included in their formal education or training.

Note: ICT refers to information and communication technology Source: OECD, TALIS 2018 Database, Tables I.4.13 and I.4.20.

Supporting new teachers

School leaders can offer formal induction and mentorship programmes for teachers new to teaching and new to the school. They can also urge all teachers to participate in these activities – as beneficiaries, facilitators or mentors.

In some provinces in **Korea**, experienced "master teachers" are responsible for providing induction activities for new teachers. These activities focus on the practical aspects of classroom teaching and student behaviour management as training in these areas is relatively less intensive for secondary school teachers. Experienced Korean teachers express a sense of professional responsibility towards new teachers such that several professional learning communities have emerged wherein teachers and school leaders work together to share knowledge and revise teaching approaches as necessary.

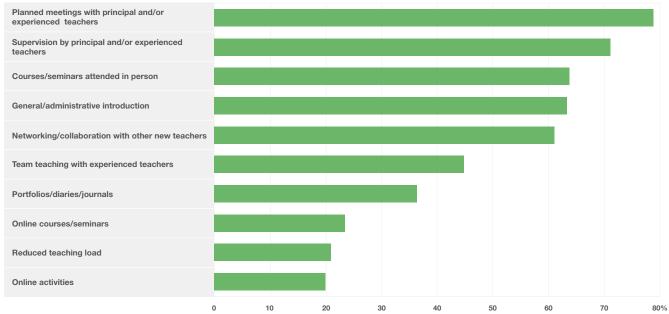
Many studies have shown that teachers' participation in induction and mentoring programmes at school is associated with better student learning – and with teachers' sense of self-confidence in their teaching abilities and satisfaction with their job. Yet these programmes are not widely available. On average across OECD countries and economies, only 30% of teachers participated in formal induction activities at their current school (such as regular supervision by the

principal, a reduced teaching load or formal mentoring by experienced teachers); 35% participated in informal induction activities (such as working with other new teachers or benefitting from a welcome handbook for new teachers). While school principals generally consider mentoring to be important for teachers' work and students' performance, only 22% of novice teachers have an assigned mentor, on average across OECD countries and economies.



Figure 11. Induction activities for teachers

Percentage of lower secondary teachers reporting that the following provisions were included in their teacher induction at their current school¹ (OECD average 30)



¹The sample is restricted to teachers who took part in induction activities at the current school, based on teachers' responses, and also have access to induction activities, based on principals' responses.

Values are ranked in descending order of the percentage of lower secondary teachers reporting that the following provisions were included in their teacher induction at their current school.

Source: OECD, TALIS 2018 Database, Table I.4.42.

IN PRACTICE:

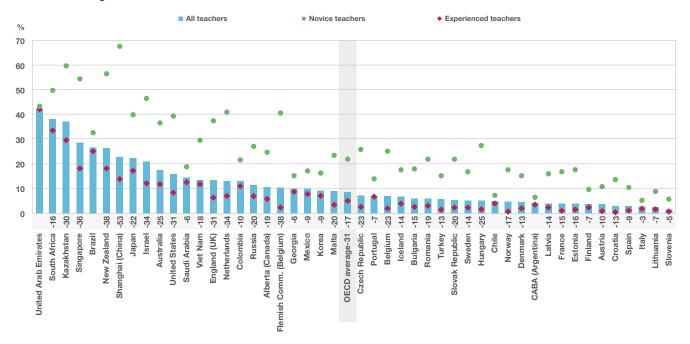
Training school leaders

There is considerable room for improving the preparation and training of school leaders, and by implication their professionalism. Pre-service programmes and professional development activities can focus on, for example, developing school leaders' abilities to cultivate a shared vision and shared practices among school staff, shape improvements in instruction, develop organisational capacity and manage change.

Singapore sets its teachers on the path to prepare for leadership roles early in their career, through an identified leadership track. Teachers who aim to be school leaders in the future can assume specific roles and responsibilities. For new principals, the National Institute of Education in Singapore, in collaboration with the Ministry of Education, designed a six-month, pre-service programme called Leaders in Education. A key focus of the programme is innovation and the creation of new knowledge, whereby the principal is seen as instrumental in collaboratively creating knowledge tailored to their school's context.

Figure 12. Peer mentoring

Percentage of lower secondary teachers who have an assigned mentor as part of a formal arrangement at the school¹



¹Mentoring is defined as a support structure in schools where more experienced teachers support less experienced teachers.

Note: Statistically significant differences between experienced teachers (with more than 5 years of experience) and novice teachers (with less than or equal to 5 years of experience) is shown next to the country/economy name.

Countries and economies are ranked in descending order of the percentage of lower secondary teachers who have an assigned mentor.

Source: OECD, TALIS 2018 Database, Table I.4.64.

As far as principals are concerned TALIS finds that, across OECD countries and economies, 85% of school leaders had completed teacher training or an education programme or course before assuming their position as principal. Many of them simultaneously serve or had served before as teachers. Another 5% had received some training in teaching, but only after becoming principal; the remaining 10% never did.

While TALIS finds that school leaders generally attained a higher level of education than teachers did, a smaller percentage of them completed a programme that specifically prepares them for the job of school leader. While 63% of school leaders hold a master's degree or equivalent, on average across OECD countries and economies, only 54% completed a programme or course in school administration or principal training before assuming their position as principal.



How do teachers and school leaders stay up-to-date in their profession?

Lower secondary teachers and schools leaders are conscientious about maintaining and upgrading their skills. TALIS finds that nearly all lower secondary teachers (94%) and virtually all school leaders (99%) had participated in at

least one professional development activity during the 12 months preceding the survey. More than 80% of teachers report that their training has a positive impact on their teaching practices.

IN PRACTICE:

Offering professional development activities

School leaders can consider offering opportunities for professional development on school premises. Those activities should be tailored to meet the needs of the teachers working at the school; and teachers should be able to participate in them. School leaders in a given geographical area can work together to organise professional development activities that meet their specific needs too.

An experimental study in **South Africa** compared the effects of two forms of in-service teacher development on changes in primary teachers' practices and student outcomes. The two forms of professional development were: training at a centralised venue (training); and classroom visits by coaches who observe teaching, provide feedback and demonstrate corrective actions (coaching). The results showed that teachers whose professional development was in the form of coaching were more likely to implement "group-guided reading" (a difficult strategy to put in place) than teachers whose professional development was in the form of training or than teachers who did not receive either form of professional development.

The most effective training, according to teachers, is based on strong subject and curriculum content, collaboration, and the incorporation of active learning and collaborative approaches to instruction. Yet, the great majority of teachers report that they had attended courses or seminars (76%) and/or had read professional literature (72%) during the previous 12 months. Only around 40% of teachers had participated in training based on peer learning and networking.

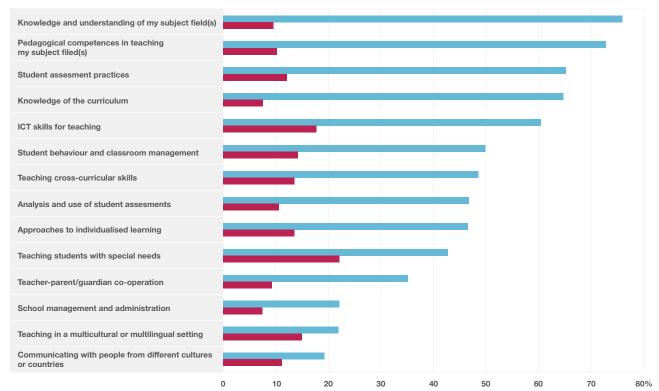
TALIS asks teachers to cite the teaching-related areas where they feel they need more training. The three areas cited by the largest proportions of teachers in OECD countries are: teaching students with special needs (22% of teachers, on average), ICT skills for teaching (18%), and teaching in a multicultural or multilingual setting (15%).

Meanwhile, the high rate of participation in professional development activities among school leaders may reflect a need to compensate for insufficient pre-service training. In addition, school leaders no longer want to be confined to acting solely as head of school administration: more than 7 in 10 principals had participated in training to become an instructional and/or pedagogical leader. Those in TALIS-participating OECD countries and economies report great interest in improving both school organisation and the practices of their teachers. Their main self-reported training needs range from using data to make informed decisions, to improving collaboration among their teachers.

Figure 13. Participation in professional development and need for it

Results based on responses of lower secondary teachers (OECD average 31)

- Percentage of teachers for whom the following topics were included in their professional development activities
- Percentage of teachers reporting a high level of need for professional development in the following areas



Note: ICT refers to information and communication technology

Values are ranked in descending order of the percentage of teachers for whom the above topics were included in their professional development activities.

Source: OECD, TALIS 2018 Database, Tables I.5.18 and I.5.21.

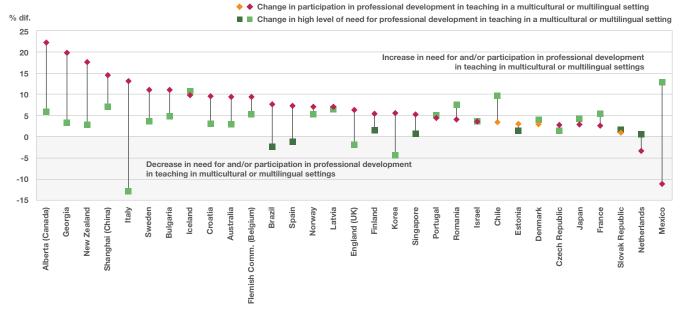
Supporting continuous training

More can be done to support continuous training, such as making participation in one training area of need periodically compulsory and also free of charge for both teachers and school leaders. School leaders can also ensure that teachers' schedules are flexible enough to allow them to participate in relevant training activities.

The Good School (*La Buona Scuola*) reform in **Italy**, introduced in 2015, made in-service training mandatory, permanent and structural. The Italian government invested substantially to provide training in areas of school autonomy, evaluation, innovative teaching, 21st-century skills (such as digital skills, schoolwork schemes) and skills for inclusive education. Through the programme, teachers are given EUR 500 per year on their "Teachers Card" to participate in training activities, purchase materials or attend conferences. Training offers are matched with training demands via a digital platform.

Figure 14. Professional development in teaching in multicultural or multilingual settings, 2013 to 2018

Percentage-point differences between 2013 and 2018 in the share of teachers who participated¹ in and reported a high level of need for professional development in teaching in multicultural or multilingual settings



Refers to professional development activities in which teachers participated in the 12 months prior to the survey.

Notes: Values over zero reflect an increase in participation or need between 2013 and 2018 while values below zero reflect a decrease in participation or need between 2013 and 2018.

Statistically significant values are marked in a darker tone.

Countries and economies are ranked in descending order of the change in the percentage of teachers reporting that teaching in multicultural or multilingual settings was included in their professional development activities (TALIS 2018 - 2013). Source: OECD, TALIS 2018 Database, Tables I.5.27 and I.5.28.

Teachers and school leaders face considerable barriers to attending professional development activities, even though participation rates are high and the benefits of participating in these activities are evident. On average across OECD countries, around one in two teachers (54%) and principals (48%) report that participation in professional development activities is restricted by scheduling conflicts. Teachers and, to a lesser extent, school leaders also report that they are dissuaded from participating by cost and a lack of incentives. Teachers tend to participate more in professional development programmes when they are released from teaching duties for activities that are held during regular working hours, when they are provided with the materials needed for activities, and when they are reimbursed for participation costs.

Despite these obstacles, participation in continuing professional development activities rose between 2013 and 2018 across all topics examined

by TALIS. The activities in which participation increased the most during the period were related to "student assessment practices" (participation increased in 28 of 33 countries and economies with available data); "teaching students with special needs" (participation increased in 27 of 33 countries and economies with available data); and "teaching cross-curricular skills" (participation increased in 27 of 33 countries and economies with available data).

TALIS 2013 and 2018 asked teachers to report the areas in which they felt they need more training. During that five-year period, the increases in reported need were greatest for the areas of "teaching in a multicultural or multilingual setting" (an increase in 21 of 33 countries and economies with available data); and "teaching students with special needs" (an increase in 20 of 33 countries and economies with available data).

IN PRACTICE:

Providing in-school training on diversity

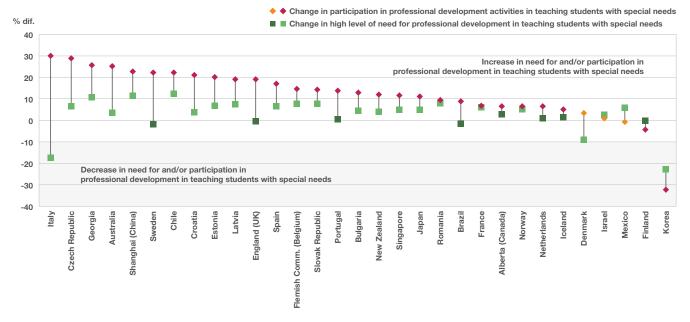
School leaders can develop a school-wide approach to professional in-service training in teaching multicultural, multilingual and mixed-ability classes by organising school-embedded professional development activities targeted to the type(s) of diversity relevant to their school. They can take into account teachers' ability and preparedness to teach in diverse environments when allocating teachers to specific classes. They can also team teachers experienced in these settings with those who have less experience so they can learn from each other.

Alberta (Canada) Education offers a series of resources to in-service teachers so they can learn about the Indigenous communities of Canada (First Nation, Métis and Inuit) and understand contemporary issues affecting students from these communities. It also supports teachers by providing a curriculum-development tool, Guiding Voices, to incorporate Indigenous perspectives throughout the school curriculum.

The National Agency in **Sweden** offers courses in the area of newly arrived and multilingual children, with the aim of supporting teachers in vocational guidance for newly arrived students, subject-specific instruction and the acquisition of Swedish as a second language.

Figure 15. Professional development in teaching students with special needs, 2013 to 2018

Percentage-point differences between 2013 and 2018 in the share of teachers who participated¹ in and reported a high level of need for professional development in teaching students with special needs²



Refers to professional development activities in which teachers participated in the 12 months prior to the survey.

²"Students with special needs" are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

Notes: Values over zero reflect an increase in participation or need between 2013 and 2018 while values below zero reflect a decrease in participation or need between 2013 and 2018.

Statistically significant values are marked in a darker tone.

Countries and economies are ranked in descending order of the change in the percentage of teachers reporting that teaching students with special needs was included in their professional development activities (TALIS 2018 - 2013). Source: OECD, TALIS 2018 Database, Tables I.5.27 and I.5.28.



For more information

Australia:

- http://www.oecdteacherready.org/promising-practice/ recruiting-highly-qualified-mature-steam-graduates-to-teaching-in-australia/
- New South Wales: https://education.nsw.gov.au/policy-library/policies/ beginning-teachers-support-funding-policy.
- Austria: Cerna, L. et al. (2019), "Strength through Diversity's Spotlight Report for Sweden", OECD Education Working Papers, No. 194, OECD Publishing, Paris, http://dx.doi.org/10.1787/059ce467-en.
- > Canada:
 - Alberta: https://www.alberta.ca/bullying-prevention-for-educators.aspx.
- Estonia: Santiago, P. et al. (2016), OECD Reviews of School Resources: Estonia 2016, OECD Reviews of School Resources, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264251731-en.
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- Portugal: https://www.oecd.org/education/2030/Curriculum-Flexibility-and-Autonomy-in-Portugal-an-OECD-Review.pdf.
- > Singapore: National Institute of Education, *Leaders in Education Programme*, https://www.nie.edu.sg/our-people/academic-groups/policy-and-leadership-studies/programmes/leaders education-programme-lep.
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- Sweden: Cerna, L. et al. (2019), "Strength through Diversity's Spotlight Report for Sweden", OECD Education Working Papers, No. 194, OECD Publishing, Paris, http://dx.doi.org/10.1787/059ce467-en.
- > United States:
 - Cerna, L. et al. (2019), "Strength through Diversity's Spotlight Report for Sweden", OECD Education Working Papers, No. 194, OECD Publishing, Paris, http://dx.doi.org/10.1787/059ce467-en.
 - United States: http://www.oecdteacherready.org/promising-practice/ teachingworks-a-practice-based-approach-for-preparing-teachers-in-the-united-states.

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Videos

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