Teaching and Learning International Survey

TALIS 2024

Insights and Interpretations

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OECD
BETTER POLICIES FOR BETTER LIVES

What is TALIS?

The Teaching and Learning International Survey (TALIS) is the world's largest international survey about teachers and school leaders. Conducted by the OECD, in 2024 it sampled about 280 000 lower secondary teachers in 17 000 schools across 55 education systems. The report highlights teachers' experiences in the classroom, information about their working conditions and professional development, and examines themes including AI in education and increasingly diverse student populations.

By capturing the voices of teachers and principals, TALIS helps policymakers and education leaders craft informed strategies to improve teaching quality and learning environments. TALIS 2024, released on 7 October 2025, is the fourth round of the survey since its launch in 2008. This brochure offers insights into some of the initial findings and puts them into context.

Did you know...

The share of teachers who are satisfied with their salaries has increased in 23 out of 43 education systems since 2018.

Are teachers happy teaching?

Global headlines about teaching often portray the profession as being in crisis. Stories about teacher shortages, falling student outcomes and violent attacks on school grounds give the impression that the "noble profession" might have lost some of its appeal. So, policymakers will be heartened to learn that nine in ten teachers report that they are satisfied with their jobs overall, on average, across OECD education systems participating in TALIS. Almost three-quarters of teachers would also choose to work as a teacher again, on average, if they had the option to do so.

While teacher experiences and opinions will obviously differ, overall the data firmly point towards most teachers, in most places, being satisfied with their jobs. Indeed, almost 95% of teachers surveyed by TALIS say they often feel happy while teaching.

Why? To start with, few professions offer the sense of purpose that teaching does: 95% of teachers cite the opportunity to make a worthwhile social contribution as being important to them, according to OECD data.

Most teachers in OECD countries work in public-sector roles, and in most developed economies these positions can be shielded from the volatility of market cycles. Pension schemes, healthcare benefits and predictable career progression can make teaching a financially stable profession, if not a lucrative one.

So we shouldn't be surprised that in some parts of the world, it seems the teaching profession could be growing in appeal. The share of novice teachers who say teaching was their first-choice career has gone up in nine education systems, and down in seven, since 2018. In some education systems, teaching is a particularly attractive role for newcomers. More than 85% of new teachers in Albania, Korea, Saudi Arabia, Shanghai (China) and Viet Nam say the occupation was their number one job pick.

Other TALIS data also reveal a more mixed picture. Teacher pay has long been a focal point in discussions about education reform. The share of teachers who are satisfied with their salaries has increased in 23 out of 43 education systems surveyed by TALIS since 2018. On average, around two in five teachers are satisfied with their salaries. But in some education systems the proportion is higher. In Austria, the Flemish and French Communities of Belgium, Bulgaria, Colombia, Denmark, Kazakhstan, the Netherlands*, Saudi Arabia and Uzbekistan, more than three in five teachers are satisfied with their pay. However, in other systems wages remain a major issue: less than one in five teachers are satisfied with their paycheques in Iceland, Malta, Portugal and Serbia.

Some of these statistics are obviously far from ideal. However, as previously noted, many teachers are driven by a deep sense of purpose, and access to professional development, strong leadership and a positive school culture often rank just as high as salaries in terms of teacher motivation.

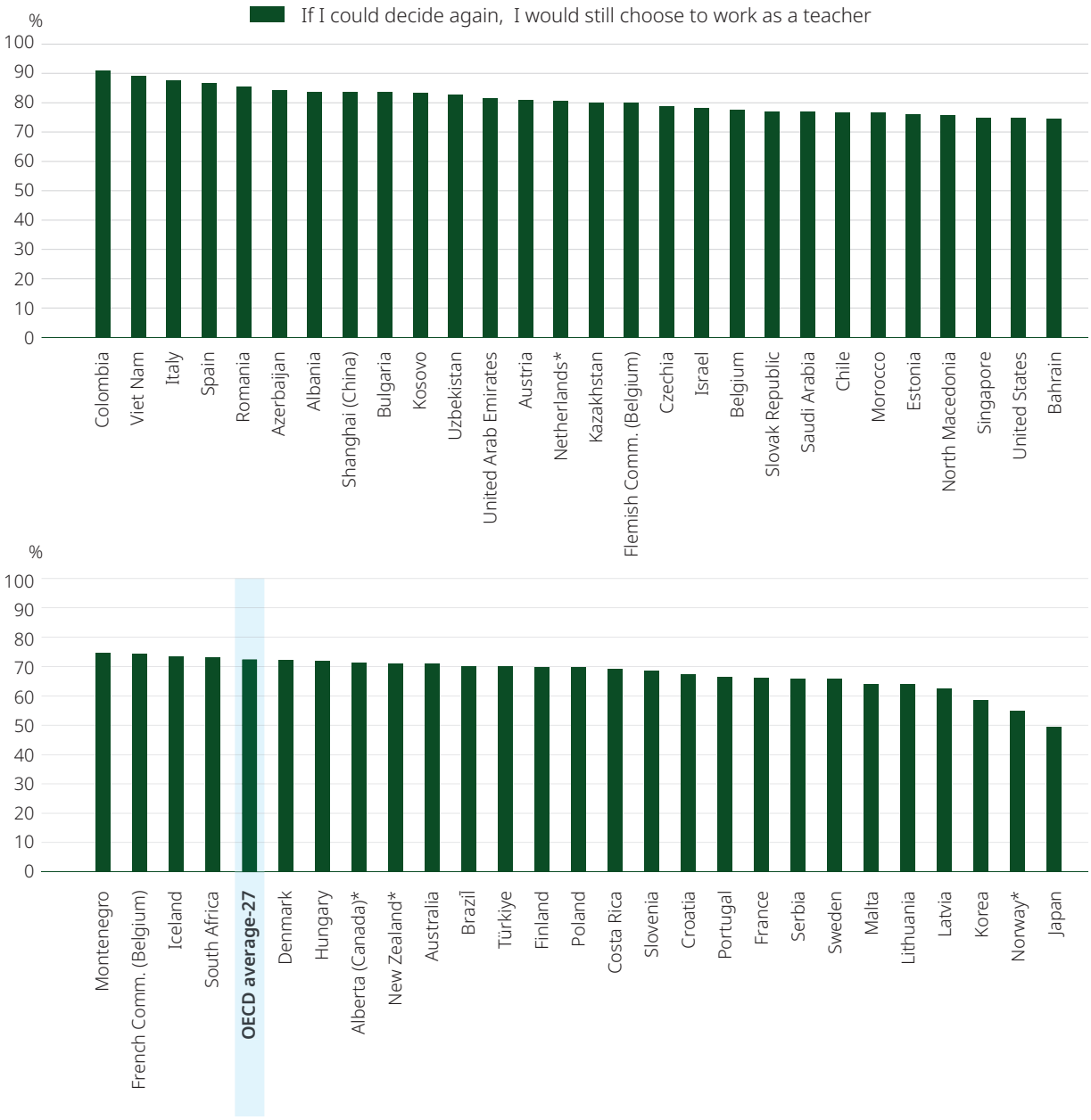
Stress is another factor to consider. Teachers are constantly juggling multiple responsibilities, from managing diverse student needs and maintaining classroom discipline to meeting curriculum standards and administrative expectations. However, only around one in five teachers say they experience stress “a lot” in their work, on average, according to TALIS. In contrast, according to Gallup's State of the Global Workplace report, two out of five employees report experiencing a lot of daily stress.

Are teachers really less stressed than other professions? TALIS data show that, overall, around half of teachers experience little or no stress in their work across all education systems. Although in some places, teachers seem to be having a harder time. More than 30% of teachers in Alberta (Canada)*, Australia, Bahrain, Costa Rica, Malta and New Zealand* experience stress “a lot” in their work.

The school environment – and how teachers are perceived by society – can have a big impact on whether teachers feel supported and empowered. When teachers feel respected and valued by society, it helps attract high-calibre candidates and plays a role in retaining them. TALIS data show that the status of teachers has declined in some nations, but remains high in others. More than 70% of teachers feel valued by society in Saudi Arabia, Singapore, United Arab Emirates and Uzbekistan, with the share topping 92% in Viet Nam. Teachers who believe the profession is valued by society are less likely to want to leave teaching within the next five years, on average. Policymakers should take note.

Looking at all the data together, the latest TALIS survey reveals a diverse picture. But rather than a profession in decline, the data show that teaching continues to attract individuals driven by purpose, resilience and passion. Overall, yes, teachers are happy in their jobs. This is something to celebrate.

Share of lower secondary teachers who agree or strongly agree they are satisfied with their jobs



*Estimates should be interpreted with caution due to higher risk of non-response bias.

Note: See the advisory on page 42.

Source: OECD (2024), TALIS 2024 Database, Table 2.6.

Did you know...

Across the OECD, 40% of teachers report that too much marking is a source of stress.

How to ensure young teachers want to stay in the classroom

In many OECD countries, the ageing of the teaching workforce is a growing concern. A significant proportion of educators are nearing retirement age, which threatens to create staff shortages. For example, lower secondary teachers in Latvia, Lithuania and Portugal are over 50 years old, on average, according to TALIS data (the OECD average is 45). This demographic trend puts pressure on these education systems to hire younger teachers and to ensure they receive enough support to maintain teaching standards. But some of these countries are also struggling with high numbers of young teachers quitting. What can be done in those contexts to ensure young teachers stay in the classroom?

TALIS data suggest some countries are finding better policy solutions than others. Fewer than 10% of teachers under the age of 30 intend to leave teaching in the next five years in Azerbaijan, Italy, Spain and Sweden (countries where the average age of teachers is at least 45 years old). This share is half the OECD average and four times less than the percentage who want to leave in Latvia (53%), Lithuania (50%) and Estonia (49%).

There is no magic bullet and one-size-fits all solution but countries can take inspiration from each other. In Italy, for example, where the average teacher is 48 years old, policymakers have begun to make strides in retaining younger teaching talent. Reforms have focused on improving job stability by offering clearer career progression and merit-based components to teachers' salaries. Compulsory professional development opportunities have also helped new teachers build confidence and competence early on. Italy is one of only a handful of countries that have seen a decrease in the average teacher age in lower secondary schools.

Iceland, where the average age of teachers is 46, is another country where policymakers recognised they faced a looming teacher shortage, particularly in rural and remote areas. Enrolment in teacher education had declined with just 165 new teachers graduating in 2019. A five-year initiative to tackle the issue included streamlining teacher education with a flexible master's programme, easing hiring rules, and boosting financial support for student

teachers through paid placements and graduation grants. Since then, Iceland has seen a 160% increase in teacher graduations compared to the previous five-year average – with 454 teachers graduating in 2022.

These initiatives show that targeted actions can make a difference. In contrast, the Baltic states have struggled to find an effective response. They face the twin challenges of an ageing teacher population and vast numbers of early-career teachers planning to leave the profession. Low pay and limited support contribute to this situation. The three Baltic countries also have the lowest share of male teachers in the world.

Part of the issue might also be that teachers do not feel valued by society. In Estonia, Latvia and Lithuania only around 20% of lower secondary teachers believe the teaching profession is valued. TALIS data show that teachers who do not feel valued are more likely to consider quitting. In addition, younger generations are increasingly less likely to stay in one profession throughout their working lives. This is partly driven by digitalisation, giving people more flexible career options, including greater opportunities for remote and freelance work. This trend affects all professions, including teachers.

This is not necessarily a bad development. Turnover can introduce fresh ideas. It also naturally filters out teachers who may lack motivation, improving overall teaching quality. But schools need to rethink how they attract and retain high-quality teachers. Improving professional development opportunities for mid-career teachers is a no-brainer. Providing clearer advancements is likely more sustainable than endlessly recruiting replacement teachers. Education leaders should also develop policies that encourage people in other careers to take up teaching. Iceland, for example, has the highest share of second career teachers in the world – people who became teachers after a significant amount of time in a different job. Flexible teaching options could be a benefit here, such as guest-lecturing. This would help attract professionals who wish to contribute but who cannot fully commit to a traditional teaching schedule.

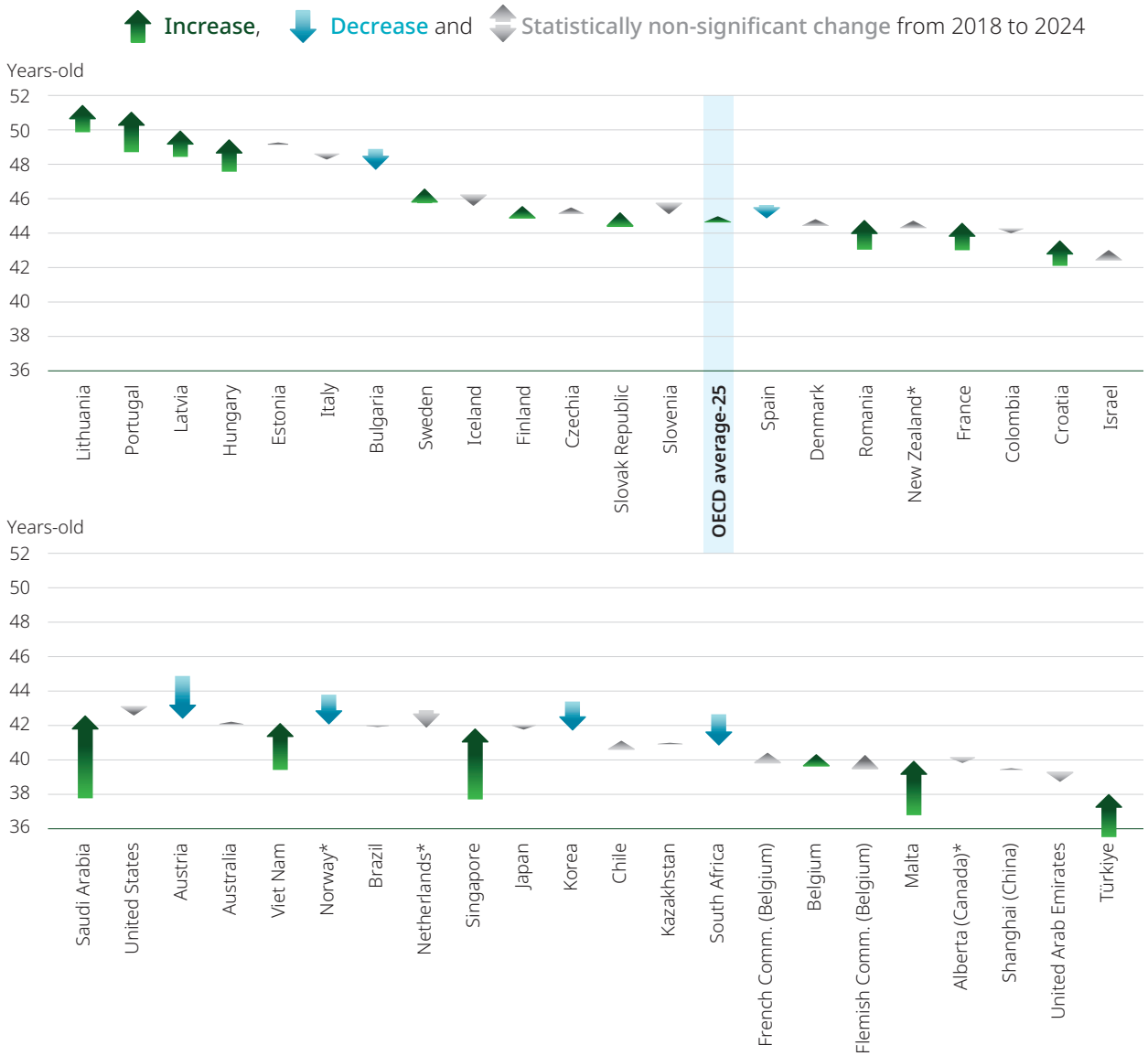
Flexibility for the existing workforce is also an important issue. Around half of teachers, on average, say working hours that fit with family responsibilities is of “high importance”, according to TALIS. Remote teaching could potentially help here. At the moment, around 16% of teachers work in schools where at least some lessons are delivered online or in hybrid format, on average. This indicates a gradual but notable shift towards remote teaching practices. For example, Singapore offers home-based learning for secondary and pre-university students about twice a month. This aims to nurture self-discipline in students and allows teachers to work remotely while virtually monitoring students.

However, while this may improve educational access and flexibility, it also introduces complex challenges. Many teachers lack formal training in online teaching, from digital classroom management to the use of virtual tools, so countries need to support teachers in this area. Some countries have already moved in this direction. For example, Germany, Italy, New Zealand* and the French and Flemish Communities of Belgium all have specific central strategies on digital education to ensure it is effective.

Ultimately, education leaders must not bury their heads in the sand and simply hope schools will be able to hire new teachers when required. This is a policy matter, and policymakers need to act. If they do not, some education systems risk chronic teacher shortages, which will stretch resources and harm students’ academic development and prospects.

The average age of teachers increased in many education systems between 2018 and 2024

Average age of lower secondary teachers

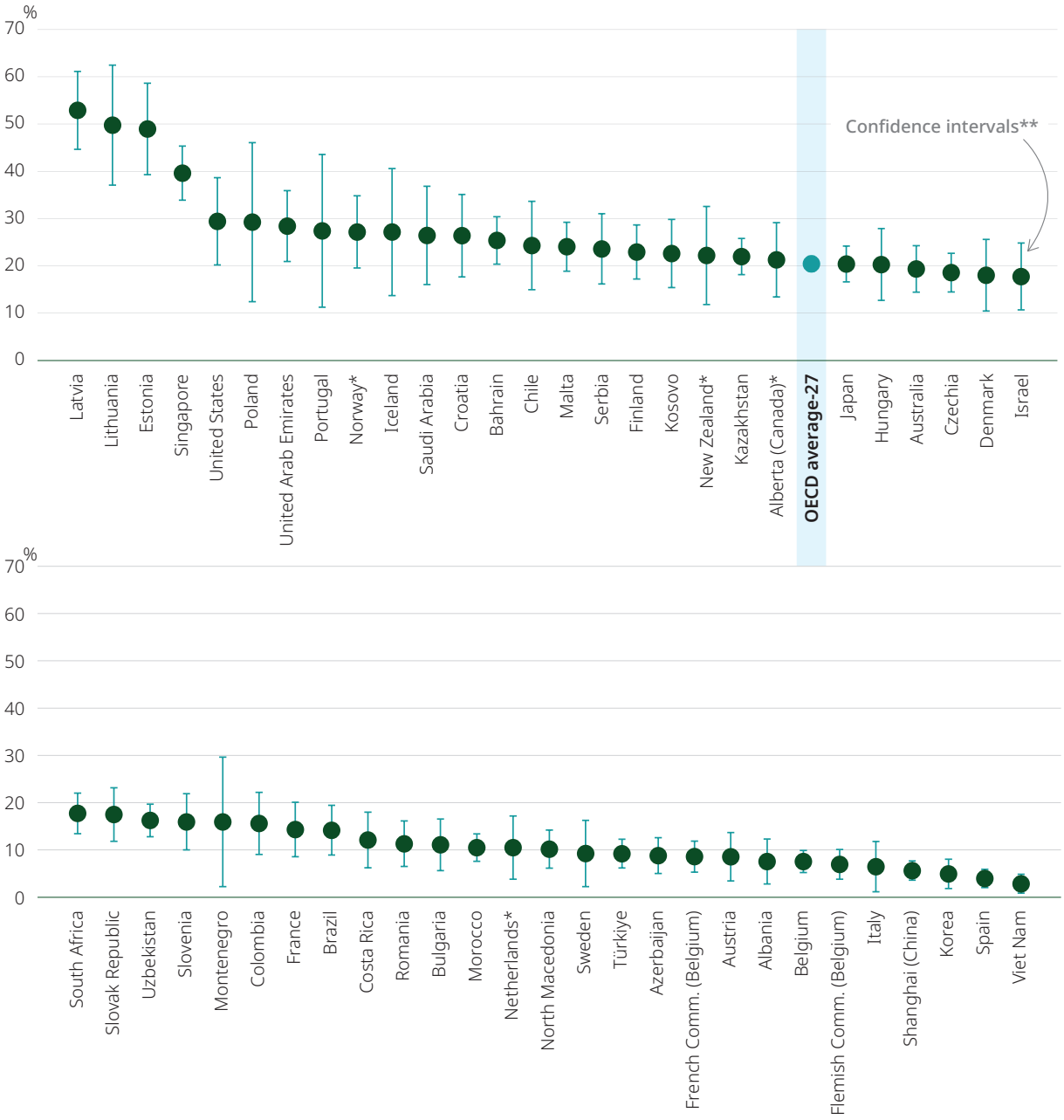


*Estimates should be interpreted with caution due to higher risk of non-response bias.

Note: See the advisory on page 42.

Source: OECD, TALIS 2018 and TALIS 2024 Databases, Table 1.4.

Share of lower secondary teachers aged under 30 who intend to leave teaching in the next five years



*Estimates should be interpreted with caution due to higher risk of non-response bias.

**Confidence interval: 95 percent confidence that the value is within this range.

Note: See the advisory on page 42.

Source: OECD (2024), TALIS 2024 Database, Table 7.1.

Why are the youngest teachers sometimes in the most demanding classrooms?

TALIS data and other research show that more experienced teachers are more likely to meet their lesson aims. So, imagine a world where the most experienced, older teachers work in the most challenging classrooms. Where seasoned educators teach students with the toughest social and academic prospects.

The concept makes sense. And in many countries assessed by TALIS, there is a relative balance. However, in certain education systems, young teachers aged under 30 disproportionately report working in the most demanding classroom environments. In comparison, older, more experienced teachers often seem to get the opportunity to work in less challenging schools.

TALIS data reveal some especially large gaps. For example, in Bahrain, Colombia, Israel and United Arab Emirates, the share of teachers under 30 who report working with students with language difficulties is 15 percentage points higher than that of their older colleagues. Younger teachers are also more likely to say they work with students presenting special education needs in 15 out of 53 systems surveyed by TALIS. The gap is largest in the Netherlands*, where 73% of younger teachers report teaching classes with a high share of students with special needs - 19 percentage points higher than their older colleagues.

A similar pattern is observed for behavioural problems. In most education systems, younger teachers are significantly more likely than older colleagues to report that over 10% of their students have antisocial or disruptive behaviour. The difference is 25 percentage points in Latvia and Portugal. However, one interpretation of the data could be that older teachers are better equipped to handle bad behaviour, so report it as less of an issue.

These disparities not only negatively affect young teachers, but also students, and ultimately the entire education system more broadly. Younger, inexperienced teachers are more likely to be confronted with challenging classrooms during a period when they are still developing their class management skills and confidence. Almost one in three novice teachers

report needing training focused on classroom management, on average, more than the share of experienced teachers. On top of this, new teachers will sometimes have to operate with limited support systems. These circumstances increase the odds of young teachers burning out or abandoning the profession altogether. In turn, students in demanding classrooms, who are already disadvantaged by circumstance, may see their teachers struggle or quit. This inevitably creates a cycle of instability and undermines long-term strategies to improve educational outcomes.

This mismatch between the complexity of teaching contexts and the preparedness of new teachers underlines the need for smart deployment strategies and targeted support. So what can policymakers do? Some countries offer compelling policy ideas. In Japan, for example, teachers are expected to rotate schools throughout their careers. This is to ensure that all schools have access to effective teachers and a balance of experienced and novice teachers. In Korea, a mandatory rotation system requires teachers to move to a different school every five years. Incentives – such as extra pay, smaller classes and the ability to choose the next school where one works – are also used to attract skilled educators to the most challenging schools. Pairing high- and low-performing schools can also be beneficial. In Shanghai, for example, the "empowered management programme" allows teachers and school leaders from both types of schools to work together, including observing classes and discussing effective practices.

Many OECD countries have brought in targeted financial incentives to encourage teachers to work in schools perceived as more difficult working environments. These "pay rewards", if well designed, can help encourage teachers to work in tougher schools and can be more cost efficient than across-the-board salary incentives. However, while bonuses and salary increases may draw teachers to hard-to-staff schools, they do not guarantee retention or sustained performance.

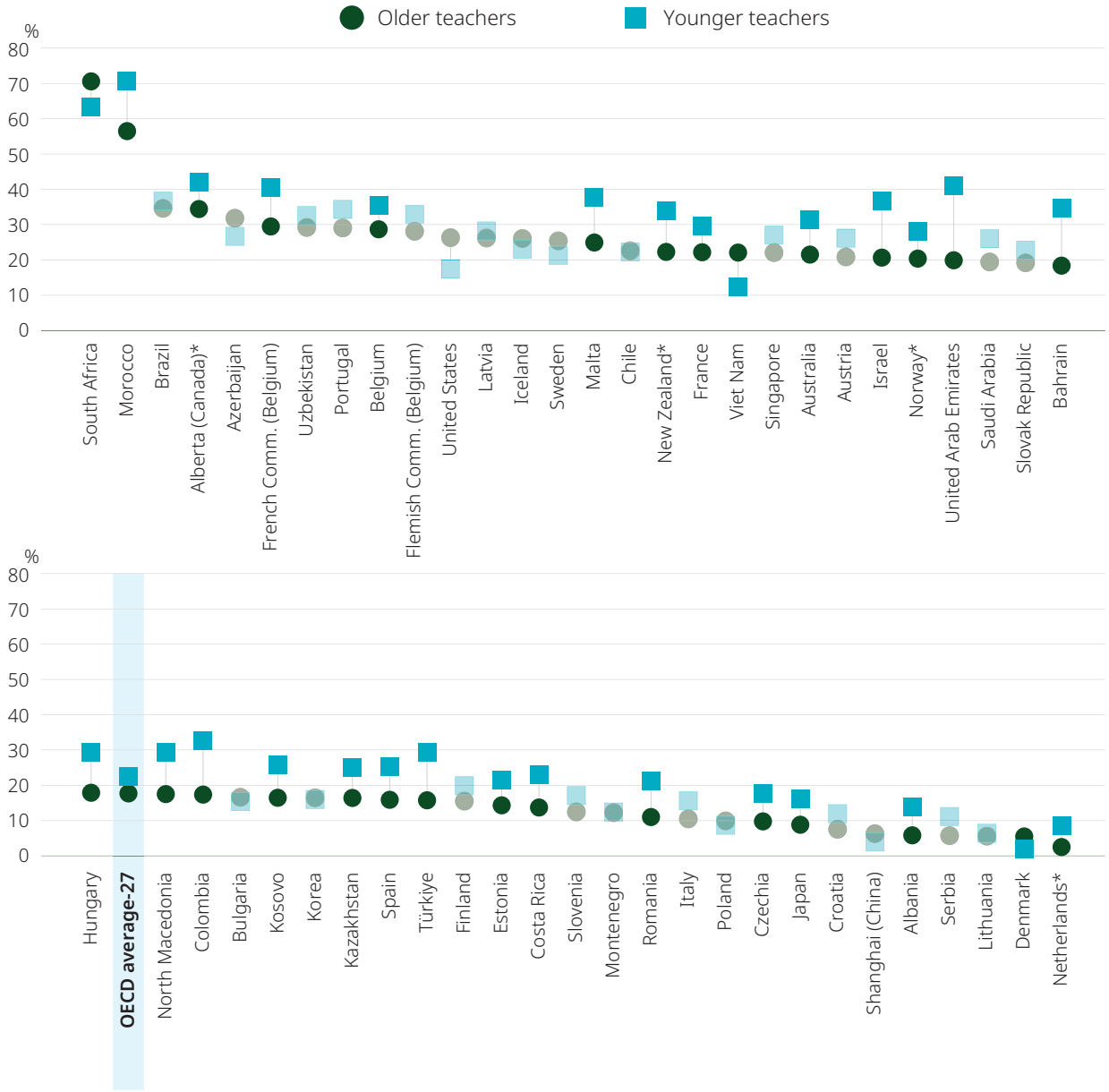
More effective strategies tend to combine career incentives with robust support mechanisms. For example, offering accelerated career progression, leadership opportunities or access to advanced professional development can be more motivating than financial rewards. Policymakers need to rethink how they organise schools and empower educators. They must also not neglect the basics: developing a positive work environment and providing sufficient resources, supportive leadership and collaboration among staff. All of these have been shown to boost teacher satisfaction and retention.

Countries like New Zealand* and Singapore have introduced differentiated career tracks that allow teachers to advance while staying in the classroom, rather than taking on administrative roles. Other strategies, such as less class-contact time or smaller classes, are also worth considering for schools in difficult areas or that have specific education needs. Technology can also help, especially in remote or underserved regions where teacher expertise is limited. Digital platforms can bring high-quality instruction to students regardless of geography, enabling remote schools to benefit from "master teachers" through live-streamed lessons, virtual mentoring and shared digital resources.

Looking ahead, education leaders need to promote the idea that it is a smart career move for experienced teachers to work in the toughest schools. For long-term success, policymakers must go beyond attracting teachers to the profession. They need to make disadvantaged schools places where teachers feel valued, supported and rewarded. At the moment, veteran teachers sometimes gravitate toward institutions with higher academic reputations, better resources and lighter workloads. Without greater incentives, that situation is not going to change.

Teachers who say more than 10% of students struggle to understand the language of instruction

Percentage of lower secondary teachers



*Estimates should be interpreted with caution due to higher risk of non-response bias.

Notes: Older teachers refer to those aged 50 and above. Younger teachers refer to those under age 30.

Results refer to lessons taught to a class randomly selected from teachers' current weekly timetables during the week preceding the survey.

Statistically significant coefficients are shown in solid green and blue, while non-significant coefficients are transparent.

See the advisory on page 42.

Source: OECD (2024), TALIS 2024 Database, Table 3.25.

Did you know...

Teacher training on AI is highest in Singapore (76%) and lowest in France (9%).

How to balance teacher autonomy with accountability in the classroom?

Education systems often face tensions between granting teachers' professional autonomy and holding them accountable for the decisions they make. Indeed, TALIS data show that the level of autonomy afforded to teachers varies considerably across countries. For example, fewer than 30% of lower secondary teachers have significant responsibility to choose the learning materials they use in lessons in Azerbaijan, Bahrain, Japan, Morocco and Uzbekistan. In contrast, the share is above 90% in Denmark, Estonia, Iceland, Italy, the Netherlands*, Poland and Slovenia, according to principals' reports. So how much freedom should teachers have in the classroom?

It is a simple question and at first glance many would argue that teachers must be free to do their jobs rather than simply follow instructions handed down from above. But in practice, there are many pedagogical and system matters to consider. According to TALIS data, teachers who report higher levels of autonomy in designing lessons and teaching methods tend to feel more confident in managing classrooms and delivering lessons. More autonomy also correlates with higher job satisfaction, lower stress and greater confidence in adapting lessons to students' needs, in most cases by a large margin.

This seems to suggest that greater teacher autonomy is a good thing. However, TALIS only tells us there is a correlation. Not what the driving factor is. For example, confidence could be the main reason why teachers act more autonomously and are less stressed.

It is also important to note that the data show a stronger link between autonomy and self-efficacy among experienced teachers. Educators who have spent ten years or more in front of a blackboard tend to flourish when they are free to tailor their approach. In contrast, too much autonomy for novice teachers, who might lack support structures, could have a negative impact.

How should policymakers respond? While autonomy is often championed as an important component of teaching, that should not mean a lack of coherence in practice. Idiosyncratic or unscientific methods risk undermining student outcomes and the credibility of teachers. It is important for policymakers to promote a shared professional culture grounded in evidence-based practice. Education systems should consider which teachers are granted more freedom and under what circumstances. A teacher's profile – their experience, confidence and competence – should inform decisions about autonomy. For example, a novice teacher may need structure and mentorship before being expected to exercise autonomy.

Countries have confronted these issues in different ways. In Slovenia, for example, a decade-long reform of upper secondary education saw teachers gradually take on greater responsibility for whole-school planning and implementation. This meant that teachers had considerable autonomy to shape classroom practices. At the same time, accountability was built into the system through shared strategic goals and national resources to guide teachers' work.

Colombia has embedded teacher involvement by allowing teachers to participate in educational governing bodies, giving them a say on curriculum and policy. The country has also strengthened teacher autonomy through five annual weeks dedicated to institutional development. In this time, teachers can work on teaching practices as well as their school's planning and partnerships. These examples of structured programmes balance freedom with shared responsibility. They create space for teacher-led initiatives to work alongside broader educational goals.

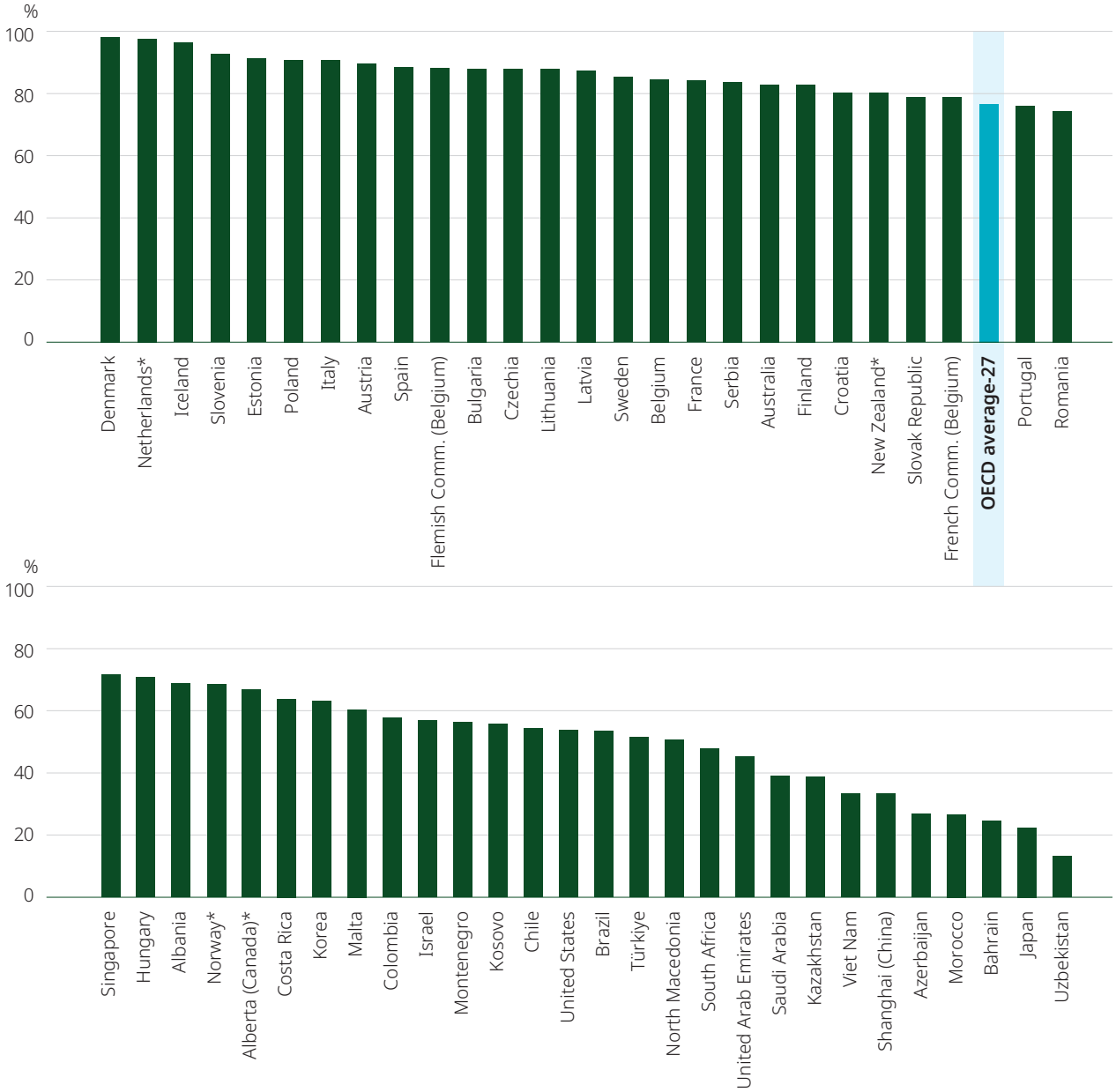
But allowing freedom in the classroom should not mean a lack of oversight. And at the moment, there is sometimes insufficient oversight in countries where teacher autonomy is high. For example, in Italy and Norway*, where many teachers report having substantial instructional autonomy, about one in four have never been appraised. In Finland, the share exceeds one third. Education leaders, effectively, may not really know what teachers are doing in the classroom.

This can have serious implications. Successful accountability systems allow teachers to innovate while maintaining clear benchmarks for success. Policymakers need to cultivate environments for teachers to work together to frame good practice, such as through classroom observation and professional learning communities. This will ensure that autonomy is exercised collaboratively and responsibly; and help legitimise instructional autonomy while maintaining standards.

However, if accountability systems go too far, they can have a negative impact. When systems become punitive or disconnected from real classroom work, they can limit and undermine autonomy altogether. That, in turn, can breed an atmosphere of compliance, rather than creativity, and harm the quality of teaching.

Share of teachers who have significant responsibility to choose learning materials

Percentage of lower secondary teachers, according to principals' reports



*Estimates should be interpreted with caution due to higher risk of non-response bias.

Notes: Results based on responses of principals.

See the advisory on page 42.

Source: OECD (2024), TALIS 2024 Database, Table 5.1.

Did you know...

Half of the teachers aged under 30 in Estonia, Latvia and Lithuania and report they intend to quit teaching within five years.

How do teachers manage classroom discipline?

Across many countries, teachers are spending increasing amounts of time maintaining classroom discipline. In fact, TALIS data show that the share of class time allocated to keeping discipline has increased in almost all OECD systems, from 13% in 2018 to 16% in 2024 on average. What is going on?

TALIS data offers several clues as to why teachers are spending more time on discipline. For example, in Finland and Kazakhstan, the proportion of teachers having to tell students to follow classroom rules has shot up (18 and 28 percentage points, respectively) since 2018. In Latvia, there has been a huge rise in the share of teachers needing to calm students who are disruptive (up 36 percentage points). More than a third of teachers in Chile, Finland, Portugal and South Africa report a lot of disruptive noise and disorder in the classroom. In Brazil, the figure is a massive 57% compared to an OECD average of 21%. And, overall, almost one in five teachers across the OECD say they lose quite a lot of time due to students interrupting lessons.

At first glance, these statistics could suggest that classrooms are being more unruly, at least in some places. However, the data more likely points towards the growing challenges teachers face, which results in more time spent on classroom management.

First, let's consider student behaviour itself and the context. Many students are struggling with motivation, anxiety and self-directed learning. In the smart phone world, students are seconds away from using social media or playing a computer game at any moment. Indeed, OECD data tell us that nearly one in three students get distracted by using digital devices in class on average. That is one of the reasons why many schools have banned phones in class and a growing number of countries have forbidden digital devices on school grounds or implemented restrictions.

However, the challenge is not just about keeping students off their phones; it is about guiding them to use devices responsibly and in a way that supports learning. Teachers are now expected to coach students on how to navigate digital spaces, evaluate sources and stay focused amid constant notifications.

This shift demands a new kind of classroom management, one that blends behavioural oversight with digital literacy education. And if teachers do not receive effective support to manage today's classrooms, that can lead to opportunities for student misbehaviour.

Even minor things, such as talking out of turn or ignoring instructions, can erode a teacher's authority and potentially escalate into more serious incidents, such as verbal or physical confrontations. According to TALIS, intimidation or bullying on school grounds is the most reported safety issue, on average. Across OECD countries, 19% of teachers work in schools where student bullying or verbal abuse on school grounds occurs regularly, according to principals' reports. The figure tops 40% in Finland, Malta, Norway* and Sweden and is around 50% in the Flemish Community of Belgium. These behaviours can have devastating effects on victims, including anxiety, depression and a decline in academic performance. Bullying also contributes to a toxic school climate.

TALIS results also reflect the growing diversity in classrooms across the world, resulting in extra challenges for teachers. TALIS data show that about one in five teachers say more than 10% of their students have difficulties understanding the language of instruction. In some education systems, this is a particular issue. The share rises to about 25% in Bahrain, Latvia, Saudi Arabia and the United States, and exceeds 50% in Morocco and South Africa. If students cannot understand what the teacher is saying, it is not surprising if teachers may have to spend time repeating classroom rules.

TALIS data show that the share of low-achieving students in a classroom has a greater association with disruption than aspects like class size, language difficulties or special educational needs. Meeting the needs of low-achieving students requires extra time and personalised instruction, which can put significant pressure on a teacher's focus. This potentially leads to increased disruption.

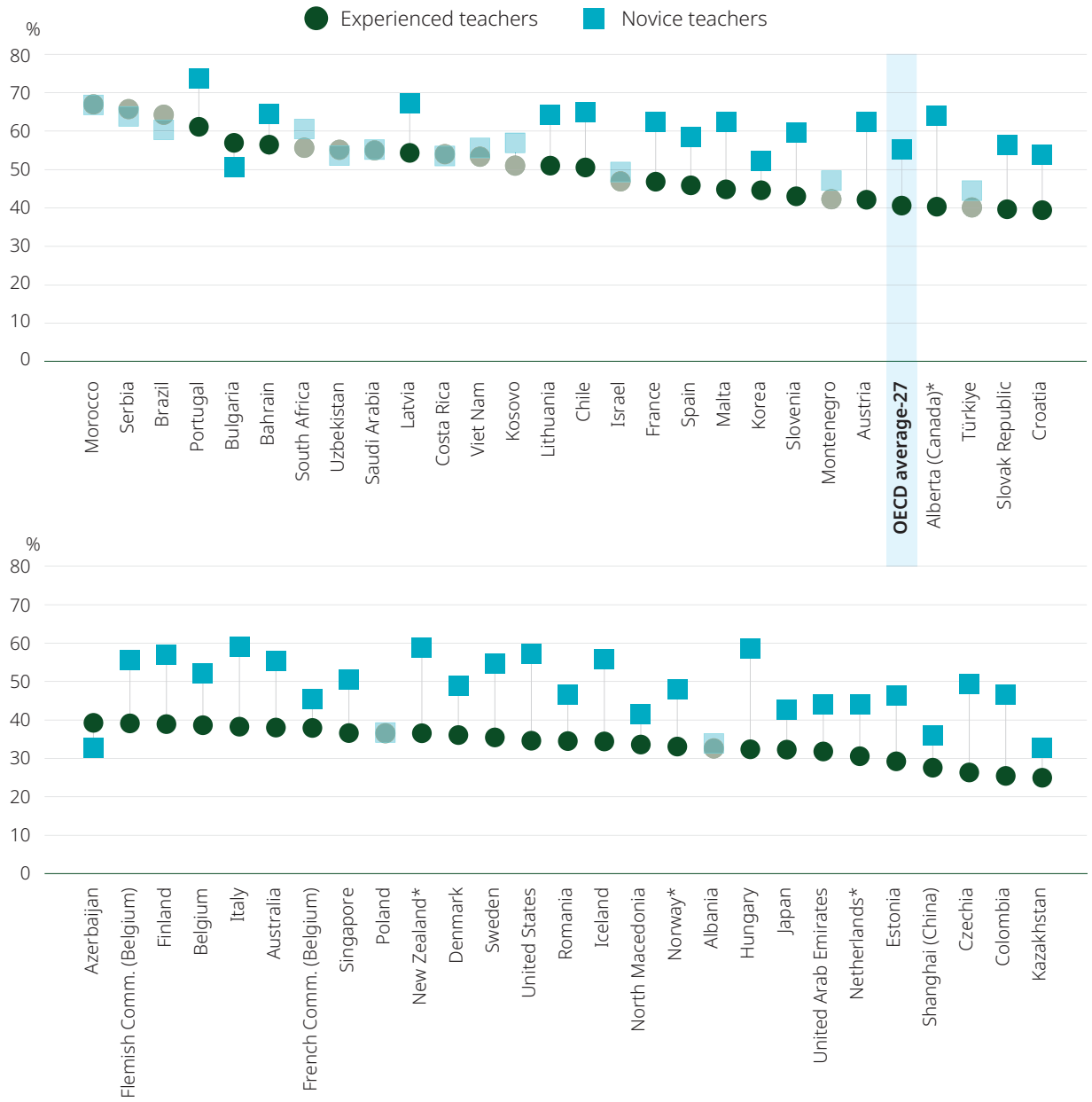
When considering these different accumulating demands, is it any wonder that some teachers may find it more difficult to deliver well-structured lessons? This, in turn, can make classroom management more challenging.

Conversely, we should also consider that dedicating more time to classroom discipline could be a good thing. Are teachers proactively nipping bad behaviour in the bud and, in so doing, preventing naughty students from getting out of control and disturbing the class? When teachers set clear expectations for behaviour and create a safe, structured and supportive learning environment, they spend less time on classroom management and students spend more time on learning. And with fewer behavioural interruptions, teachers can devote more energy to teaching and students can focus more effectively on learning. In contrast, an inconsistent approach to disrespectful behaviour may send students signals that in some cases such behaviour is acceptable.

Incidentally, this evidence ties in with an earlier chapter of Insights and Interpretations recommending that policymakers take steps to prevent the least experienced teachers from teaching in the most difficult classrooms! TALIS data show that teachers with high self-efficacy in classroom management consistently report lower levels of stress related to discipline, often by over 40 percentage points. This is potentially because they perceive behavioural challenges not as threats, but as manageable aspects of their role. When teachers are confident in their ability to respond effectively to disruptions, it helps create a buffer against emotional exhaustion and burnout. In unruly classrooms, this can make discipline feel less overwhelming and more like a solvable part of the teaching process.

Share of teachers who say maintaining classroom discipline is a source of stress

Percentage of lower secondary teachers who report maintaining classroom discipline causes stress "quite a bit" or "a lot"



*Estimates should be interpreted with caution due to higher risk of non-response bias.

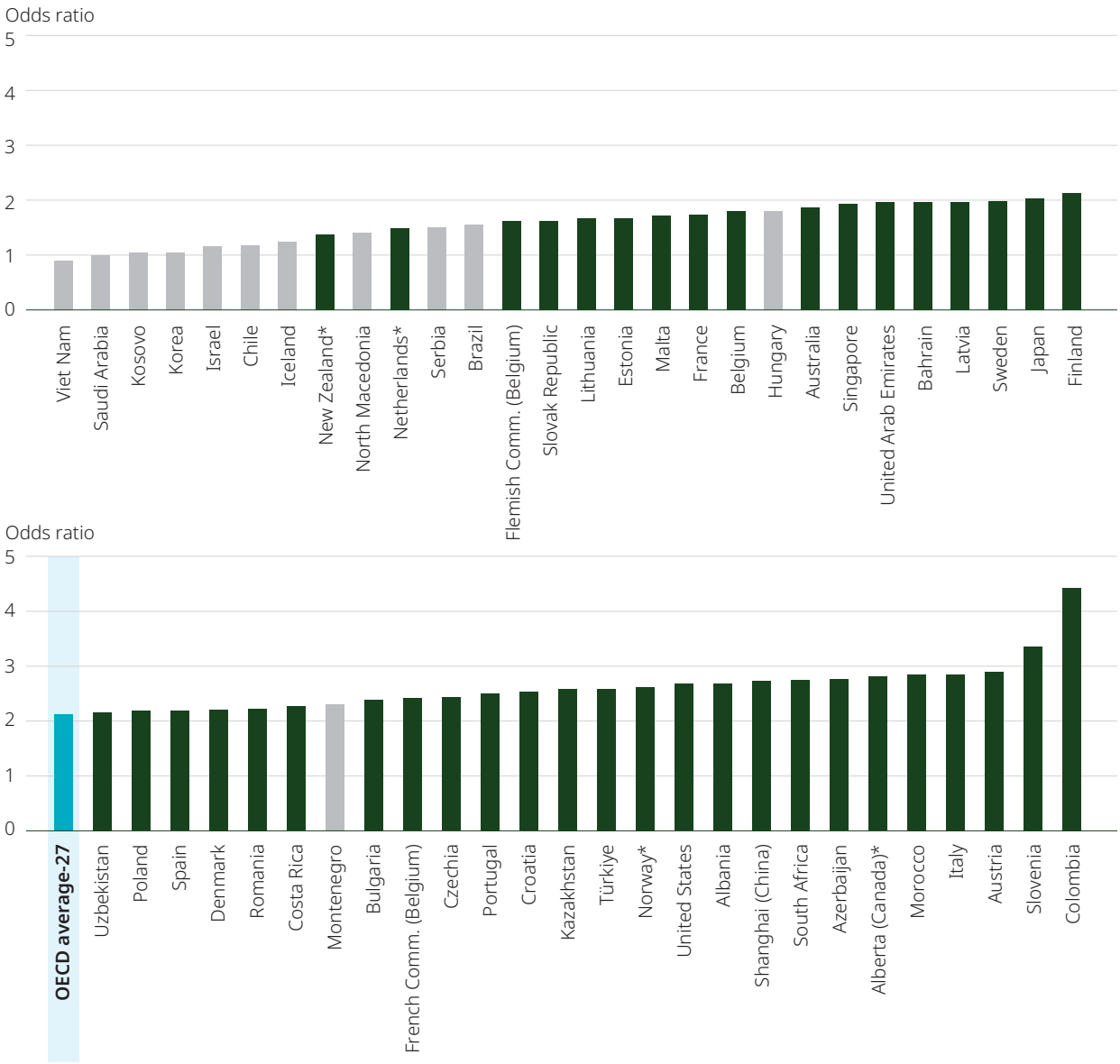
Notes: Novice teachers refer to those with up to five years of teaching experience. Experienced teachers refer to those with more than ten years of teaching experience.

Statistically significant coefficients are shown in solid green and blue, while non-significant coefficients are transparent.

See the advisory on page 42.

Source: OECD (2024), TALIS 2024 Database, Table 3.16.

Change in the likelihood† of teachers saying they will quit related to intimidation or verbal abuse by students



† Change in the likelihood of teachers reporting that they intend to leave the profession within the next five years associated with experiencing intimidation or verbal abuse by students as a source of stress "quite a bit" or "a lot".

* Estimates should be interpreted with caution due to higher risk of non-response bias.

Notes: An odds ratio indicates the degree to which an explanatory variable is associated with a categorical outcome variable. An odds ratio below 1 denotes a negative association; an odds ratio above 1 indicates a positive association; and an odds ratio of 1 means that there is no association. After controlling for teacher and school characteristics.

The analysis is restricted to teachers who report that retirement from work sector is “not at all likely” or “not very likely” to lead them to leave teaching within the next five years.

Statistically significant coefficients are shown in green and blue, while non-significant coefficients are shown in grey.

See the advisory on page 42.

Source: OECD (2024), TALIS 2024 Database, Table 7.12.

Should AI mark your children's schoolwork?

Like the rest of society, many teachers across the globe are embracing artificial intelligence as an important tool. A third of teachers are now using AI for work, with most using it for planning lessons and learning about teaching topics. Out of those teachers using AI, TALIS data also reveal a quarter employ it to assess or mark students' work. This represents a fundamental shift in how students are evaluated and raises a fundamental question: is it a good development or not?

The attraction of AI is obvious as teachers regularly say they are short on time. Between planning lessons, teaching and managing classrooms, and marking assessments, the workload can be relentless. So, if AI software claims it can assess hundreds of maths tests in seconds, it is no surprise that some teachers jump at the chance. AI is simply better than humans at doing certain things, particularly tasks requiring repetitive precision. But assessing the quality of an essay or musical composition is far more complex and nuanced. Out of teachers who use AI, at least 50% in Azerbaijan, Kazakhstan, North Macedonia, South Africa, Türkiye and Viet Nam mark schoolwork with it, according to TALIS data. In Uzbekistan, the share reaches an astonishing 85%. That is fast take-up given that ChatGPT was only launched at the end of 2022. It is also a major change that, in most cases, has occurred without formal policies or consistent training.

This rapid evolution raises many questions, including: What software are teachers using? How do you know the AI isn't making mistakes? And how does using AI to mark schoolwork affect the relationship between students and teachers?

For critics, the speed at which AI has been adopted is a risk, with technology companies competing for a global market with little regard for oversight. But for supporters, AI is the solution to numerous issues that teachers contend with on a daily basis. Across the OECD, 40% of teachers report that too much marking is a source of stress. By instantly assessing grammar, coherence and structure, proponents of AI argue it allows teachers to spend more time on lesson planning and mentoring students, freeing them from "never ending" marking.

But some researchers contend that there is a lack of robust, large-scale independent evidence that proves AI enhances student learning. AI may struggle to capture subjective elements of assessment, such as creativity or originality, they argue. And it may also have difficulty understanding context or cultural influences. In addition, there are privacy and data security concerns. And left unchecked, algorithmic grading may amplify racial, gender and socio-economic biases rather than erase them.

These issues raise concerns about what checks have been carried out before implementing AI in the classroom. The effectiveness of algorithms varies considerably. Does the AI grade fairly across different student demographics? Does its feedback genuinely help students improve? Education leaders and schools should know the answers before deploying the software, particularly as some surveys suggest that nearly two-thirds of adults oppose the use of technology for marking.

Another profound shift to consider is the relationship between teacher and student. Traditionally, marking has been about more than just correcting errors. It is a form of dialogue with teachers' comments offering insight and encouragement to students. If replaced by AI, does it weaken the personalised relationship between teacher and student? Could some students make less effort if they realise AI, and not teachers, are marking their work?

These are questions that policymakers should urgently get answers to, particularly in countries where the use of AI in teaching has really taken off in ways other than marking. For example, around three-quarters of teachers in Singapore and United Arab Emirates report using AI in their general work, according to TALIS data. Training on AI is highest in Singapore (76%) and lowest in France (9%). And among teachers who use AI, some 73% report leveraging it to efficiently learn about and summarise topics, and 69% use it to generate lesson plans, on average, according to TALIS. Given the speed at which AI is racing through classrooms, it is no surprise that policymakers are scrambling to keep up.

It is also important to note that many teachers are less than enthusiastic. TALIS data show that about half of teachers believe AI should not be used in teaching at all. And one in ten report that their schools have policies banning the use of AI in teaching. The data reveal major divides between schools and teachers on the use of AI tools in classrooms. This is reflected by countries policies too, with some nations embracing AI and others urging caution.

It is clear that AI's role in education is anything but settled, but education leaders must not avoid it or be afraid of it. Instead, schools need to ensure that AI is applied effectively and in contexts where it truly enhances learning. The OECD will continue to support teachers and policymakers to make informed decisions. This includes an AI literacy framework to help educators better assess students' understanding of AI, and research about the opportunities, guidelines and guardrails to ensure AI is used effectively.

Ultimately, students and teachers must understand how AI systems evaluate work. Schools must ensure fairness, so the AI avoids bias and ensures equitable treatment. And while AI can assist with grading, human judgment remains crucial, particularly for creative or subjective work. The OECD recommends countries actively embrace the role of AI in teaching and learning and establish guidelines about how and when it should be used. That will ensure teachers have the final say – not the algorithm.

Out of teachers who use AI, how many use it to assess or mark student work?

Percentage of lower secondary teachers

* Estimates should be interpreted with caution due to higher risk of non-response bias.

Note: See the advisory on page 42.

Source: OECD (2024), TALIS 2024 Database, Table 1.60.

Did you know...

This TALIS survey sampled about 280 000 teachers in 17 000 schools across 55 education systems.

Why it is important for teachers to believe in a growth mindset to support learning

In educational circles, few ideas have gained as much traction, or provoked as much scrutiny, as the concept of the "growth mindset". Coined by psychologist Carol Dweck, the term describes a belief that intelligence is not fixed and can grow. Research shows that students tend to see better academic results if their teachers embrace a growth mindset. These teachers are more likely to praise effort rather than innate talent and provide constructive feedback that helps students learn from mistakes. This is especially true for students at risk of falling behind. In PISA 2018, students who demonstrated a growth mindset outperformed peers with a fixed mindset by a significant margin; 31 points higher in reading, 27 points higher in science and 23 points higher in maths.

Given these findings, it is perhaps surprising that the growth mindset has not been more warmly embraced in some countries. For example, over 85% of lower secondary teachers believe in a growth mindset in Alberta (Canada)*, Chile, New Zealand*, Australia, United States, France, Iceland, Spain, Sweden, and Brazil. But in some education systems, such as Azerbaijan, Czechia, Kosovo, Montenegro, North Macedonia, Shanghai (China), South Africa and Viet Nam, only around half of the teachers believe that intelligence can be developed.

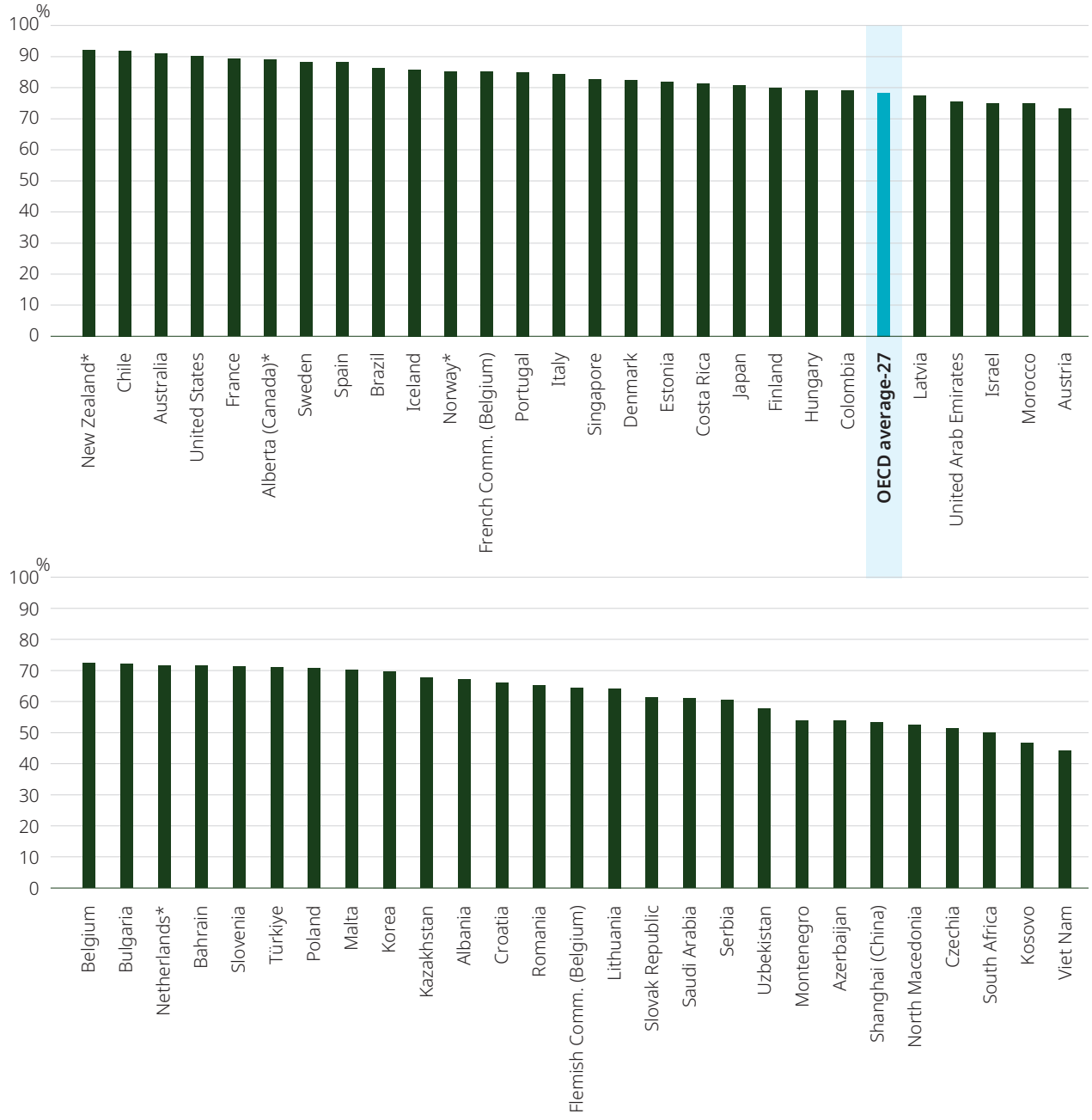
OECD researchers say these differences may be shaped by cultural factors. However, it is important to note that teachers who have a fixed mindset can often be quick to label learners as either "capable" or "incapable" and become rigid in what they expect from students. Instead of seeing setbacks as opportunities to learn, they might view them as evidence of failure. Policymakers should tackle this head-on and promote and develop teaching cultures rooted in the belief that all students are capable of learning and growth.

Some countries are already taking proactive steps in this direction. In Singapore, the belief that all students can grow intelligence is a core professional value of the country's Introduction to Teaching Programme. By familiarising new recruits with growth mindset principles early on, the system builds a strong philosophical foundation so that teachers start their jobs with high expectations for all learners. Similarly, in South Africa, one of its provinces' education departments, Western Cape, uses various methods to foster a growth mindset in teachers and students alike. This includes the use of multimedia resources and partnerships with neuro-linguistic practitioners, resulting in tailored teacher training that has reached thousands of educators.

Both of these examples reflect an understanding that belief systems shape behaviour. And as classrooms become more diverse, the argument for teachers to embody a growth mindset has, arguably, become more compelling. Critics may caution against overemphasising the impact. A growth mindset cannot, by itself, erase systemic inequalities or substitute for quality teaching. But the data suggest it is still a significant lever for boosting student outcomes.

Share of teachers who are more likely to believe in a growth mindset

Percentage of lower secondary teachers who "strongly disagree" or "disagree" that people cannot change their intelligence



* Estimates should be interpreted with caution due to higher risk of non-response bias.

Note: See the advisory on page 42.

Source: OECD (2024), TALIS 2024 Database, Table 2.36.

Did you know…

The share of class time allocated to keeping discipline has increased in almost all OECD systems, from 13% in 2018 to 16% in 2024 on average.

Mentoring is on the rise – good!

For decades, teaching has been a relatively solitary profession. New teachers, fresh from training, were often thrust into classrooms with little more than a curriculum guide and a pile of textbooks. Meanwhile, more experienced teachers were expected to independently navigate the various teaching challenges they faced. This is still the case in many places today. While the importance of effective teacher learning is widely recognised, many teachers are working in relative isolation and are left to largely manage their own personal learning. But in some countries mentoring is gaining traction – and this is a good thing!

TALIS data show that the share of novice teachers with an assigned mentor has increased in about one-third of education systems. This signals, perhaps, something of a cultural shift. And it is long overdue. Mentoring pairs novice teachers with experienced colleagues who can offer guidance, feedback and emotional support. For example, in Singapore all new teachers are paired with an instructional mentor in the first two years of their career. And in the Netherlands*, primary school teachers are supported through structured, continuous mentoring in their first years of practice.

Across the OECD, about one in four novice teachers now has an assigned mentor, on average. And some education systems are streets ahead. More than 50% of teachers with less than five years experience have a mentor in Bahrain, Israel, the Netherlands*, Poland, United Arab Emirates and Uzbekistan. In Shanghai (China) the proportion is nearly 80%.

These education systems are leading the way and although mentoring remains relatively uncommon overall, its growing popularity indicates that some teachers are receiving extra support. There are many benefits: TALIS data show that novice teachers with a mentor are often more likely to report

fulfilling their lessons' aims, have an improved sense of confidence and have higher job satisfaction. Mentees can gain competence more quickly, while mentors often rediscover purpose and refine their own practice. Induction programmes for beginning teachers have also been shown to reduce the number of teachers dropping out of the profession.

TALIS data reveal some of the areas where mentoring could provide support. For example, around a third of novice teachers say they need classroom management training, which is up 6 percentage points since 2018. More experienced teacher mentors can share strategies for maintaining discipline and managing students in the classroom. They can also give guidance on curriculum planning, help newcomers navigate school policies and administrative tasks, as well as the unique culture of their school environment.

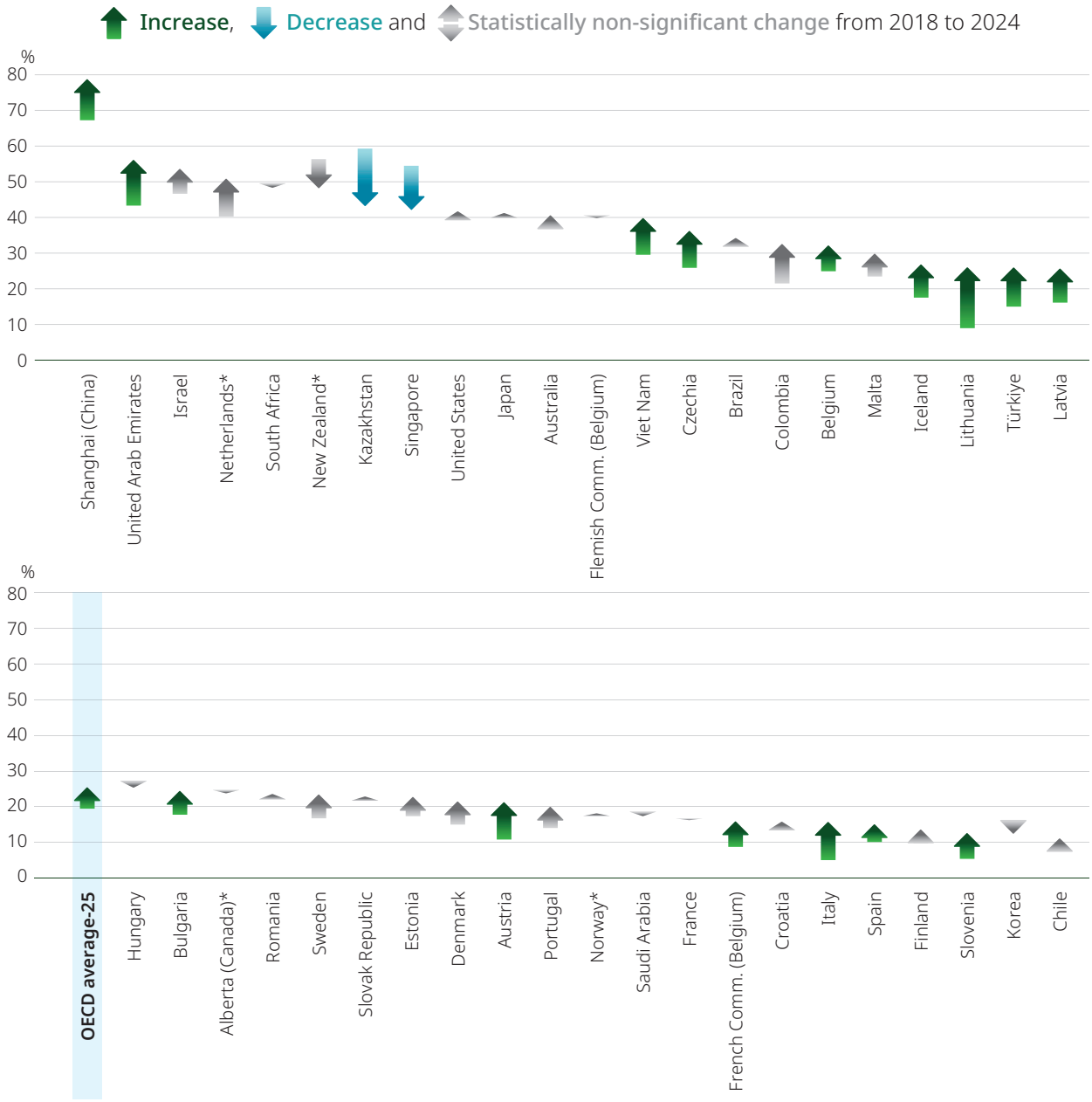
Why is mentoring becoming more popular? The data doesn't give a definitive answer. However, a few factors are likely in play. First, teacher shortages have made retention issues a strategic imperative. For example, around 5% of teaching positions were not filled in Austria or Sweden at the start of the school year in 2022, according to OECD data. TALIS data show that one in five teachers under the age of 30 intend to leave teaching in the next five years, on average. Mentoring can be part of the solution to help prevent burnout and attrition.

Second, the COVID pandemic highlighted the need for more robust professional networks. Remote teaching, shifting expectations and the emotional strain of working in a crisis underscored the need to provide teachers with greater support.

Third, the OECD has repeatedly recommended mentoring as a key strategy to develop effective teachers and strengthen school systems. Studies show that teacher candidates in high performing countries typically receive intensive induction or mentoring programmes at the start of their careers. This is borne out by the TALIS data. The share of novice teachers being mentored is above the OECD average in Australia, Czechia, New Zealand*, Poland and Singapore. In all these countries, 15 year-old students perform above the OECD average in maths, reading and science, as measured by PISA.

Given all the evidence, policymakers should look to implement mentoring programmes at scale. However, a note of caution: it may be challenging to expand mentoring programmes while maintaining effectiveness. Analysis of teacher coaching programmes found that small trials had larger positive effects than larger programmes implemented at scale. One reason might be that it is hard to find enough teachers capable of coaching many other colleagues, especially when their learning needs are so different. So, there is work to do in ensuring effective implementation. Technology can help overcome some of the challenges by helping recruit mentors and improving mentor-mentee matching. But the direction is clear – the path towards more mentoring is a good thing.

Change in the share of novice lower secondary teachers with an assigned mentor, from 2018 to 2024



*Estimates should be interpreted with caution due to higher risk of non-response bias.
Notes: Novice teachers refer to those with up to five years of teaching experience.
See the advisory on page 42.
Source: OECD, TALIS 2018 and TALIS 2024 Databases, Table 4.11.

Did you know...

About one in four novice teachers has an assigned mentor, on average, across the OECD.

Teaching is becoming more of a team sport

The benefits of teacher collaboration have long been trumpeted by policymakers. Creating lesson plans together, co-developing assessments and reflecting on classroom practice are ways to improve the quality of teaching and student outcomes, according to extensive research. So education leaders will be happy to see that teachers are spending more time working together. Indeed, according to TALIS, full-time teachers report spending just over 3 hours per week participating in teamwork and dialogue with colleagues, on average across the OECD. Some countries have seen a particularly big jump. Brazil, for example, has leaped from 3.5 hours in 2018 to 5 hours in 2024.

TALIS asked teachers how often they collaborate; tasks such as team teaching and sharing teaching materials. Across the OECD, 31% of teachers report teaching jointly as a team. The proportion is particularly high in some countries. In Austria, Azerbaijan, Denmark, Italy, Japan and Uzbekistan, the share of teachers engaged in team teaching is around 50% or more. In Viet Nam, the figure is 69%. In contrast, less than 10% of teachers in Bulgaria, Cyprus, Lithuania, Malta, Montenegro and Morocco teach jointly in the same class. In Croatia, the figure is a paltry 3%.

These statistics reveal how far some countries have progressed in this area, while others lag behind. This is important because the more teachers take part in training, the more confident they feel about teaching. They are also more likely to use teaching methods that get students thinking and actively involved. OECD data show teachers who work closely with their colleagues tend to use these strategies more often. This suggests that when teachers share ideas, visit each other's classrooms and support one another, they are more likely to use effective teaching strategies. As a result, schools should encourage teachers to work together and engage in professional networks, rather than work alone.

Other results in TALIS reveal there is often a general lack of co-operation. Only 9% of teachers, on average across the OECD, observe other teachers' classes and provide feedback, although this would take up a lot of time and resources. And 46% exchange teaching materials with colleagues monthly or more, although female teachers are more likely to do so than their male counterparts. Despite the evidence that teamwork among teachers is a good thing, the reality inside many schools remains stubbornly solitary.

Why is this the case? There are many reasons. Time is the most obvious constraint. School schedules are notoriously rigid, and carving out hours for collaboration often means sacrificing instructional time or could mean teachers work unpaid. Cultural norms also play a role. In some countries, hierarchy and deference to seniority are deeply ingrained, which may mean younger teachers hesitate to critique or co-plan with more experienced colleagues. In others, those who embrace teacher autonomy might resist teamwork. Teaching is often seen as a craft, honed through personal experience and individual flair. Asking teachers to expose their practice to scrutiny could feel like an affront to their professional identity.

Looking ahead, if education systems are serious about improving outcomes, they should bolster collaboration. That means rethinking timetables, investing in training, and cultivating cultures of trust. It also means recognising that teamwork is not an add-on, but a core component of being a teacher.

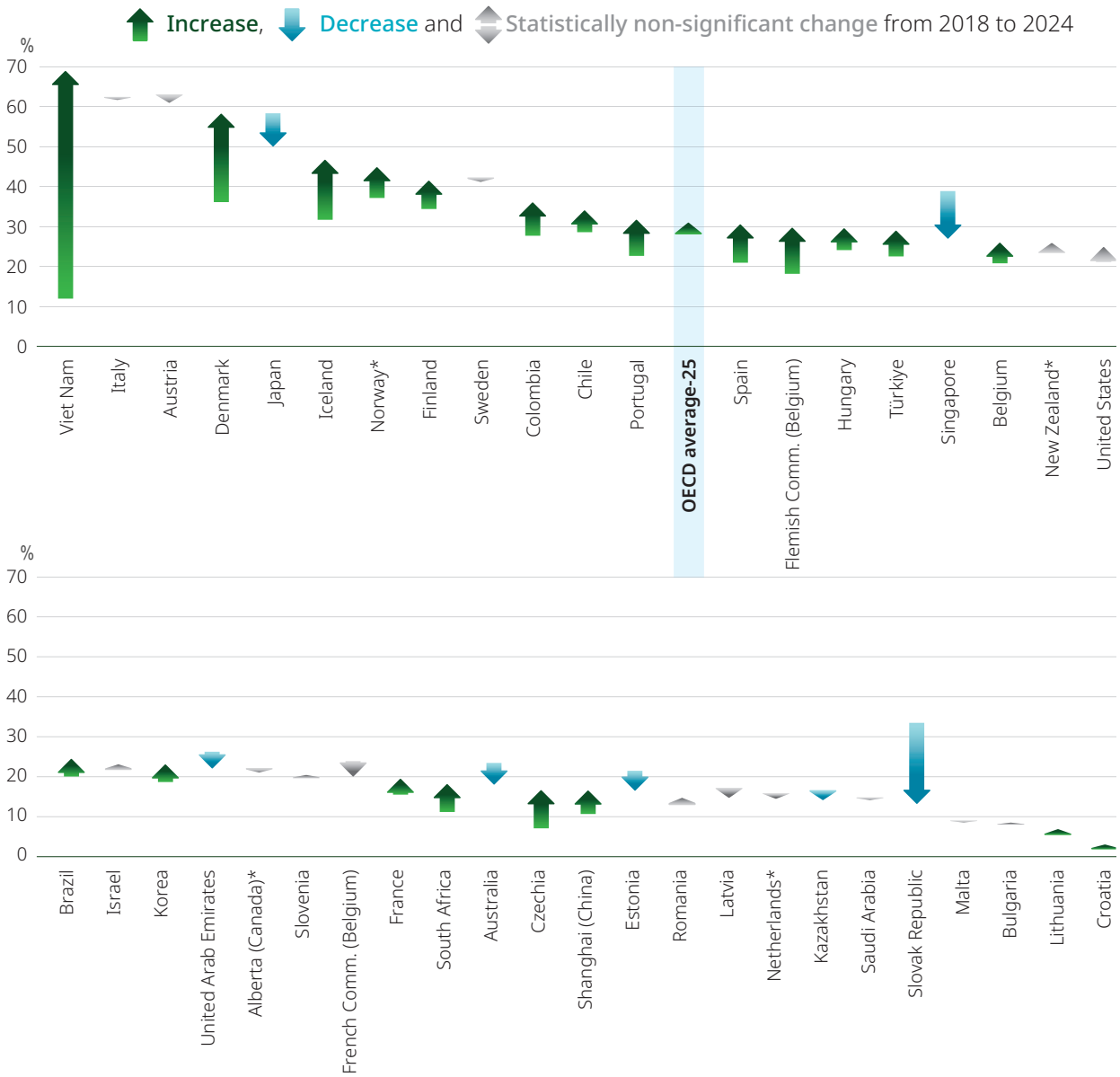
Change in time spent on teamwork and dialogue with other teachers, from 2018 to 2024

Average number of hours per week that full-time lower secondary teachers spend on teamwork and dialogue with colleagues at school

*Estimates should be interpreted with caution due to higher risk of non-response bias.
Notes: The analysis is restricted to full-time teachers.
See the advisory on page 42.
Source: OECD (2024), TALIS 2018 and TALIS 2024 Databases, Table 6.2.

Change in the share of teachers teaming up in the same class at least once a month, from 2018 to 2024

Percentage of lower secondary teachers



*Estimates should be interpreted with caution due to higher risk of non-response bias.

Note: See the advisory on page 42.

Source: OECD (2024), TALIS 2018 and TALIS 2024 Databases, Table 6.7.

Some teachers struggle to support social and emotional skills

Education systems around the world increasingly recognise social and emotional skills as an essential part of schooling. Skills like empathy, self-efficacy and emotional control are not just helpful, but essential for individual and societal success. Yet, according to TALIS data, many teachers doubt whether they can nurture these skills in their students. In particular, male teachers are almost always less confident at developing these skills than their female peers.

TALIS surveyed teachers on a range of lesson goals, such as giving feedback and presenting information clearly, and asked whether they felt confident achieving these objectives. Out of all the goals, teachers said they are least likely to achieve supporting students' social and emotional learning. In fact, on average, just over two-thirds of teachers' report being able to help students manage their emotions, thoughts and behaviour across the OECD. In contrast, more than 90% of teachers believe they can teach general subjects with clarity.

Why do fewer teachers feel capable of handling tasks linked to social and emotional learning compared to other teaching responsibilities? The data doesn't give a clear answer. However, a likely reason is that many teachers are working without a clear policy roadmap. While some countries have embedded social and emotional skills into their national curricula and assessment frameworks, in some schools there is outright hostility towards the concept of teaching them. In others they are considered soft extras, not foundational competencies.

This is unfortunate, as OECD analysis suggests that these skills can be as important as cognitive skills in predicting life outcomes such as academic achievement and success in later life. For example, self-control and persistence are strongly associated with academic and labour market outcomes, according to OECD research.

While professional development and training can help, relying on workshops or one-off sessions can leave teachers without the sustained support they need to integrate social and emotional skills into everyday learning. A more transformative solution involves embedding them directly into the curriculum and assessments. Social and emotional skills should be woven into the fabric of education – not treated as an add on. For example, co-operation, self-control and empathy can be integrated into sciences, humanities and sports. This will ensure they become part of the educational culture.

Easy-to-use assessment tools for classrooms are also needed to send a clear message that these skills matter. Self-assessments, peer feedback and teacher observations are all helpful, but it is also important to use tools that prompt students to demonstrate social and emotional skills in action. Ongoing large-scale monitoring is also a must.

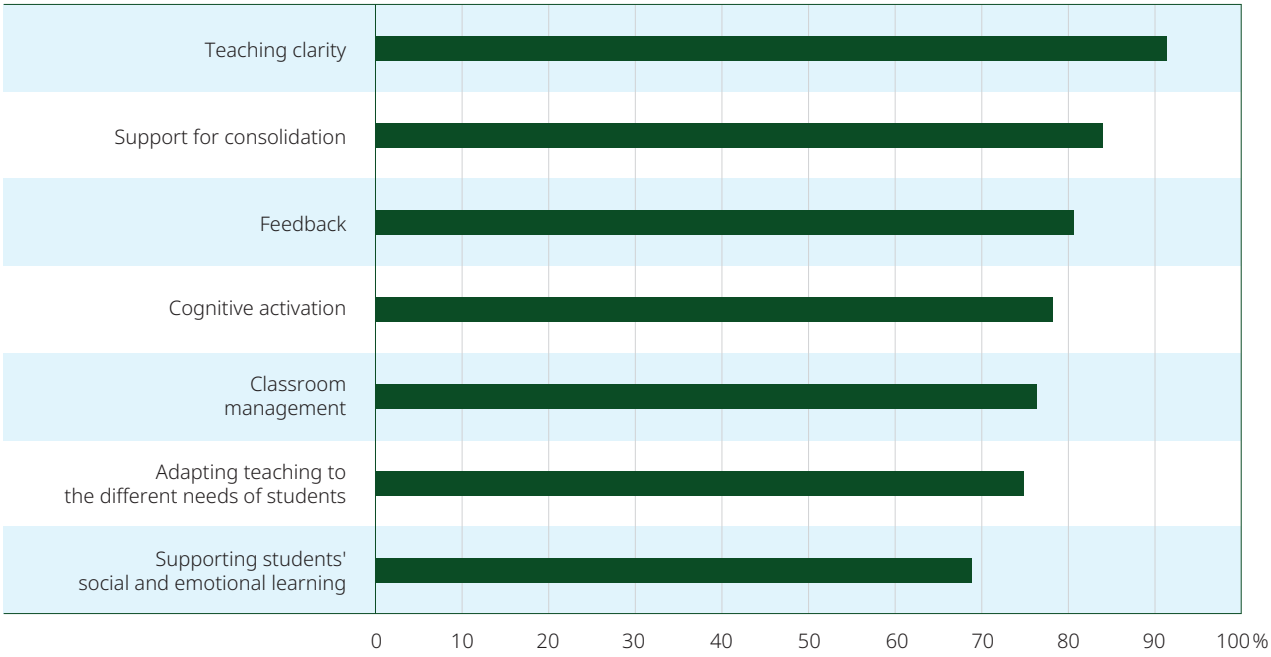
All these changes are doable. The OECD's Survey on Social and Emotional Skills has gathered clear evidence showing that skills like empathy, self-control and stress resistance show high teachability across diverse contexts. Although some are trickier to teach and harder to assess. Optimism, for example, unlike algebra or grammar, has been hard to define.

And some education systems have already taken steps to embed social and emotional learning across school life. In Alberta (Canada)*, teachers receive lesson plans and activities to promote such skills in daily routines. Similarly, Portugal has taken steps to integrate social and emotional skills into schools, including through a manual that includes templates for activities to promote self-regulation, empathy and co-operation in students.

Looking ahead, if education systems seriously recognise the importance of social and emotional skills, they must treat them as core competencies. These skills should not be treated as extras. That means policymakers need to develop awareness of the teachability of these skills and rethink teacher preparation, with structured support for teachers.

Share of teachers who say they fulfill the following lesson aims "quite a bit" or "a lot"

Percentage of lower secondary teachers (OECD average-27)



Notes: Results refer to lessons taught to a class randomly selected from teachers' current weekly timetables during the week preceding the survey.

See the advisory on page 42.

Source: OECD (2024), TALIS 2024 Database, Table 2.1.

Advisory: The graphs and charts in this brochure are occasionally simplified version of the originals. You can see the original figures and tables in the full report, OECD (2025), *Results from TALIS 2024: The State of Teaching*, TALIS, OECD Publishing, Paris, https://doi.org/10.1787/90df6235-en.

*Estimates should be interpreted with caution due to higher risk of non-response bias.

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