First Draft of the Thematic Report on Human Resources in School Education

Group of National Experts on School Resources
OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools

10-11 December, OECD Boulogne

This first draft of the thematic comparative report on human resources in school education reflects preliminary findings and conclusions from the OECD School Resources Review. It should not be distributed, published, quoted or cited. Some analytical parts will be further developed for the second draft. The report will be completed by the third quarter of 2019.

The Group of National Experts is invited to:
- REVIEW this first draft and COMMENT on the content and structure of the report;
- ANALYSE the preliminary descriptions of country practices, challenges and policy options proposed, DISCUSS their suitability and PROPOSE adjustments;
- and - BRING to the attention of the OECD Secretariat successful policy initiatives in countries and policy documents useful for the analysis to be developed in the thematic report.

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JT03440524

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1. Introduction

1. The thematic report will provide a synthesis of the analysis of the School Resources Review concerning the governance and management of human resources in school education to promote educational quality, equity and efficiency. Given the knowledge of the impact of teachers on the quality of the student experience and outcomes, the report will reflect on policies to professionalise teaching. Particular attention is paid to the governance (Chapter 2), distribution (Chapter 3), and the development of human resources (Chapter 4).

1.1. Scope

2. According to international nomenclature, the expression “human resources” in the context of school education refers to educational personnel both instructional and non-instructional. It can include those involved in student instruction (classroom teachers and teacher aides), those providing professional support for students (whether it is pedagogical support or health and social support), those involved in the management and administration of the education service (school level management and administrative personnel), and personnel who support the maintenance and operations of the schools. Despite this broad definition, the report will focus mostly on teachers and school leaders, given their importance in school systems, but also due to the limited availability of the evidence base for other types of personnel. Nevertheless, issues related to other types of personnel will be addressed when feasible and pertinent.

1.2. Motivation

3. The motivation to look at human resources in school education derives from a number of points, among which:

- Established evidence base that “teacher quality” is the single most important school variable influencing student achievement, development and outcomes.
- The salaries of teachers represent the largest single cost in formal education.
- The labour-intensity of education provision makes it difficult to achieve growth in productivity over time, tends to drive up the unit cost of education, and efficiency gains become a challenge.
- Difficulty of matching demand and supply of teachers due to demographic changes affecting the demand side (e.g. changes in fertility rates, emigration flows, internal migration from rural to urban areas, immigrant flows), and the supply side (e.g. ageing of the teacher workforce, the profession not attracting young graduates, teachers not joining or dropping out of the profession).
- The difficulty of creating the incentives for the best performing teachers to teach in schools and to students that most need them.
• The profession lacking in social status and failing to attract and/or retain good quality graduates in a number of countries.
• The challenge of attracting the best students to teacher education, train them well, and ensuring their continuous professional development once in the field.
• The challenge of attracting the best people to school leadership positions, train them well, and ensuring their continuous professional development once in the role.

4. Designing policy that mobilises, recognises and preserves the profound impact that teachers, school leaders and other school staff have on students is essential. Such policy should be conscious of important resource trade-offs (e.g. investments in quality vs. quantity of human resources, see Box 1.1 and Figure 2.2; investments in initial teacher education vs. continuous professional development). Policies must also be designed and implemented in ways that are sensitive to the unique contexts and cultures of schools and the teaching profession in different jurisdictions.

5. The third thematic School Resources Review report will synthesise scholarly and policy literature, international data, country reviews from review participants and other relevant OECD work to articulate human resource policy options. Particular attention will be paid to describe the nuances required for implementing these options and the challenges countries face for reform within the political economy of human resource policies and resource constraints.

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**Box 1.1. Trade-offs in decisions concerning the use of teacher resources**

Holding other factors constant, organising students in smaller classes is more expensive since it requires more staff resources per student. While smaller classes are often assumed to improve educational quality by allowing teachers to focus more on the needs of individual students, the effectiveness of class size reductions needs to considered in comparison with competing strategies to improve student outcomes.

Some studies indicate that smaller classes can improve non-cognitive skills (Dee and West, 2011[1]) and others have found these effects to be more pronounced among students from disadvantaged socio-economic backgrounds (Dynarski, Hyman and Schanzenbach, 2013[2]; Piketty, 2004[3]). Most studies that rigorously identify effects of class size reduction, however, have focused on the earlier years of education (Chetty et al., 2011[4]) and cross-national evidence from OECD countries has generally found a weak association between smaller classes and the performance on standardised tests, attainment or degree completion (OECD, 2013[5]). Some of these inconsistencies may arise from the assignment of less qualified or experienced teachers to smaller classes. Another reason may be that marginal reductions in class size only translate into better outcomes once they enable teachers to employ different pedagogical practices (Santiago et al., 2016[6]).

Given the trade-off between investments in lower class-size and other priorities, some high-performing systems, such as Shanghai and Singapore, have chosen to reduce teacher workloads instead to enable them to spend more time on professional development. Others have proposed increasing class sizes to invest in higher salaries for teachers, teaching technology, or more widespread use of assistant teachers (OECD, 2014). Recent
findings from the 2013 OECD Teaching and Learning International Survey (TALIS) show that the proportion of a teacher’s students with behavioural problems remains a strong predictor of low job satisfaction, while the size of their classes is insignificant in most participating countries (OECD, 2014[7]). This underlines the importance of ensuring that teachers are well-equipped to teach diverse and challenging classrooms regardless of their size.


1.3. Evidence base

6. The analysis in the report is based on multiple strands of evidence. The report draws on the work from the School Resources Review project, such as systematic reviews of the scholarly and policy literature, and the experiences of countries participating in the Review. So far, the Review has produced 12 full country reviews, as well as 6 additional country background reports. In addition, the report draws on OECD comparative work, such as the Programme for International Student Assessment (PISA), the Teaching and Learning International Survey (TALIS) and the work of the Indicators of Education Systems (INES) and its networks.

Notes

References


2. Governing human resources in school education

1. National and sub-national policies shape the terms upon which teachers and leaders enter the profession and advance in their careers. Aligning professional standards with teachers’ evolving responsibilities and developing career structures and working conditions that enable and motivate teachers to employ their competencies effectively are critical to improve student learning. This chapter analyses how entry requirements and competency frameworks can support teacher professionalism and how the design of compensation systems can help to attract, retain and motivate effective educators. It explores how the horizontal and vertical structure of teachers’ careers can provide them with opportunities for professional growth within the classroom and offer clear pathways to positions of educational leadership. The quality of individual teachers is critical, but so is the environment in which teachers work. The chapter therefore also considers their working conditions and the role of local autonomy and teachers’ voice in shaping the profession.

2.1. Responsibilities for HR management

2. Schools employ a diverse set of educational personnel in both instructional and non-instructional positions. This includes those involved in direct student instruction (classroom teachers and teacher aides), those providing professional support for students (whether it is pedagogical support or health and social support), those involved in the management and administration of education service (school level management and administrative personnel), and personnel who support the maintenance and operations of the schools (UNESCO-OECD-Eurostat, 2015[1]). The distribution of responsibilities for the management of human resources in schools varies considerably across OECD countries and the types of decisions concerned, but also for different types of personnel. Learning support staff, which plays an increasingly important role in some school systems (Masdeu Navarro, 2015[2]) may be hired by different authorities and employed under different contract types than the teachers they assist. The same goes for non-teaching staff, substitute teachers and school leaders. In the light of these complexities, responsibilities for the management of teachers and non-teaching staff will be considered separately below.

2.1.1. Responsibilities for the governance of teachers

3. On average across OECD countries, decisions concerning teachers are relatively evenly distributed across different levels of government, compared to the organisation of instruction, which is predominantly a responsibility of schools, or decisions on school facilities and the educational offer, which are more frequently taken at the central level (see Figure 2.1). Decisions on the hiring and dismissal of teachers as well as their duties and working conditions are particularly decentralised (as discussed in more detail in Chapter 3). By contrast, only 16% of countries report that schools or local authorities are responsible for setting teachers’ salaries since the majority vests this authority in the
central or state level. Compared to the management of teachers, decisions concerning the hiring and dismissal, duties and working conditions of principals are more centralised, and largely rest with local or central authorities rather than the schools themselves (OECD, 2018, pp. 413, Figure D6.3a(1)).

Figure 2.1. Percentage of decisions concerning HR management taken at each level of government in public lower secondary education, 2017

Notes: OECD average includes Lithuania; Countries are ranked in descending order of the percentage of decisions about organisation of instruction taken at the school level.

4. In the majority of OECD school system, decisions on the recruitment and dismissal of teachers, their working conditions and salaries are taken by more than one authority and even in the countries where a single level of government has the ultimate authority across all of these domains, they usually operate in consultation with or within frameworks set by at least one other level of administration. Under these circumstances, split responsibilities for aspects of human resource governance are inevitable. For example, in 9 out of 37 OECD countries and economies with available data, different authorities are responsible for hiring teachers than for their dismissal (OECD, 2018, pp. 417, Table D6.6a(1)). As with any domain of decision-making that involves authorities from different levels of government, careful co-ordination is essential to avoid misalignments that could undermine the successful governance of human resources.

5. While there may be good reasons for vesting multiple authorities with the responsibility to hire or manage different types of staff, this division can affect the composition of schools’ staff in ways that do not reflect the efficient mix of, for example, teachers and pedagogical support staff. In Austrian general compulsory education, the provinces are responsible for the employment of teachers, while municipalities are responsible for the employment of administrative personnel in schools. In practice, this split in responsibilities has exacerbated an existing shortage of administrative staff since some municipalities do not have the financial means to employ them in sufficient numbers and provinces are unable to support their teachers by provide administrative staff of their own. In other cases, municipalities had the financial means but lacked the incentives to hire sufficient administrative staff since provincial and federal authorities
often compensated for their shortcomings by increasing the number of teachers’ working hours (Nusche et al., 2016, p. 171[4]).

- Note: This section / corresponding policy options are yet to be fully developed.

### 2.1.2. Responsibilities for the governance of non-teaching staff

6. Many schools employ non-teaching staff to support student learning, including librarians and instruction aides for students with special educational needs or those requiring assistance in the acquisition of the language of instruction. Besides school principals, many schools also employ additional administrative staff from assistant principals to secretaries, clerical support staff and curriculum specialists. In addition, schools employ operational service providers such as maintenance or security personnel, catering and custodial staff, as well as health service staff such as nurses, social workers, psychologists, and speech therapists.

7. As part of wider efforts to improve the inclusion of students with diverse learning needs and reflecting the recognition that disruptive behaviour can severely harm students’ educational outcomes, many schools now place a greater emphasis on the availability of psychological and other student support staff in schools. While some forms of support, such as student guidance counsellors, have been shown to improve teachers’ perceptions of the school climate and reduce misbehaviour (Reback, 2010[5]), there is no conclusive evidence on the relative effectiveness of different staff types. No robust evidence exists to suggest whether and under which circumstances the marginal benefit of additional teaching assistants, socio-emotional or psychological support staff could outweigh that of teachers and determining the optimal staff composition in each school remains a challenge (see Chapter 3).

8. According to the latest available EAG indicators from 2011, hiring decisions for non-teaching staff was more frequently vested at the school and local level than those for teachers (24 of compared to 20 of 34 countries with available data). The same was true for decisions concerning their salaries, which was in the hands of schools and local authorities in 14 countries, compared to 10 for teachers, although in the majority of OECD countries, the salaries of non-teaching staff were still set at the state or central level (19 of 34 with available data) (OECD, 2012, pp. 506, Table D6.8[6]). It follows that in a number of school systems, different authorities are responsible for governance of teaching and non-teaching staff as well as their funding. As with other types of expenditure, clearly aligning funding with managerial responsibilities for non-teaching staff and combining responsibilities for highly interdependent resource types at a single level of administration can facilitate their effective management (OECD, 2017[7]). In some countries, the OECD review team observed misalignments in the governance of non-teaching staff that made it difficult to provide incentives for the efficient operation of schools.

9. In the Czech Republic, for example, local authorities are responsible for the operation of schools and funding its operating costs, while the state is responsible for funding expenditures related to schools’ core educational mission, including staff salaries. Yet, the arrangement does not distinguish between different types of human resources, which means that expenditure on technical and operational staff such as kitchen or maintenance personnel accrues to the state just as the salaries of teachers, school leaders and teaching assistants do (Shewbridge et al., 2016, p. 119[8]). This prevents local school owners from engaging in a holistic assessment of the trade-offs involved in certain operational decisions related to the management of their school facilities. Installing
modern heating systems, for example, may lead to a reduction in the cost for operating staff but an increase in technical maintenance. Within the Czech Republic’s current division of responsibilities, school owners would incur the investment costs of installing a new heating system, without being able to use the associated savings (a reduction in labour costs) to cover the associated increase in operational costs. Instead, the savings would accrue to the state and need to be spent on salaries, for example for additional teachers (Shewbridge et al., 2016, p. 111[8]).

2.2. Governing minimum qualifications and entry requirements

10. The quality of teachers and those who support them has a profound impact on children’s lives, their learning outcomes and their opportunities. At the same time, evidence points to substantial heterogeneity in teachers’ effectiveness and its significant impact on students’ achievement (Staiger and Rockoff, 2010[9]). Since teachers’ productivity rises only modestly with on-the-job experience beyond the first few years of their careers, attracting, selecting and retaining effective teachers has been a key concern for school systems. While the profession’s attractiveness is an important precondition for this, entry requirements are a key lever to control the quality of candidates who enter initial teacher education (see Chapter 4), remain in the profession and advance to positions of educational leadership.

2.2.1. Minimum qualifications and entry requirements for teachers

11. The governance of minimum qualifications, selection criteria and entry requirements is an important tool to regulate the entry to the teaching profession and raise the quality of the teaching workforce. There is significant variation in the requirements for entry used by the OECD review countries and high-performing school systems more generally. While some of this is explained by local contexts and challenges, there is no shortage of disagreement over the best strategies to attract high-calibre candidates to the profession, the points at which selection is most effective and the right mix of qualifications in schools.

12. All OECD countries require teachers to fulfil certain minimum criteria or possess specific certifications (usually a level ISCED 6 qualification in the field of education), in order to teach in public schools. Among these countries, the vast majority of teachers in schools attended by 15-year-olds are qualified to teach (87% according to PISA data based on principals’ reports). There are some notable exceptions among the OECD review countries though, including Chile and Colombia, where only 25% and 11% of teachers at this level were fully certified (OECD, 2018[10]). Similar problems had been observed at the secondary level in Uruguay. Of course, qualifications are not the only form of entry requirement for teachers. While initial teacher preparation is sufficient to enter the teaching preparation, in 25 of the 35 countries with available data, graduates from initial teacher education programmes can start teaching directly at the lower secondary and upper secondary levels, 14 of the 35 countries required teachers to pass a probation period to become a fully qualified teachers and other systems require novice teachers to have passed a competitive examinations (OECD, 2014, p. 502 f.[11]).

Entry requirements to attract high-calibre teachers

13. The design of entry requirements for the teaching profession not only serves to bolster the professional status of teachers and ensure that minimum standards are met. Informed by research on human resources in education, policy makers have also pursued
different strategies to design entry requirements that ensure that teachers of the highest calibre enter and remain in the classroom. One approach has been to raise the bar that teacher students need to clear before entering the classroom, for example by raising qualification requirements or introducing more rigorous examinations. Others advocate reducing the hurdles that teachers need to take prior to enter the classroom and engaging in rigorous selection later on, based on their proven effectiveness in practice.

14. High-performing countries and economies in PISA have very different approaches to the selection of candidates for both initial teacher training and the entry into the profession. While some systems like Korea and Chinese Taipei require competitive examinations at the start of both, other high-performing countries, including Australia, England (United Kingdom), Estonia, Norway, Singapore and Slovenia make no use of competitive examinations at either point (OECD, 2018, p. 46[10]). Cross-sectional evidence from US states suggests that barriers for certification, such as state examinations or course requirements depress the overall supply of teachers (Hanushek and Pace, 1995[12]), which can be a concern for systems facing acute teacher shortages. Yet, some have also argued that requiring large up-front investment in the form of exams or specific course requirements also risks discouraging high-potential candidates with diverse backgrounds from entering the teaching profession (Vegas and Ganimian, 2013[13]). Proponents of this hypothesis often point to open questions concerning the effectiveness of conventional certification requirements and to the difficulty of assessing teachers’ effectiveness ex ante.

15. Designing effective entry requirements for teachers is notoriously difficult, given that most characteristics that are observable ex ante during their initial education are only modestly associated with future performance. Evidence from schools in New York City, for example, indicates that the teacher characteristics conventionally available for schools in the hiring process, such as certifications, advanced tertiary degrees or the competitiveness of their post-secondary programmes are relatively weak predictors of their effectiveness (Kane, Rockoff and Staiger, 2008[14]; Boyd et al., 2008[15]). In the case of New York City, the differences in classroom performance between teachers with different types of qualifications were dwarfed by the difference within each of these groups. While the selection of teachers with stronger qualifications can make (and in the case of New York City, has made) a difference for students’ achievement, this line of research suggests that teachers’ performance can only be reliably observed in the classroom. It also highlights the importance of policies that enable school leaders to provide teachers with targeted professional development once their needs become more apparent on the job (see Chapter 4).

16. Different strategies have been proposed to adjust teacher education courses, leaving examinations and entry requirements to raise the effectiveness of the teaching workforce in light of these circumstances. Including practical teaching experience as an integral part of teacher education programmes might allow for certifications to more meaningfully reflect teachers’ abilities in the classroom while at the same time giving student teachers an opportunity to reflect on their motivation and career choice based on a realistic impression of the profession.

17. Others have proposed introducing a high bar for decisions on the retention of teachers after a few years of work experience, rather than at the point their initial certification (Staiger and Rockoff, 2010[9]). In countries operating a tenure system that grants selected teachers a protected status after a given number of years, these decisions may constitute a better time to assess and select the most effective teachers. In the Czech
Republic, for example, there are plans to complement the screening of candidates at the start of initial teacher education with an assessment after their first year of practice that determines whether teachers can remain in the profession (Shewbridge et al., 2016, p. 150[8]). A new career structure in Chile introduced a similar hurdle that teachers must take four to eight years after entering the profession (Santiago et al., 2017, p. 253[16]) (see Table 2.2). Issues related to teachers’ selection and recruitment are analysed in depth in Chapter 3.

18. Multiple systems have also sought to provide outstanding individuals with alternative routes to enter the profession. Some highly selective programmes, such as Teach for America, allow high-achieving university graduates without prior pedagogical qualifications to be trained and teach in high-needs schools for two years. Evaluations of the programme using random control trials have shown these teachers to have a stronger impact on mathematics achievement and an indistinguishable impact on reading and other student outcomes, compared with their traditionally certified peers (Glazerman, Mayer and Decker, 2006[17]). Studies of other “alternative certification” pathways in the United States, which allow teachers to enter the classroom before having completed all of their certification requirement have demonstrated strong variation in the training they received across states and school districts but no systematic overall in their characteristics and effectiveness compared to conventionally certified peers (Constantine et al., 2009[18]). Whether or not these alternative routes into the profession offer adequate alternatives to traditional certifications therefore appears to depend on their specific characteristics.

Variation in minimum requirements across levels, sectors and roles

19. Entry requirements and selection criteria for teachers vary not only across countries but also across sectors and levels of education within countries and even among teachers working in the same school. Some of this observed heterogeneity reflects the fact that not all teachers of a school perform the same work and that their qualifications may evolve over the course of their career, in line with changing task profiles and responsibilities. However, while diversity in teachers’ qualification requirements can be commensurate with and even support a mix of skills in schools, generalised distinctions in qualification requirements for teachers at different levels of education are rarely justified by the nature of their work. Nevertheless, these differences remain wide-spread in OECD countries with Austria, Hungary, Luxembourg, the Netherlands, Poland, Spain, and Switzerland requiring higher degrees to teach in general lower and/or upper secondary schools than at the primary level (OECD, 2018, p. 362[3]). They are even more pronounced for teachers at the pre-primary level. Even though the bachelor’s degree has become the minimum qualification in 27 of the 37 OECD and partner countries (2017, p. 43[19]), the Slovak Republic, for example, requires them to have obtained as little as an upper secondary qualifications, in contrast to requirements at the master’s level for teachers at the other levels of school education (Santiago et al., 2016[20]).

20. In some cases, discrepancies in qualification requirements across levels have had unproductive consequences, harming both the status and supply of highly qualified graduates to teach at lower levels of education. In the Flemish Community of Belgium, for example, the review team observed difference between the status of upper secondary school teachers, who are required to obtain master’s degree level qualifications, and those in pre-primary, primary and lower secondary education, who are only required to obtain qualifications at the bachelor’s degree level. Even though these differences in qualification requirements are not justified in light of the competencies and levels of preparation required at all levels of education, it has been the basis for considerable salary
differences (Nusche et al., 2015, p. 155[21]). Higher minimum qualifications and salaries for teachers at the secondary level can also lead to imbalances in the distribution of resources that are at odds with the widely recognised benefits of investments in the early years of education (Woessmann, 2008[22]).

21. Raising the requirements for all teachers who performing highly qualified pedagogical work to a common level regardless of the level at which they teach can have significant budgetary implications, not least due to its implications for teachers’ salaries. Nevertheless, in some cases, long-term strategies towards the convergence of qualifications across levels of education can be important to improve of the status and attractiveness of the teaching profession as a whole. In the case of Belgium, the OECD review team suggested phasing in different steps towards the convergence of qualification requirements and salaries over time to render its fiscal impact more feasible. New, more highly paid and qualified teachers could, for example, be integrated into the system at the same rate as more experienced teachers with higher salaries retire (Nusche et al., 2015, p. 160 f.[21]).

22. Given the inertia in the teacher workforce, it can also take a very long time for a change in teachers’ entrance requirements to be reflected in teachers’ average or most prevalent qualifications. In Austria, for example, newly introduced qualification requirements and service codes are expected to take about 40 years to apply to all teachers (Nusche et al., 2016, p. 29[4]). To accelerate this process, school systems can target their efforts to raise qualifications not only at newly entered, but also at in-service teachers through professional development. As part of its 2014 reform of the Folkeskole, Denmark has set itself the goal to ensure that every teacher, including practising ones, has the competencies and qualifications for the subjects they teach by 2020. To reach this goal, many teachers need to upgrade their skills through courses and written exams. The Danish government has committed itself to financing these courses (although not the teacher release time for participation) with earmarked resources allocated directly to municipalities amounting to DKK 1 billion (Nusche et al., 2016, p. 151[23]).

23. Differences in the qualification requirements for teachers across sectors and providers – although they may be justified in light of their professional responsibilities in some cases – can create barriers to teacher mobility and increase the complexity of teachers’ initial education system. In many systems, including several OECD review countries like the Czech Republic, for example, special education teachers working in separate schools have a different type of certification than those in mainstream education. In some cases, this has created difficulties or even undermined efforts to move towards a greater integration of students with SEN since their teachers would need to be re-certified to work in mainstream schools (OECD, 2018, p. 275[24]) (Shewbridge et al., 2016, p. 75[8]).

24. In Austria, a long-standing division between federal and provincial schools, which provide secondary education under the governance of different authorities, has raised similar concerns. Until recently, provincial schools required teachers to have completed a three-year ISCED 6 qualification while federal schools required a five-year ISCED 7 qualification. This discrepancy has led to a number of governance challenges and divisions within the teaching profession. It created barriers for teachers’ mobility between different types of schools and meant that provincial school teachers suffered from a relatively lower status compared to the more highly qualified federal school teachers. The discrepancies in teachers’ entry requirements also raised concerns around the effective organisation of initial teacher education programmes, since it required them
to be geared towards the different school types (rather than levels of education). A comprehensive reform of initial teacher education (PädagogInnenbildung NEU) passed in 2013 and implemented from 2015/16 has sought to address these problems by harmonising qualification requirements across school types. Following the reform’s implementation, all new teachers will need to complete an eight-semester bachelor’s degree, plus a master’s degree of two to three semesters within the first five years of teaching. Part-time master’s degrees will be made available before 2019/20. From 2029, however, new teachers will need to attain their master qualification before entering the profession (Nusche et al., 2016, p. 150[4]).

2.2.2. Minimum qualifications and entry requirements for school leaders

25. Multiple OECD review countries report difficulties in attracting qualified candidates for school leadership roles. In some cases, recruitment issues are rooted in unattractive employment conditions, a high workload, insufficient professional support or incommensurate salaries. In other cases, however, these concerns can be traced back to inadequate selection procedures and entry requirements or a failure to effectively employ them in the recruitment process. The failure to recruit qualified candidates for school leadership roles risks to damage schools’ educational and organisational success. Although the estimated effects of principals on student outcomes vary in size, there is a consensus that effective leaders are critical for schools’ success (Vegas and Ganimian, 2013[13]). This is thought to be the case largely due to successful leaders’ ability to create an environment in which they can improve their pedagogical skills and student learning (Day et al., 2009[25]) (Witziers, Bosker and Krüger, 2003[26]). In addition, highly rated principals appear more effective at reducing turnover (Kraft, Marinell and Shen-Wei Yee, 2016[27]), strategically retaining high-performing teachers, and dismissing low-performing teachers (Grissom and Bartanen, 2018[28]). Few rigorous studies have investigated which characteristics of principals are most significant for improving student outcomes, but some evidence from the United States points to the importance of their organisational management skills (Grissom and Loeb, 2011[29]) and studies of Chinese principals show that their adeptness at organising instruction is correlated with student success (Zheng et al., 2017[30]).

26. The role of school leaders requires knowledge and skills in areas as diverse as leadership and management; personnel and team development; quality management and development; school and lesson development; personnel management and community relations. As many countries move towards budgetary devolution, school leaders are also increasingly vested with resource responsibilities that require technical and financial expertise (OECD, 2017, p. 82[7]). Even though school leaders are predominantly recruited from the teaching profession, many of these competencies at the heart of their role are not covered during the initial teacher preparation. Countries increasingly recognise the expanding and increasingly complex role of school leaders as well as the positive effect that well-prepared school leaders can have on their students’ learning outcomes. Based on this is a growing awareness that a successful teaching record alone is not sufficient and that school leadership is a specialist occupation that requires rigorous preparation and entry requirements.

27. Entry requirements can help to ensure that school leaders are qualified and prepared to perform their duties effectively, although a wider range of mechanisms will need to ensure that they are continuously supported in the time leading up to their appointment and while they are on the job (see Chapter 4). Applicants for school leadership positions are commonly required to fulfil minimum requirements related to
their teaching qualifications and professional experience. These criteria underline school leaders’ pedagogical leadership role, which assumes an intimate understanding of teaching practices and practical experience in applying it. The minimum teaching experience required to become a school leader does not vary widely among OECD review countries, ranging from five years in Portugal, Kazakhstan and the Slovak Republic or six years Austria, Chile and Colombia to nine years in Uruguay. In addition, countries like Austria Chile, Colombia, Denmark, Kazakhstan, Portugal, the Slovak Republic and Uruguay require school leaders to possess the same qualifications as the teachers they supervise.

28. International research suggests that effective leadership requires significant training prior to an appointment (Pont, Nusche and Moorman, 2008[31]). Nevertheless, not all systems require leaders to demonstrate specific training that prepares them for their new responsibilities. In some cases, school principals are only expected to undergo the training after they took office. Having recognised the shortcomings of this approach, Austria now requires aspiring school leaders to undergo a training programme (30 ECTS, or the equivalent of half an academic year) prior to their recruitment rather than – as was previously the case – during their first four years in service (Nusche et al., 2016[4]). In the United States, aspiring school leaders in most states are required to pursue an administrative credential referred to as a license or certificate. Although many states offer alternative pathways to licensure, of the 50 U.S. states, 47 required some teaching experience to be conventionally eligible for the licensure exam. In addition, 45 states required at least a master’s degree in some subject, of which 30 required the degree to be in educational leadership (Perrone and Tucker, 2018[32]). Despite a growing awareness of the importance of school leaders’ preparation, a number of OECD countries do not require school leaders to exhibit qualifications that distinguish them from teachers. In fact, some have moved in the opposite direction and relaxed entry requirements and professional standards for leaders, sometimes motivated by a difficulty to recruit sufficient number of candidates to the profession. In England, for example, as of 2013, aspiring school leaders no longer need to acquire the National Professional Qualification for Headship (NPQH) or hold Qualified Teachers Status, which had previously been compulsory.

29. Although some countries have introduced aptitude tests and assessment centres to inform the selection of school leaders, recruitment procedures and the composition of selection bodies can undermine the objective assessment of candidates’ skills and competencies. In Austria, for example, the review team noted that selection procedure for leaders of provincial schools was often seen as influenced by political considerations, given that members of the collegiate boards responsible for appointments are nominated by political parties (Nusche et al., 2016, p. 173[4]).

2.3. Professional standards and competency frameworks

30. The governance of professional standards and competency frameworks is a powerful means to enhance professionalism in schools and foster a shared understanding of good teaching and leadership practices. This encompasses both the production and the use of documents or frameworks that detail the kinds of skills and competencies teachers and leaders should possess. Professional standards can elevate the status of teachers and school leaders and align various stages of their careers, from initial teacher education to continued professional development and career advancement based on a coherent vision of their professions and student learning objectives. Clear, well-structured and widely
supported standards can also strengthen horizontal accountability by clarifying expectations and providing a benchmark against which teachers and leaders can self-assess or be assessed against (Hooge, 2016[33]).

2.3.1. Professional standards for teachers

31. A shared understanding of professional standards is vital to strengthening teacher professionalism. Yet discussions of the meaning of excellent teaching were conspicuously absent in some of the schools, municipalities and central administrations visited by the OECD review team (Nusche et al., 2016, p. 160[23]), while others had built common understanding of high-quality teaching with the potential to perform teachers’ practice. There are different means to arrive at this goal and some countries rely primarily on initial teacher education to impart a common understanding of what constitutes “good teaching”. In Finland, for example, all teachers have Master’s degrees and universities follow a unified programme for initial teacher education that is grounded in a common notion of high-quality teaching (OECD, 2013, p. 296[34]). Yet, the potential applications and benefits of more codified teaching standards extend well beyond initial teacher education. As described further below, high-quality teaching standards can be used by actors across the system and applied in a wider range of context to align various elements of teachers’ careers.

32. At a minimum, formalised teaching standards detail the competencies, skills and knowledge that characterise the profession and high-quality teaching in general. Some systems have developed general teacher profiles that specify which skills teachers are expected from the profession as a whole in order to foster professionalism, self-regulation and a dialogue on quality teaching. Teaching standards may also provide indicators or rubrics to increase their utility as tools for self-assessment or official appraisal procedures. Chile’s Good Teaching Framework, for example, covers four domains (Preparation for teaching; Creation of an environment favouring the learning process; iii) Teaching that allows the learning process of all students; and iv) Professional responsibilities). Each domain is associated with a set of criteria (20 in total) and corresponding descriptors. Each descriptor comes with a rubric specifying four levels of performance that are used for teachers’ appraisal (Santiago et al., 2017, p. 243[16]).

33. Beyond generally applicable standards, competency frameworks can be differentiated on the basis of specific teacher profiles, for example at different levels of education, subjects, or stages of their career. The Flemish Community of Belgium, the Czech Republic and Estonia, for example, have developing professional profiles that specify the skills, knowledge or attitudes teachers are expected to exhibit at each stages of their career, in order to facilitate their linkage to appraisal procedures and career advancement (see Table 2.1). First established in 1998 and updated in 2007, the Flemish Community of Belgium provides teachers with a list of basic teacher competencies, describing the knowledge, skills and attitudes that graduates from initial teacher education need to acquire. In addition, a set of professional profiles is aimed to guide the development of in-service teachers, describing professional standards. Both the basic competencies and the professional profiles are adapted for pre-primary, primary and secondary education and cover specific teacher functions such as educator, content expert, organiser, innovator and researcher, partner of parents, member of a school team and member of the educational community (Nusche et al., 2015, p. 148[21]).

34. In some countries, such as Colombia, multiple descriptions of professional standards co-exist for different purposes (Radinger et al., 2018, p. 248[35]) and
decentralised systems may permit individual schools and local authorities to develop their own teaching standards or adapt existing national frameworks based on local practice. However, to avoid fragmentation or inconsistencies and ensure the effective use of competency frameworks across the whole education system, a shared understanding of high-quality teaching is critical. This also implies applying teaching standards consistently across different types of providers to ensure the quality of publicly funded schools. This was not the case in some OECD review countries, including Chile, where teachers in publicly funded private schools were exempt from the publicly mandated evaluation and certification procedures until a 2018 reform (Santiago et al., 2017, p. 256[16]).

35. Since the ultimate aim of teacher competency frameworks is to improve the quality of teaching, their development should be informed by and reflect students’ needs and the learning objectives that schools are aiming to achieve (OECD, 2013, p. 297[34]). This also means to set expectations for teachers to continually improve their teaching practice, expand their professional knowledge around pedagogy, assessment and evaluation, and using it to meet their students’ learning needs. The development of competency frameworks should also be informed by research and be subject to regular reviews to ensure that they reflect the latest evidence on effective teaching practices and cover the aspects of teaching that are most strongly associated with student learning (OECD, 2013[34]).

*Using professional standards to align teachers’ preparation, appraisal, professional development and career advancement*

36. Professional standards can be used to align various elements of teachers’ careers based on a shared understanding of high-quality teaching to promote student learning. They can be to guide initial teacher education, teacher appraisal procedures, the certification process, continued professional development and teachers’ career advancement. Table 2.1 provides an overview of some of these approaches in OECD reviews countries.

37. Competency frameworks can serve as a reference for education institutions to align their initial teacher preparation with system-wide standards (see Chapter 4). In Chile, the national teaching standards (Good Teaching Framework) served as a basis for the development of Graduating Teacher Standards to guide the content and structure of initial teacher education programmes and define the set of competencies and knowledge all graduates should acquire as part of their initial teacher education (Santiago et al., 2017, p. 252[16]).

38. Although the development of professional standards and their use to calibrate initial teacher education can be very productive, the OECD review team has observed that many countries do not fully exploit their potential uses in schools. Even in systems that have well-articulated professional profiles and teaching standards, like the Flemish Community of Belgium, it appeared that they were not widely known in schools and that they were not systematically used to plan the professional development of teachers or guide their teacher appraisal systems (Nusche et al., 2015, pp. 148, 164[21]).

39. Teaching standards can play an important role in the teacher appraisal processes and evaluation protocols that have become the norm in most education systems. The absence of a reference framework and performance criteria for teachers weakens the capacity of evaluators to effectively appraise teachers and provide constructive feedback for their improvement (OECD, 2013, p. 296[34]). In 2011, the OECD Evaluation and
Assessment reviews found that many, but by far not all participating countries used central teaching standards or more general central descriptions of teachers’ professional duties as a main reference document to guide their regular appraisal procedures. Other systems relied primarily on other documents, such as school level development plans, internal regulations and evaluation parameters or did not systematically use any reference documents to guide the appraisal process (OECD, 2013, p. 294). Where teacher standards are an obligatory reference for teacher appraisal, systems need to ensure that they are appropriately conducted in all schools, for example, as a criterion in the appraisal of the school leadership.

40. Finally, multiple OECD review countries have established linkages between competency frameworks and teachers’ career structure, specifying the competencies, knowledge and skills that teachers should exhibit at different points in their career. This can provide teachers with a better sense of what is expected of them and what they need to do to advance their careers while also providing school leaders or certification bodies with a transparent set of criteria to guide their evaluation of candidates’ eligibility for promotion. As of 2011, the use of national teaching standards for promotion purposes was not widespread and only Israel reported using them as a main reference document in the process (OECD, 2013, p. 296).

41. If teacher standards are recognised as meaningful, for example by virtue of their use in evaluation and assessment activities, they can also encourage teachers’ continued professional growth since the participation in continuing professional development activities is often the best route to acquire the skills required by competency frameworks, especially where the two are well-aligned. A good example of this can be seen in Memphis, Tennessee in the United States. In Memphis City Schools, appraisal is based on teaching standards, and professional development is linked to teachers’ competence on the standards. A teacher who performs poorly on a specific indicator of the teaching standard can be directed to the corresponding professional development opportunities. Memphis City Schools publishes a professional development guide each year that lists the professional development offerings, organised by standard and indicator. In addition, most of the professional development courses are taught by Memphis City School teachers, ensuring that the course offerings will be relevant to the contexts in which these teachers work (OECD, 2013, p. 324).
# Table 2.1. Development and use of teaching standards in OECD review counties

<table>
<thead>
<tr>
<th>Country</th>
<th>Competency framework / teaching standards</th>
<th>Authority developing standards</th>
<th>Content specified</th>
<th>Distinguished by level of education (A), career stages (B), specialist roles (C)</th>
<th>Use of teacher standards</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>No teacher standards</td>
<td></td>
<td>a</td>
<td>a</td>
<td>a a a a a a a a</td>
<td></td>
</tr>
<tr>
<td>Belgium (Fl.)</td>
<td>Basic competencies and professional profiles</td>
<td>central</td>
<td>knowledge, skills and attitudes</td>
<td>A, C</td>
<td>Yes n/s n/s No</td>
<td></td>
</tr>
<tr>
<td>Belgium (Fr.)</td>
<td>m</td>
<td>m</td>
<td>m</td>
<td>m</td>
<td>m m m m m m m m</td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>“Good Teaching Framework” / “Graduating Teacher Standards”</td>
<td>central</td>
<td>knowledge and skills</td>
<td>No</td>
<td>Yes Yes Yes No</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>Multiple frameworks, Evaluation institute (central)</td>
<td>central</td>
<td>competencies</td>
<td>B</td>
<td>No No No Yes</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>No teacher standards</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a a a a a a a a</td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>Teacher professional standards</td>
<td>Qualifications Authority (central)</td>
<td>Competencies</td>
<td>B</td>
<td>No No No Yes</td>
<td></td>
</tr>
<tr>
<td>Iceland</td>
<td>No national standards</td>
<td>a</td>
<td>a</td>
<td>a</td>
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<tr>
<td>Luxembourg</td>
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<td>Portugal</td>
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<tr>
<td>Sweden</td>
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<td>m m m m m m m m</td>
<td></td>
</tr>
<tr>
<td>Uruguay</td>
<td>No national standards</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a a a a a a a a</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Promotion refers to the use of teacher standards for appraisal schemes that are designed specifically for the purpose of making decisions about promotion, recognising that regular appraisal may also influence decisions about promotion.

Source: OECD School Resources Review country review reports and country background reports (http://www.oecd.org/education/school/school-resources-review-reports-participating-countries.htm).

42.
Engaging teachers in the development of professional standards

43. Giving teachers a leading role in the definition of professional standards is critical to guarantee their relevance and create a sense of ownership that facilitates the standards’ acceptance, implementation and effective use (OECD, 2013, p. 297[34]). More broadly, engaging teachers in shaping their professional profile recognises their skills and experience, (Hess and West, 2006[36]), amplifies their voice and sense of self-agency and is an important step towards the profession’s self-regulation. The authorities responsible for the development of professional standards should therefore work hand in hand with teacher unions, teacher professional organisations and outstanding teachers from across the system.

44. Not all OECD review countries have the requisite structures for the organised engagement of teachers in professional matters, which may include professional organisations or teaching councils that could assume a leading role in this process. In other systems, teachers’ organisations may not have a tradition of assuming responsibility for the self-regulation and conceive of their responsibilities more narrowly as limited to the representation of teachers’ political interests in terms of employment rights and working conditions. Australia, Ireland, New Zealand and the United Kingdom provide some positive examples of teachers’ organised involvement in the definition of professional standards (see Box 2.1).
Box 2.1. Organised involvement of teachers in the development of professional standards

In Australia, the teaching profession, employers and teacher educators have been extensively involved in the development of teacher accreditation standards. Teaching colleges and institutes as independent statutory bodies provide teachers with professional autonomy, self-regulation and the right to have a say in the further development of their profession. The country has also established an Australian Institute for Teaching and School Leadership (AITSL), with the ambition to establish a nationally shared understanding of what counts as accomplished teaching and school leadership. This institute has developed the Australian Professional Standards for Teachers to provide a national measure for teaching practice, in close collaboration with the profession, employers and teacher educators.

In New Zealand, the New Zealand Teaching Council (NZTC) acted as the professional body of teachers holding the leading role in defining standards for the profession, with the extensive involvement of the teaching profession, employers and teacher unions (OECD, 2013[34]). In 2015, New Zealand introduced a new professional organisation for teachers of all education levels with a wider mandate to lead the teaching profession, promote good practice and raise its status, The Education Council of Aotearoa New Zealand.10 The Council seeks to strengthen accountability and to bring consistently high standards across the education system. It is independent and sets its own agenda, commissions its own research, leads public discussions about teaching issues, and takes a position on education matters.

In Ireland, the Teaching Council assumes a leading role in the self-regulation of the profession, in promoting professional standards for teaching, and in supporting the quality of teaching and learning more generally. As part of its recent programme of work, the Council has established standards for all stages of teachers’ careers, started a new pilot model of induction and probation, drafted new teacher registration regulations, reviewed and accredited all initial teacher education programmes, and launched the consultation on a National Framework for continuing professional development (CPD) (OECD, 2015[37]).

In Northern Ireland (United Kingdom), a similar General Teaching Council was established as a professional and regulatory body for teachers in 2002. It provides a research-informed voice on behalf of the profession on all matters relating to teaching. The Council is in charge of the professional registration of teachers, establishing and promoting professional standards for teachers, developing and applying a code of professional practice, accrediting education courses for teachers and pre-service teachers, and working closely with the government and employers to promote teachers’ continuous professional learning (Shewbridge et al., 2014[38]).


45. To create widespread ownership of newly developed professional standards, their implementation should involve national consultations with a variety of actors at different...
levels and from different contexts. Feedback mechanisms, including provisions for periodical reviews and revisions following the implementation of standards can ensure that they remain aligned with the system’s priorities and useful in the promotion of teacher professionalism. Finally, standards and their implications need to be understood by teachers in order to transform their practice. Teachers’ adoption integration of new professional standards into their practice can occur at several stages of their careers (Santiago et al., 2016, p. 197):

- During initial teacher education courses, to ensure that beginning teachers already have a clear understanding of what is expected from them.
- During induction processes and mentoring programmes, to help new teachers understand and apply existing teaching standards in their practice.
- During in-service training, to ensure that practicing teachers understand the use of standards and their implications for classroom practice.

2.3.2. Professional standards for school leaders

46. Like the teaching profession, school leadership careers can be governed by standards defining the skills and competencies principals are expected to exhibit. Although the extent to which these are formalised and distinguished from teachers’ standards varies in practice, professional standards are considered essential to elevate the professional status of school leadership (OECD, 2013), to provide guidelines for the preparation and recruitment of school leaders (Pont, Nusche and Moorman, 2008), and to offer benchmarks for their evaluation and appraisal (Ingvason et al., 2006). Although empirical research on the effect of professional standards is limited, some evidence suggests that they can contribute to increasing the capacity of school leadership (Kimball, Milanowski and McKinney, 2009), which has been internationally recognised as a highly cost-effective way of improving teaching and learning in schools (Schleicher, 2012).

47. Despite the fact most school leaders are recruited from the teaching profession, many of the competencies at the heart of the leaders’ role are not covered during the initial teacher preparation. Clear professional standards for school leadership can therefore play an important role in giving teachers a clear sense of how to advance to leadership positions and making the recruitment process more transparent and effective (see Chapter 3). Standards and competency frameworks for school leaders can also be used to align various aspects of the profession, from initial preparation and eligibility criteria, to systems for appraisal and career advancement. Yet, although an increasing number of countries have been developing professional standards for school leadership, the use of formal competency frameworks is less advanced for leaders than it is for teachers (Nusche et al., 2016, p. 173).

48. The OECD reviews of Evaluation and Assessment identified a significant minority of countries that used professional school leadership standards as a reference in their appraisal process. This includes many states and territories in Australia, the French Community of Belgium, various provinces and territories in Canada, New Zealand, as well as some schools and levels of education in Israel and Mexico (OECD, 2013, pp. 570, Table 7.A.1). Most OECD review countries did not have central competency frameworks for school leaders. Although some, like Austria, had developed standardised job profiles, they lacked competency standards that could provide a clear and transparent reference for the selection and recruitment of leaders (Nusche et al., 2016, p. 173). In
the absence of professional standards, the selection of principals was often found to be insufficiently guided by the competencies required for leadership positions.

49. Some notable exceptions are Australia, Chile, New Zealand and the Slovak Republic. Chile utilises their Good School Leadership Framework to provide a reference for the recruitment of teachers, the evaluation of school leaders and as a guide for initial preparation and professional development of school leaders (Santiago et al., 2017, p.165[16]) (see Box 2.2). Given that effective school leadership is highly context-dependent, Chile’s leadership standards are intended to be adapted based on schools’ characteristics. The national standards are therefore complemented by professional profiles adapted to specific local contexts (e.g. for disadvantaged schools and rural schools) (Santiago et al., 2017, p. 168[42]).

Box 2.2. Professional standards for school leaders in Chile

In Chile, multiple sets of school leadership standards promote a shared vision of the profession and guide school leaders in the roles they should fulfil. The Ministry of Education published a first set of standards, the Good School Leadership Framework (Marco para la Buena Dirección) in 2005 and updated it in 2015 (Marco para la Buena Dirección y el Liderazgo Escolar). Rather than the traditional administrative and managerial role of school leaders, all of these frameworks and standards emphasise their responsibilities as pedagogical leaders. These standards are not prescriptive but rather act as a reference for leadership that can be adapted to the local context.

The leadership standards have been designed to support school leaders in their self-reflection, self-evaluation and professional development; to establish a common language and shared expectations around school leadership within the school community; to guide the initial preparation and professional development of school leaders; to provide a reference for the recruitment and evaluation of school leaders; to facilitate the identification of effective school leaders; to spread good practices; and provide a reference for professional learning.

Conceptually, the standards distinguish between practices, personal resources and competencies that form the basis of successful school leadership. The practices contain five dimensions: i) constructing and implementing a shared strategic vision; ii) developing professional competencies; iii) leading processes of teaching and learning; iv) managing the school climate and the participation of the school community; and v) developing and managing the school. Personal resources comprise three areas: i) ethical values; ii) behavioural and technical competencies; and iii) professional knowledge.

2.4. Governing teachers’ and leaders’ career structures

50. Career structures can be thought of as a set or sequence of professional positions with associated tasks and responsibilities, as well as the rules that govern individuals’ progression across these positions. The traditional teaching career has often been described as “flat” and providing few opportunities for progression or diversification (OECD, 2005[43]). It is not inconceivable for teachers to perform the same kinds of tasks and have the same set of responsibilities from the first to the last day of their career. Likewise, the only pathways towards meaningful career advancements in many school systems require teachers to leave the classroom and take up more administrative roles, such as the school leadership. This lack of opportunities for promotion and specialisation risks to diminish teachers’ motivation, reduce the attractiveness of the profession and lead to mismatches between the competencies of leaders and teachers and the tasks they perform.

51. Well-designed career structures have the potential to enhance the effective use of human resources in schools. They provide a means to recognise good performance, to assign employees to roles and responsibilities that are commensurate with their evolving capabilities and thereby use their full potential, as well as to increase teachers’ and leaders’ long-term motivation and retention. There are reasons to believe that these functions of an articulated career structure are particularly important in the teaching profession, given that educators tend to receive little external recognition. In the absence of feedback through formal evaluations or tangible results of their work, teachers are often expected to be highly self-motivated and thrive on indirect recognition, for example through their students’ success. There are different ways in which the governance of career structures could help to overcome these challenges by articulating vertical career paths and opportunities for horizontal diversification.

2.4.1. The structure of teachers’ careers

52. Teachers’ careers can offer both vertical and horizontal opportunities for professional advancement. The vertical dimension of teachers’ careers typically involves a ladder-structure with successive roles associated with progressively increasing responsibility, while their horizontal dimension may involve opportunities for specialisation in a specific area of expertise inside- or outside the classroom. Some career structures combine both dimensions, offering multiple parallel pathways of advancement, offering what is sometimes described as a lattice career structure.

Vertical progression in the teaching career

53. Traditionally, the teaching profession has been dominated by single-stage career structures that offer few opportunities for teachers to grow professionally and advance their careers within the classroom. Single-stage career structures offer limited scope to recognise teachers’ growing experience and effectiveness and giving them progressively increasing responsibility. Teachers seeking to advance their careers within this context may be required to leave the classroom and take on more administrative responsibilities, for example as deputy-principals or school leaders. This process can be to the detriment of student learning since it risks depriving them of their most effective teachers. At the same time, teachers with the most advanced pedagogical skills may not make for the most effective administrators.
54. Well-defined multi-stage career structures promise to redress some of these problems by providing teachers with opportunities to advance their careers within the classroom. They promise to make more effective use of teachers by assigning them responsibilities that are commensurate with their skills. For instance, experienced or highly effective teachers are better able cope with larger class sizes and are more efficient in their lesson preparation, which may allow them to take on additional teaching hours, students or classes (Jensen et al., 2012[44]). Differentiated task profiles in multi-stage career structures can also provide principals or professional bodies with a means to incentivise and reward teachers’ pedagogical advancements even in the absence of end-of-year bonuses and other incentives common in non-teaching professions (Nusche et al., 2016, p. 173[4]) and thus play a distinct role in the recognition of teachers’ skills and their long-term motivation (Crehan, 2016[45]; Natale et al., 2013[46]).

55. Today, the majority of OECD review countries provide their teachers with multi-stage career structures comprised of district roles within the classroom that are associated with progressively increasing responsibilities (see Table 2.2). The different stages of a career tend to be distinguished by different responsibilities, task profiles or standards of performance. While vertical career advancement is often voluntary and tied to centrally or locally administered certification procedures, some countries require teachers to apply for higher career stages after a given amount of time and use these hurdles as an implicit means to remove under-performing teachers from the profession.

56. Although multi-stage career structures are usually connected to progressive compensation, this is not necessarily the case (European Commission/EACEA/Eurydice, 2018[47]). In Estonia, for example, the four-stage career structure is not formally linked to salary levels and serves primarily as means to formally recognise teachers’ competencies and serve as a reference for their development. While a link between career stages and compensation is not theoretically required for them to help school leaders in matching teachers’ skills to different roles and responsibilities, the OECD review of Estonia has revealed some challenges in practice. Notably, in the absence of financial incentives, most teachers were not well-informed about the career structure or showed little interest in accessing the levels that correspond to their competencies or engaging in continuous development to advance their careers. As a consequence, the career structure sends relatively weak signals of teachers’ skills and has not penetrated schools’ teacher management practices, e.g. the distribution of roles and tasks (Santiago et al., 2016, p. 212[48]).

Table 2.2. Vertical structures of teaching careers in OECD review countries

<table>
<thead>
<tr>
<th>Type of structure (No of stages)</th>
<th>Criteria for advancement</th>
<th>Process for advancement</th>
<th>Assessment for retention</th>
<th>Validity of certification / Duration of appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria Single-stage</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>Belgium (Fl.) Single-stage</td>
<td>a</td>
<td>a</td>
<td>No (probation period)</td>
<td>a</td>
</tr>
<tr>
<td>Belgium (Fr.) Single-stage</td>
<td>a</td>
<td>a</td>
<td>No (probation period)</td>
<td>a</td>
</tr>
<tr>
<td>Chile Multi-stage (5)</td>
<td>Experience, Competencies</td>
<td>Certification (mandatory for stages 1-3, voluntary for 4/5)</td>
<td>Yes (after 4-8 years)</td>
<td>Open-ended (all stage)</td>
</tr>
<tr>
<td>Colombia Single-stage</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>Czech Republic (under review)</td>
<td>Multi-stage (3)</td>
<td>m</td>
<td>Assessment (mandatory for stage 2, voluntary for 3)</td>
<td>Yes (after 1 year)</td>
</tr>
<tr>
<td>Denmark Single-stage</td>
<td>a</td>
<td>a</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>
Articulating stages of vertical career progression

57. Policy makers need to make a series of decisions when designing multi-stage career structures, including on the number of stages to be defined, their associated roles and responsibilities, and the links between career stages, professional standards and remuneration systems. Among the OECD review countries, vertically differentiated career structures comprise between 3 and 5 distinct stages. The first of these are often reserved for novice teachers. They may correspond to teachers’ probation period or enrolment in induction programmes that teachers undergo before attaining the status of fully qualified teacher. The first steps in a teachers’ career can also be associated with a reduced teaching load and additional support by mentors. Reaching higher stages in the career ladder tends to be associated with additional responsibilities and expectations to more widely contribute to the school or the profession. In Lithuania, for example, teachers in more senior positions (Methodologists and Teacher-experts) are expected to contribute to the development of their schools and the teaching profession more broadly by developing and spreading good practice both within and beyond their schools. This can include such diverse tasks as co-authoring text books, evaluating, supporting and guiding novice teachers, or contributing to local, regional and national pedagogical events (Shewbridge et al., 2016, p. 132[49]). Box 2.3 describes the Estonian career structure – another example of a career structure that provides teachers with multiple levels of professional advancement within the classroom (Santiago et al., 2016[48]).
Box 2.3. Multi-stage structure of the teaching career in Estonia

In 2013, Estonia introduced a new career structure alongside a reformed system of teacher professional qualifications. Its main aim is to serve as a reference for teachers’ competency development and it comprises four distinct grades, reflecting different levels of professional skills and experience, as described below. Unlike many other multi-stage career structures, the grades are not formally linked to salaries and access to higher grades is voluntary. The career stages of Level 6 and 7.1 are awarded indefinitely, while the Levels 7.2 and 8 are awarded for a five-year period after which the teacher must reapply.

- **Teacher** (Level 6): applies only to pre-primary teachers upon entrance into the teaching profession, following the completion of an initial teacher education programme (at bachelor’s degree level) or following the recognition of professional qualifications for this level by the teacher professional body.
- **Teacher** (Level 7.1): is awarded upon entrance into the teaching profession, following the completion of an initial teacher education programme (at master’s degree level) or following the recognition of professional qualifications for this level by the teacher professional body.
- **Senior teacher** (Level 7.2): is awarded to teachers who, in addition to their regular teaching activities, support the development of the school and of other teachers and are involved in methodological work at the school level.
- **Master teacher** (Level 8): is awarded to teachers who, in addition to their regular teaching activities, participate in development and creative activities in and outside their school and closely co-operate with a higher education institution.

Each stage of the career structure is associated with a set of teacher professional standards developed by the Estonian Qualifications Authority, which define the associated competencies. A teacher professional organisation (the Estonian Association of Teachers) is responsible for the certification process that determines teachers’ advancement across career stages. Every year in April or November, teachers can apply for a new certification. The two-stage application process is overseen by a three-member committee and involves the evaluation of a set of documents submitted by the candidate and an interview.


58. Since most school leaders in OECD countries begin their professional careers as teachers, providing a range of middle and senior management positions within a multi-stage career structure can help to strengthen the link between the two roles. It provides teachers with an opportunity to prepare for school leadership and to get a sense of their suitability for the role while at the same time providing schools with an opportunity to identify promising candidates for promotion. In Chile, for example, reaching the highest two career stages provides teachers with preferential access to roles of pedagogical leadership and guidance (Santiago et al., 2017, p. 253[16]). Formalising intermediate positions that contribute to specific aspects of school leadership can also bolster the capacity of school leadership teams to successfully handle their increasingly complex responsibilities. For further discussions on the preparation of school leaders, see Chapter 4.
59. Ideally, each stage of a teacher’s career should have a clear set of associated responsibilities, tasks and competencies, for example by linking them to existing teaching standards that specify what is expected of teachers at different stages of their career (see above). These standards can provide a strong basis for certification procedures or assist school leaders in their promotion decisions and the appraisal of teachers at different career stages. Furthermore, aligning multi-stage career structures with opportunities for professional development can help in directing teachers to the most relevant course offerings and give them a clear sense of the steps they can take to advance their career.

60. Some OECD review countries have only recently introduced multi-stage career structures and addressed the challenges related to their implementation. Moving from a single-stage to multi-stage career structure or modifying the number of steps on the ladder might require the reclassification of existing staff or their assignment to positions that correspond most closely to their current roles and responsibilities. In Chile, where a multi-stage career structure was introduced in 2016, all new teachers entering the profession were assigned to the lowest stage while current were designated a step based on their years of experience and previous results in multiple teacher evaluation processes (Santiago et al., 2017, p. 240[16]).

61. Of course, multi-stage career structures are not the only way to provide recognition for teachers’ pedagogical competencies. In the Slovak Republic, for example, an annual national teacher’s day provides an occasion to acknowledge, reward and celebrate high-preforming teachers (Santiago et al., 2016[20]). In the United States, the National Teacher of the Year Program serves a similar function since 1952 by bringing together State Teachers of the Year and publically recognising their contributions to the education system. Chapter 4 discusses some of these complementary means of recognition in more detail.

Basis for career advancement

62. Teachers can advance their positions in multi-level career structures based on a variety of factors. Seniority – while rarely sufficient – is often a necessary condition for teachers’ vertical career progression. In Lithuania, for example, senior teacher are required to have at least four years of teaching experience, teacher-methodologist need five years, and teacher-expert need six years (Shewbridge et al., 2016, p. 126[49]). In Chile, the different steps in the teaching career require four, eight and twelve years of experience respectively (Santiago et al., 2017, p. 24[16]). In addition to a certain measure of experience, promotion practices vary considerably and attach varying weight to appraisal or evaluations results, proven pedagogical competencies or the completion of professional development. Among ten high-performing countries and economies participating in the 2015 PISA test, all but one placed a moderate or high importance on teachers’ assumption of additional roles or tasks. Six of ten also placed a moderate or high importance on teachers’ length of service while appraisal results were of low or no importance in all but four of the ten countries (OECD, 2018, pp. 61, Figure 2.8[10]).

63. For vertical career structures to be effective, teachers’ access to higher career stages should be voluntary and meritocratic, which some countries have sought to achieve by means of a certification process that involves formal evaluation. These standardised certification or registration system to regulate access to different stages of a teacher’s career and confirm teachers’ competence to perform in a given role. Teachers are usually certified, permanently or provisionally, upon completing their initial teacher education and may choose to apply for advanced certifications confirming their readiness to assume
additional responsibilities or roles. To ensure fairness and consistency, certification procedures typically involve external evaluators or a national teaching agency or council. A certification process can offer a transparent means to regulate teachers’ vertical career advancement based on high standards of performance, to inform teachers’ professional development plans and provide public assurance with regard to teachers’ standards of practice.

64. A number of OECD review countries, including Chile, Estonia, Kazakhstan and the Slovak Republic, have introduced formal certification procedures to regulate career advancement (see Box 2.3). Chile uses a competency-based certification process to regulate progression across the 5 stages of its career structure. The System for the Recognition of Teacher Professional Development (Sistema de Reconocimiento del Desarrollo Profesional Docente) is used to assess whether a teacher has acquired the competencies needed to perform at a given career stage based on the country’s national teaching standards (the Good Teaching Framework). It involves an external component comprised of a standardised written assessment and external markers evaluating a professional portfolio, which includes classroom observation. While advancement to the two highest stages of the teaching career (Expert I and Expert II) is voluntary, teachers are expected to move from the first stage (Initial) to the second or third (Early, Advanced) after four to eight years of service, which serves as a means to remove underperforming teachers from the profession if they fail the examination more than twice (Santiago et al., 2017, pp. 240, 253[16]).

65. It is important for certification procedures to concentrate on assessing the competencies that allow teachers to perform their core pedagogical responsibilities at a high level that corresponds to their career stage. Lithuania has been working towards this goal by adding competency requirements to their certification framework, which had previously specified only a series of formal criteria for teachers to provide evidence of, such as having undertaken professional development in ICT and SEN (Shewbridge et al., 2016, p. 126[49]). Concerns about the relevance of certification procedures as well as their resource-intensity were also raised in the OECD review of the Slovak Republic. Eligibility for higher stages in the Slovak Republic’s teacher career primarily depends on the acquisition of qualifications and professional development credits, for example by submitting and defending an academic thesis. Despite being highly resource-intensive for teachers, this process does not concentrate on teachers’ core work and it is unclear whether the production of a thesis will improve the teachers’ work and student learning (Santiago et al., 2016, p. 188 f.[20]).

Duration of appointments

66. Teachers’ promotion to or certifications for a given career stage may be permanent or subject to mandatory renewal. In Chile’s newly introduced career ladder as well as those of Lithuania and the Slovak Republic, for example, certifications for a given stage are valid for the rest of a teacher’s career. This raises a number of concerns since it implies that teachers do not need to periodically demonstrate their fitness to perform at a given certification stage, which reduces their incentives to continuously update their knowledge and skills. Other systems, like Estonia, require teachers to undergo periodic re-evaluations, especially at higher stages of the teaching career. Well-designed re-certification procedures serve not only to ensure that teachers continue performing at the level that is expected from them at a given career stage but also allow school leaders to detect and address consistent underperformance or professional development needs. Among the OECD review countries, only a few require teachers to regularly undergo re-
certification procedures (see Table 2.2). Where they exist, countries have organised their re-certification process in different ways, sometimes involving as little as a simple attestation by a school-based committee that the teacher is continuing to meet the agreed standards of practice (this may or may not include external members). The duration of a certification’s validity also varies. In Australia, for example, teachers are required to renew their registrations in intervals of five years (Shewbridge et al., 2016, p. 141[49]).

**Horizontal diversification in the teaching career**

67. The tasks and responsibilities that teachers are expected to assume beyond traditional classroom instruction are increasingly complex and diverse. Since it is natural for teachers to enjoy and excel in some roles more than in others, recognising and supporting teachers’ capacity to exercise leadership in different areas is just as important as it is to recognise their need for further development (see Chapter 4). Providing teachers with systematic opportunities to choose a specific aspect of their profession in which to specialise and assume greater responsibility has several benefits. First, allowing teachers to focus on the area of their work that they are most productive in can improve the allocation of tasks and result in a more efficient use of teachers’ knowledge and skills. Second, it provides teachers with increased autonomy to shape their career based on their interests, which constitutes an important source of long-term motivation (Crehan, 2016[45]). Several OECD review countries have pursued these goals by introducing greater horizontal diversification in teachers’ career structures.

68. Strengthening horizontal career pathways may include the introduction of specialist roles such as teacher mentors, ICT specialists, heads of subject committees or co-ordinators of school projects and in-service training. In 2015, Austria’s new service code introduced several specialist functions (*Fachkarrieren*) that allow teachers with specific knowledge and skills to take on additional responsibilities without having to move to administrative and principal roles. These include mentors of new teachers or teacher students, learning and career counsellors, “learning designers” as well as special needs and remedial pedagogues. Some of these positions require substantial training and are tied to extra allowances of up to EUR 156 per month (Nusche et al., 2016, p. 159 f.[4]). In Uruguay, teachers are provided with multiple opportunities for horizontal specialisation, either as teacher leaders, pedagogical counsellors or bibliographic counsellors. While these roles are not remunerated, teachers performing specialist duties have reduced teaching hours to compensate for the additional responsibilities they assume (Santiago et al., 2016, p. 229[50]).

69. In both Uruguay and Austria, teachers have very limited opportunities for vertical career advancement and while the opportunities for horizontal specialisation compensate for some of these shortcomings, other systems have successfully combined both horizontal and horizontal career pathways. So-called career lattice structures allow teachers to advance their pedagogical capabilities through vertical progression, while allowing them to specialise in a specific aspect of teaching through horizontal diversification. Singapore’s career structure is a good example for this, offering three parallel streams – the teaching track, a leadership track, and a senior specialist track, each comprised of at least four stages of career advancement, culminating in the roles of Principal Master Teacher, Director-General of Education and Chief Specialist respectively (Crehan, 2016, p. 88[45]). The Slovak Republic’s teaching career (Box 2.4) is also differentiated vertically, through a multi-step career structure, as well as horizontally, through range of specialised career positions (Santiago et al., 2016, p. 169 ff.[20]).
70. Defining and implementing specialised roles for teachers can constitute a challenge. Attempts to provide greater horizontal differentiation within teachers’ careers in Colombia, for example were met with strong opposition by the country’s largest teacher union and discontinued in 2017, only two years after their conception. The plan had foreseen the introduction of specialised roles to contribute to school development, such as teacher support leaders (*docente líder de apoyo*) (Radinger et al., 2018, p. 250[35]).
Box 2.4. Vertical and horizontal career progression in the Slovak Republic

**Vertical career structure**

A multi-stage career structure allows for teachers’ vertical progression across four grades. Advancement reflects professional competencies, experience and is partly linked to the accumulation of credits through continuous professional development:

1. **Beginning teacher**: Entry to this category after initial training. They participate in mentoring programmes and adaption courses under the supervision of a mentor teacher. They must pass a school-evaluation within two years to progress to independent teacher. They can only perform class teacher activities.

2. **Independent teacher**: Permitted to teach independently and perform any of the horizontal career paths activities except mentor teacher. Must pass a first certification examination or hold a doctorate in the field of their pedagogy in addition to the possession of 60 professional development credits or 30 credits and a specific preparatory training programme.

3. **Teacher with first certification**: Permitted to perform any horizontal career path activities and teacher leader, professional development trainer, member of examination committees for first certification.

4. **Teacher with second certification**: Requirements for teacher with first certification plus sponsoring professional development programmes, member of examination committees for second certification, member of national and international expert committees.

**Horizontal career structure**

A range of specialised career positions provide opportunities for horizontal differentiation in the teaching profession. School leaders decide on the structure and assignment of career positions in a given school. These typically include:

- **Class teacher**: assumes co-ordination and communication responsibilities for one class. This involves guidance, maintaining pedagogical documentation, and communicating with parents.

- **Mentor teacher**: mentors beginning teachers during their “adaptation” period. This can involve observing the teacher’s classroom interactions, modelling effective teaching approaches, and providing advice on pedagogy, assessment and administration.

- **Educational advisor**: provides consulting services, including methodological assistance.

- **Head of subject committee (or study area), Head of methodology association (or study programme)**: take responsibility for the school’s pedagogical work in on a given subject (or study area) or its pedagogy more generally, with involvement in projects, advisory and evaluation work.

- **Career advisor**: provides students with career guidance and counselling.

- **ICT co-ordinator**: co-ordinates use of ICT in the teaching and learning process.

- **Co-ordinator**: takes responsibility for a specific area of work within the school,
such as that with special needs children or children from a socially-disadvantaged background.


2.4.2. The structure of school leaders’ careers

71. The demands placed on school leaders, including their administrative and pedagogical responsibilities, have intensified and expanded over time (Pont, Nusche and Moorman, 2008[31]). Despite the growing awareness of school leaders’ impact on schools’ educational success, a number of OECD review countries, including Austria, the Czech Republic, Chile and the Slovak Republic face difficulties in making the career attractive for high-calibre candidates (Santiago et al., 2017, p. 196[16]; Shewbridge et al., 2016, p. 180[8]). These have resulted in ageing or demographically imbalanced school leader population or concerns over the ability to fill vacancies, especially in hard-to-staff schools (see Chapter 3). Ensuring the role’s attractiveness is thus of critical importance and the structure of school leaders’ careers – next to their remuneration and working conditions – can contribute to this goal by recognising its distinct professional status and ensuring that it offers perspectives for longer-term professional growth.

Recognition of school leader’s professional status

72. The role of school leaders involves responsibilities and requires competencies that differ markedly from those of teachers. Nevertheless, this fact is rarely reflected in a clear delineation the two careers paths, including separate salary scales and professional standards. The majority of OECD review countries do not provide a separate career structure for school leadership roles and either treat them as the final stage of the teaching career ladder or a mere extension of the teachers’ role that they can assume alongside or temporarily replacing their teaching duties. Acknowledging the distinct responsibilities of leadership positions in schools, including those of deputy leaders, by providing them with a distinct career structure can help in communicating the importance of administrative and pedagogical leadership while raising their status and attractiveness to potential candidates.

73. Portugal is an example of a system in which the role of school leaders is not clearly distinguished by a separate career structure or salary scale and where school leadership is not conceptualised as a profession in and of itself. The OECD review team noted that the leaders in Portugal placed little emphasis on instructional leadership or improvement and rarely engaged in activities like classroom instruction or the promotion of new teaching practices. Some of this stems from their limited pre-service development and access to ongoing professional development, which might be strengthened if school leaders’ professional status was more clearly recognised. At the same time, principalship in Portugal is an elected office, which results in the role being responsive to the school’s governing bodies (General Councils) which elect them and are often dominated by fellow teachers, rather than student interests (Liebowitz et al., 2018, p. 201[51]).

74. The problem of insufficient professional recognition for school leadership roles often extends beyond the principals themselves since many systems fail to acknowledge the distinct competencies, preparation and support required for middle management positions and other members of school leadership teams. In Austria, for example, all but a few large secondary schools do not have a permanent deputy principal position. Instead,
school principals rely on the assistance of teachers who effectively function as administrators in all but their official title. A 2015 education reform sought to strengthen their professional status by creating a separate professional group for all leadership personnel in schools, comprising principals, deputy principals and middle management, and providing them with standardised job profiles, recruitment procedures and contractual conditions (Nusche et al., 2016, pp. 62, 154[41]).

Opportunities for advancement within and beyond school leadership

75. As for teachers, a lack of opportunities for promotion within the school leader career can be another factor diminishing the attractiveness of school leadership roles for potential candidates as well as the long-term motivation and retention of those already in principal positions. While many school leaders have opportunities to apply for positions within the municipal education administration, multi-level career structures that allow for professional growth within the profession are exceedingly rare and even fewer countries have developed robust centrally governed frameworks for leaders’ career advancement that are linked appraisal procedures (OECD, 2013, p. 547[34]). Although none of the OECD review countries offer school leaders clearly defined opportunities for professional advancement within their roles, other OECD countries as diverse as Australia, Canada, France, Israel, Korea, Mexico and Norway have developed multi-stage career structures for leadership (OECD, 2013, p. 578 Table 7.A.2[34]).

76. The potential benefits of these multi-stage careers structures are evident. They create incentives for high performance, reward continuous improvement and can render the profession more attractive to teachers, especially in countries facing recruitment issues. At the same time, allowing the most effective leaders to take on system leadership roles is an effective way to harness their experience and capacity to contribute to the improvement of the education system as a whole (Pont, Nusche and Moorman, 2008[31]). To facilitate the selection of qualified candidates, ensure that principals are well-prepared for their roles and to provide a framework for their appraisal, multilevel career structures for school leaders should be underpinned by an authoritative set of professional standards.

77. Building multi-stage career structures for school leaders can go hand in hand with the formalisation of intermediate leadership positions that increase schools’ leadership capacity, provide the basis for more distributed forms of leadership, and create a pipeline for future school leaders. Kazakhstan offers an example of such a career pathway with multiple steps leading up to the principal role, which has the potential to be extended to include additional positions for system leadership roles (Box 2.5). A good example for these types of roles can be seen in Singapore, where teachers can enter a separate leadership track that leads from roles as subject and department head to principalship, but extends further to lead on to roles as cluster superintendent and eventually to deputy director and director-general (Crehan, 2016, p. 88[45]).
Box 2.5. School leadership teams in Kazakhstan

Schools in Kazakhstan, provided that their student population is sufficiently large, are allowed to employ one school principal and three deputy principals comprising their leadership teams. The members of the leadership team usually assume the following responsibilities:

**Deputy principal for academic affairs**: Coordinates and supervises pedagogical improvements, consolidation and dissemination of best teaching practices; plans school educational operations including class timetables; recruitment of teachers and professional development; organises school evaluation, teacher appraisal and student assessments; ensures learning equipment is up-to-date.

**Deputy principal for educational work**: Organises and ensures the quality of extracurricular activities, and home-schooling for children with special needs; participates in the recruitment of, and supervises and supports the professional development of senior counsellors, after-school teachers, and home-school teachers; and, liaises with representatives of the community, law enforcement bodies, Parents’ committee and parents.

**Deputy principal for economic activities**: Administrates, procures and controls expenditure on material and financial resources; supervises maintenance works; ensures fire and safety compliance; monitors operation of the school’s technology and energy equipment.

**School principal**: leads the overall school in compliance with norms; approves the school plan, staffing and number of classes; appoints other school leaders and recruits teachers; fosters pedagogical improvement and professional development and distributes rewards to the staff; ensures learning materials, equipment and physical infrastructure are safe and up-to-date; ensures that disadvantaged students are supported and no children are out-of-school in the neighbourhood; and, reports to administrative authorities.


78. The problems associated with single-stage career structures can be exacerbated by the fact that school leaders are increasingly appointed on fixed-term contracts and in some cases a maximum time of service (Pont, Nusche and Moorman, 2008, p. 178[31]). In Portugal, for example, principals can serve two terms (eight years) within the same position, after which they either need to find a position at a different school or return to the classroom (Liebowitz et al., 2018, p. 175[51]). Uncertainty about employment opportunities beyond a given leadership position can be a significant source of stress, not least because a return to teaching is sometimes considered an undesirable or problematic move for leaders (Pont, Nusche and Moorman, 2008[31]). This makes the need for a clear career path particularly salient.

2.5. Governing compensation and benefits

79. Given the labour-intensive nature of school education, teachers’ salaries constitute the largest expenditure item in any OECD education budget. In 2015, across OECD countries, an estimated 63% of current expenditure in primary to post-secondary non-tertiary education was spent on teacher salaries and another 15% on the salaries of non-
teaching staff, although it is worth noting that the combined share of expenditure on all staff categories ranged from anywhere between 62% to 93% (Figure 2.1). Figure 2.3 presents a decomposition of the cross-country variation in staff expenditure to highlight some of the key factors that explain different levels of expenditure, but also highlight some of the choices they make in how these resources are used. Smaller class sizes, more total working hours and less instructional time per teacher all increase per student expenditure on staff. Yet, the level of teachers’ salaries remains the most important source of variation, in monetary terms.

Figure 2.2. Share of current expenditure spent on staff and other resources, 2015

Public and private institutions in primary, secondary and post-secondary non-tertiary education

2. Primary education includes pre-primary programmes.

Note: Countries are ranked in descending order of the share of all staff compensation in primary, secondary and post-secondary non-tertiary institutions; Lithuania included in OECD averages; Variation in the share allocated non-teaching staff salaries reflects different definitions of staff categories across countries.

Figure 2.3. Contribution of various factors to salary cost of teachers per student, 2015

In USD converted using PPPs for private consumption; Public institutions, lower secondary education

Note: Countries and economies are ranked in descending order of the difference between the salary cost of teachers per student and the OECD average.


80. Effective compensation systems in schools need to meet multiple challenges at once. With a limited set of resources, they need to permit schools to attract high-quality candidates with the right skills, while at the same time retaining high-performing staff once they have entered the profession and motivating them to show high performance throughout their career. The fact that teachers continue to earn less than similarly-educated workers in many OECD review countries is frequently discussed as an obstacle to the recruitment of high-performing teachers or those with specific profiles. Likewise, the design of salary scales and the basis for pay differentiation and advancement over the course of teachers’ careers are often seen as critical for retaining effective teachers, motivating them and recognizing their performance.

81. While compensation and benefits are therefore rightly seen as important policy levers in the governance of human resources, there are no one-size-fits-all solutions in the design of effective salary scales. Instead, policymakers’ decisions depend on the specific challenges a country seeks to address as well as the characteristics of their local labor markets. These factors need to be taken into account when reflecting on such questions as whether and up to which point higher starting salaries can effective means to attracting
high-performing teachers and what forms of salary progression are best suited to recognise, amplify and preserve teachers’ profound impact on student learning.

2.5.1. The level of teachers’ salaries

82. In more than half of the 36 OECD countries and economies with available information, the central or state level are responsible for setting teachers’ salaries, in more than one-quarter of the countries, the responsibility is shared between multiple levels and in all but two of the remaining six systems, salaries are set at the school level, albeit within frameworks set by the central level. The responsibilities for setting school leaders’ salaries are similarly distributed, the only difference being that in those systems where teachers’ salaries are set at the school level, their leaders’ salaries tend to be decided on by local authorities (OECD, 2018, pp. 414, Tables D6.6a and D6.6b).

83. In some OECD countries, particularly those with rising student enrolments or a large share of teachers approaching retirement age, schools’ ability to attract qualified personnel remains a concern. On average across OECD countries, 29% of 15-year-old students were enrolled in schools whose principal considered a lack of teaching staff to hinder instruction at least to some extent in 2015 (OECD, 2016, pp. 397, Table II.6.14). As discussed in Chapter 3, these teacher shortages can be subject to significant regional variation and tend to be more pronounced in disadvantaged schools and for subjects with specific technical skills that are in high demand outside of schools. Although teacher shortages and a lack of qualified candidates can have a range of causes, comparatively low salaries are frequently seen as a contributing factor.

84. Following a period of real term growth in teachers’ salaries in most OECD countries and economies, the financial and economic crisis of 2008 has prompted many teachers’ salaries to be frozen or cut between 2009 and 2013, before rising again (OECD, 2018, p. 366). Compared to similarly educated workers, teachers’ salaries are lower in almost all countries and economies with available information, although they tend to increase with the level of education taught. In 2016, pre-primary teachers’ average salaries amounted to 81% of the full-time earnings of tertiary-educated adults between the ages of 25-64, while primary teachers earned 86% of this benchmark, lower secondary teachers 91%, and upper secondary teachers 96% (OECD, 2018, pp. 376, Table D3.2).

85. Some of this variation across levels of education is explained by differences in teachers’ minimum required or most prevalent qualifications. In 2014, 10 of 35 countries with available data required teachers to have earned an upper-secondary or short-cycle tertiary qualification to teach in pre-primary schools while all but one required at least a bachelor’s degree to teach general subjects at the upper secondary level. In five systems, teachers completing initial teacher education were awarded a master’s degrees at the upper secondary, but not at the lower secondary level (including the French Community of Belgium, Denmark and the Netherlands), and in six systems, the same discrepancy existed between the lower secondary and the primary level (including Austria, Luxembourg, Portugal and Spain) (OECD, 2014, pp. 502, Tables D6.1 a, b, c and d). Significant salary discrepancies for similarly qualified teachers at different levels of education can make it harder to attract high-potential candidates to teach, for example, in primary or lower secondary schools. Efforts to raise qualification requirements for levels of education or encourage teachers to advance their professional qualifications over the course of their careers have therefore frequently been tied to commensurate adjustments to their salaries (see above).
86. Across OECD review countries, teachers’ relative earnings varied widely, as can be seen in Figure 2.4. While teachers earned significantly more than similarly educated adults in some countries, including Portugal (1.3), Mexico (1.5-2.9) and Luxembourg (1.8-2.0), they earned two thirds or less at some levels of education in countries including the Slovak Republic (0.4-0.6), Czech Republic (0.5-0.6), Estonia (0.6-0.9). Although the gap between teachers’ salaries and those of similarly educated adults has slightly narrowed on average and reduced significantly in some countries between 2011 and 2016, salaries have become less competitive in some countries. In Estonia, for example, teachers’ salaries from the primary to the upper secondary level have almost caught up with those of other tertiary-educated workers, while those of Portuguese teachers have risen further above an already competitive level. Likewise, Austria, Chile and the Slovak Republic have narrowed the gap by eight percentage points or more at the secondary level. By contrast, over the same period, teachers’ salaries have become less competitive compared to the industry average in New Zealand, Spain and Denmark (see Figure 2.4).
Figure 2.4. Teachers’ salaries relative to earnings of tertiary-educated workers, 2011-16

Note: Sorted by ratio in primary education 2016; Unless otherwise noted, ratio of average actual salary, including bonuses and allowances, for teachers aged 25-64 to earnings for full-time, full-year workers with tertiary education aged 25-64; Years of reference are 2011 and 2016 or the closest available.
1. Ratio of statutory salary after 15 years of experience and minimum training to earnings for full-time, full-year workers with tertiary education aged 25-64 (these do not reflect regional or family allowances, bonuses and other benefits).


87. Students enter the teaching profession for a wide range of reasons and the factors that matter for their entry into the profession may not be the same that convince them to remain on the job in the long run. It is well known that nonpecuniary factors are an important part of what makes the teaching profession attractive (OECD, 2018[10]) and surveys of teachers in several countries as well as qualitative evidence from OECD country reviews suggest that extrinsic factors (such as job stability, pay or working hours) are of secondary importance for those who have chosen to enter and remain in the teaching career (OECD, 2005, pp. 67-69[43]). Nevertheless, the attractiveness of teachers’ salaries compared to those of alternative professions does affect the supply of teachers.
and the propensity of young people to undergo teacher training (Santiago, 2002[53]) (Dolton, 2006[54]).

88. Across OECD countries, 15-year-old students in countries with higher teacher salaries are more likely to expect going into a teaching career, even though there is little evidence that higher salaries could increase the average calibre of those who enter the profession (OECD, 2018, p. 142[10]). Several countries in which teachers’ salaries were significantly lower than those of similarly educated workers therefore considered reducing this gap an effective means to attract high calibre candidates to the profession. In the Czech Republic, for example, low salaries and poor working conditions have been identified as key drivers of teachers’ low morale and social status. Following an initial increase in teachers’ salaries by 22% in real terms between 2009 and 2014, the government has therefore made it a priority to continue raising salaries as part of its Strategy 2020 (Shewbridge et al., 2016, p. 142 f.[8]). In countries with very low teacher salaries, such as Uruguay, the OECD review team observed its negative effect on the system’s ability to attract high-quality entrants, as well as a range of detrimental consequences for those in the profession, including low levels of motivation and the frequent accumulation of excessive teaching hours or multiple jobs to make up for low compensation. To address these shortcomings, Uruguay has raised the salaries of public school teachers at a higher rate than those in the general economy since 2003 (Santiago et al., 2016, p. 235[50]).

89. Occasionally, the competitiveness of teachers’ salaries has been considered important not only to ensure the sector’s general attractiveness, but also its appeal to graduates with specific characteristics that are underrepresented in the profession. PISA 2015 shows, for example, that 15-year-old students’ expectations to become teachers were more gender-balanced in countries with higher teachers’ salaries (OECD, 2018, pp. 142, Table 4.10[10]). This was corroborated by the OECD reviews, for example of the Slovak Republic, where low salaries were associated with a highly feminised workforce (Santiago et al., 2016, p. 132[20]). Studies finding a higher wage-elasticity of male graduates’ decision to teach may reflect their higher opportunity costs of becoming a teacher, but may also reflect the complex and potentially reciprocal relationships between the profession’s gender composition, its social status and remuneration.

90. Teacher shortages are often concentrated in specific subject areas and many schools face difficulties recruiting teachers with technical skills who could command higher salaries in the general labour market. Policy makers and academics have therefore considered differentiating teachers’ salaries based on their training or subject areas to reflect their opportunity costs of pursuing a teaching career (Kershaw and McKean, 1962[55]). In the United States, as in most countries, the principle of uniform salary scales has imposed limits on subject-based pay differentiation, although some school districts facing dramatic teacher shortages in sciences or mathematics have occasionally exempted schools from these roles (Murnane, Singer and Willett, 1989[56]).

91. Competitive salaries may also support schools in retaining high-performing teachers in the profession. High rates of teacher turnover, can adversely affect student achievement and are a particularly pressing concern in many disadvantaged schools where students may be taught by a succession of novice teachers who are yet to make their most significant gains in effectiveness (Ronfeldt, Loeb and Wyckoff, 2013[57]). Despite the adverse selection of teachers who leave the profession early, the loss of experience and productivity due to the forced reallocation of incumbent teachers across grades means that student achievement tend to suffer from high turnover rates (Hanushek,
Rivkin and Schiman, 2016(58)). There is some evidence to suggest that teachers’ salaries (and, relatedly, the opportunity cost of foregone wages from their best careers outside of teaching) affect the likelihood of teachers leaving the profession (Falch, 2011(59)), particularly in the early years of their careers (Murnane, Singer and Willett, 1989[56]; Hendricks, 2014[60]). However, it is not clear whether higher salaries alone improve schools’ ability to retain high-performing teachers at higher rates than low-performing ones, i.e. the net effect on teacher quality remains ambiguous.

92. It should also be noted that, while the relative level of teachers’ salaries is an important factor shaping the profession’s financial attractiveness, other aspects associated with teachers’ remuneration should be taken into account when assessing its competitiveness. In many OECD review countries, for example, teachers are civil servants and have a high level of job security or access to benefits like pension schemes, tax exemptions and family allowances that workers in comparable private sector positions do not. It is therefore important to choose a relevant comparison group when assessing the competitiveness of teachers’ salaries and consider benefits – financial and non-financial – alongside salaries when considering how to raise the profession’s attractiveness.

2.5.2. Differentiation and progression of teachers’ salaries

93. Although the level teachers’ salaries matter to attract a sufficient number of high-performing graduates to the profession, cross-national evidence on the relationship between teacher’s compensation and system-wide performance is limited. Most countries that perform highly in PISA pay their teachers above their per capita GDP, but the same is true in some low-performing countries. Policy makers need to consider not only the competitiveness of teachers’ lifetime earnings, but also how their compensation is distributed over the course of teachers’ careers, weighing the relative importance of higher starting salaries against the potential for greater increases over the course of teachers’ careers. It is therefore important to consider the shape of teachers’ salary scales and the basis on which their salary progression is determined.

94. The range of teachers’ pay scales and their slope, i.e. the rate at which salaries increase over the course of a teacher’s career vary significantly across OECD countries and economics with available data. On average, lower secondary teachers entering the profession with minimum qualifications earned a PPP-adjusted statutory salary of USD 32 797 in 2017, rising to USD 46 007 with 15 years of experience, and up to USD 58 254 for teachers with maximum qualifications at the top of the salary scale, implying a potential salary progression of up to 78% over the course of a career (see Figure 2.5). Teachers in a number of countries, including Chile, Hungary, Israel and the United Kingdom, start their career earning less, but experience a stronger increase in their salaries as they gain seniority with top-end salaries exceeding those at the bottom by more than 150%. By contrast, the salary scales in countries like Denmark, Germany and Switzerland, which offer some of the highest starting salaries, are comparatively compressed.
Figure 2.5. Salary progression of lower secondary teachers, 2017

Annual statutory salaries of teachers in public institutions, in equivalent USD converted using PPPs

<table>
<thead>
<tr>
<th>Country</th>
<th>Starting salary (min. qual.)</th>
<th>Salary after 15 years of experience (most prev. qual.)</th>
<th>Salary at top of scale (max. qual.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ath. Republic of Cyprus</td>
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<tr>
<td>Austria</td>
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<td>Belgium</td>
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<td>Czech Republic</td>
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<td>France</td>
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<td>Greece</td>
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<td>Iceland</td>
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<td>Ireland</td>
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<td>Israel</td>
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<td>Italy</td>
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<td>Japan</td>
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<td>Luxembourg</td>
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<td>Malta</td>
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<td>Mexico</td>
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<td>Netherlands</td>
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<td>Norway</td>
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<td>Poland</td>
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<td>Portugal</td>
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<tr>
<td>Portugal (L)</td>
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<tr>
<td>Slovak Republic</td>
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<tr>
<td>Slovenia</td>
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<td>Spain</td>
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<td>Sweden</td>
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<td>Switzerland</td>
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<td>Turkey</td>
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<tr>
<td>United Kingdom (I)</td>
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<td></td>
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<tr>
<td>United Kingdom (Scotland)</td>
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</tbody>
</table>

Note: Countries and economies are ranked in ascending order of teachers’ starting salaries with minimum qualifications.
1. Actual base salaries.
2. Salaries at top of scale and minimum qualifications, instead of maximum qualifications.
3. Salaries at top of scale and most prevalent qualifications, instead of maximum qualifications.
4. Includes the average of fixed bonuses for overtime hours.

95. Multiple OECD review countries have sought to address challenges specific to their respective teacher labour markets by adjusting the slope of their salary scale—a process which requires weighing a number of trade-offs, and often involves significant budgetary consequences and implementation challenges. Broadly speaking, compressing the salary scale can free up resources to increase teachers’ starting salaries at the expense of more experienced teachers, while increasing its slope can create space to provide higher salaries at the top-end of the scale. In light of local labour market conditions and different challenges related the supply and demand for teachers, the former strategy usually aims at attracting more students to the profession and reducing turnover in the early years of teachers’ career, while the latter may serve to retain and motivate more experienced teachers or offer a wider scope for salary differentiation between teachers. Although adjusting the slope of salary scales and shifting resources towards their lower or upper end can be budget neutral in theory, its fiscal consequences can be hard to predict and they may involve significant transition costs over the course of their implementation.

96. In 2015, Austria implemented a new teacher service code which will be mandatory for all teachers entering the profession from 2018 and includes a compression of the salary scale, providing more attractive starting salaries while reducing top-end salaries, keeping the expected lifetime earnings of teachers roughly equal. The changes are accompanied by raised qualification requirements for new teachers in provincial schools and an increased teaching load in federal schools. Flattening the salary structure (whose slope had been considerably steeper than the OECD average) may lead to an increase in expenditure in the medium term until the more highly-paid senior teachers who have a right to continue serving under the old salary scheme will retire, although some of this may be offset by longer teaching hours and new overtime regulations.
introduced by the new service code (Nusche et al., 2016, pp. 78, 158[4]). During a transition period, between 2015 and 2018, in which its adoption was voluntary, fewer teachers than anticipated chose to follow the new service code (Rechnungshof, 2016[61]).

97. Many OECD review systems are faced with the dual challenge to provide competitive starting salaries to attract high-calibre graduates to the teaching profession while also seeking to retain, motivate and recognise experienced, high-quality teachers through progressive salary increases. In addition, many systems aim to diversify the profession and recognise the importance of incentivising teachers to continually update their skills and assume responsibilities that are commensurate with their growing capacity. In light of these complex and diverse objectives, the design of effective teacher salary scales requires policy makers to go beyond their starting point and slope to consider the various ways in which differentiation and salary progression can be linked to teachers’ experience, performance and responsibilities.

98. The practices among high-performing countries vary greatly with respect to the factors used to determine teachers’ career and salary progression (i.e. the relative weight assigned to appraisal, taking on additional responsibilities, professional development and seniority (OECD, 2018, p. 61 f.[10]). In many school systems, teachers are compensated based on some version of a step and lane structure where salary increases are based either on lateral movements along the steps of a lane (often based on seniority) or vertical movements across lanes (frequently conditional on the attainment of additional educational credentials). Under these traditional models, teachers’ salary progression occurs relatively automatically or based on factors like credentials that are only indirectly related to their performance in the classroom. In an effort to use compensation as a lever to promote quality teaching, some countries have therefore introduced bonuses and other means of strengthening the link between teachers’ salary progression and their performance or responsibilities. These policies are discussed further below.

Education-based progression

99. As for any profession, the demands placed on teachers change over time, due to evolving student needs, technological change and the continuous refinement of pedagogical knowledge. The ageing teacher population has added to the emphasis that many countries place on the continued professional development of their teaching workforce in order to help them adapt to the changing demands of their profession. While some high-performing countries, like Finland, instil a culture of research-based inquiry early on by expecting all new teachers to have completed a master’s research thesis, other systems, such as Singapore, encourage teachers to pursue master’s or PhD degrees in mid-career to gain new insights by situating their practical experience within a more theoretical research context (Schleicher, 2018, pp. 84, 123[62]). There are many ways in which governments can encourage the continuous professional growth of teachers and the development of their pedagogical skills (for a more detail discussion, see Chapter 4). Engaging in additional training can constitute a significant investment of teachers’ time and financial resources. Additional payments are therefore one way in which countries have sought to compensate and incentivise teachers who undergo additional training. As can be seen in Figure 2.6, this practice is relatively widespread in OECD countries.

100. More than half of OECD countries and economies with available data report that teachers in primary to upper secondary school receive some form of compensation for attaining further formal qualifications (e.g. degrees that exceed the countries’ minimum requirements or qualifications in additional subjects). In 10 of 32 countries (incl. Chile,
Iceland and Luxembourg), these are rewarded in the form of salary progressions, an advancement to higher lanes or step increments within the salary grid. Another 8 countries reward further qualifications through annual payments (e.g. the Flemish and French Communities of Belgium), occasional payments (e.g. Denmark) or as a percentage of teachers’ base salary (e.g. the Slovak Republic and Slovenia) (OECD, 2018[c]).

101. This is corroborated by OECD data on teachers’ salaries, which shows that – in countries where the most prevalent teacher qualification exceeds the minimum entry requirements at a given level – most highly qualified teachers earn at least 10% more. This is the case, in Canada, the Flemish Community of Belgium (upper secondary level), Norway (upper secondary level), Poland (pre-primary, primary and lower secondary levels), in the United Kingdom, and the United States (primary, lower and upper secondary levels), and at some stages of the teaching career only in the French Community of Belgium, Greece, Hungary, New Zealand and Norway (primary and lower secondary levels) (OECD, 2018, p. 362 f.[3]). Although it is less common among OECD countries, some teachers also receive financial rewards for the successful completion of continuing professional development (CPD) activities. 13 of 32 OECD countries and economies with available information reward teachers’ pursuit of CPD, in the form of annual payments (the Czech Republic and Spain), a percentage of their base salary (Chile, Israel and the Slovak Republic) or salary progression (Iceland and Luxembourg).

**Figure 2.6. Additional compensation of teachers in public primary and secondary schools, 2017**

Number of countries

<table>
<thead>
<tr>
<th>% base salary</th>
<th>Annual payment</th>
<th>Occasional payment</th>
<th>Salary progression</th>
<th>Reduced time</th>
<th>Multiple</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding teaching performance</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Completing professional development</td>
<td>✓</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Attaining additional formal qualifications (1)</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentoring / supporting new teachers</td>
<td>✓</td>
<td></td>
<td></td>
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<tr>
<td>Class teacher/ form teacher (3)</td>
<td>✓</td>
<td></td>
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<tr>
<td>Special tasks (1)</td>
<td></td>
<td>✓</td>
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<tr>
<td>Engaging in extracurricular activities (2)</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
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<tr>
<td>Student counselling (2)</td>
<td></td>
<td>✓</td>
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<tr>
<td>Teaching additional classes / hours (2)</td>
<td></td>
<td></td>
<td>✓</td>
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<tr>
<td>Additional school management activities (3)</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
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</tr>
</tbody>
</table>

1. Refers to lower secondary and primary
2. Refers to lower and upper secondary
3. Refers to lower secondary

*Source: OECD (2018) Education at a Glance, Table D3.7. (web only)*
Performance-based differentiation

102. The idea of performance-based compensation for teachers (sometimes referred to as “merit pay”) has a long history in countries like the United States, where school districts have experimented with merit pay schemes throughout the 20th century, although many of them were short-lived and have since been replaced by uniform salary scales (Murnane and Cohen, 1986[63]). In theory, performance-based compensation is meant to motivate teachers to improve their practice and raise students’ performance by rewarding effective teaching or punishing—short of dismissal—insufficient performance. Common criticisms of merit pay schemes point to the difficulty of measuring performance at the level of individual teachers and perverse effects like the risk of narrowing the curriculum or reducing teachers’ efforts on tasks not explicitly rewarded by the scheme. Some also fear that an excessive reliance on extrinsic incentives might undermine teachers’ intrinsic motivation to do well (Bénabou and Tirole, 2003[64]) (Frey, 1997[65]) or that competition among teachers could reduce co-operation, both of which could impair performance in the long run.

103. Performance-related pay systems can take very different forms, distinguished most importantly by the mechanism through which teachers’ pay is linked to their appraisal. While some systems provide a more direct link (e.g. by introducing a variable salary component or end-of-year bonus the size of which depends on a given year’s performance), others provide a more indirect link by considering teachers’ performance evaluations in decisions on their career progression, which in turn affects their salaries through a link between salary and career structures (Conley and Odden, 1995[66]). In practice, these systems may complement or substitute one another and an OECD review of public sector performance-pay systems found that some have replaced merit increments with bonuses because they do not have a long-term impact on the wage bill and pension liabilities (OECD, 2005[67]). Whether the link between performance and pay is direct or mediated via career structures, policy makers need to address a number of design questions when considering to link teacher performance to their remuneration:

- How large is the incentive? (What share of teachers’ salaries varies by performance and how large do differentials between high-performing and low-performing teachers’ salaries need to be to incentivise positive behavioural change?)
- By which method is teachers’ performance evaluated? (Is additional compensation based on principals’ evaluations, on student test scores, other pre-defined indicators or a combination of the above?)
- Which aspects performance are evaluated? (Does it factor in non-academic outcomes, such as students’ behaviour and well-being or is it limited to students’ subject-specific performance? Is the focus on absolute or relative gains and are all students’ results weighed equally?)
- Are teachers’ evaluations independent of one another? (Is performance measured at the level of the individual or groups of teachers? Are salary increases based on a quota system limiting the number of teachers who can succeed?).

104. Of the teachers responding to the OECD TALIS 2008 survey, three quarters reported that they would receive no recognition for being more innovative or improving the quality of their teaching. Likewise, three-quarters of teachers report that the most effective teachers in their school do not receive the greatest monetary or non-monetary
rewards (OECD, 2009, p. 170 f.[68]). Conversely, in many OECD systems, teachers face no significant consequences for persistent under-performance. Just one-quarter of teachers reported that colleagues in their school would be dismissed based on sustained poor performance (OECD, 2009, pp. 188, Table 5.9[68]). This reflects the high level of job security that teachers in many systems enjoy once they have reached tenure. As discussed further in Chapter 4, however, the inability to dismiss underperforming teachers can be just as stifling for a school’s performance as school leaders’ inability to retain their most effective ones. Some countries appear to compensate for a lack of formal dismissal mechanisms through informal means of peer-control and social norms. For example, according to TALIS 2008 data, few teachers in Turkey need to fear dismissal for underperforming, but an above average proportion of teachers report that sustained poor performance would not be tolerated by the rest of the staff. In most cases, however, a lack of formal recognition of performance goes hand in hand with low levels of peer-control. Austria, Ireland, Korea Norway, Slovenia and Spain, for example, appear to combine a lack of formal and informal means address underperformance (OECD, 2009, pp. 188, Table 5.9[68]).

105. Of course, many of the tasks that teachers perform can be expected to provide a strong intrinsic motivation, especially if they are carried out under conditions that make intellectually stimulating and enjoyable – a key objective in inspiring high-performing teachers is therefore to promote their intrinsic motivation and create conditions that stimulate their self-motivation. Yet, as in most professions, some aspects of teachers’ work, while important to promote student learning, are less inspiring or require discipline. Providing a measured balance of intrinsic and extrinsic sources motivation is important to promote and reward high performance across the whole range of teachers’ tasks (OECD, 2007[69]). In recognition of this, OECD countries can look at a long history of experimenting with various forms of performance-based differentiation in teachers’ compensation. In 2017, about half of the OECD countries and economies with available data compensated teachers in primary and secondary education for outstanding performance in one way or another. Three countries (Chile, Turkey and England [UK]) reported that strong performance could accelerate their teachers’ progression within their salary range. More frequently, in a total of 13 schools systems, performance-based rewards take the form of occasional payments (Austria, Denmark, Estonia, Israel, Italy, Japan, Poland and Slovak Republic), annual payments (Finland, Latvia, Norway and Slovenia) or a proportion of their base salary (Czech Republic and Mexico) (Figure 2.6).

Measuring teacher effectiveness

106. A central challenge for performance-related compensation systems – particularly those that are not exclusively based on principals’ evaluations – is the selection of valid performance indicators that can be measured transparently and reliably, that do not set perverse incentives and whose cost of measurement does not exceed their expected impact on student performance. Imperfections in the evaluation of teachers’ performance can elicit unpredicted and potentially destructive responses from workers. Whichever indicators are chosen to reflect students’ performance, there is a risk that teachers will focus their efforts on maximising these outputs at the expense of others, resulting in teaching to the test, neglecting dimensions of student learning that are less amenable to measurement, or reducing contributions outside the classroom, such as assistance to peers. While expanding the set of measured performance indicators reduces these perverse incentives, it may increase the cost of the merit pay system beyond justification.
107. Another concern relates to heterogeneous effects that performance-related incentives may have across the student population. In order to underline the importance of each student’s progress and eliminate factors such as their socio-economic background from teachers’ evaluations, many measures of teacher effectiveness are based on students’ average gains in performance. This approach provides incentives for teachers to focus on students for whom a marginal increase in attention is likely to produce the greatest gains. These are often assumed to be students in the middle of the performance spectrum, whose support may come at the expense of those who struggle the most. Some proposed remedies, such as the weighting of performance gains based on students’ characteristics, compel policy makers to engage with complex problems that are inextricably linked with fundamental ethical questions (Murnane and Cohen, 1986, p. 13[63]). Alternative indicator-based methods of teacher assessment have been suggested to resolve some of the problems and merit further investigation. For example, measures of teacher performance that are based on changes in their students’ ordinal ranking relative to their peers, promise to remove incentives to teach to the test or manipulate assessment scales (Barlevy and Neal, 2012[70]).

Direct links between appraisal and compensation

108. The most straightforward method of linking teachers’ appraisal to their compensation involves payments in the form of end-year bonuses or a variable salary component based on the result of their performance evaluation. A 2005 OECD review has found performance-related payments to be increasingly common in public sector employment, and that – where they took the form of direct payments – maximum rewards for top performers at the employee level have tended to be modest, usually constituting less than 10% of the base salary (OECD, 2005[67]). The evidence of the overall impact of such extra payments is mixed and their implementation has been highly contentious and occasionally potentially divisive (OECD, 2005[43]).

109. The Slovak Republic operates a performance-based compensation system that awards teachers a personal allowance based, among other factors, on their performance. One challenge observed by the OECD review team was the absence of a clear framework for appraising the performance of teachers, which led to concerns about the transparency and subjectivity of the process. In practice, bonuses were more frequently awarded based on the assumption of additional responsibilities than teachers’ effectiveness in the classroom and their impact on student learning. In the light of recent reforms to the Slovak Republic’s career structure, the OECD review team concluded that additional monetary performance-incentives might become redundant if teachers can advance on a career ladder with associated salary increases based on good performance (Santiago et al., 2016, pp. 193, 202[20]). Similar challenges were observed in the Czech Republic, where school principals have the discretion to allocate individual allowances and bonuses to reward teachers for high performance or additional work. Neither the level, nor the criteria for the allocation of these personal allowances are defined by laws or based on transparent and objective criteria (Shewbridge et al., 2016, p. 137[8]). For any incentive structure to have its intended effects, it is important for the agents involved to have a clear understanding of the underlying mechanisms and the steps they can take to improve their results.

110. Most high-quality evaluations of teacher performance schemes have been carried out in the United States. Evidence has been mostly discouraging on whether incentive schemes with singular, test-based measures of teacher performance can improve educational outcomes, yet there are sufficient instance of positive outcomes to merit the
attention of policy makers (Podgursky and Springer, 2007[71]). Many studies found either no positive impacts of teacher merit pay on student achievement (Fryer, 2013[72]) (Springer et al., 2010[73]), very small ones (Sojourner, Mykerezi and West, 2014[74]), or mixed effects, subject to estimation specifications or the implemented design of incentive pay programmes (Springer, Ballou and Peng, 2014[75]) (Balch and Springer, 2015[76]) (Goodman and Turner, 2013[77]).

111. Some more encouraging results were reported from performance-based compensation systems that were established under Teacher Incentive Fund (TIF) grants that were awarded in 2010. Estimates suggest a small increase in student achievement of 1 to 2 percentile points after three years of the programme’s implementation, although its execution often diverged significantly from the guidance of the grant providers (Wellington et al., 2016[78]). Positive effects were also reported from the District of Columbia Public Schools’ IMPACT evaluation system, which provided unusually strong incentives based on multiple measures of teacher performance (including test scores, but also several structured observational measures). An evaluation indicated that the threat of dismissal for low-performing teachers increased voluntary attrition by more than 50 percent and improved the performance of those who remained. At the same time, the scheme further improved the performance of high-performing teachers who received significant increases in compensation (Dee and Wyckoff, 2015[79]). These estimates are local though, i.e. they concern only those teachers around the cut-offs for negative or positive consequences. The incentive scheme should be expected to be much less motivating for those in the middle of the performance-spectrum who are unlikely to face consequences either way (OECD, 2005[67]).

Group-based incentives

112. Since many aspects of teachers’ work depends on and benefit from collaboration with other teachers and staff, it makes sense for these activities to be rewarded and not discouraged. In fact, there are some concerns that individual-based performance rewards might undermine these essential group activities by fostering competition among teachers. Likewise, many desirable outcomes, such eliminating bullying or violence in schools, may be impossible to attribute to the work of any individual teacher, even though they arguably play a critical role in their accomplishment and should be encouraged in working towards them.

113. Some countries have therefore introduced incentive structures based on collective rather than individual performance. In Colombia, for example, teachers are eligible to receive a performance bonus tied to a school-level performance index, the Education Quality Synthetic Index (ICSE). However, the index’ design has raised some concerns since it fails to take schools’ socio-economic context and the prior performance of its students into account and therefore penalises disadvantaged schools even though they might provide their students with a high value added (Radinger et al., 2018, pp. 196, 249[35]). Chile also provides teachers and school leaders with a range of performance-related incentives, some of which are based on individual performance, such as the voluntary Individual Performance Allowance programme (Programa Asignación Variable por Desempeño Individual, AVDI), while others provide group-based incentives, like the Collective Performance Allowance (Asignación de Desempeño Colectivo) for school leaders, described in Box 2.6 (Santiago et al., 2017, pp. 188, 247 f.[16]).
114. Rewards based on collective performance provide weaker incentives for individual behavioural change the larger the groups on which they are based. Consistent with this, their impact on student achievement has tended to be smaller in the few existing evaluations (Jackson, Rockoff and Staiger, 2014[80]). Furthermore, group-based reward systems are not immune to the creation of perverse incentives either. For example, an overreliance on group-based performance rewards could be expected to deter high-performing teachers from working in schools with a lower average teacher quality even though they might need their support the most.

Challenges in the implementation of performance-based compensation systems

- Note: This section / corresponding policy options are yet to be fully developed.

115. The potential long-term effects of performance-based compensation schemes must be weighed against the challenges and considerable costs that can arise in the course of their implementation. This concerns not only the challenge of achieving teacher buy-in, but also building the necessary capacity among the authorities responsible for teachers’ evaluation, and the systems’ careful monitoring to identify and remediate any unintended negative consequences early on. Given that the implementation of performance based compensation systems has often been highly contentious and occasionally potentially divisive (OECD, 2005[43]), engaging stakeholders during the implementation process is critical to successfully manage transitions, e.g. from a seniority-based compensation system, towards a system that gives greater weight to individual or group-based performance and responsibilities.

116. It is widely acknowledged that a highly effective ways to improve teachers’ performance is through peer-learning and regular growth-oriented evaluations carried out by trained supervisors in an atmosphere of mutual trust (OECD, 2013[34]). A central criticism levelled at performance-based pay is that it can undermine these mutually supportive relationships, that it can incentivise teachers to conceal their failings in fear of financial retribution, rather than openly addressing them and seeking help from peers or supervisors. Particularly where the evaluation systems used to determine teachers’ salaries are not sharply distinguished from more formative forms of teacher evaluation, the former risk to undermine the latter, making it harder for school leaders to provide them with the support they need (OECD, 2013[34]) (Murnane and Cohen, 1986[63]). The positive impact of bonuses on top-performing teachers may thus be more than offset by its negative impact on those who fail to obtain them and the corroding effect this may have on collegial relationships.

117. In addition, even if merit pay systems were based on perfectly reliable measures of teacher performance, perceived unfairness and a lack of transparency remain potential sources of dissatisfaction and demotivation. Most principals engaged in regular classroom observations have a good sense of who their most effective teacher. Yet, they may struggle to justify this assessment to teachers who are denied merit pay and – even more problematically – may fail to point them to a clear path for obtaining it, given the nature of teaching and the absence of clearly defined behaviours that consistently result in higher performance (Murnane and Cohen, 1986[63]). The positive impact of bonuses on top-performing teachers may thus be more than offset by its negative impact on those who fail to obtain them and the corroding effect this may have on collegial relationships.

118. Although performance-related pay for government employees has occasionally been proposed not only to enhance teacher performance but also to reduce costs (OECD, 2005[67]), it is important to underline that the introduction of high-quality systems for performance evaluation that, given the high stakes involved, seek to reduce error to a minimum can impose significant costs. Providing reliable and multi-dimensional estimates of teacher performance may require the use of more sophisticated systems of
teacher assessment, involving e.g., higher-frequency observations with multiple, carefully trained evaluators (Dee and Wyckoff, 2015[79]).

119. Another implementation challenge that countries might encounter when linking teachers’ salary scales to performance or evaluation results is the difficulty of predicting their fiscal impact. While the overall expenditure on teachers’ salaries is relatively easy to forecast if salaries increase based on seniority, it is considerably harder to predict teachers’ performance and the outcomes of their evaluations. In Colombia, where a remuneration reform assigned greater weight to evaluation results, this problem was addressed by making any promotions conditional on the availability of sufficient resources provided through the central government. The number of possible promotions is therefore determined ahead of the evaluations and factored into the process, which in turn implies year-to-year variations in the level of performance required for salary raises (Radinger et al., 2018, p. 232[35]). Quotas and other forms restrictions to the magnitude and number of performance-related salary increases are common methods to control the fiscal impact of performance pay schemes across the public sector (OECD, 2005[67]).

120. Learning from countries’ experiences with the implementation of performance-related pay systems as well as isolating and evaluating their effects is difficult, given that their introduction is often accompanied by organisational changes on a larger scale. In public administrations, these have often included the reform of appraisal and goal setting processes, the clarification of tasks, acquisition of skills, creation of improved employee-manager dialogue and, in the case of schools, the reform of teaching standards and career structures. Many of these dynamics may have a positive impact on performance and constitute secondary effects not directly related to the financial incentives (OECD, 2005, p. 14[67]).

Indirect links between performance and compensation

- Note: This section / corresponding policy options are yet to be fully developed.

121. Many countries recognise and financially reward teachers who fulfil tasks that go beyond such core teaching-related activities as lesson planning, marking students’ work, general administrative work, communicating with parents, supervising students or working with colleagues (OECD, 2018, pp. 371, Table D3.7[3]). These additional responsibilities can include supporting new teachers as part of mentorship and induction programmes, acting as a class teacher, engaging in extracurricular activities (e.g. organising homework, sports or drama clubs), counselling students (e.g. providing career guidance or delinquency prevention) or taking over managerial roles such as serving as the head of a department.

122. Primary and secondary teachers who participate in management activities on top of their teaching duties are compensated in three quarters of OECD countries and economies with available data. These benefits may accrue indirectly in the form of reduced teaching hours, as in Finland, Portugal and the Slovak Republic, or more commonly, the form of occasional or annual additional payments, as in Austria, Costa Rica, England (United Kingdom), France, Germany, Ireland, Italy, Japan, Korea, Norway, Spain and Turkey. In Denmark, teachers who take on managerial responsibilities benefit from both reduced teaching time and an annual payment (Figure 2.6). It is also common to see additional compensations for teachers who take on more classes or hours than required by their full-time contract (e.g. in the form of overtime payments) and who perform special tasks, such as training student teachers. By contrast, less than a third of OECD countries with available data report compensating teachers with payments or a
proportional increase in their base salary for their engagement in the organisation of extracurricular activities (exceptions include Chile, Czech Republic, Estonia and Slovak Republic) or student counselling activities (exceptions include Austria, Chile, Czech Republic, Estonia, Israel, Slovak Republic and Spain) (Figure 2.6).

123. Providing compensation based on the assumption of additional outside the classroom constitutes one way to reward teachers’ additional efforts and the assumption of responsibilities, although they may not provide strong incentives for them to improve their performance in the classroom itself. An effective means to do so while avoiding some of the risks associated with direct performance-pay is to link teachers’ compensation to their career advancement based on robust certification processes that allow teachers to assume increasing responsibilities on the basis of their demonstrated effectiveness in the classroom (as described above in the section on vertical career paths) (Conley and Odden, 1995[66]).

124. Conventional performance-based pay systems often provide bonuses for the highest-achieving staff which may seem unattainable and fail to motivate a large majority of teachers. Providing incentives for teachers to gradually advance their knowledge and skills has the potential to offer realistic goals and a clear pathway to achieve them for novice and senior teachers alike by making them relative to their respective position on the career ladder. Linking performance to teachers’ compensation via their career progression could also involve linking the speed of their salary progression on performance rather than, or in addition to their seniority. This ensures that teachers have a monetary incentive to achieve good performance while taking advantage of existing structures of appraisal and performance evaluation. Effectively implementing these incentives requires school systems to develop and establish links between their frameworks for teaching standards, career structures and salary scales.

2.5.3. Compensation and benefits of school leaders

125. To ensure a sufficient supply of high quality candidates for school leadership positions, their salaries need to be attractiveness, not only compared to those of positions with similar levels of responsibility in the public and private sectors, but also compared to those of senior teachers among whom most school leaders are recruited. In nearly all OECD review countries with available data, the maximum salaries for school leaders exceed those of teachers. Nevertheless, the salary ranges for teachers and school leaders overlap in nearly all systems and in a number of them, including Austria, Greece and Portugal, neither the bottom nor the top statutory salaries of school leaders with minimum qualifications were significantly distinguished from those of teachers (see Figure 2.7).

126. Evidence from country reviews suggests that the status and attractiveness of school leadership roles can suffer if their compensation fails to reflect their higher level of responsibility (Nusche et al., 2016, p. 172[4]). In Colombia, for example, where school leaders are not subject to a separate salary scale, their earnings are often inferior to those of their teachers despite a significantly heavier workload (Radinger et al., 2018, p. 185[35]). Likewise, school leaders in Uruguay earned less than their senior teachers resulting in schools at all levels struggling to recruit candidates for leadership roles and many teachers hesitating to apply for a position, despite having completed the initial preparation for principalship. In addition, the low remuneration of school leaders in Uruguay creates incentive for them to take on additional roles to supplement their salary. In some schools visited as part of the review visit, principals and deputy principals worked in private schools, teacher education institutions, or adult education in addition to
their leadership role or even distributed the time in their school so they could take on additional employment outside of their school, meaning that they could dedicate less time to the improvement of their schools (Santiago et al., 2016, p. 184[50]). Establishing separate salary scales for school leadership roles, including principals and deputy principals, can provide a good basis to recognise their distinct responsibilities both financially and through the articulation of a separate career ladder, rather than treating principal posts as a mere extension of the teaching career (see further below).

**Figure 2.7. Minimum and maximum statutory salaries for lower secondary teachers and school heads, 2017**

Note: Countries and economies are ranked in descending order of maximum salaries of school heads; Based on teachers with most prevalent qualifications at a given level of education and school heads with minimum qualifications.

1. Actual base salaries.


127. Given that the responsibilities of school leaders, the complexity of their tasks and their administrative burden can vary considerably depending on the school they serve, some countries have sought to adjust their compensation based on school-level characteristics. In Austria, for example, the service bonus that school leaders receive on top of their salaries as teachers varies based on the size of their schools, ranging from EUR 300 per month for leaders in very small schools up to EUR 1 650 for those of large schools. School principals who are responsible for two or several schools receive the bonus for each school they manage (Nusche et al., 2016, p. 155[4]). Similarly, school leaders in Chile, receive a bonus of 25%-200% of the basic minimum salary for teachers, depending on the size of their schools and their percentage of disadvantaged students (UNESCO, 2014[81]).

128. Additional school-level factors that might be reflected in the salary scales of school principals include factors such as a school’s leadership structure and the amount of support principals receive through deputy or assistant principals. Particularly in systems that struggle to fill leadership positions for schools in disadvantaged, rural or remote areas, location-based salary adjustments can also be effective in reducing regional inequalities (see also Chapter 3). Including these weightings in leaders’ salary scales can
ensure that all schools have a chance to attract high performing leaders (Pont, Nusche and Moorman, 2008[31]).

Box 2.6. Group-based incentives for school leaders in Chile’s Collective Performance Allowance

Based on the belief that leadership is an organisational quality, the Collective Performance Allowance system (Asignación de Desempeño Colectivo) is designed to encourage school leaders to collaborate and improve the practices and behaviours of leadership teams. Through the setting and evaluation of collective objectives and targets, the system aims to strengthen the organisational leadership and management capacity of schools as a whole, to encourage school leaders’ commitment to the improvement of teaching and learning in their school, and to facilitate and encourage successful collaboration of leadership teams. Participation in the Collective Performance Allowance process is voluntary for school leaders in all schools with at least 250 students. First implemented in 2005, an increasing number of school leadership teams are taking part.

The Appraisal of Collective Performance system is built around the development of an institutional objective and two to four institutional targets that results in an agreement of collective performance. The development of the agreement of collective performance involves the distribution of related tasks and school principals and other technical-pedagogical school leaders taking on mutual responsibilities. The institutional targets are determined by local contexts and priorities, but need to be linked to five areas of school leadership (leadership, pedagogical leadership, school climate, support to students, financial management) and results. At least one of the institutional targets needs to be related to pedagogical leadership, another to results. To align the Collective Performance Allowance process with other measures for improving school leadership, the institutional objective and institutional targets need to be defined with reference to the Annual Development Plan of Municipal Education (Plan Anual de Desarrollo Educativo Municipal, PADEM) and the School Development Plan (Proyecto Educativo Institucional, PEI).

Once a school leadership team has established an agreement of collective performance, the school leadership team together with its school provider develop strategies to monitor the achievement of the objective and targets and related leadership practices and behaviours. It is, then, subject to further approval or revision by the responsible provincial department of education (Departamento Provincial de Educación, DEPROV) to ensure that the agreement complies with legislation and corresponds to national education goals. Ultimately, the school leadership team presents its agreement, institutional objective and targets to the school community.

The extent to which the institutional objective and each of the institutional targets have been reached is assessed by the school provider on the basis of an implementation report (Informe de Implementación) and an evidence portfolio (Carpeta de Evidencias) compiled by the school leadership team to document progress towards the objective and targets and any challenges and difficulties in the process. The extent to which the overall agreement of collective performance has been reached is calculated from the total sum of the degree of achievement of the individual objective and targets. The results are, ultimately passed on to the provincial department of education for validation. On the
basis of four rating levels (0%-49.9%, 50%-74.9%, 75%-89.9%, 90%-100%), school leadership teams that have achieved the two highest rating categories receive a financial allowance of 10% and 20% of the National Minimum Basic Salary (Remuneración Básica Mínima Nacional, RBMN). To ensure the sound implementation of this tool, the Chilean Ministry of Education can carry out external audits of the Appraisal of Collective Performance process as implemented by individual school providers.


129. Table 2.3 summarises some of the criteria used to determine school leaders’ base salaries and their additional payments in OECD review countries. Both school-based weights and incentives for further professional development or formal qualifications are relatively common and about a third of the review countries’ salary scales include performance-based components. School leaders in Sweden, for example, receive an individualised salary based on regional education director’s assessment of their performance. The degree to which these assessments are systematised and transparent varies across municipalities and across the school boards that evaluate school leaders. Directors of education may take into account a variety of indicators from the schools’ academic results and teachers’ or parents’ testimonies to the labour-market outcomes of their students. Some municipalities have taken inspiration from the private sector or other public sectors like health services to design evaluation systems for their school leaders (Pont, Nusche and Moorman, 2008[31]).

130. In Austria, school principals are eligible to receive one-off bonuses for outstanding performance or involvement in particularly successful projects (Bruneforth et al., 2016[83]). As for teachers, a critical condition for the success of performance-related pay is to ensure that the process is transparent and perceived as a fair, positive encouragement by the principals themselves. It is therefore essential to develop reliable indicators and clear assessment criteria, to prepare and train evaluators and to ensure that assessment procedures take into account the context in which principals are working. As with the performance-based compensation of teachers, incentives for school leaders can be provided at the individual or at the group-level and Chile’s Collective Performance Allowance system (Asignación de Desempeño Colectivo) provides an example for such collective incentives used to encourage collaboration and distributed leadership (see Box 2.6).
### Table 2.3. Individual and school characteristics affecting school leaders’ salaries at the lower secondary level in OECD review countries

<table>
<thead>
<tr>
<th></th>
<th>Performance-related</th>
<th>Development-based</th>
<th>System leadership roles</th>
<th>School characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Austria</strong></td>
<td>Outstanding performance (end-year bonus)</td>
<td>a</td>
<td>m</td>
<td>School size (higher base salary)</td>
</tr>
<tr>
<td><strong>Belgium (Fr.)</strong></td>
<td>a</td>
<td>Further formal qualifications (annual payment)</td>
<td>m</td>
<td>a</td>
</tr>
<tr>
<td><strong>Chile</strong></td>
<td>Collective performance (added allowance)</td>
<td>Further formal qualifications</td>
<td>m</td>
<td>Disadvantaged/remote school (higher base salary)</td>
</tr>
<tr>
<td><strong>Colombia</strong></td>
<td>Performance on ISCE management index (end-year bonus)</td>
<td>m</td>
<td>m</td>
<td>School size / remote location (higher base salary)</td>
</tr>
<tr>
<td><strong>Czech Republic</strong></td>
<td>Outstanding performance (one-off payment)</td>
<td>Professional development (annual payment)</td>
<td>m</td>
<td>a</td>
</tr>
<tr>
<td><strong>Denmark</strong></td>
<td>Further formal qualifications (occasional payment)</td>
<td>Professional development (occasional payment)</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td><strong>Estonia</strong></td>
<td>m</td>
<td>m</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td><strong>Iceland</strong></td>
<td>a</td>
<td>Further formal qualifications (salary progression)</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td><strong>Kazakhstan</strong></td>
<td>m</td>
<td>m</td>
<td>m</td>
<td>Rural schools (allowances and housing support)</td>
</tr>
<tr>
<td><strong>Lithuania</strong></td>
<td>m</td>
<td>m</td>
<td>m</td>
<td>School cluster size</td>
</tr>
<tr>
<td><strong>Luxembourg</strong></td>
<td>m</td>
<td>m</td>
<td>m</td>
<td>Inclusive/SEN school (higher base salary)</td>
</tr>
<tr>
<td><strong>Portugal</strong></td>
<td>Outstanding performance (occasional payment)</td>
<td>Further formal qualifications (% of base salary)</td>
<td>m</td>
<td>School size (higher base salary)</td>
</tr>
<tr>
<td><strong>Slovak Republic</strong></td>
<td>Outstanding performance (annual payment)</td>
<td>Further formal qualifications (annual payment)</td>
<td>m</td>
<td>Disadvantaged/remote school (annual payment)</td>
</tr>
<tr>
<td><strong>Slovenia</strong></td>
<td>Outstanding performance (annual payment)</td>
<td>Professional development (annual payment)</td>
<td>m</td>
<td>Disadvantaged/remote school (annual payment)</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td>Outstanding performance (annual payment)</td>
<td>Professional development (annual payment)</td>
<td>m</td>
<td>Disadvantaged/remote school (annual payment)</td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
<td>m</td>
<td>m</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td><strong>Uruguay</strong></td>
<td>m</td>
<td>m</td>
<td>m</td>
<td>m</td>
</tr>
</tbody>
</table>

a. not applicable  
m. missing


### 2.5.4. Compensation of non-teaching staff in schools

Although relatively little internationally comparable information is available on the remuneration of non-teaching staff in schools, their presence is increasingly common...
and plays an important role in the management of human resources. It is important to underline that the different types of employees conventionally subsumed under the category of non-teaching staff vary considerably not only with respect to the roles they fulfil, but also with respect to their qualifications, salaries and employment contracts.

132. Other than teachers’ salaries, which are often regulated by national statutes or service codes and follow a uniform remuneration scheme, the terms of employment for non-teaching staff tend to be more heterogeneous. Many categories of the non-teaching staff could engage in comparable work in order sectors, both private and public, and the salaries they would be able to command in equivalent jobs outside the school is likely to be subject to greater regional heterogeneity based on local labour market conditions. Schools or local authorities might benefit from some flexibility in adjusting salaries for technical staff in order to attract qualified candidates.

133. The OECD review team noted, for example, that salaries of technical staff in the Czech Republic were considerably higher in the capital and wealthier cities than in other regions, and that allowing schools to adjust their payments to these local labour market conditions could improve their capacity to hire qualified staff and lead to a more efficient use of school funding. Whereas rich municipalities with higher local salaries may be unable to attract sufficient technical staff if they were obliged to remunerate them at the national average, whereas poorer jurisdiction could avoid excess spending by adjusting the salaries of their technical staff based on local market rates (Shewbridge et al., 2016, p. 119[8]).

134. Some categories of school staff, such as psychologists, may have a significantly higher earnings potential working in a private or clinical environment and face foregone earnings that schools are unlikely to match. This may create difficulties in attracting high-performing candidates to serve in these roles which – in light of the increasing commitment to strengthen socio-emotional and psychological support in schools – raises serious questions on what their adequate compensation should look like.

2.6. Governing working conditions

135. Conducive working conditions that enable teachers to work effectively are critical to support their students’ success, but could also be an important lever to enhance the profession’s attractiveness and ability to retain high-performing educators. While some aspects of working conditions, such as the quality of school facilities, the level of administrative support or the composition or the student body, are highly variable across schools, system level policies can exert a significant influence in setting standards for factors such as class sizes, the flexibility of working practices, the teaching load or opportunities for professional development (Dolton, 2006[54]).

136. Considering that increases in teaching load and class sizes are commonly discussed as responses to teacher shortages, investigating their effect on the supply and retention of teachers would seem critical (Santiago, 2002, p. 63[33]). Nevertheless, robust evidence concerning the effect of working conditions on individual teacher supply decisions, motivation and attrition remains scarce and difficult to establish, not least since working conditions tend to be highly correlated with other school characteristics, such as their socio-economic composition (Horn, 2009[83]). According to PISA data, cross-country differences in working conditions (teaching load and class sizes) are not significantly associated with the proportion of 15-year-olds expecting to pursue a
teaching career (Won Han, Borgonovi and Guerriero, 2018[84]). Yet, practicing school teachers in a Europe-wide survey ranked improvements in working conditions and lower class sizes as one of the factors with the greatest potential to make the profession more attractive – after higher salaries and social status (European Commission, 2013, p. 72[85])

137. The importance of working conditions for the effective management of human resources in schools has been corroborated by the OECD team’s country reviews. Among other factors, they have shown the governance of working time, task profiles and the organisation of administrative support to be promising levers for enhancing the capacity of teachers and school leaders alike. Teachers’ opportunities for development – another central factor – are discussed in more detail in Chapter 4.

2.6.1. Regulations of teachers’ working time and teaching hours

138. Teachers’ work is highly complex, characterised by a multitude of often competing responsibilities and requires them to engage in a great variety of activities over the course of the school day and week (see Figure 2.8). In addition to regular classroom instruction, teachers are usually expected to spend time preparing their lessons, correcting students’ work, collaborating with their peers, counselling students, communicating with parents and engage in professional development. They may also, sometimes on a voluntary basis, engage in mentoring or induction activities for new teachers, substitute for colleagues and contribute to school projects or the organisation of extracurricular activities (OECD, 2014, p. 162[86]). These activities are not only an important dimension of professionalism, teachers’ engagement in collaboration and peer feedback, school self-evaluation and improvement planning are also important for raising the overall quality of teaching and learning at schools. Teachers have traditionally enjoyed a high degree of autonomy over the use of their non-teaching time, which is testament to their recognition and school leaders’ faith in their independence. However, in many systems, it has led to conceptions of teachers’ working time that are no longer aligned with the breadth of their professional roles and have made it harder to manage the effective use of their time, individually and collectively (see Chapter 4).
Figure 2.8. Teachers’ working hours in lower secondary education, 2013

Average number of total 60-minute hours teachers report having worked during the most recent complete calendar week and estimated shares of individual tasks

Note: The reported times are national averages of all surveyed teachers, including part-time teachers; Time spent on individual tasks was proportionally adjusted to match total reported working hours; "Other tasks" include student counselling, participation in school management, engagement with parents and extracurricular activities; A "complete" calendar week is one that was not shortened by breaks, public holidays, sick leave, etc. Also includes tasks that took place during weekends, evenings or other off-classroom hours.

Source: OECD (2014) TALIS 2013 Results: An International Perspective on Teaching and Learning, Table 6.12

Recognition of teachers’ non-teaching tasks

139. It is increasingly recognised that the tasks teachers perform outside of the classroom as an integral part of their professional roles. Nevertheless, in many countries, teachers are left with too little time to prepare their lessons, collaborate with their peers, and engage in peer observation or knowledge creation. While the reasons for these shortcomings are manifold and vary across systems (as elaborated below), adopting a conception of teachers’ working time that accounts for their responsibilities both within and outside the classroom is an important precondition to improve this condition. In many OECD school systems, service codes and other statutes that regulate how teachers spend their time are based on a narrow conception of the profession and account for nothing but their teaching hours, i.e. the time teachers are expected to spend on classroom instruction.

140. According to information collected for OECD Education at a Glance, at least 20 of the 34 countries with available data for 2012, required lower secondary teachers to perform individual planning or preparing lessons, teamwork and dialogue with colleagues and communicating and co-operating with parents during their statutory working time. Around half of the countries also required teachers to mark or correct students’ work, engage in general administrative communication and paperwork, and professional development activities (OECD, 2014[11]). Nevertheless, although many OECD countries
specify the non-teaching tasks required of teachers in their working conditions, most
countries fail to make explicit how many hours teachers should allocate for each of these
or even the sum of these activities.

141. The teachers service code for Austrian federal schools, does not specify an overall
workload but, prior to the implementation of a new regulations in 2015 (see Box 2.7),
merely provided them with a basic teaching assignment of 20 hours, weighted by the
subjects they taught (Nusche et al., 2016, p. 151[4]). Likewise, national regulations in the
Flemish Community of Belgium stipulate a minimum and maximum teaching load but do
not specify teachers’ overall working hours or the time they are expected to spend on
non-teaching tasks, which are established on an individual basis at the school level
(Nusche et al., 2015, p. 142[2]). Likewise, teachers’ contracts in Uruguay were based
exclusively on a stipulated number of teaching units. Even though contracts in secondary
education stipulate anywhere between 20 to 48 teaching hours, low salaries have
compelled many teachers to supplement them with additional teaching hours in a second
or third school, which leaves very little room for non-teaching activities or professional
development (Santiago et al., 2016, p. 230[50]).

142. Failing to explicitly account for teachers’ time spent on non-instruction tasks has
a number of negative consequences for their effective use of their time and the status of
the profession. On the one hand, it fails to provide any formal recognition for the
important work that teachers perform outside of the classroom, which can have a
detrimental effect on their teacher motivation. It also makes it more difficult to provide
enough time for these tasks, which means that teachers often spend considerably longer
hours on non-teaching duties or do not find enough time to pursue them, which can have
a negative impact on the quality of their teaching and their engagement with peers or the
wider community. If teachers’ salaries are exclusively tied to their teaching load, rather
than their total working time, it also diminish school leaders’ capacity to plan their
teachers’ time based on a holistic conception of their tasks.

143. To ameliorate these conditions, all factors that are relevant to teacher’s work load,
including their non-teaching obligations, should be taken into account when determining
their teaching hours. This principle was already recognised in the 1966 ILO/UNESCO
Recommendation concerning the Status of Teachers (ILO/UNESCO, 2016, pp. 36, §§ 90-
93[87]). Reflecting the time teachers are expected to commit to non-instruction tasks in
service codes and working regulations is an important step to align regulations with
modern conceptions of teacher professionalism. Moving towards an employment
framework that recognises teachers’ entire workload can also provide a good basis for
moving towards a greater diversity in teachers’ roles and granting schools more flexibility
in allocating individual teachers’ time to instructional and non-instructional activities,
depending on the functions they perform at the school.

144. Examples of workload-based conceptions of teachers’ working time can be found
in a number of OECD review countries, including Chile, Estonia, Lithuania and the
Slovak Republic. There are different ways of introducing such employment systems (see
Box 2.7 for examples). Some specify nothing but the overall workload, leaving it
to school principals to assign teachers’ time across different kinds of activities. Others
indicate the total number of hours or a proportion of teachers’ time that should be
dedicated to teaching and non-teaching activities (e.g. 60/40 or 75/25), or they might be
even more prescriptive, stipulating guidelines or requirements for the weekly time to be
spent on specific non-instruction tasks or categories of tasks.
Box 2.7. Workload-based models of teacher working time

Shifting from employment based on teaching hours to a workload system in Estonia

In 2013, teacher employment in Estonia was reformed based on the Working Time of Educational Staff Act. The reform marked a shift from a teaching load system in which staff contracts only specified teaching hours to a workload system that specifies the total number of working hours and defines the full range of tasks teachers are expected to perform. The reform implicitly acknowledged 290 annual hours spent on non-teaching activities in pre-primary education, 921 in primary and lower secondary education and 972 in upper secondary education, yielding a total annual workload of 1,610 statutory working hours in pre-primary education and 1,540 hours in primary to upper secondary education (corresponding to 35 weekly hours). These overall working hours are below the OECD average, as were the teaching hours specified by the old system. Given that the new regulations no longer specify teaching hours, the distribution of teachers’ overall workload across individual teaching and non-teaching tasks is at the discretion of the school management. In some cases, school leaders’ decisions on the use of teachers’ time are subject to political agreements at the municipal level or with a school’s teacher council. Representatives from Tartu City, for example, informed the OECD review team that local trade unions had negotiated the number of teaching hours to be set at 23, to alleviate concerns that school leaders might otherwise wield too much power over teachers’ remuneration.

Creating more time for non-teaching activities through a workload system in Chile

Chilean teachers are employed on the basis of a workload system that stipulates their total working hours and the teaching and non-teaching activities they are expected to perform within this time. In 2014, teachers at all levels had 2,006 annual working hours, of which 75% were designated to classroom activities, which constitutes both a very heavy workload and a high proportion of contact hours by international comparison. In 2016, Chile introduced a new System for Teacher Professional Development, motivated in part by a desire to ameliorate these working conditions. The new law initiated a reduction in the proportion of teaching time to 70% of the workload by 2017 and to 65% of the workload by 2019. This provides teachers with more time to engage in non-teaching activities, fosters teacher’s engagement in the school and provides greater opportunities for collaboration among peers through the requirement to stay at the school during some of their non-teaching hours.

Workload-based systems in Austrian provincial and federal schools

In Austria, the workload of teachers in provincial schools is regulated according to an annual working hours scheme which stipulates 1,736 hours of work per year for teachers aged 43 or older, and 1,776 hours of work per year for all younger teachers. The annual standard is divided into three activity areas: teaching duty including supervision; preparation, follow-up and correction; and hours for other activities such as substitute teaching, class co-ordination, administrative tasks and school-projects. Over one year, 720 to 792 hours, that is about 20 to 22 hours a week, have to be dedicated to direct teaching, 600 to 660 hours are foreseen for the planning and follow-up of lessons, and the remaining 324 to 456 hours of the annual standard are available for other activities. For all teachers, the task of student assessment is regulated and typically takes up a substantial amount of teaching time relative to direct teaching. While no such workload
system exists in federal schools yet, a new teacher service code (Dienstrechts-Novelle 2013 – Pädagogischer Dienst) implemented in 2015 has sought to harmonise the working time arrangements of federal school teachers with those in provincial schools. This included a slight increase in the teaching load from 20 to 24 teaching units of 50 minutes per week and the specification that two of these hours need to be spent on non-instructional tasks, such as student counselling and mentoring of new teachers, which had not previously been acknowledged.


145. Of course, other obstacles besides a lack of official recognition, may impede teachers from using their non-teaching time effectively to engage in collaboration and the preparation of lesson. In Uruguay’s general and technical-professional secondary schools, for example, teachers’ working time includes a number of hours for non-instructional activities. Given that many teachers are required to work in multiple schools, though, teachers’ ability to make use of this time to collaborate with other teachers or participate in co-ordination meetings is significantly diminished (Santiago et al., 2016, p. 187[50]).

Scope for teaching load adjustments

146. Some countries allow statutory teaching hours to be adjusted to reflect teachers’ other commitments, their experience, their effectiveness or the subjects they teach. In Austrian federal schools, for example, the basic teaching assignment of 20 hours is adjusted based on the subjects taught (e.g. German-language instruction receives a higher weighting than physical education) and the fulfilment of additional responsibilities, such as managing the school library or providing administrative support for the principal (Nusche et al., 2016, p. 151[4]). Of the 38 OECD members and review countries with available EAG 2018 data, 3 systems rewarded teachers with reduced teaching hours for taking on additional school management activities, 2 for mentoring or supporting new teachers, and 1 for student counselling or engagement in extracurricular activities respectively (see Figure 2.6).

147. Considering that novice teachers report lower levels of self-efficacy and effectiveness in the classroom, it is surprising that many OECD countries do not adapt their teaching load to reflect their lack of experience and greater need for professional development. Teachers’ working conditions could be adapted to reflect these differences by assigning experienced or highly-effective teachers additional teaching hours, students or classes and reducing new teachers’ teaching load in turn so they can focus on developing their teaching skills at the beginning of their careers. Yet, in many countries, new teachers have almost the same amount of teaching hours as their more experienced peers, despite the fact that teachers’ effectiveness increases markedly over the first few years of their career (Jensen et al., 2012[44]). Some OECD review countries, such as Portugal, even practice the opposite and reduce teachers’ hours as they gain seniority. Teachers in Portuguese primary education benefit from a reduction of five teaching hours at the age of 60, while those in secondary education receive a reduction of two hours at 50 years, another two at 55 years, and four hours at 60 years. Although their overall
working hours remain unchanged, they are not required, for example, to use this additional time to support less experienced peers (Liebowitz et al., 2018[51]).

148. OECD review countries also assign varying degrees of responsibility to school leaders in adjusting individual teachers’ teaching load and assigning non-instructional tasks and responsibilities. In theory, greater flexibility in the allocation of teaching hours could allow for a more efficient management of teachers’ time by adapting it to the learning needs of their students as well as the competencies, strengths, weaknesses, and learning needs of staff. Whether or not expanding school leaders’ scope for adjustments would lead to a more efficient allocation of tasks and responsibilities in practice depends on a range of factors, including the ability of school leaders to recognise teachers’ needs and potential and work together with them to address students’ needs. In any case, translating this newly-gained flexibility into a practical improvements can take time and requires strong leadership capacity.

149. In 2013, Denmark passed a reform (Act no. 409) that gave school leaders greater scope in determining the use of teachers’ working hours. While previous agreements had regulated the amount of teaching hours and allocated each teacher a set preparation time for each class they taught (regardless of their subjects or experience), the new framework enabled school leaders to, for example, assign more teaching hours to experienced teachers or reduce their contact hours to let them support newly qualified colleagues in their school or collaborate with peers on their areas of expertise. While the reform established the necessary conditions for managing teachers’ time more efficiently, the review team noted that not all principals were prepared to make the most of it. Many school leaders lacked examples of effective ways to allocate the working and teaching hours of their workforce based on the needs of teachers and students and reported a lack of capacity to evaluate the effectiveness of their interventions (Nusche et al., 2016, pp. 52, 147, 169[88]).

Accountability and presence in the school

150. Teachers have traditionally enjoyed a high degree of autonomy over the use of their non-teaching time, including not only their decision how spend it, but also where they spend it. Many OECD review countries thus do not prescribe whether teachers should spend any of their non-teaching time at school, leaving it to them to work from home. This is the case in Austria, for example, where the teacher service code does not regulate the hours that teachers are expected to be present at school for either federal or provincial teachers (Nusche et al., 2016, p. 151[4]). In other cases, such as for pre-primary and primary education in the Flemish Community of Belgium, teachers are required to spend a given amount of time at the school, but only marginally more than their number of teaching hours (Nusche et al., 2015, p. 143[21]).

151. Where national service codes do not prescribe the amount of on-site presence or the tasks that teachers are expected to perform in their non-instruction time, doing so may be at the discretion of school leaders, as is the case in Flemish secondary school (Nusche et al., 2015, p. 143[21]). Yet, principals’ leverage over their teachers’ presence in schools may be limited. Even though Portuguese teachers are normally expected to devote about 10 hours of their non-teaching time to tasks like grading assignments, contacting families, planning lessons at school, principals can define the content of only up to 2.5 hours of teachers’ non-teaching tasks per week (Liebowitz et al., 2018[51]).

152. Based on 2013/14 data collected for a Eurydice report, about half of the 38 European school systems with available data included the time to be spent at school in
their official definitions of lower secondary teachers’ working time. The differences between teachers’ statutory teaching hours, their overall working time and the hours to be spent at-school provide some indication of where teachers are expected to work when not teaching and reveal large differences across countries. Based on official regulations, teachers are required to spend at least 10 hours a week carrying out non-teaching duties on school premises in Bulgaria, Cyprus¹, Iceland, Ireland and Norway and at least 5 hours a week in Greece, Hungary, Malta, Scotland, Spain and Turkey. In the majority of countries, though, central regulations either do not mandate any or relatively little availability at school, e.g. 2 hours in Latvia and Luxembourg or 3 hours in Finland (European Commission/EACEA/Eurydice, 2015, p. 24 ff.[89]).

153. Teachers’ shared presence in schools can make it easier for them to engage in informal professional exchange, observe each other’s practice, collaborate on projects, engage in collective knowledge creation and innovate (Paniagua and Istance, 2018[90]). According to TALIS results, having a collaborative culture within the school, the frequency of team-teaching, peer-observation and feedback and collaborative professional learning, are some of the factors that shows the strongest association with teachers’ self-efficacy and job satisfaction (OECD, 2014, pp. 424 f., Tables 7.16 and 7.17[86]). Even though schools usually provide teachers with spaces to work independently or with colleagues, between lessons or in the afternoons, opportunities for interaction among peers are often limited in practice due to a lack of shared non-teaching time at school.

154. In order to facilitate teachers’ collaboration and increase accountability around their non-instruction time, countries like Denmark have taken steps to increase teachers’ presence at school beyond their teaching hours. Following the passage of a reform that afforded greater flexibility in the organisation of teachers’ time (Act no. 409) in 2013, more than half of Danish municipalities introduced attendance requirements that require teachers to be present at school for a certain duration each day irrespective of their number of teaching hours (Nusche et al., 2016, p. 52[88]).

155. Of course, building a collaborative culture in schools requires more than teachers’ co-presence and attempts to impose professional collaboration may be counter-productive and poorly received by teachers. Conversely, it is likely that teachers who perceive their school’s atmosphere to be collegial and conducive to their professional development would spend more time in schools voluntarily. As discussed in more detail in Chapter 4, the importance of ensuring that teachers can spend time together at the school therefore needs to be balanced against the risk of appearing to impose collegiality or crowding teachers’ agenda with time requirements that might inhibit bottom-up professional initiative and true collaboration (Schleicher, 2018, p. 88[62]). The strong resistance experienced in Denmark has underlined that reforms of teachers’ working hours can be

¹ Note by Turkey: The information in this document with reference to “Cyprus” relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the “Cyprus issue”.

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.
seen as an infringement of their autonomy and underlines the importance of ensuring buy-in from teachers and stakeholder support (Nusche et al., 2016, p. 52).

2.6.2. School leaders’ task profile and working conditions

156. The tasks and responsibilities associated with the school leader role vary significantly across OECD countries and, to some extent, between schools of different sizes within them. School leaders typically function as the direct supervisors for all school staff, including teachers, advising them on their teaching and pedagogical work and monitoring their instruction and students’ performance. They are also responsible for liaising between the school, its students, their parents, the school partners and the wider community, to implement the decisions adopted by school boards as well as laws and directives issued by educational authorities. In addition, they are held accountable and may be expected to report data and on various aspects of the schools’ conditions to the responsible authorities.

157. The task profile of school leaders differs markedly when it comes to their pedagogical, organisational, staff and financial responsibilities, depending on the schools’ curricular autonomy and freedom to manage their own budget and recruit staff. In countries operating a centralised system for the selection and distribution of teachers, school leaders may not be directly involved in hiring decisions. Instead, they can contribute to the process by submitting estimates of their demand for human resources, by serving an advisory role during the hiring process or by reserving the right to veto proposed appointments. Likewise, in some OECD school systems local or central authorities retain most budgeting and accounting responsibilities to allow principals to focus on their role as pedagogical leaders while others give them extensive autonomy, which adds to their administrative burden but also allows them to align budget allocations with their schools’ pedagogical needs (OECD, 2017).

158. School leaders’ working conditions are not only a function of their formal responsibilities, but also the size of their schools and the extent to which they are supported by administrative staff and middle management personnel. Not all school leaders are exempt from teaching duties, for example, and although countries such as Austria have lifted teaching requirements for most school leaders, they remain in place in small and very small schools (Nusche et al., 2016, p. 157). Although the leadership of schools is a demanding task requiring a high level of commitment, low salaries have driven school leaders in some OECD review countries like Uruguay, to take on additional roles in private schools, teacher education institutions, or adult education to supplement their income, diminishing the time and energy they could devote to effectively run their schools (Santiago et al., 2016, p. 184). Adequate remuneration and sufficient accountability around the use of their time need to ensure that leaders can commit to managing their schools full-time.

2.6.3. Administrative tasks and support

159. Support staff in schools can assume administrative, secretarial and logistical tasks to enable teachers and school leaders to focus on their core pedagogical responsibilities. Although most school of a certain size employ support staff, teachers and school leaders tend to share some of the administrative in practice. The extent to which teachers and leaders are supported in their work varies significantly across OECD school systems. According to lower secondary principals’ reports, one administrative or managerial staff member is available for around 6 teachers on average across the OECD, but the ratio
ranges from 3 in England to 12 in Finland. Administrative and managerial staff includes receptionists, secretaries and administrative assistants, as well as principals and assistant principals. Some school systems appear to compensate for a lack of administrative support by providing their teachers with a greater number of other support personnel, including teacher aides and other non-teaching instruction support, professional curriculum or instructional specialists, educational media specialists, psychologists and nurses (OECD, 2014, pp. 285, Table 2.18[86]). Yet, a number of OECD countries provide teachers with little of both (see Figure 2.9).

Figure 2.9. Administrative and pedagogical support for teachers, 2013

Notes: Pedagogical support staff provides services to students to support the instructional programme, such as librarians or guidance counsellors; School administrative personnel include receptionists, secretaries and administration assistants; Management personnel include principals, assistant principals, and other management staff whose main activity is management.

160. In some countries, such as Austria, the OECD review team observed that teachers have to assume a significant share of administrative work (sometimes in return for a reduced teaching load), due to a lack of sufficient administrative support or the inefficient organisation of the staff that is available in schools. This not only reduces the time that teachers can spend on instruction, the preparation and follow-up of classes, it is also inefficient, given that teachers’ time tends to be more highly remunerated than that of administrative staff. In addition, the distribution of administrative tasks between teachers has been a cause for concern in some OECD review countries, since novice teachers have been reported to be disproportionately burdened with these duties (Nusche et al., 2016, p. 171[4]). In other cases, for example in primary schools of Flemish Community of Belgium, similar challenges stemming from a lack of administrative support have been observed for school leaders, many of whom reported lacking the time to engage in teacher appraisal and coaching (Nusche et al., 2015, p. 164[21]).

161. Different strategies can help to increase the administrative support for schools and use existing support staff more effectively. Austria, for example, redeployed civil servants who had become redundant in other public services to provide administrative support to schools and encouraged support staff to be shared by groups of schools within a region, for example to provide IT support (Nusche et al., 2016, p. 172[4]). Surprisingly, across countries, there is no statistically significant association between the average proportion of teachers’ working time devoted to general administrative tasks and the
average number of administrative or managerial staff employed by their schools. Some of the systems with the highest number of support staff, including Singapore and Korea, are also those whose teachers devote the largest share of their working time to administrative tasks while teachers in countries like as Finland, the Flemish Community of Belgium and Italy perform little administrative work despite a low number of support staff.

162. While the administrative duties teachers are expected to fulfil vary across systems and may confound this relationship, the findings nevertheless illustrate that the employment of additional support staff might neither be sufficient nor necessary to ease teachers’ administrative burden. Technological solutions, such as advanced data management systems, can undoubtedly play a role in alleviating some of the challenges associated with administrative overload.

2.7. Policy options

2.7.1. Strengthen professionalism by developing standards for high-quality teaching and school leadership

163. Clear, well-structured and widely supported professional standards that are aligned with student learning objectives can provide a framework to guide the development of the profession as whole, informing initial teacher education, appraisal, professional development and career advancement (see below). Teaching standards should specify which competencies, knowledge and skills teachers are expected to exhibit at different points in their career under underline the importance for teachers to continually improve their practice and professional knowledge and using it to improve the their students’ learning outcomes. Teaching standards should also be informed by research and be subject to regular reviews to ensure that they reflect the latest evidence on effective teaching.

164. Distinct professional standards should be developed for school leaders to promote a coherent vision of school leadership. A clear expression of the skills and competencies school principals are expected to have can be used as a basis for their selection, appraisal and professional development. School leader standards should reflect the complexity of their role and go beyond the bureaucratic and administrative qualities emphasised by traditional models of principalship, to acknowledge their responsibility for pedagogic leadership.

Use professional standards to align initial teacher preparation, professional development, appraisal and career advancement

165. Well-designed competency frameworks and teaching standards have the potential to align various elements of the teaching career based on a common vision for the profession. They should serve as a reference for the development of teacher education curricula and serve as a basis for appraising individual performance. Aligning professional development offerings with the knowledge and skills demanded by teacher competency frameworks can be an effective means to strengthen the link between appraisal and ongoing professional development. Professional standards can also strengthen teachers’ career progression if they specify which skills and competencies teachers are expected to exhibit at different stages of their career. Together with career structures that define the roles and responsibilities corresponding to each step on the
career ladder, professional standards can then provide a clear structure for teacher appraisal, certifications and promotion.

**Involve teachers in the development of professional standards**

166. Giving teachers a leading role in the definition of these professional standards is critical to guarantee their relevance, but also to strengthen teachers’ voice and sense of self-agency, their involvement in the profession’s self-regulation and to generate a sense of ownership that is critical for the standard’s acceptance, implementation and effective use. Teachers’ participation in the process recognises their professionalism, the importance of their skills and experience and the extent of their responsibilities. To help teachers assume greater responsibility for the self-regulation of their profession, the authorities responsible for the development of professional standards should work hand in hand with teacher unions, teacher professional organisations, teaching councils and outstanding teachers from across the system. To ensure that new teacher standards are well-understood by teachers and used as envisaged, their implementation needs to be accompanied by a strategy for their socialisation. Initial teacher education programmes, induction courses and in-service training should be adapted to reflect the new teacher standards and explain their implications for teachers’ classroom practice and appraisal.

2.7.2. **Ensure that salaries are competitive enough to recruit and retain high-quality teachers and leaders**

167. Remuneration is only one of many aspects that render a profession attractive. Working conditions, opportunities for professional growth, the social status of teachers, as well as their autonomy are important to render teaching careers not only financially, but also intellectually satisfying and attract high calibre candidates to the profession. Nevertheless, the structure of salary scales and the factors that determine salary progressions over the course of a career are critical policy levers that should be considered when confronting challenges related to the supply, retention and motivation of teachers and leaders.

**Ensure that salaries are commensurate with teachers’ roles and responsibilities**

168. The optimal design of salary structures depends on a range of contextual factors, including the structure of local labour markets, the demand and supply of teachers and the wider policy environment, including the structure of teachers’ careers and their employment conditions. Yet, in order to attract high-potential candidates to a teaching career, it is widely recognised that their remuneration needs to be competitive with those of similarly educated adults working in comparable positions. Depending on the specific policy challenges a country faces, a range of strategies can further bolster the system’s capacity to attract new entrants (e.g. by making the salaries of beginning teachers more attractive) or its ability to retain experienced and high-quality teachers (e.g. by expanding the potential for salary progression). Some of these adjustments can be budget neutral while others may have significant long-term fiscal implications or incur high transition costs during the early stages of their implementation. How teachers’ salaries compare across levels of education, between different roles and to those of administrative and leadership staff also affects their relative attractiveness and the distribution of qualified candidates across different staff categories. Salaries of school leaders, for example, need to be sufficiently differentiated from those of teachers to reflect their additional responsibilities and to provide incentives for qualified candidates to assume leadership positions.
Recognise and encourage high performance while balancing the risks of extrinsic reward structures

169. Providing teachers’ with a good balance of intrinsic and extrinsic sources of motivation is critical to promote and reward high performance across the whole range of their tasks. Teachers’ self-motivation should be encouraged by providing the conditions for their work to be intellectually stimulating and enjoyable. Many countries have sought to complement these efforts with sources of extrinsic motivation, among others, in the form of financial incentives. Direct links between teachers’ performance and their salaries have had very mixed results in practice and are notoriously difficult to implement in ways that are transparent, fair and aligned with students’ learning objectives. The most encouraging examples have been based on multi-dimensional measures of teacher performance, clearly articulated the system’s expectations to teachers and provided them with coaching and support to meet these expectations. Doing so can require significant investments which need to be weighed against the policy’s potential gains. In addition, the evidence base is insufficient to provide clear guidance on many technical aspects of performance-pay schemes, such as the optimal size of rewards or the best individual- or group based measures to use. The overall impact appears to be highly variable based on the design of performance schemes as well implementation challenges, including resistance among teachers, and other, context-dependent unintended consequences. More indirect links between teachers’ performance and financial rewards, for example via their career progression, can avoid some of the damaging consequences that may result form badly implemented bonus systems. Where available, school systems should establish clear links between teachers’ salary scales and the steps in their career structure. Robust certification systems should govern teachers’ career progression on the basis of established teaching standards and competency frameworks as well as their capacity to assume responsibilities and perform at the level required by a given step in the teacher career. Linking salaries to career progression promises to offer sufficient incentives to motivate high performance while at the same time affording administrations and the teaching profession greater scope in ensuring that the frameworks guiding this process are well-aligned with students’ learning objectives, transparent and well-understood.

2.7.3. Establish distinct career structures and salary scales for school leaders, underpinned by clear professional standards

170. To make leadership positions attractive to senior teachers and acknowledge their additional responsibilities, school leaders’ salaries should be attractive not only relative to those of similarly educated adults in other occupations, but also relative to those of teachers. Adequate levels of remuneration could take the salaries of other professionals in the public sector with similar levels of responsibility as a benchmark. To ensure that all schools have a chance to attract high-performing leaders, salary scales should also reflect school-level characteristics, such as their size as well as the composition of their leadership teams to account for the challenges associated with a given position. Separate salary and career structures for school leaders can contribute to raising the profession’s status and communicate its importance, rather than treating them as a mere extension of the teachers’ career.

171. Multi-level career structures for school leaders should provide them with opportunities for professional advancement and continued motivation as they gain experience and assume progressively increasing responsibilities. These career structures should also provide opportunities for school leaders to progress to system leadership roles.
that allow them to contribute to the improvement of the wider education system. Each steps of the career structure should be underpinned by an authoritative set of professional standards to increase transparency, professionalism and guide their recruitment, appraisal and career advancement.

2.7.4. Create opportunities for vertical and horizontal advancement in the teaching career

172. Career structures should offer teachers opportunities to apply the skills and experiences they acquired over the course of their career in roles with commensurate responsibility without having to move out of the classroom into administrative roles. Pathways for vertical career progression can incentivise teachers to perform at their best, engage in continuous professional learning and be recognised for effective teaching. Different steps in the career structure should be aligned with professional standards detailing the knowledge and skills teachers are expected to display for different roles. This creates the basis for greater transparency and – if linked to professional development opportunities – can provide teachers with a clear sense of their needs and opportunities for growth.

173. Teachers’ advancement across the career structure should be voluntary and involve a formal certification process based on national frameworks of teacher competencies. Given the high stakes of certification procedures, they should be based on standard procedures and involve an external component (e.g. external markers of a professional portfolio and a standardised written assessment) to ensure objectivity and fairness. The certification process should be well-aligned with students’ learning needs and linked to teaching practice, for example by including classroom observation as part of a teachers’ evaluated portfolio. Once a teacher has been certified as fit to perform at a given career stage, regular re-certification after a given number of years can ensure that the teachers remain capable of performing at a given level and reduce the risk of non-identified long-term underperformance. Re-certification also provide incentives for teachers to continuously update their knowledge and skills and proactively address development needs.

174. In addition to opportunities for vertical progression, career structures should allow for horizontal diversification and allow teachers to assume leadership positions in specific areas corresponding to their interests and expertise. Allowing teachers to acquire and apply specialised knowledge and skills creates opportunities for a more effective allocation of tasks and offers teachers greater autonomy in shaping their career, which may motivate them and have a positive effect on the attractiveness of the profession. Examples for specialised roles that teachers might assume include teacher mentors, learning and career counsellors, curriculum experts and co-ordinators for school projects. The definition of these roles, their associated responsibilities and appropriate forms of compensation, for example reductions in teaching hours, should occur in close consultation with teachers.

2.7.5. Ensure that teachers’ working time reflects the diversity of their tasks

175. Teachers are expected to engage in a range of activities beyond classroom instruction. Ensuring that they can devote sufficient time to lesson preparation, collaboration, peer observation and knowledge creation is increasingly recognised as central to their professional role and effectiveness as teachers. Providing employment contracts based on a workload system, that stipulates the total number of hours teachers
are expected to work (and possibly to stay at the school) rather than or in addition to their teaching hours teachers is an important step to recognise and acknowledge the diversity of teachers’ tasks. These holistic conceptions of teachers’ working time can make it easier for school management to foster teacher collaboration and develop professional learning communities, for example by formally setting aside and co-ordinating time to engage in peer feedback and joint work with colleagues. It also makes it easier for school leaders to engage in whole-school planning and can provide a basis to more flexibly allocate teaching hours and non-teaching activities across teachers based on a more diverse set of roles for teachers in schools, based on their other commitments or their experience and effectiveness in the classroom. All of this has the potential to make teachers’ time in schools more effective to improve instruction and student learning, as well as making the profession more attractive.

2.7.6. Set minimum qualifications requirements adapted to teachers’ roles and responsibilities at all levels of education

- Note: This policy option is yet to be developed.
References


Kershaw, J. and R. McKean (1962), Teacher Shortages and Salary Schedules, RAND Corporation, Santa Monica, CA.


1 Authors’ analysis of TALIS 2013 data.
3. Distributing human resources in school education

176. The employment of staff in schools ensures that students are provided with the stipulated instruction time as well as other non-instructional activities throughout the school day and year. It also ensures the strategic leadership, management and administration of schools. Schools however vary in their geographical locations, the student population they serve and their organisation (e.g. specific curricular programmes and subject areas they offer at particular levels of schooling). Different schools may therefore require a different mix of staffing in terms of type, numbers, experience, and qualifications to support student learning and development. Of course, attracting and recruiting high quality staff and matching them to particular schools and students alone is not sufficient, also organizational supports in and for schools are required to make staff effective and ensure high quality teaching for all students (Little and Bartlett, 2010[1]; Kraft et al., 2015[2]).

177. The processes governing the recruitment, selection and allocation of staff analysed in this chapter influence the extent to which the distribution of staff resources meets schools’ and students’ needs. Shortcomings in the recruitment or deployment of staff can have a detrimental effect on students and schools. To give only some examples, the late hiring of teachers or the lack of a replacement teacher in case of another teacher’s sick or training leave can result in lost learning time for students. A shortage of teachers with specific expertise, such as advanced mathematics, in a school can prevent that school from offering particular courses or require a teacher to instruct in a subject for which they have not been qualified. Since shortcomings in staff employment may affect some schools more than others, they may also lead to inequities in opportunities for learning between students.

178. Shortcomings in staff employment can result from difficulties in the overall supply of staff. For instance, it can be difficult to provide high quality mother-tongue teaching to minority students if few teachers with knowledge of a minority language enter the profession and if those that do have not received high quality training (Luschei and Chudgar, 2017[3]). In Chile, indigenous students can be taught through so-called “traditional teachers” from their own communities within a Programme for Intercultural Bilingual Education (Programa de Educación Intercultural Bilingue) that seeks to maintain and develop indigenous languages and culture. Traditional teachers, however, often have low levels of education and often no pedagogical training which may influence the quality of instruction they are able to deliver (Santiago et al., 2017[4]).

179. The supply of the educational workforce in a system as a whole (e.g. in terms of numbers, age, gender, experience, qualifications) that can be employed in schools to ensure effective learning environments depends on the governance of the staff employment framework overall and their initial preparation and ongoing development as discussed in Chapters 2 and 4. The attractiveness of particular jobs in school education which are in turn shaped by factors such as remuneration and working conditions influence the number and type of people willing to take on these jobs, while qualification
requirements determine the type and level of education of staff that can work in schools. The way qualification requirements are set for different levels and sectors also influences the skill mix of staff across the system and the flexibility with which staff can work in different parts of the system. The initial and ongoing education of staff on the other hand influences their preparedness and support to fulfil their role in schools in general, but also in particular contexts, such as small rural multi-grade classrooms or diverse schools in urban areas. While building interest among staff to work in high-needs contexts is important, preparing and supporting candidates in teaching in these environments is also critical.

180. The quantity and quality of staff working with students can vary across schools and geographical areas leading to inequities in the quality of learning and teaching. The distribution of staff furthermore influences the amount of financial resources a school and student receive since the salaries of teachers and school leaders are often tied to experience and qualifications as analysed in Chapter 2. The sorting of teachers and school leaders with different types of qualifications and years of experience can therefore result in inequities in resource flows between schools, with advantaged schools receiving greater funding than disadvantaged schools, for example.

181. Many countries struggle with inequities in the distribution of staff resources, as a rich knowledge base has established most notably for the case of teachers. A recent OECD report on effective teacher policies (OECD, 2018[5]) reviewed the international evidence on teacher sorting and selection. The review found an important body of research in the United States where inequities in the distribution of teachers have been documented at least since the early 2000s. Teachers with weaker qualifications or without certification have been found to be more likely to teach in disadvantaged schools, for example (Clotfelter, Ladd and Vigdor, 2005[6]; Goldhaber, Lavery and Theobald, 2015[7]; Jackson, 2009[8]; Murnane and Steele, 2007[9]; Lankford, Loeb and Wyckoff, 2002[10]; Boyd et al., 2008[11]).

182. The review found similar emerging evidence for other countries, such as Chile (Cabezas et al., 2017[12]), England (Allen, Burgess and Mayo, 2017[13]), France (Combe, Tercieux and Terrier, 2016[14]), Italy (Abbiati, Argentin and Gerosa, 2017[15]), Norway (Bonesronning, Falch and Strøm, 2005[16]) and Turkey (Özoğlu, 2015[17]). The UNESCO Global Education Monitoring Report for 2013/14 similarly identified inequities in the distribution of teachers in lower income countries (UNESCO, 2014[18]) as did a report of India, Mexico and Tanzania (Luschei and Chudgar, 2017[3]).

183. Based on an analysis of data from the OECD’s PISA 2015, the OECD’s report on effective teachers found that in more than a third of countries and economies participating in the assessment, teachers in the most disadvantaged schools are less qualified or experienced than those in the most advantaged schools. Moreover, cross-country correlations suggest that gaps in student performance related socio-economic status are wider when fewer qualified and experienced teachers work in socio-economically disadvantaged schools (OECD, 2018[5]). Inequities in the distribution of teaching staff were also evident in a number of countries participating in the School Resources Review. The country review studies of Colombia, Lithuania and the Slovak Republic, for instance, found inequities in the distribution of teachers for rural and small municipalities (Santiago et al., 2016[19]; Shewbridge et al., 2016[20]; Radinger et al., 2018[21]).

184. There is less evidence on inequities in the distribution of school principals and other leaders, but some studies suggest that principals may sort into schools so that principals with less experience and qualifications work in more challenging contexts (e.g.
The School Resources Review of Uruguay identified concerns about inequities in the distribution of teacher leaders across schools, with socio-economically advantaged schools having a larger number of such teacher leaders (Santiago et al., 2016[23]). Such emerging evidence is also a concern given research that suggests that effective school leadership can play a particularly important role in low-performing and disadvantaged schools (Leithwood et al., 2004[24]; Branch, Hanushek and Rivkin, 2012[25]).

The distribution of staff, both in terms of the distribution between different types of staff and in terms of the distribution of staff across schools and students, also influences the level of expenditure on education. The salaries of staff, and teachers in particular, make up the bulk of educational expenditure. On average across OECD countries, staff compensation makes up 78% of current spending in non-tertiary education. Sixty three percent of this staff compensation goes to teachers and 15% to other staff (OECD, 2018[26]). Choices about staffing allocations (e.g. in terms of class size, teacher-student ratios, use of teachers’ time) as well as efficiencies in the distribution of staff (e.g. limiting the cost of additional staff recruitments) also have a bearing on educational expenditures.

The employment of staff in schools furthermore influences the composition of the workforce in that particular school and in turn the experience of the professionals in a school. Peer learning represents a particular powerful form of teacher learning and development (see Chapter 4), but opportunities for peer learning and mentoring will also depend on the makeup of the teaching body and the experience and skills that are available in a school. The matching of staff to schools and students furthermore also influences stability and turnover as staff seek schools that better match their profile and expectations. While desirable to some extent, high turnover rates can have detrimental effects on schools and school administration, such as the loss of expertise, ongoing hiring and training costs, and negative working climate (Holme et al., 2017[27]; DeArmond, Gross and Goldhaber, 2010[28]).

Particular country contexts will influence the distribution of staff. For example, large countries with challenging geographies or large disparities in socio-economic development across regions may find it more difficult to ensure an equitable and efficient distribution of staff than small and homogeneous countries (Luschei and Chudgar, 2017[3]). Other features of school education, such as the degree of school choice and student sorting across schools, can interact with the sorting of staff into different schools if these policies lead to segregation.

3.1. Responsibilities for employment

The distribution of responsibilities for the employment of school staff in a country depends on the specific employment position in a school. For some types of staff, schools may be directly responsible for recruitment and selection, while for others, higher-level authorities will be responsible for recruitment, allocation and transfers to schools. Accordingly, candidates apply for a particular position at the school they wish to work for, either for their first position or to change jobs, or they apply to the responsible education authority for deployment or transfer. The level and processes of decision-making for staff employment will also influence the degree of autonomy for schools to determine the profile and mix of their workforce.
3.1.1. School leaders

189. The OECD’s *Education at a Glance* publication provides some comparative information on the responsibilities for hiring school principals and teachers for lower secondary education in public schools (Table D6.6a and D6.6b available online).

190. Looking at school principal positions, recruitment is typically the responsibility of the education administration rather than individual schools. Only in eight systems with available data are schools directly responsible for the recruitment of their school principal (the Flemish Community of Belgium, England, Ireland, the Netherlands, New Zealand, Portugal, the Slovak Republic, and Slovenia). Most often, the recruitment of school principals is in the hands of an intermediate authority, such as the local, regional or sub-regional level. In seven systems, the central or, in the case of federal systems, the state administration are responsible for the selection and appointment of principals (Australia, Austria, France, Hungary, Israel, Luxembourg and Mexico) (OECD, 2018[26]).

191. Information for other school leadership positions which may exist in a system, such as deputy principals or department heads, is not available on a comparative level. Employment in such middle leadership positions will also depend on the overall governance of school leader employment and the design of career structures for school leaders as analysed in Chapter 2. Middle leaders may be subject to the same regulations as teachers and their employment may therefore be regulated under the same terms. Countries taking part in the OECD’s School Resources Review illustrate some approaches that may be in place.

192. In Uruguay, teachers can take on middle leadership roles in the form of deputy principal or teacher leader positions (*docentes adscriptos*) regulated as indirect teaching positions in the national teacher statute. As is the case for school principals (and teachers), candidates interested in a deputy principal role apply for positions through a central process. The appointment to teacher leader positions however depends on the level of education (each of which is under the responsibility of specific central authorities). In primary education, school principals have the freedom to appoint their teacher leaders on a temporary basis; in secondary education, teacher leaders are again appointed to a particular school and shift through the general central teacher recruitment process (Santiago et al., 2016[23]).

193. In the Czech Republic, leadership is often distributed with schools having one or more deputy principals depending on their size as well as administrative staff (e.g. for budgeting). Teachers in Czech schools can furthermore take on specific roles, including leadership roles, through the existence of a teacher career structure. A new career structure that was being introduced at the time of the OECD review in 2016, gives high performing teachers the possibility to progress to specific roles, such as mentoring or subject leadership. For both, types of roles, it is up to principals to make appointments and decide which responsibilities to delegate (Shewbridge et al., 2016[29]).

194. In Chile, there are a number of middle leadership positions established by law as part of the teacher career and school principals are free to delegate responsibilities to other leadership staff. Schools can employ deputy principals, heads of technical-pedagogical units, typically in charge of pedagogical and curricular issues, and general inspectors in charge of a range of organisational aspects such as student admissions, class management and school discipline. Teachers may take on further leadership roles, such as head of a department or educational cycle. The organisation of school leadership structures and the distribution of tasks in schools is defined by school providers and
schools themselves. With the implementation of the Quality and Equality of Education Law, school principals have recently received more discretionary powers to form their leadership as they can now select their deputy, head of the technical-pedagogical unit and general inspector from the municipality’s teaching body as long as they fulfil the central requirements necessary to assume such a position (Santiago et al., 2017[4]).

3.1.2. Teachers

195. In the case of teachers, the highest level of governance, be it the central level or the state in the case of a federal system, is responsible for recruitment and allocation in seven countries (Australia, France, Greece, Luxembourg, Mexico, Spain and Turkey). In ten countries, this is the responsibility of an intermediate level of governance: the regional/sub-regional level in six (Germany, Hungary, Israel, Italy, Japan, and Korea) and the local level in four countries (Canada, Chile, Norway and Switzerland). In 15 systems, responsibility lies with individual schools (Austria, the Czech Republic, Denmark, England, Estonia, the Flemish Community of Belgium, Iceland, Ireland, Latvia, Lithuania, Netherlands, New Zealand, Scotland, the Slovak Republic, Slovenia, Sweden, and the United States) (OECD, 2018[26]).

196. Overall responsibility for teacher employment however does not mean that hiring decisions are taken in isolation. Decisions on recruitment at the school level are taken in full autonomy in only 6 out of the 15 systems (the Czech Republic, England, Iceland, Lithuania, the Slovak Republic and Sweden). In the remaining nine, decisions are either taken within a framework set by a higher level or in consultation with higher-level authorities. Schools are therefore not always completely autonomous in their decisions to fill teaching positions.

197. This was also evident in countries participating in the School Resources Review. In the Flemish Community of Belgium, for instance, schools recruit their teachers directly through their school board with considerable involvement of the principal, but they need to observe specific regulations set by the community on qualification requirements. (Nusche et al., 2015[30]). Also in Denmark, school principals are responsible for the recruitment of their teachers, but within the national work and tariff regulations and following the guidance of their municipality (Nusche et al., 2016[31]).

198. The same may be the case for decisions that are decentralised to intermediate levels of governance, which may need to respect central employment frameworks and regulations. In Mexico and Spain, for example, states and autonomous communities respectively are responsible for the recruitment and deployment of teachers. Recruitment and allocation processes however need to take place within a central framework or consultation with the central level (OECD, 2018[26]).

199. Similarly, recruitment decisions at higher administrative levels are not necessarily made by these authorities alone. Lower levels in the system, including schools, may provide input and inform employment decisions. For Education at a Glance, only Luxembourg, Portugal and Turkey reported that the central level is solely responsible for the recruitment and assignment of teachers to schools. In Australia on the other hand states take such decisions in consultation with schools. In France, the regional level informs assignment decisions by the central authorities (OECD, 2018[26]).

200. Again, this was also evident in review countries. In Austria and Uruguay, for example, the school inspection services tended to provide some input into staffing allocations by state and central authorities (Santiago et al., 2016[23]; Nusche et al.,
201. Some countries have a mixed system in place, as is the case in Germany. Here, in a number of states teachers are assigned by bureaucratic agencies above the school level, and teachers apply to a recruitment process managed by these authorities. In addition, schools are allowed to advertise for positions at their own institutions for a certain share of the open positions in a given year, often related to particularly urgent needs or special profiles of the school. These positions are still publicised in databases managed by the higher level authorities. Applicants for teaching positions can, therefore, choose between applying directly for open positions at schools and submitting an application to the general pool of applicants (Nusche et al., 2016[32]).

3.1.3. Support staff

202. As for school leadership positions other than principals, no comparative information is available for the types of support staff that can be employed in schools and for the level of authority responsible for deciding which types of the support staff are required and who should be hired for these positions. Table 3.1 nevertheless illustrates the types of support staff that can be employed in School Resources Review countries.

203. In some systems, schools are directly responsible for the employment and recruitment of their support staff. In Denmark, for example, schools can hire different types of support staff and school hiring practices have traditionally created a broad range of staff who work with students in the school. Typically, school communities have a mix of social workers, psychologists, pedagogues and counsellors for behaviour, social inclusion and wellbeing (Adfærd-Kontakt-Trivsel, AKT) (Nusche et al., 2016[31]). Similarly, in the Slovak Republic, schools can directly hire teaching assistant (to support the education of students with special needs in mainstream schools and disadvantaged students in mainstream and special education) and employ specialist employees such as a psychologist, a special educator or a speech therapist (Santiago et al., 2016[19]).

204. In other systems, intermediate authorities are responsible for the employment of support staff. In the Flemish Community of Belgium, for example, school boards hire support staff for their schools, including support specialists (e.g. special needs co-ordinator, ICT co-ordinator, child care workers) and medical and paramedical staff in special schools (e.g. speech therapist, psychologist, physiotherapist) (Nusche et al., 2015[30]). In Chile, school providers are responsible for the recruitment of staff, including learning support staff such as psychologists and speech therapists and assistant teachers that fulfil technical roles related to both teaching and learning in classrooms and the general administrative operation of the school. In practice, some providers may delegate some responsibilities to their schools, including for human resource management (Santiago et al., 2017[4]). And in Estonia, school owners hire support specialists, such as special education teachers, school psychologists, speech therapists and social pedagogues (Santiago et al., 2016[33]).

205. Austria and Uruguay represent systems with more centralised provision of support staff. In Austria, the state or central authorities are responsible for the employment of social workers, social pedagogues and student counsellors, depending on
Reform proposals at the time of the review envisaged greater autonomy for schools to define their staff mix through the possibility to convert up to 5% of their teaching staff positions into pedagogical support staff positions. School psychology and career guidance is organised centrally (Nusche et al., 2016[32]). In Uruguay, central education authorities are also responsible for the recruitment and allocation of support staff, such as psychologists and social workers (Santiago et al., 2016[23]).

Table 3.1. Support staff roles in School Resources Review countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Support staff roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>school psychologists, social workers, youth coaches, administrators, school doctors,</td>
</tr>
<tr>
<td></td>
<td>special education teachers, social pedagogues, library staff, career guidance</td>
</tr>
<tr>
<td></td>
<td>coordinators</td>
</tr>
<tr>
<td>Belgium (Fl.)</td>
<td>support specialists (e.g. special needs co-ordinator, ICT co-ordinator, child care</td>
</tr>
<tr>
<td></td>
<td>workers), administrative staff (e.g. secretaries, accountants), medical and</td>
</tr>
<tr>
<td></td>
<td>paramedical staff in special schools (e.g. speech therapist, psychologist,</td>
</tr>
<tr>
<td></td>
<td>physiotherapist)</td>
</tr>
<tr>
<td></td>
<td>maintenance staff (e.g. cooks, repairmen)</td>
</tr>
<tr>
<td>Belgium (Fr.)</td>
<td>speech therapists, special education teachers, paramedics,</td>
</tr>
<tr>
<td></td>
<td>psychologists, social worker, coordinators, nurse, assistant</td>
</tr>
<tr>
<td>Chile</td>
<td>psychologist, speech-language therapists, education psychologists, teaching</td>
</tr>
<tr>
<td></td>
<td>assistants, auxiliaries (maintenance and cleaning)</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>advisors, teaching assistants, school psychologist, special education pedagogues,</td>
</tr>
<tr>
<td></td>
<td>“school prevention methodologist”</td>
</tr>
<tr>
<td>Denmark</td>
<td>pedagogues, AKT counsellors (focus on social processes), teachers’ assistants,</td>
</tr>
<tr>
<td></td>
<td>learning consultants</td>
</tr>
<tr>
<td>Estonia</td>
<td>special education teachers, school psychologists, speech therapists, social</td>
</tr>
<tr>
<td></td>
<td>pedagogues</td>
</tr>
<tr>
<td>Iceland</td>
<td>school assistants, special teachers, social pedagogues, sign language interpreters,</td>
</tr>
<tr>
<td></td>
<td>librarians and educational and vocational counsellors, ICT technicians and</td>
</tr>
<tr>
<td></td>
<td>office administrators</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>deputy principal for academic affairs, educational work and economic activities;</td>
</tr>
<tr>
<td></td>
<td>learning support staff, accountant, psychologist, nurse, librarian, clerk, secretary,</td>
</tr>
<tr>
<td></td>
<td>repair man, guard, doorman</td>
</tr>
<tr>
<td>Lithuania</td>
<td>education experts * “methodologists”, educational consultants</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>career advisor, educational advisor, head of subject committee, ICT coordinator,</td>
</tr>
<tr>
<td></td>
<td>social coordinator, teaching assistants, psychologists, special educator, speech</td>
</tr>
<tr>
<td></td>
<td>therapist</td>
</tr>
<tr>
<td>Slovenia</td>
<td>mentor, advisor, councillor, counsellor, teacher assistant, computer specialists,</td>
</tr>
<tr>
<td></td>
<td>librarian, pedagogical advisors, psychologists, social workers, social pedagogues,</td>
</tr>
<tr>
<td>Spain</td>
<td>support teachers, therapists, technicians, librarians, caregivers, counsellors,</td>
</tr>
<tr>
<td></td>
<td>nurses</td>
</tr>
<tr>
<td>Sweden</td>
<td>career guidance counsellors, administrators, nurses, psychologists, social</td>
</tr>
<tr>
<td></td>
<td>specialists, librarians</td>
</tr>
<tr>
<td>Uruguay</td>
<td>pedagogical counsellor teachers, bibliographic counsellor teachers, lab assistants,</td>
</tr>
<tr>
<td></td>
<td>technology counsellor teachers, pedagogical facilitator teachers, tutor teachers</td>
</tr>
</tbody>
</table>

Source: Based on Country Review and Country Background reports.
3.1.4. Trade-offs between systems with different levels of decision-making

206. The level of decision-making for the employment of staff may influence certain trade-offs in terms of equity and efficiency for their distribution across schools. Given that most evidence and insights are available for the employment of teachers, the following will focus mainly on levels of decision-making for the employment of teaching staff. The distribution of responsibilities for the employment of other types of staff, such as shared or split responsibilities for recruiting support and teaching staff respectively, however is also an important dimension for the staffing of schools. Given limited resources, there may for instance be trade-offs whether to use those resources to employ support or teaching staff.

207. The School Resources Review of Austria, for example, found that a lack of sufficient pedagogical support staff is also linked to the distribution of responsibilities for human resource management which does not enable decision-making about staff recruitment based on a more general view of staffing needs in schools and which gives schools limited say in such decisions. The lack of pedagogical support staff has a number of negative consequences. Teachers may need to spend time on tasks for which they are not sufficiently qualified and lack the required support for differentiated teaching in classrooms, while students may not have the psychological and socio-emotional support they may need (Nusche et al., 2016[32]).

Matching the employment of teaching staff to schools’ and students’ needs through school-level involvement in teacher recruitment

208. As OECD (2005, p. 150[34]) argued, giving schools the authority for selecting their teachers may facilitate the ideal matching of teachers with particular talents and preferences to the needs of schools (e.g. student population, educational project, professional culture, teaching methods, extracurricular activities, etc.). An exploratory mixed-method study of a mid-sized school district in Florida, for instance, found, some school principals used their influence on recruitment decisions to hire teachers that would enrich the mix of staff in terms of race, gender, experience and skills and that they believed to fit in in terms of work habits (Harris et al., 2010[35]).

209. The experience of the School Resources Review also illustrates the potential of school involvement in staffing decisions. School communities interviewed for the School Resources Review of Lithuania among others placed great value on local decision-making, including for staffing, and the possibility this creates for ensuring connections between the school and the community it serves (Shewbridge et al., 2016[20]). In some countries participating in the School Resources Review, a lack of school-level involvement in staffing decisions had led to workarounds with individual schools influencing allocation decisions through their personal connections which is problematic since it obfuscates decision-making for staffing (Nusche et al., 2016[32]).

210. As Teachers matter further argued, school-level hiring of teachers offers the advantage that applicants themselves can choose their workplace, have personal contact with a school before the decision is taken and build a sense of commitment to their school. There is a rich economic literature on the benefits to productivity and job satisfaction of allowing workers and firms to mutually match (e.g. Jovanovic (1979[36]). This theoretical benefit is evident in the teaching profession as well. Jackson (2013[37]) finds that teachers’ effectiveness improves substantially when they switch to a school that matches better with their preferences. According to this study, the quality of a teacher’s match with a school explains two-thirds of their overall effectiveness. Beyond teacher
instructional effectiveness, locally determined matching has benefits in terms of job satisfaction, length of commute and absenteeism rates. School-based teacher selection may therefore help to reduce teacher turnover and attrition if it leads indeed to better job matching and higher satisfaction (Vegas and Ganimian, 2013[38]; DeArmond, Gross and Goldhaber, 2010[28]).

211. For school leadership, notions of situational and contingent leadership have stressed the important role of contexts and organisational factors and structures (Spillane, Halverson and Diamon, 2004[39]), highlighting the importance of ensuring a good match between individual school leaders and specific schools. For middle leadership positions, a lack of influence over such appointments for school principals likely restricts their autonomy to shape their leadership team and the possibility to foster distributed leadership (Santiago et al., 2017[4]).

212. The empirical evidence on the effects of school autonomy for teacher selection on student learning outcomes nevertheless is relatively scarce. A study of differences in school autonomy over teacher hiring between public and private schools in Korea under random assignment of students to both public and private schools finds that recruitment autonomy does lead to differences in the characteristics of teachers working in public and private schools. Private schools were found to have a higher share of male teachers and teachers on fixed-term contracts. Autonomy over teacher recruitment however did not lead to achievement differences between public and private schools (Kim, 2017[40]).

213. Studies of school autonomy more broadly suggest that autonomy can have beneficial effects on the average performance of students as measured by international assessment programmes, but that this depends on the particular domain and policy context. Analysing data from the Third International Mathematics and Science Study (TIMMS), Wössmann (2003[41]) finds that beneficial effects can be observed in particular when school autonomy in personnel and process (management) decisions is combined with centralised examination and accountability mechanisms. Based on a large-scale analysis of PISA data, Hanushek et al. (2013[42]) add the important caveat that school autonomy, in particular for academic content, but also personnel decisions, only has beneficial effects in relatively wealthy countries, whereas the effects turn out to be negative in lower income countries with less developed institutions.

214. School-based teacher recruitment and selection alone is thus unlikely to result in a more effective distribution of teachers. This will also depend on other factors, such as school-level capacity, resources and working conditions as well as teacher incentives and preferences (DeArmond, Gross and Goldhaber, 2010[28]). Where schools are responsible for human resource management, they need to establish policies to attract and retain qualified teachers and ensure that their skills are matched with student learning needs.

215. Schools may however not have the expertise to select the best candidate, or time to manage applications, conduct interviews and assess candidates, extend job offers and process new hires. As Liu and Johnson (2006[43]) found for four states in the United States, teacher recruitment may be based in schools, but schools may not have the time to engage in processes such as setting up an interview panel or a classroom demonstration that would facilitate meaningful interactions between teachers and schools. The school-based recruitment process may therefore fail to provide rich information on the quality of a match (DeArmond, Gross and Goldhaber, 2010[28]). Without sufficient administrative capacity and resources, school-based teacher recruitment may furthermore create additional pressures for school leaders and the demands on their time.
216. The extent of school autonomy may furthermore be restricted by the supply of teachers willing to work in a school (Engel, Cannata and Curran, 2018[44]). A study of school-based hiring in Norway found that delegation of recruitment responsibilities from municipalities to schools was linked with greater efficiency, but that this effect was stronger for schools with an excess supply of teachers (Naper, 2010[45]). As described above, schools are oftentimes bound by rules and regulations or collective bargaining agreements which may limit their flexibility in staffing decisions (OECD, 2018[5]). Schools may have to give preference to certain candidates, for instance to teachers with greater seniority or voluntary transfers before considering outside candidates (Engel, Cannata and Curran, 2018[44]).

217. While schools may have the say over their recruitment decisions, they may have less influence over other aspects of teacher employment, such as wage setting which also influence the matching of teachers’ skills to schools’ needs. In only four of the fifteen systems that reported that teacher recruitment is the responsibility of individual schools, schools also hold decision-making power in fixing salary levels (Czech Republic, England, Estonia, and Latvia). In all of these four systems, schools need to respect central frameworks, such as nationally set minimum wages or collective bargaining agreements, when making salary-related decisions (OECD, 2018[26]). In addition, limited budgets may restrict school’s wage setting autonomy in practice (see for example country review reports of the Czech Republic and Estonia) or introduce ambiguity among teachers about salary decisions (Santiago et al., 2016[33]; Shewbridge et al., 2016[29]). Among systems where the intermediate level is responsible for teacher recruitment, only in Japan are they also responsible for fixing salary levels (OECD, 2018[26]).

Safeguarding fairness and transparency in recruitment

218. Given closer proximity between applicants and recruiter, decentralised hiring processes can raise concerns about the transparency and fairness of recruitment, aspects which play an important role for the pool of applicants as a lack of transparency can deter good candidates, the quality of the hired candidates and the level of actual service delivery (Finan, Olken and Pande, 2015[46]). As in other fields, social networks can play an important role in recruitment. While social networks can facilitate the matching of job seekers to jobs, they can restrict access to jobs for those outside a network. More research about the role of social networks for teacher labour markets is needed, but there is research from the United States that shows that teachers believe social networks to be important when looking for a position (Cannata, 2011[47]). Research also suggests that local ties are an important factor in explaining recruitment decisions (Boyd et al., 2013[48]). In extreme cases, school-level agents may not even have the incentive to hire the best candidate (e.g. school principals may favour someone they know personally) (DeArmond, Gross and Goldhaber, 2010[28]).

219. Decentralised hiring practices may furthermore be at greater risk of discriminating against certain types of applicants and reduce diversity in the workforce. In a study of a large suburban school district in the United States that had implemented policies to increase the supply of black teachers, black candidates’ chances of being hired were low. White principals hired disproportionately fewer black teachers than their black peers (D’Amico et al., 2017[49]). This is a concern in terms of fairness in the recruitment process but also for students and schools. Growing evidence supports the value of students from minority backgrounds experiencing teachers in the classrooms who are from similar backgrounds (Dee, 2005[50]; Gershenson, Holt and Papageorge, 2016[51]; Egalite and
Kisida, 2017[52]). Given the role of schools as social institutions, diversity is furthermore arguably important in its own right (D'Amico et al., 2017[49]).

220. Transparency and fairness were also concerns in some countries participating in the School Resources Review. In the Flemish Community of Belgium, for example, schools and school boards are not required to advertise their vacancies more widely, even if some of them do so in practice. They may keep lists of potential candidates and offer them employment directly without organising an open recruitment process (Nusche et al., 2015[30]). In the Slovak Republic, concerns about the transparency of teacher recruitment and the matching of supply and demand led to the introduction of the requirement for school founders and schools to publicise their vacancies on their websites and regional and national information is also available (Santiago et al., 2016[19]).

221. The quality of school leadership can also be compromised by a lack of transparency and fairness in selection processes – which as in the case for teachers can make school leadership less attractive and deter high quality candidates from applying. There are arguments for the employer of school principals to take responsibility for their selection and management. The power to select who leads their schools gives school providers the possibility to match their human resource policy with their educational strategy. The delegation of recruitment decisions to school owners and providers (as is the case for teachers when recruited at the school level) can however put appointments at risk of favouritism. In Austria, for example, the selection process of school principals was traditionally considered to be driven by political networks rather than by an objective assessment of the candidates’ skills and competencies. The risk for “political” appointments was related to the political nature of the federal and state bodies responsible for the selection process, although the state authorities have been recently reformed (Nusche et al., 2016[32]). In the Czech Republic, central regulations for the appointment of school principals which school founders need to follow provide a sound basis for the recruitment of qualified candidates, but a risk for “political” appointments by school founders remains as school founders are free to appoint the candidate of their choice (Shewbridge et al., 2016[29]). As for the case of teachers, hiring authorities may furthermore lack the capacity to conduct high quality recruitment processes (e.g. smaller municipalities).

The risk for inequities in the quality of teaching staff between schools

222. Since the effects of school autonomy for teacher recruitment will also depend on the capacity (and size) of schools, school autonomy could lead to greater disparities in teachers’ qualifications and experiences among schools. Schlicht-Schmälzle et al. (2011[53]) confirm a weak positive effect of school autonomy on average performance, but they also find a negative effect on equity. Differences in the extent of school-level autonomy between different sectors and types of schools may be a further source of inequities. In Chile, for example, publicly funded private schools are free to select teachers, whereas public schools are often not (Santiago et al., 2017[4]).

223. Teacher allocations through higher-level authorities could help steer a more equitable distribution of teachers across schools and help fill hard-to-staff teaching positions in schools with specific profiles. Engel and Finch (2014[54]) found notable differences in recruitment practices between advantaged and disadvantaged schools with the former being able to rely on their professional networks to recruit new teachers and the latter having to rely to a greater extent on support by the school district to fill positions. In Colombia and some states in Germany, authorities responsible for the
recruitment of teaching staff have organised specific recruitment rounds to fill-hard-to-staff schools in rural and remote areas.

224. Comparative data and analysis of PISA however in fact suggests that both systems with higher-level and school-based teacher recruitment may suffer from inequities in the distribution of teachers (OECD, 2018[5]) – something which also the experience of review countries with different approaches pinpoints. For example, inequities in the distribution of teaching staff seemed to be evident in the school-based recruitment systems in the Flemish Community of Belgium and the Czech Republic and the central recruitment and deployment systems in Colombia and Portugal. This essentially highlights the role of other factors, such as the financing of teaching positions and levels of available resources to attract the best teachers as well as the design of recruitment processes and criteria.

3.2. Funding the employment of staff

225. The resources available for paying staff salaries, and thus for determining the number and types of staff that can be hired in a school, will depend on a school system’s governance and funding arrangements. This includes essentially the responsibilities for raising and distributing funding for staff salaries for particular levels and sectors of school education, issues which are analysed in depth in the project’s comparative thematic report on school funding (OECD, 2017[55]). Drawing on this analysis, the following highlights some of the important aspects for funding the employment of staff.

226. The approach to funding staff in schools also influences the equity and efficiency of staff employment in a country as it determines the resources available for hiring and employing staff, and incentives for recruitment and allocation. In countries where the availability of funding to hire staff is heavily dependent on local tax bases, areas with more disadvantaged students are likely to have fewer resources to meet student needs, although fiscal equalisation mechanisms may offset such resource disparities to some extent. Where responsibilities for raising funds to pay for staff salaries and for making decisions on the number of staff that are employed are misaligned, hiring authorities may have no incentive to ensure efficient staffing levels and allocations and adjust these to changing needs, such as a fall in student enrolment (OECD, 2017[55]).

3.2.1. Approaches to staff funding

227. The distribution of responsibilities for school funding is often complex. In some systems, central authorities allocate funding directly to schools, but in others, the allocation of resources involves the transfer of funds (which can be tied to different conditions on the use of these funds) across levels of governance before resources reach individual schools. Resources may thus come directly from central authorities or via other administrative levels. Both approaches may be in place in countries as governance and funding arrangements often differ for levels of education (OECD, 2017[55]). In Denmark, for example, staff in primary and lower secondary education (the so-called Folkeskole) are funded by municipalities that receive a lump sum from the central government. This gives local authorities full autonomy to determine how many resources to dedicate to their schools and on which items of expenditure. At the upper secondary level, the central government transfers funding for current expenditure directly to schools who then recruit and manage their staff (Nusche et al., 2016[31]).
228. There are then two main approaches for providing resources for the employment of staff and for covering their salary costs. First, higher level authorities can transfer monetary resources to lower levels, including individual schools, to hire and pay teachers and possibly other staff and administer these funds. The use of such funding can be restricted to specific expenditures and include teaching, school leadership and/or other staff as the only resource category for which they should be spent. Alternatively, monetary resources can be transferred for use on all types of current expenditure, staff being one of the possible expenditure items. Second, higher level authorities can provide staff resources to lower level authorities or schools and cover the payroll directly, although lower level authorities or schools may still administer other funds for other types of current expenditure (OECD, 2017[55]). These different approaches will influence the level of steering and control of staff employment decisions for higher levels.

229. Among the countries participating in the School Resources Review, Estonia and Lithuania illustrate the first type of resource allocation for staff employment. In Estonia, schools are run by the central government, municipalities and private providers. While the central government mainly provides vocational education, municipalities mainly offer general education. Municipal school providers receive central financial grants that are earmarked for teachers and school leaders’ salaries, among others. Schools that are run by the central government receive central grants that they can use at their own discretion with certain restrictions, including the employment of teachers (Santiago et al., 2016[33]). Similarly, in Lithuania municipalities which are responsible for operating schools receive grants that are earmarked for specific types of current expenditure, including teaching costs and the salaries of school management and administrative and professional support staff. School leaders are responsible for preparing and managing the school budgets which are then approved by the owner of the school. The number of both teaching and non-teaching staff is usually approved by the municipality directly, though in some cases schools have some autonomy in deciding the number of non-teaching staff (Shewbridge et al., 2016[20]).

230. The second approach is illustrated by Austria and the Flemish Community of Belgium. In Austria, the administration and funding of school education differs by level of education, with some schools at lower and upper secondary level being run by the federal government (central level), and others at primary and lower secondary being run by the provinces (state level). In both cases, funds are mainly raised at the federal level, teaching positions are allocated by education authorities, and teaching staff receive their salaries directly from their responsible education authority (the federal government or the province). In the case of schools administered by the provinces, financial transfers to the provinces are based on staff plans that that are negotiated between the federal government and the provinces (Nusche et al., 2016[32]).

231. In the Flemish Community of Belgium, schools are run by a legally recognised authority typically referred to as the school board. For operational costs, school boards receive funding that they can use at their own discretion for expenses such as maintenance staff and instructional materials. Teaching, school management and administrative staff are however paid directly by the Ministry of Education and Training of the Flemish Community through the Agency for Educational Services (AgODI). These teaching resources are provided in the form of staffing hours, the calculation of which differs for primary and secondary as well as special needs education. Schools are free to use their staffing hours as they see fit in consultation with their school board and to determine related organisational aspects such as class size and the use of teachers’ time.
School boards are free to distribute allocated hours between their schools and hire staff to deliver the allocated teaching hours (Nusche et al., 2015[30]).

232. As for funding flows in general, countries may have both types of approaches in place depending on the level of the education system and/or the types of staff. In Israel, for example, the salaries of teachers, principals and deputy principals in primary and lower secondary education are covered directly by the ministry of education. In upper secondary education, teaching and school leadership staff are provided by the municipalities, which receive funding to be spent on these types of staff from the central level. Resources for non-teaching staff (and other operational expenditures) are provided in the form of monetary transfers from the central level to the municipalities and then to schools who hire and employ non-teaching staff at all levels. In Portugal, monetary resource for teaching staff (who are hired centrally) are transferred to schools who are organised as clusters of multiple levels and sites. Funding arrangements for the employment of non-teaching staff however differ across levels of education, with such staff being employed directly by municipalities at primary and lower secondary levels, and by school clusters at upper secondary level who receive specific grants for this from the ministry of education (OECD, 2017[55]).

233. In the case of support staff, funding and/or staff may also be provided from other government authorities or agencies (see Box 3.1).
Box 3.1. Funding support staff through other sources

In Austria, the Federal Ministry of Labour, Social Affairs and Consumer Protection (Bundesministerium für Arbeit, Soziales und Konsumentenschutz, BMASK) is the main actor and provider of funds for a system of career assistance (Netzwerk Berufliche Assistenz). Under this umbrella the nation-wide “Youth Coaching” initiative offers youth coaches who advise and accompany young people aged 15-19 at risk of dropping out from school or being marginalise. As part of this initiative, youth coaches advise and accompany young people aged 15 to 19 at risk of dropping out from school or of being marginalised to look for the educational pathway that works for them. Youth coaches generally have a background in social work, therapeutic pedagogy, social pedagogy, social management or psychology (Nusche et al., 2016[30]).

In Chile, the National Board of School Assistance and Scholarships (Junta Nacional de Auxilio Escolar y Becas, JUNAEB) is an agency responsible for administering state resources intended to ensure that Chilean children and adolescents in a biopsychosocial vulnerability condition, can enter, stay and have success in the educational system. The agency has established programmes to provide psychological and social support for vulnerable students at the risk of drop-out.

Through the Programme to Support School Retention (Programa de apoyo a la retención escolar) interdisciplinary teams made up of pedagogues, social workers and psychologists provide pedagogical and psychological support in groups of students or individually. The Skills for Life initiative (Habilidades Para la Vida) provides psychological and social support for the school community, including students, teachers and parents, in the two years of pre-primary education prior to entering primary education and the first two years of primary education. Teams and units of social work and psychological services within municipalities develop projects that are then presented to the regional offices of the JUNAEB. If selected and approved, teams and projects receive initial funding for three years with the option of extension (Santiago et al., 2017[4]).

3.2.2. Determining staff allocations

234. The allocation of resources for hiring and employing different types of staff – through monetary resources or staff allocations – can be determined on the basis of different methods as discussed in OECD (2017[55]). These mainly include 1) administrative discretion, that is based on an individual assessment of the staff requirements of each school; 2) incremental costs, that is based on historical allocations; 3) bidding and bargaining; and 4) formula funding, that is based on a universally applied rule of resource entitlements. The following will look into the factors that are typically taken into account when defining resource allocations for teaching, leadership and support staff.

235. When funding is allocated on a historical basis, this funds existing staff year after year and typically involves the payment of invoices submitted by schools for supplementary costs. Schools have no incentives to reduce their expenditures or increase their efficiency. Nor do they have incentives to improve the quality of their provision (OECD, 2017[55]). In Colombia, the country’s main funding mechanism (the Sistema General de Participaciones) provides one basket of funding to territorial entities (departments, districts and municipalities) which have been certified to provide education
mainly for teachers’ salary costs. The calculation of this basket is specific to each certified territorial entity, combining enrolment with effective payroll costs. Funding of teaching costs has facilitated the rapid expansion of coverage throughout the country, recognising that most teachers are permanent national staff that present a highly inflexible and permanent expense over time. At the same time, it has created inequities as teachers with higher qualifications and greater experience are distributed asymmetrically throughout the country (Radinger et al., 2018[21]).

Teachers

236. Student enrolments will be an important factor determining allocations to ensure sufficient teaching staff for the required instruction time in all systems. The required teaching resources can be determined on the basis of student numbers or the number of classes (OECD, 2017[55]). Going back to some of the previous examples, in Austria, the bulk of central funding for pedagogical staff to the provinces is based on student-teacher ratios, adjusted for school type, that is one teacher for 14.5 students in primary schools and one teacher for 10 students in general secondary schools (Nusch et al., 2016[32]). Estonia uses a formula to calculate the funding for teaching positions municipalities are entitled to. The formula is based on assumptions about the number of full time professional staff necessary to teach the programmatic hours of the national curricula at different Year levels. To determine the number of teaching positions, normative class sizes are used. For example, at the basic education level, the formula for 2015 allocated funding for teachers’ salaries on the assumption that the average class should have three possible values: 24 students for municipalities with a student-teacher ratio equal or above 15; 21 students for municipalities with a student-teacher ratio between 7.8 and 14.9; and 10 students for municipalities with a student-teacher ratio of 7.7 or below (Santiago et al., 2016[33]).

237. The basis for determining teaching staff allocations can set particular incentives for the use of staff. Allocating teaching resources on a per student basis promotes competition and efficiency in the organisation of schooling and the use of teachers, for example in terms of the size and number of classes which are much more important for determining the cost of teaching than total enrolment (OECD, 2017[55]). A teacher working with a small class of students will present a higher cost per student. Assuming that two teachers have the same salary, for example, the salary cost per student of a teacher teaching a class of 5 students will be 6 times higher than the salary cost per student for a class of 30 students (IIEP-UNESCO, 2016[56]). At the same time, fixed costs do not diminish with the number of students and teachers cannot be easily distributed between classes and schools. Per-student allocations of teaching resources can therefore create pressures for schools with small or declining enrolments which have high numbers of staff for few students (OECD, 2017[55]).

238. Class size regulations which may vary across types of provision, educational levels or school size, also influence the ways in which teachers and students are grouped together as well as the number of teachers that are required in a school. Each student above the maximum permitted number of students in a class demands the forming of two classes (OECD, 2018[57]). In Denmark, a country where schools have a large degree of autonomy in their resource allocations, national regulations on class size and teaching hours in a school year and in different subjects establish the framework for schools to employ particular teaching staff (Nusche et al., 2016[31]). Class size rules can have undesired effects when enrolments change and classes have to be split unexpectedly, causing potential teacher shortages (OECD, 2018[57]). Evidence from California’s class-
size-reduction programme indicates that the need to split classes has compelled particularly disadvantaged schools to hire inexperienced and less qualified teachers (Jepsen and Rivkin, 2009[58]).

239. The level of teachers’ salaries (over which the authority responsible for hiring and paying teachers may have no control as discussed above) is a further important aspect determining the amount of resources that are available to employ a certain number of teachers with particular profiles (e.g. in terms of qualifications and experience). In some systems, teacher salaries may be factored in to the allocation of teaching staff resources. In Estonia, for example, once the total number of teaching hours and full-time equivalent teaching positions has been determined for a municipality, this figure is multiplied by a national minimum salary for teachers and increased by 20% to determine a municipality’s teacher salary budget (Santiago et al., 2016[33]). Also in Lithuania average teacher salaries are an important input variable in the formula determining the allocation of resources (Shewbridge et al., 2016[20]). Such systems provide a specific framework for balancing actual teacher salary expenses with the amount of funding available to pay for staff. They can also act in an equalising way as they promote similar staffing levels across schools.

240. In other countries, the level of teacher salaries is not taken into account. In the Flemish Community of Belgium, for example, schools receive a total number of teaching hours which are paid by the ministry regardless of actual staff cost to provide these hours. This has led to large differences in expenditure across levels of education since teachers in upper secondary education receive higher salaries based on levels of qualifications and since classes at this level tend to be smaller (Nusche et al., 2015[30]).

School leaders

241. For school leadership positions, the allocation of staff is typically treated as a fixed cost and depends on the size of the school and the number of students or teachers. For the case of principal appointments, in Austria, for example, a school principal is appointed to a schools with at least ten teachers. In schools with less than ten teachers, there are no school principal positions, but teachers are entrusted with the leadership and management of the school and in return partly exempt from their obligation to teach (Nusche et al., 2016[32]). In the Flemish Community of Belgium, similarly, the functions of principal and co-ordinator are funded automatically (Nusche et al., 2015[30]).

242. Similarly, the appointment of middle leaders often depends on the size of the school. In Colombia, for example, school coordinators who are responsible for supporting school management and directing the different initiatives and programmes defined in the school educational project, are appointed according to the enrolment of the school cluster. A rural director is funded when an individual school site within the cluster (that offers only one or more of the levels of compulsory education but not all) has more than 150 students. The number of school leaders however does not take the organisation of the school cluster, notably the number of individual school sites and the distance between them, into account. On the one hand, this exerts pressures on the effective organisation of school clusters. On the other hand, it creates challenges for school leadership and management, particularly for small remote school sites that fulfil vital services to rural communities (Radinger et al., 2018[21]).

Support staff

243. In systems where support staff is funded as part of the overall resource allocation for staff that is provided to intermediate authorities or schools and based on a formula, the
formula may incorporate specific components to reflect that resources are intended to fund other costs in addition to teacher salaries.

244. In Lithuania, for example, the calculation of the student basket includes the addition of a component for municipal pedagogical and psychological services together with textbooks and teaching materials, expressed as a percentage of the fixed basic salary of teachers, to the per-student grant calculated to cover the required teacher costs (Shewbridge et al., 2016[20]).

3.2.3. Compensating schools for disadvantage

245. Beyond minimum staffing levels, schools may benefit from additional monetary or staff resources to account for their particular contexts, either as part of the main allocation or through additional allocations. Typically, a mix of allocation mechanisms is found in many systems and such additional staff allocations are a common approach to addressing disadvantage in many European countries (OECD, 2017[55]).

Teachers

246. Going back to the example of Estonia, the country provides additional resources for teacher recruitment through the main allocation. In Estonia, the estimated number of full time teaching staff is adjusted by coefficients designed to reflect the additional teaching time associated with teaching students with special needs and students with Russian as language of instruction (for potential extra classes of Estonian) (Santiago et al., 2016[33]). Uruguay illustrates the practice of providing additional teaching staff through the use of specific programmes. Here, additional teacher resources are allocated through a range of programmes, such as the Community Teachers initiative (Maestros Comunitarios), which results in a smaller average class size for the most disadvantaged schools at the primary level (Santiago et al., 2016[23]).

247. Some systems have both approaches in place. In Austria, for example, the federal level provides funding within the main allocation for students in need of language support. Classified as “non-regular students”, these students are entitled to up to 11 additional lessons per week depending on the number of students, either in parallel or integrated in regular instruction. In addition, provincial education authorities can allocate additional teaching staff to schools if such needs are identified through the school inspection (Nusche et al., 2016[32]).

248. The allocation of additional teaching staff allocations is also evident as a frequent approach among countries when looking at data from PISA 2015: in 49 out of 70 systems, disadvantaged schools (public and government-dependent private) have more teachers per student or smaller classes than advantaged schools as reported by school principals. However, in none of these systems do principals of disadvantaged schools report that their teachers are more qualified, and in 19 of these systems teachers are reportedly actually less likely to hold a major in science or full certification. As the analysis, furthermore, suggests, compensating for disadvantage by allocating additional teaching staff is likely insufficient to close gaps in students’ performance based on socio-economic status. Also the quality of teachers needs to be considered (OECD, 2018[5]).

249. Indeed, additional funding that can be used to hire more or better qualified staff or additional staffing allocations that are paid for directly do not ensure that first, recruitment processes are in place that would hire more qualified staff or second, a supply of qualified staff is available (Adamson and Darling-Hammond, 2012[59]). As explored
further below, the type of teachers that work in a school is also linked to the process and criteria for recruitment, allocations and transfers as well as teachers’ preferences and incentives to work in particular schools.

**Support staff**

250. Schools may not only receive additional teaching staff resources, but also for the employment of support staff (see Box 3.2 for the example of Chile). In systems where schools receive such additional funding to use at their discretion there is a tension between flexibility on the one hand and accountability on the other. In England, targeted funding for disadvantaged students in the form of the Pupil Premium has also in less successful cases entailed the indiscriminate spending of funds on teaching assistants (OECD, 2017[55]).

**Box 3.2. Funding of support staff in Chile**

In Chile, schools can receive funding to finance and manage their learning support staff through the preferential school subsidy (*Subvención Escolar Preferencial, SEP*), a compensatory funding mechanism that is linked to standards-based accountability and through the School Integration Programme (*Programa de Integración Escolar, PIE*). Through SEP funding, schools can dedicate up to 50% of the subsidy for extra staff and develop technical-pedagogical teams made up of teachers and learning support staff that accompany pedagogical processes within and outside the classroom with a focus on the school’s most vulnerable students. Through the School Integration Programme, schools can integrate up to five students with transitory disabilities and two students with permanent disabilities per classroom. Integrated students with special needs receive at least between six (half-day school) and eight (all-day school) hours of professional support per week within the classroom. To meet the needs of these and all other students and to provide an inclusive education for students with special needs, schools receive additional resources. These resources can be used for a range of purposes, such as the purchase of educational materials and the adaptation of the physical space to the special needs of students, but also for hiring learning support staff. Schools can establish multidisciplinary teams that include specialists such as speech therapists, special needs teachers and psychologists to provide support for teachers and students within classrooms. But learning support staff hired through the PIE programme also needs to dedicate at least three hours to collaborative work with classroom teachers of the school. In 2015, 44.6% of schools had established a PIE. More public than private schools take part in PIE (67.3%, compared to 24.8% of private-subsidised schools).

**3.3. Matching supply and demand for staff**

**3.3.1. Workforce planning**

**Central level**

251. Workforce planning is an important element of human resource management to ensure a high quality supply of staff for the system that can be recruited or allocated to schools. Information from forward planning can inform strategies to steer the number and competency profiles of staff to the changing needs of schools and students (e.g. through
investments in initial teacher education) and to tackle other challenges to provide adequate staffing in schools, such as teacher attrition or attractiveness of teaching.

252. In Europe, the majority of countries carry out forward planning of teacher demand and supply, typically at the highest level of administration and for the short term, although a few countries plan for the mid-to long term (Denmark, Germany, the Netherlands, Finland, and Norway), in some of these cases for more than 10 years (European Commission, EACEA and Eurydice, 2018[60]). In the United States, numerous state legislatures have mandated the development of teacher supply-and-demand reports, while others have funded them through task forces (Behrstock-Sherratt, 2016[61]). In Ontario, Canada, the College of Teachers, the self-regulatory body of the teaching profession mandated to license, govern and regulate teaching, holds continuous data on teacher initial qualifications and additional qualifications earned throughout a teacher’s career. Thanks to these data, the province can anticipate teacher qualification needs and gear admissions accordingly. Box 3.3 provides some other examples from Ontario for the identification of system teacher needs.

253. Different data can be used. In Europe, data most often relate to retiring teachers, teacher demographics, teachers by taught subject(s) and teachers leaving the profession (other than for retirement reasons). The majority of European countries also use data on the likely demand for teachers, which is mostly based on student population growth projections. Many countries go further by using data on the subjects that these teachers will need to teach, thus having a clearer picture of the type of investment needed in initial teacher education programmes. Although data on prospective teachers is used less often, nearly half of the countries take into account data on the number of initial teacher education students and graduates by specialisation (European Commission, EACEA and Eurydice, 2018[60]).

254. Still, a number of countries have serious shortages of staff (e.g. states in Germany and the United States) which may be related to an ageing teaching profession or high attrition rates of young teachers, reducing the overall supply of available teachers. Some countries also face a general shortage of students enrolling in initial teacher education or high dropout rates in initial teacher education (e.g. Denmark and Sweden). In Denmark, the application process to initial teacher education programmes underwent some changes to identify students who potentially would have difficulty completing the programme and reportedly this somewhat reduced the dropout rate in initial teacher education (Nusche et al., 2016[31]).

255. Also the school leadership profession is ageing and various OECD systems find it difficult to fill positions. As analysed in Chapter 2, school leadership is often not attractive, given heavy workloads, lack of adequate support and remuneration and uncertain career advancement prospects. School leadership in primary education and smaller rural schools may be less attractive as there are fewer resources and administrative assistance to work with and as school leaders may be responsible for management and administration while carrying a reduced teaching load.

256. Some countries face the opposite problem with difficulties to adjust the supply of teachers to declining enrolment (e.g. Lithuania) or with teacher education institutions producing too many graduates (e.g. states and territories in Australia and provinces in Canada). Shortages and oversupply however typically co-exist as a result of an uneven distribution of teachers across subjects and regions. There are often shortages for specific subjects (e.g. mathematics or natural sciences), specialisations (e.g. special needs) and locations (e.g. rural and remote areas/disadvantaged urban neighbourhoods).
257. According to principal reports for PISA 2015, 39% of students on average across OECD countries attend schools where a lack of teaching staff does not hinder the capacity to provide instruction at all; 4% of students were in schools whose principal reported that a lack of teaching staff hinders the capacity to provide instruction a lot. A similar proportion of principals reported that the capacity to provide instruction is hindered by an inadequate or poor teaching staff. In a number of countries, including Germany, Greece, Ireland, Korea, Luxembourg, Spain and Thailand, school principals appear to be more concerned about the lack of teaching staff than about the quality of the staff (Table II.6.14) (OECD, 2016[62]).

258. There may therefore be questions about the use of data to identify timely policy responses as well as the kinds of data that are used for forecasting supply and demand. A number of indicators can be used to describe teacher shortages (e.g. number of applicants per vacancy, surveys of shortages) (Behrstock-Sherratt, 2016[61]). It is, for example, not straightforward to use data on teacher students as it is difficult to predict whether or when graduates will subsequently enter the teaching profession (European Commission, EACEA and Eurydice, 2018[60]). There is also a question how complex data are presented in a digestible and actionable way. Further questions relate to the right conceptualisation and definition of teacher supply issues and the goals for teacher supply (e.g. acceptable levels and benchmarks of teacher shortage and attrition) (Behrstock-Sherratt, 2016[61]).

259. The organisation of school education, such as the length of the school day or education of children with special needs, will be an important factor influencing the need for different types of support staff in schools, and changes in the organisation of school education will have important consequences for the staffing of schools and the mix of professionals required. Changes to the organisation of the school day in Austria and Denmark, for example, have raised questions about the use (and possibly funding) of other types of staff (Nusche et al., 2016[32]; Nusche et al., 2016[31]), as have policies to promote the inclusion of children with special needs in the Czech and Slovak Republics (Santiago et al., 2016[19]; Shewbridge et al., 2016[31]).

260. In Austria, where school education was traditionally provided in the mornings only, the expansion of all-day schooling has been a priority to increase equity in educational opportunities and to meet the demand for day care as more children grow up in single-parent families or with both parents working full-time. Longer school days, of course, however require additional staff to cover the additional time (e.g. for extracurricular activities and homework) (Nusche et al., 2016[32]). In Denmark, a reform of the Folkeskole (public primary and lower secondary education) entailed the creation of longer and more varied school days (e.g. through greater involvement of local sports clubs and cultural associations). This also entailed changes to staffing with the greater use of pedagogues in schools, professionals trained to support all stages of human development from birth to old age and focussed on children’s and young people’s comprehensive development, which includes their intellectual, social, emotional, neuromuscular, ethical, moral and aesthetic development (Nusche et al., 2016[31]). In the Slovak Republic, the number of teaching assistants to support the learning of students with disabilities and gifted children in mainstream schools has more than doubled in five years, from 86 in 2009 to 1 640 in 2014 (Santiago et al., 2016[19]).
Box 3.3. Targeting entry to initial teacher education based on system needs

In Ontario, the Ontario College of Teachers (OCT) provides an annual report called Transitions to Teaching based on a survey conducted with its members (see https://www.oct.ca/about-the-college/annual-reports). This report provides information to the education sector to describe demographic characteristics of the current workforce. The Ontario Ministry of Education also partners with OCT to collect information about registration in additional qualification courses. As a result, the province is more aware of how teachers are engaging in professional learning, how this might serve to meet system needs, and how to best allocate human and financial resources.

The Higher Education Quality Council of Ontario (HEQCO) is an independent organisation that was established with a mandate to assist the government of Ontario (and the Minister of Training, Colleges and Universities in particular) through the provision of impartial research and policy advice for improving the accessibility, accountability, and quality of Ontario’s colleges and universities. Reaching out to independent research organisations to conduct evaluations for identifying system needs is another possible approach to forecasting for future teacher recruitment needs.

Reproduced from (Nusche et al., 2016[31])

School level

261. In systems where schools are responsible for their staff recruitment and for managing their budgets for staff employment, they will also have to adequately manage and plan their staffing levels and mix according to their needs and development plans as well levels of available funding in the medium term. Projected student enrolment and staff movements will be important factors to take into account. Some systems, such as England (UK) and Victoria (Australia) provide schools with guidance and tools to manage their workforce.

262. The number of teachers that are required depend on many factors, notably the curriculum (defining the minimum requirements regarding subjects and instruction time) and school organisation (defining the type of professionals required, workload and class size). The number of teachers needed in a school is furthermore influenced by other aspects, such as the ratio of teaching and non-teaching hours, the number and diversity of subjects included in the curriculum, and the availability of other types of staff. Teacher salary costs and working time (incl. part-time vs. full-time employment) have an important role to play for schools to manage their available resources (Bertoni et al., 2018[63]).

263. The possibility for schools to employ teachers in part-time arrangements as well as the extent to which schools employ teachers part-time differ across countries. According to principal reports for PISA 2015, on average across OECD countries, a student attends a school where 21% of teachers work part time. Students in Mexico, the Netherlands, Switzerland and Uruguay attend schools where more than half of the teachers work part time, while in Colombia and the United States less than 4% of teachers work part time (Table II.6.9). As PISA data suggest, in some countries disadvantaged schools rely to a greater extent on full-time employment, as is the case in Luxembourg, Mexico, the Netherlands and Uruguay, the proportion of full-time teachers is at least 15
percentage points larger in disadvantaged schools where the proportion of full time
teachers is at least 15 percentage points higher in disadvantaged schools (OECD,
2016[62]).

264. Teachers may also be working in multiple schools, with specific work and/or
teaching loads at these schools. In Uruguay, based on the latest Teacher Survey carried
out in 2015, 12% of teachers reported to work in at least three schools, with the
proportion rising to 17% in both general public secondary and technical-professional
schools and to 21% in private secondary schools (Instituto Nacional de Evaluación
Educativa (INEEd), 2016[64]).

3.3.2. Setting entry requirements to steer the overall supply and composition of
the workforce

265. As discussed in Chapter 2, systems typically have in place minimum
qualifications requirements that individuals need to meet to join the teaching profession.

266. There are two main approaches in this respect: wide funnel and narrow funnel
recruitment strategies. A wide funnel system is characterised by low standards of entry
whereby screening happens after entry into the classroom. A narrow funnel system is
characterised by high standards of entry into the profession. Each of these models has
their benefits and drawbacks. Arguably, minimum qualification or competence
requirements may be one way to ensure a supply of competent teaching staff that are
available for employment (Luschei and Chudgar, 2017[3]). However, high entry barriers
may screen out potential high quality teachers based on a narrow set of qualifications
rather than their pedagogical methods in the classroom. Wide funnel systems may help
alleviate issues of teacher shortages and give schools the possibility to assess whether a
teacher is adequately carrying out their roles and responsibilities to satisfactory standards.
At the same time, low calibre teachers may continue teaching once in the system if there
are no effective systems for identifying and dismissing teachers with performance
concerns.

267. Also, qualification requirements may differ across levels and sectors of education,
which can result in inequities in the distribution of teachers with levels of qualification.
For instance, tracking could then contribute to inequalities in education not only by
segregating students, but also through qualitative differences in the teaching staff working
in each track (OECD, 2018[5]). Different qualification requirements can furthermore make
it difficult to respond to changes in demand by allocating teachers flexibly across
education levels.

268. Qualification requirements can be adjusted to respond to shortages, attract
professionals with specific expertise. Vocational education and training is one such area
where different qualification requirements are typically in place given the specific nature
of practical courses. In the Flemish Community of Belgium, Chile, the Czech Republic
and Estonia, for example, vocational trainers do not require standard teaching
qualifications, but instead professional experience, sometimes combined with some
training or certificate in teaching and pedagogy. In Colombia, teaching in general is open
to university graduates with qualifications in other fields, but candidates that are
successful in gaining a position are required to complete 12 month training in pedagogy.

269. Alternative entry routes provide additional flexibility to respond to increasing
student numbers or to respond to a teacher shortage in specific subjects. Alternative entry
has also been tried as strategies to make teaching more attractive for those who would
otherwise not be interesting in teaching. Alternative entry may arguably broaden the range of backgrounds and experiences in schools and provide access to teaching for individuals at different stages of their lives and in different life circumstances (OECD, 2005[34]). At the same time, alternative pathways raise questions as to whether teachers recruited via such pathways are as effective as conventional teachers – teaching is complex and intellectually demanding which requires expertise, discretion and judgement (Zeichner, 2014[65]) – and whether teachers who enter through an alternative pathway then remain in teaching (Little and Bartlett, 2010[1]) (more on this in Chapter 4).

270. Some countries have teacher registration or certification processes in place to officially confirm teachers as competent for teaching practice. Advancement to fully registered teaching status typically occurs upon completion of a probationary teaching period and/or following an appraisal against registration/certification criteria. The process typically involves external evaluators or a national agency responsible for teacher registration. After teachers have initially become fully registered, in some countries they have to renew their registration every few years (OECD, 2013[66]). In 11 out of 35 countries with available data, such teacher registration processes were in place in 2015. While in some countries (e.g. New Zealand, Slovenia, Sweden and the United States) registration is voluntary, in others it is mandatory (e.g. Ireland and Spain) (OECD, 2015[67]). Professional bodies sometimes play a considerable role for setting entry standards and registration processes and requirements, such as the Teaching Council in Ireland and the Teaching Council of Aotearoa New Zealand.

3.3.3. Temporary and permanent employment

271. Countries typically have different types of contract conditions for teachers, employing some on permanent and others on temporary contracts. A number of countries have such dual labour markets. In the Flemish Community of Belgium, for example, where teachers are recruited by school boards, all beginning teachers are recruited on a temporary basis of one year before they can be appointed to a temporary position of continuous duration and ultimately on a permanent basis (Nusche et al., 2015[30]). In Ireland, schools can recruit teachers on permanent contracts, contracts of indefinite duration (the same as a permanent contract, except that the holder is paid based on the hours they teach), and temporary contracts. Temporary contracts are used for filling vacancies generated by a teacher on leave, secondment or career break or where there is the need for a teacher but the education department does not allocate a permanent position. After two years on a temporary contract in a school, temporary teachers become eligible for a contract of indefinite duration.

272. In Colombia, temporary teachers fill vacancies that cannot be filled through the central recruitment process. Candidates that were not successful in the central recruitment can become part of a register of qualified candidates and take on temporary positions which are filled directly by the sub-national authorities that provide education (Radinger et al., 2018[21]). In Portugal, similarly teachers with lower rankings in the central recruitment and allocation are employed on temporary contracts (Liebowitz et al., forthcoming[68]).

273. A dual teacher labour market and the existence of temporary contracts create an essential level of flexibility in the management of staffing levels to respond to changing student demographics and to keep long-term financial commitments in check. Temporary appointments may also facilitate the evaluation of a teacher’s skill and ability to grow before deciding to offer a permanent contract.
274. However, dual labour markets can also create adverse effects for schools, teachers and students. Given different employment frameworks and conditions, temporary teachers do not benefit from the same statutory rights as their colleagues on permanent contracts (e.g. when it comes to professional development opportunities or career progression). Temporary teachers may need to move from one school to another and can be dismissed in a relatively straightforward manner, also possibly affecting their retention. In systems where there is little mobility among permanent teachers, temporary teachers may in fact ensure the necessary flexibility in the teacher labour market. For school and students, temporary contracts can result in a lack of stability in teaching staff if temporary teachers are at the risk of being replaced by a teacher with a permanent appointment. Where temporary teachers are not seen as full members of the school community, this can affect school climate, morale and collaboration. There can also be inequities if teachers with permanent contracts are concentrated in certain types of schools. Teachers in the more challenging contexts may then be employed under less favourable contract conditions (Radinger et al., 2018[21]; Liebowitz et al., forthcoming[68]; Nusche et al., 2015[30]).

3.3.4. Staff mobility and adjustments to changes in student enrolment

275. In systems with central teacher allocations, teachers typically have to apply for transfer if they wish to change schools for professional and/or personal reasons. The transfer of staff can also help adjust staffing levels to changes in enrolment in different schools, possibly together with a reorganisation of the school network as discussed in the Responsive School Systems report. This may also involve a reorganisation of school leadership structures, for example by creating school clusters with multiple sites (OECD, 2018[57]). Some systems have mandatory transfer and mobility requirements in place, notably Japan and Korea (OECD, 2018[5]).

276. In systems with decentralised recruitment, teachers would apply directly for an advertised vacancy and a fall in enrolment may require the dismissal of staff. Schools may be supported by central education authorities in adjusting their staffing levels. In Ireland, the Department of Education and Skills coordinates a redeployment process to facilitate the transfer of teachers on permanent contract and contracts of indefinite duration. Schools have to comply with the redeployment arrangements to be allocated all of their teaching positions.1 In New Zealand where schools are responsible for recruitment the ministry of education may help cover the costs when disestablishing a permanent teaching positions (teacher’s salary and severance pay).2

277. The locus of decision-making for teacher dismissal typically mirrors decision-making powers for teacher recruitment, except in a few systems where different levels of governance are responsible. In Austria, Germany, Sweden, the United States and Scotland, a higher-level authority is responsible for dismissal. Interestingly, in Greece, Israel and Portugal, lower levels of decision-making are responsible for dismissal (OECD, 2018[26]).

278. There can be rigities in teacher labour markets that mitigate against an efficient teacher distribution. In federal systems, teachers’ qualifications may not always be recognised in a different state for example. The statutory rights which teachers acquire through seniority, such as the progression in the salary scale and pension entitlements, may also not always be recognised as teachers change employment, reducing teachers’ mobility and creating localised teacher labour markets with different balances of demand and supply. This was found in the review of Austria, for example (Nusche et al., 2016[32]).
Depending on employment frameworks and qualifications requirements, there can also be rigidities between parts of an education system, such as general and vocational or special needs and mainstream education.

### 3.3.5. Sharing staff resources

279. Staff appointments may also be shared across schools. This can concern teachers, as is the case in Victoria, Australia, for example. Here, teachers can work in more than one school as a result of a targeted funded initiative or the employment arrangements of a particular employee. There is also a Multi School Staffing model that enables two or more schools to temporarily transfer staff between the schools on an annual basis to better meet the needs of each school.

280. Or it can concern specialist staff that could not be provided efficiently at a smaller scale. In Austria, educational psychology and career guidance (Schulpsychologie-Bildungsberatung) is provided by 77 school psychological service units across the country, run by the Federal Ministry of Education, Science and Research. They offer psychological information, counselling, support and treatment with the focus of health promotion and personality development, and expert services according to legal provisions (Nusche et al., 2016[32]). In Denmark, municipalities provide many types of specialist services, such as educational-psychological advisory services (PPR) across their schools (Nusche et al., 2016[31]). In New Zealand, specialist teachers for learning and behaviour (Resource Teachers: Learning and Behaviour) work across a number of schools and support them in managing the additional learning needs of students. There are nearly 1000 such specialist teachers working in 40 clusters throughout the country at a cost of approximately $90 million per year. Changes to the structure and governance have led to improvements in the delivery of support services through these teachers (Education Review Office, 2018[69]).

### 3.3.6. Meeting short-term needs

281. Teacher absenteeism is an unavoidable feature of education systems and therefore, substitute teachers play an integral role in ensuring the continued learning of students across many countries (see (Kenna[70]) forthcoming, for a literature review).

282. Many countries have a decentralised system of substitute teacher recruitment (e.g. Ireland) while some countries have a centralised system (e.g. primary school level France). Where the replacement of teachers through substitutes takes places at the school level, personal arrangements can aid in recruitment. It is common for schools to have a directory of substitute teachers’ contact details. This is generally compiled over time such that substitute teachers that had previously substituted at the school and were successful would be added so to aid future recruitment. The process of the creation of this list is usually based on relationships the substitute teachers formed during their time, whether they had a positive experience or not and whether full-time classroom teachers and school leaders felt they had done a good job.

283. The recruitment of substitute teachers may also involve outsourcing, for example through agency recruitment. Agency recruitment allows those charged with substitute teacher recruitment to delegate responsibilities. In the case where principals are responsible for recruitment, they have more time to carry out their responsibilities instead of recruiting substitute teachers. However, principals lose control over the quality of the substitute teacher employed at the school. Agencies are also characterised by a lack of
universal standards for entering the profession and thus, lower quality substitutes may be
deployed to schools, negatively impacting students learning experiences.

284. In The United Kingdom, agency recruitment has grown rapidly. In England and
Wales, substitute teacher recruitment through agencies has increased from 63% in 2014 to
79% in 2017 while recruitment by schools directly and local authorities have decreased
from 40% to 27% and 17% to 7% respectively during the same time period (Nasuwt,
2017[71]). Supply agency recruitment is highest in metropolitan areas and lower in rural
settings (Grant Thornton, 2016[72]). As the use of supply agencies has been growing,
issues surrounding these agencies have emerged, primarily centred around agency fees,
salary rates and exclusion from benefit entitlements. There have also been serious issues
over the cost of these agencies for school and substitute teachers such that these agencies
typically earn £40 - £50 per substitute teacher, per day (Grant Thornton, 2017[73]).

285. The recruitment of substitute teachers has become an increasing burden for those
charged with carrying out the task as the volume of teacher absences increases and the
minimum qualifications required to practice as a substitute teacher become more
stringent. The research carried out by Kukkonen and Salla (2014[74]) in Finland provides
empirical data about substitute teacher recruitment from 166 respondents across
comprehensive schools with a student population of more than 300 students. The majority
of respondents (42%) estimated they take between 11-60 minutes to find a suitable
substitute teacher.

286. Changing technological capabilities have led to the creation of new methods of
substitute teacher recruitment (see Box 3.4). These methods can help decrease the burden
of recruitment of substitute teachers for those charged with such activities, but may
potentially facilitate less oversight and control of quality.
Box 3.4. Using technology for the recruitment of substitute teachers

Technological advances have allowed for the recruitment of substitute teachers through different forms of mutual matching. They include automated phone recruitment, text message recruitment, internet recruitment, and mobile phone application recruitment.

Automated Phone Recruitment

Automated phone recruitment is one method of substitute teacher recruitment. The research by Coverdill and Oulevey (2007) looks at how substitute teachers secure and experience assignments through an automated calling and reservation system called SubMatch in Southeastern United States. Their data from the academic year 2000-2001 reveals that this system was utilised in over 500 districts in the region encompassing 12 000 students and 800 teachers. Furthermore, 31% of their sample indicated that they exclusively used the automated calling system to obtain work. The remaining 69% of respondents also used personal assignments in conjunction with automated phone system. Furthermore, as previously noted some 50% of requests (10 000 requests) in Michigan were fulfilled through the automated calling system (Gershenson, 2012).

Text Message Recruitment

In addition to changes in technology allowing for the emergence of automated phone recruitment, text messaging services for substitute teacher recruitment have also emerged. In Ireland, TextASub is a national service for the recruitment of qualified teachers for substitute teaching in primary schools across the country for a period of less than 24 weeks. Similarly, Swing Education provide a text messaging service about substitute teacher vacancies across hundreds of schools in the United States. They complement substitutions made through personal arrangement, filling those hard-to-fill teacher vacancies. Their platform increases the efficiency of substitute teacher assignment by providing filters to substitute teachers such as school types, location and assignment days.

Internet Recruitment

Internet recruitment is another method of recruitment that has emerged as a result of technological changes. The web-based recruitment system Kuntarekry-service is used by Finnish municipalities and municipality organisations to recruit substitute teachers. Both long-term and shorter-term substitute teacher positions are available (Kukkonen and Remes, 2014). In Ireland educationposts.ie allows principals to post substitute teacher vacancies and for substitute teachers to sort and filter different opportunities and apply for them online. In British Columbia, Canada web-based recruitment was the second most common recruitment method reported by TTOC with 26% reporting this was the most frequently used call-out system used in their school district.

Mobile Phone Application Recruitment

In line with changing technologies, specifically the emergence of the smartphone, a range of mobile phone apps for the recruitment of substitute teachers have appeared. Examples include TeachersRegister that operates in 180 schools across London, Birmingham and Manchester and have 13 000 teachers registered and The Supply Register that operates in more than 100 schools and has 4 000 teachers registered (Grant Thornton, 2017).
These organisations bypass recruitment agencies such that schools connect directly with substitute teachers. One such example that operates in several countries is TeacherIn. Founded in 2016, it works with over 1 100 school and 38 000 substitute teachers across Australia, New Zealand, Singapore and the United Kingdom (Cornwell and London).

Their aim is to remove agencies and directly connect substitute teachers to schools. There are still checks and balances in place to ensure substitute teachers are qualified to carry out their work. This includes a vetting process and online interview with the TeacherIn team. Furthermore, in addition to this schools have access to copies of each substitute teachers’ qualifications, CV, experience and professional development course certificates. However, once vetted schools have direct access to and contact with substitute teacher thus cutting out recruitment agencies. The pay-as-you-go rate is £10 per booking for schools or the annual subscription is £2.50 per pupil per year. According to their website schools can save up to 25% on substitute teacher recruitment through this system. Furthermore, in contrast to agencies schools are free to pay their substitute teachers directly or through TeacherIn’s PAYE payroll partner People. From the perspective of substitute teachers they do not have to pay agency fees and are paid in line with the individual school’s payment policy. In addition continuous professional development is available for all registered teachers free of charge.

Source: Kenna, A. (forthcoming), Teacher absenteeism and substitute teachers.

3.4. Processes and criteria for staff employment

287. Processes and criteria for recruitment and allocations and transfers are important elements determining the overall composition and quality of staff and the flow of staff to different schools. The processes that are in place will determine aspects such as the identification of effective professionals, fairness and transparency in decision-making, and the timeliness with which positions are filled. Given the limited evidence for the recruitment of support staff, the following sections focus on teachers and school leaders.

288. Individuals that meet the required entry standards discussed above (e.g. registration/certification requirements) will need to pass through processes that determine where a teacher will work that is specific to their context. The broader governance of teacher employment as described above will influence the shape these processes take, the scope education authorities and schools have for designing their selection processes, and the rules they may have to follow in making recruitment, allocation and transfer decisions.

3.4.1. Identifying effective teachers at the point of hiring and matching teachers to schools’ and students’ needs

289. One difficulty for any teacher recruitment process, whether centralised or decentralised, concerns the challenge to identify effective teachers at the point of hiring (Staiger and Rockoff, 2010[77]). Most externally observable indicators, such as teacher certification, advanced tertiary degrees, competitiveness of post-secondary programme, are poorly correlated with improvements in students’ test scores (Kane, Rockoff and Staiger, 2008[78]) (Rockoff et al., 2011[79]) (Boyd et al., 2008[11]). Such readily observable factors will thus not be sufficient factors to identify quality teachers. Furthermore, recent evidence indicates that teachers who are effective in improving students’ cognitive skills may not be necessarily equally effective in supporting students in developing their non-
cognitive skills, such as resilience, growth mind-set, self-efficacy and behaviour in class (Gershenson, 2016[80]).

290. In systems with centralised teacher recruitment, allocations and transfers candidates typically need to pass a centralised process to become part of the teaching workforce and to be allocated to schools once they finish their initial education and apply for transfers throughout their career should they wish to change to a different school. In Colombia, for example, where school education is the responsibility of certified sub-national authorities, teachers both at the beginning and throughout their career apply through a central recruitment process for vacancies that the sub-national education authorities report to the ministry of education (Radinger et al., 2018[21]). Similarly, in Portugal, teacher candidates apply to a national recruitment that is open for both new and experienced teachers, disseminated in the official state journal and on the website of the ministry of education (Liebowitz et al., forthcoming[68]).

291. The central recruitment processes will entail different elements depending on their design. In Portugal, teacher candidates are assessed based on factors such as the marks they received in higher education programmes and their years of teaching experience (Liebowitz et al., forthcoming[68]). In Colombia, candidates have to take a written knowledge and competency exam, a psychometric test, a check of credentials and an interview. The possibility of such teacher tests to identify better teachers is most likely limited (Cruz-Aguayo, Ibarrarán and Schady, 2017[81]) but they help ensure fairness and transparency (Estrada, 2017[82]).

292. In systems where teacher hiring is the responsibility of schools or education authorities at an intermediate level of governance, these authorities will be responsible for opening positions and defining their recruitment processes to fill them. Recruitment processes will therefore differ. Schools and intermediate authorities may also collaborate in the recruitment process, for example through joint recruitment panels or through central support in advertising vacancies, screening applications and notifying applicants. As discussed above, schools and authorities may have to comply with requirements linked to national employment regulations (e.g. in terms of publication of vacancies) or collective bargaining agreements (e.g. in terms of selection criteria).

293. The quality of the recruitment processes and the tools used for screening and selecting applicants will depend on the capacity of recruiters (e.g. in terms of preparation, experience and time). One challenge schools may face is the lack of time among staff to organise processes that would provide rich information about candidates. Recruitment needs may be difficult to predict given short-term changes in student enrolments or budgeting processes and only be known shortly ahead of the new school year at a time when it is difficult to organise activities such as classroom demonstrations (Liu and Johnson, 2006[43]).

294. Student teacher placements during their initial education may provide one route for schools to identify good teachers that match their organisational culture as they provide time for observing these potential teachers in the classroom. Also student teachers have a chance to get to know a school and its ethos and culture. Student teacher placements may therefore have implications for the distribution of teachers among schools (Cannata, 2011[47]).
3.4.2. The role of regulations for recruitment and allocation decisions and resulting inequities in the distribution of teaching and school leadership staff

295. The criteria that systems may have in place for recruitment and allocation decisions, sometimes the results of collective bargaining agreements, combined with teachers’ preferences, can contribute to disparities in the distribution of teachers. Teachers’ qualifications and experience influence teachers’ employment, not only in terms of salary progression (see Chapter 2), but also the place of employment.

296. In many systems, teachers’ interests rather than students’ needs drive the distribution of teachers and make it difficult to match the mix of experience and skills of teaching staff to school contexts. In systems with central teacher recruitment and deployment, teachers with the highest rank, may for example, have the first choice for the school they would like to work at. In decentralised systems, schools or sub-national authorities may have to safeguard statutory rights of teachers, such as giving preference to teachers with a permanent contract or with higher levels of seniority. These practices can result in a mismatch between the needs of schools and teachers’ interests and skills as well as large proportions of teachers who do not enjoy teaching in their school, possibly concentrated in schools with more difficult working conditions.

297. Seniority-based systems may also work against novice teachers and fail to reflect the evidence-base on teacher effectiveness. New teachers require a placement where they receive sufficient support and can grow into their roles. Evidence suggests that teachers’ impact on student achievement grows from year to year within their first five years in the profession. New teachers often struggle with the realities of classroom teaching (Guarino, Santibañez and Daley, 2006[83]). Teacher labour markets that channel these teachers to the most challenging schools may reduce their sense of efficacy and increase their likelihood of moving to another school or to leave teaching altogether (Luschei and Chudgar, 2017[3]). At the same time, it is not evident that additional experience after the first few years in the profession improve teaching skill (e.g. Rockoff (2004[84]) and Boyd et al. (2008[11])).

3.4.3. Filling teaching positions in time

298. It can be difficult to fill teaching positions in time for the beginning of the school year, resulting in lost learning time for students which has been shown to negatively affect learning outcomes (Papay and Kraft, 2016[85]). Difficulties to predict staffing arrangements can hamper the recruitment process and result in filling vacancies after the beginning of the school year. In centralised systems, assignment processes can be slow to fill positions if too few teachers were initially assigned to a school on the basis of forecasts for the actual number of students at the beginning of the school year as has been the case in Portugal (Liebowitz et al., forthcoming[68]). In Colombia, central recruitment processes can be very lengthy and cumbersome given capacity challenges in central authorities involved in the process. This may also potentially deter high quality candidates (Radinger et al., 2018[21]).

3.4.4. Promotion into leadership positions

Note: This section is yet to be developed

Requirements for recruitment into principal and deputy principal positions (teaching experience, training requirements)
Introduction of term limits to school leadership appointment terms (e.g. in AUT and CZE); introduction of performance contracts in CHL
School leadership frameworks for selection
School community involvement in selection processes

Box 3.5. Recruiting future school leaders

In Chile, school principal positions have been opened for teachers with less experience, as long as they hold a certain level of education, to respond to difficulties in filling leadership positions.

In England, the Talented Leaders programme run by the Future Leaders charity seeks to recruit outstanding school leaders for areas that face recruitment challenges. The charity’s programmes act as a pipeline for young, aspiring school heads who want to gain leadership responsibility, and are keen to do so in those schools that need them the most.

Estonia provides a further interesting example in the form of its School Leader Offspring programme, which seeks to develop and attract new talent into school leadership positions. The 24-month development programme for future school leaders is open to school staff, plus individuals from other sectors, and selects participants through a competitive process. Each participant then has a mentor and performs field training in schools. The programme offers different modules, including an introduction to pedagogy and the management of learning for those not in the education sector.

3.5. Shaping staff preferences for working in particular contexts

299. The distribution of staff across schools also depends on the preferences and choices of individual teachers and the financial and other incentives for where to work. For the case of teachers, research suggests that in many school systems, teacher preferences may direct the more qualified and more experienced teachers to schools enrolling mostly students with few socio-economic disadvantages (Hanushek, Kain and Rivkin, 2004[86]; Karsten, 2006[87]; Bénabou, Kramarz and Prost, 2009[88]). This is part of the explanation why additional resources, be it in the form of monetary transfers for decentralised recruitment or in terms of staff allocations and deployments as analysed above may not translate into attracting and keeping better teachers in disadvantaged contexts.

3.5.1. The role of place

300. Teachers’ preferences for where they live and work have an important impact on the distribution of teachers. Research from different contexts suggests that teachers prefer to work close to their homes, families and friends, even when they gain their initial teaching qualification far from home (Reininger, 2012[89]; Jaramillo, 2012[90]; Barbieri, Rossetti and Sestito, 2011[91]; Prost, 2013[92]). For example, Boyd et al. (2005[93]) found that 85% of new teachers who entered public school teaching in New York State between 1999 and 2002 took their first jobs in schools located within 40 miles of their hometowns. Women who make up a large share of the teaching profession in many countries are more likely to prefer working close to home and within their own communities (Engel and
Cannata, 2015[94]). This research suggests that teacher labour markets are geographically relatively small and the pool of prospective teachers available to work in a given school is limited. In rural and remote areas, “Grow your own” strategies can therefore play an essential role for meeting the demand for teachers (Sipple and Brent, 2015[95]).

3.5.2. The role of financial incentives

301. Several school systems have put in place financial incentives (monetary or in-kind) for teachers to work in areas of need, such as higher salaries in schools enrolling high proportions of students from disadvantaged backgrounds or differential pay for particular expertise. The OECD’s Education at a Glance publication provides comparative data on this as well as details on the types of incentives that are in place (see Table 3.1). Financial incentives seem to be most common related to geographical factors, to compensate for differences in cost of living and to fill positions in rural and remote areas:

**Differences in cost of living**

- In England and Wales, there are separate geographical pay ranges for teachers employed in different areas to reflect the cost of living in different areas: 'Inner London Area', 'Outer London Area', the 'Fringe Area', 'England and Wales (excluding London Area) area'.
- In Finland, there are two “cost areas”, with the difference amounting to 1% of the statutory base salary.
- In France, teachers receive an Indemnité de résidence payed each month depending on the area.

**Socio-economic disadvantage**

- In Greece, teachers in disadvantaged regions receive an allowance of EUR 100 gross per month.

**Rural and remote areas:**

- In Australia, states and territories may have rural and remote incentive schemes that may draw on a range of incentive options, including (but not limited to): subsidised accommodation, concessional travel arrangements, education assistance for dependents, additional leave entitlements, additional learning and development entitlements and priority transfer following a period of service.
- In Greece, teachers in a disadvantaged or borderline region receive an allowance of EUR 100 gross per month.
- In Israel, there is a special grant for teachers in peripheral communities who receive a rent refund. This rent refund is limited.
- In Poland, allowances go up to 10% of the monthly base salary paid to teacher for teaching in rural areas or in towns with no more than 5 thousand inhabitants. There are residence allowances for teaching in rural areas or in towns with no more than 5 thousand inhabitants. The amount of additional payments specified in the regulations is left to the discretion of local authorities and vary from one case to another.
• In Scotland, when a teacher is employed in a remote school the council will pay, in addition to the teacher’s normal salary, the remote school allowance and/or the Distant Island allowance as stipulated by the SNCT. The Remote Schools Allowance from 1 April 2017 is GBR 1,431 per annum for payments in accordance with paragraph 1.3(a) and GBR 2,685 per annum for payments in accordance with paragraph 1.3(b).

• In Slovenia, teachers can be reimbursed transportation cost from home to the school and back (if the distance is more than 2 km). This includes cost of public transport for days at work.

**Special educational needs**

• In France, teachers in charge of children with special needs receive an allowance of 929 €.

**Multi-grade teaching**

• In the Czech Republic, teachers working in classes with students of different ages receive a payment of CZK 600-2000 monthly, with school principals assigned the exact amount.

• In Slovenia, teachers at ISCED 1 and 2 in multi-grade classes receive 7-10% of the basic salary hour rate salary for teaching hours (compensation: Annual additional payments).

**Specific subject areas**

• In Slovenia, teachers of bilingual classes or classes in Italian language receive 12-15% of the basic salary.
Table 3.2. Financial incentives for teaching in particular contexts

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<th>Countries</th>
<th>Levels</th>
<th>Teaching conditions and other criteria</th>
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<td>Teaching students with special educational needs (in mainstream classes)</td>
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<td>Australia</td>
<td>ISCED 0-3</td>
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<td>Costa Rica</td>
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<td>Denmark</td>
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<td>ISCED 0-3</td>
<td>Salary progression</td>
</tr>
<tr>
<td>Slovenia</td>
<td>ISCED 0</td>
<td>a</td>
</tr>
<tr>
<td>Slovenia</td>
<td>Primary</td>
<td>Annual payment</td>
</tr>
<tr>
<td>Spain</td>
<td>ISCED 1-3</td>
<td>Annual payment</td>
</tr>
<tr>
<td>Sweden</td>
<td>ISCED 0-3</td>
<td>m</td>
</tr>
<tr>
<td>Switzerland</td>
<td>ISCED 0-3</td>
<td>m</td>
</tr>
<tr>
<td>Turkey</td>
<td>ISCED 0-3</td>
<td>a</td>
</tr>
<tr>
<td>England (UK)</td>
<td>ISCED 0-3</td>
<td>Annual payment</td>
</tr>
<tr>
<td>Scotland (UK)</td>
<td>ISCED 0-3</td>
<td>a</td>
</tr>
<tr>
<td>United States</td>
<td>ISCED 0-3</td>
<td>m</td>
</tr>
</tbody>
</table>

Teaching in a disadvantaged, remote or high cost area (location allowance)  
Residence allowance (not dependent on a particular location)

Australia ISCED 0-3 Annual payment a Annual payment
Austria ISCED 0-3 a a a
Belgium ISCED 0-3 a a a
Canada ISCED 0-3 m m m
Chile ISCED 0-3 a Salary progression a
Colombia ISCED 0-3 m m m
Costa Rica ISCED 0-3 a Annual payment a
Czech Republic ISCED 1-3 Annual payment a a
Denmark ISCED 0-3 Annual payment Reduced time Annual payment a
Estonia ISCED 1-3 Salary progression a a
Finland ISCED 0-3 a % base salary a
France ISCED 0-3 Annual payment Annual payment % base salary
Germany ISCED 1-3 a a a
Greece ISCED 0-3 a Annual payment a
Hungary ISCED 0-3 % base salary % base salary a
Iceland ISCED 0-3 Salary progression a Occasional payment
Ireland ISCED 0 m m m
Ireland ISCED 1-3 a a a
Israel ISCED 0-3 % base salary Annual payment Salary progression
Italy ISCED 0-3 a a a
Japan ISCED 0 m m m
Japan ISCED 1-3 Annual payment Annual payment Annual payment
Korea ISCED 0-3 a Annual payment a
Latvia ISCED 0-3 Annual payment a a a
Lithuania ISCED 0-3 % base salary a a a
Luxembourg ISCED 0-3 a a Salary progression
Mexico ISCED 0-3 a % base salary a
Netherlands ISCED 0-3 m m a
New Zealand ISCED 0-3 m m m
Norway ISCED 0 a a a
Norway ISCED 1-3 Annual payment Annual payment a
Poland ISCED 0-3 a % base salary % base salary
Portugal ISCED 0-3 a a a
Slovak Republic ISCED 0-3 Salary progression a % base salary
Slovenia ISCED 0 a Annual payment a
Slovenia Primary Occasional payment Annual payment a
Spain ISCED 1-3 Occasional payment Annual payment a
Sweden ISCED 0-3 m m a
Switzerland ISCED 0-3 m m m
Turkey ISCED 0-3 a a a
England (UK) ISCED 0-3 Annual payment Salary progression Annual payment
Scotland (UK) ISCED 0-3 a Annual payment a
United States ISCED 0-3 m m m

Source: Education at a Glance 2018, Table D3.7 online.
302. As Vegas and Ganimian (2013[38]) concluded in a review of the evidence from the United States, monetary incentives have shown promising results to allocate teachers where they are most needed (see for example, (Clotfelter et al., 2008[96]) and (Steele, Murnane and Willett, 2010[97])). A financial incentive scheme for working in disadvantaged schools in France however did not show positive results (Prost, 2013[92]), highlighting that such incentives will work differently depending on the design and size of the incentives and the general framework for teacher employment and career progression (OECD, 2018[5]). Financial incentives have also been shown to be effective in attracting teachers to rural schools, although not for remote schools (Pugatch and Schroeder, 2014[98]; Dal Bó, Finan and Rossi, 2013[99]). It may moreover be important to monitor allocations over time to ensure they are no longer provided once teachers change schools or the context of a school changes (Urquiola and Vegas, 2005[100]).

3.5.3. The role of non-financial incentives

303. However, not only financial aspects are important for the distribution of staff, but also non-financial ones. Teachers are highly motivated by the intrinsic benefits of teaching – working with children and young people and helping them develop and learn as well as opportunities for personal and intellectual growth role (Lortie, 1975[101]). Professional factors matter, such as opportunities to take on extra responsibilities and positions of influence, reforms and innovation, and developing strong leadership and collegiality in professional development (Shewbridge et al., 2016[29]), as do working conditions, such as class size, preparation time or facilities (Rice, 2010[102]). Research also suggests that accountability pressures inform teachers’ preferences of where to work (Feng, Figlio and Sass, 2018[103]; Gjefsen and Gunnes, 2015[104]).

3.6. Allocating staff within schools

3.6.1. Use of teachers

304. Also the allocation of teachers within schools and the matching of students and teachers is important to make the best use of teachers’ expertise and to promote learning and development in an efficient and equitable way (Monk, 1987[105]). As the case of reassignments of teachers to a new grade and/or subject within a school illustrate, such assignments influence both students and teachers in terms of learning outcomes and turnover (Ost and Schiman, 2015[106]; Atteberry, Loeb and Wyckoff, 2016[107]).

305. Data from the OECD provide insights into school’s autonomy for grouping students (OECD, 2018[26]) and the extent to which students are grouped by ability within schools or classrooms (OECD, 2016[62]). But relatively little is known from a comparative perspective on sorting of teachers and students within schools. Some studies however point to school-internal inequities in the distribution of teachers (e.g. Toledo and Valenzuela (2012[108]) for the case of Chile). Also little is known systematically about the methods and processes for the assignment of teachers to groups of students, the distribution of responsibilities among school leaders and teachers for doing so, and the role of parents, for example.

306. Schools may determine class assignments to pursue a variety of objectives. Some schools may be strategic in tailoring classes and class assignments to the perceived strengths and weaknesses of teachers, while others may be more random in their assignment. School leaders’ experience, school size and organisation, and community context could all influence student-teacher assignment practices. School leaders that are
new to a school may have to rely more on the insights of their teaching staff on how to group students and assign teachers to these groups, for example (Monk, 1987\[105\]). In some systems, such as Colombia and Portugal, schools are organised in the form of clusters with multiple sites (Liebowitz et al., forthcoming\[68\]; Radinger et al., 2018\[21\]), creating additional challenges for the assignment and management of teachers across sites.

307. Research from the United States provides insights into some of the issues that may arise and that may influence the matching of students and teachers within schools. One concerns the overall quality of the teaching staff in a school and the opportunities and limitations this provides. With their staff and other resources, school leaders are typically responsible for ensuring students’ instruction across the curricular areas. Resources, time and staff however are always limited and school principals may need to assign teachers to subjects out of their specialisation and training to cover instruction time (Ingersoll, 2005\[109\]). Accountability pressures and school politics may also influence teacher allocations within the school. In systems with test-based accountability, there are strong incentives to assign the most effective teachers to subjects and grades with high-stakes examinations that influence rewards and sanctions for schools (Grissom, Kalogrides and Loeb, 2017\[110\]; Chingos and West, 2011\[111\]). This could lead to the assignment of less effective teachers to earlier grades where returns are greatest (Fuller and Ladd, 2013\[112\]).

308. Principals may involve teachers and parents to different degrees in their assignment decisions, be it to inform assignments with these agents’ knowledge or to minimise conflict by catering to particular teachers or parents. This can also create inequities and inefficiencies. More experienced teachers may be able to lobby their leadership to teach less challenging classrooms (Grissom, Kalogrides and Loeb, 2015\[113\]), while some parents may be more likely to request that their children are assigned to a particular teacher (Jacob and Lefgren, 2007\[114\]; Qureshi and Ost, 2018\[115\]).

3.6.2. Use of support staff

309. The evidence on the educational benefits of learning support staff is quite mixed. Learning support staff can have a positive impact on student attainment through several mechanisms. With an additional professional in class, students receive more individual help and attention from either the learning support staff or the teacher. In addition, the use of learning support staff enables a more flexible learning environment, and groups of different size and characteristics can be created to better respond to students’ needs and allow increased engagement and inclusion of children in classroom activities. It is however important to ensure that support staff have the necessary time for co-ordination and planning with their colleagues.

3.7. Policy options

- Note: The policy options are yet to be fully developed
3.7.1. Addressing imbalances in supply and demand

Establishing dialogue among researchers, policy makers and the teaching profession to identify problems in supply and develop timely solutions

310. Adequate monitoring and forecasting mechanisms (e.g. through the use of rigorous teacher supply and demand studies) that take into account a wide range of factors, including higher education and the labour market, provide important information on the future demand for teachers with specific competencies and facilitate the steering of the teacher labour market. Based on this information, authorities can develop strategies to address potential shortages and/or oversupply of teachers. In systems with shortages, authorities can for example implement measures to further increase the attractiveness of teaching, such as scholarship, grant or loan programmes for subjects for which it is difficult to attract teachers; financial bonuses for specific geographical regions; and recruitment campaigns to attract teachers in areas of need.

311. In systems with an oversupply, authorities can develop strategies for reallocating, redeploying and retiring teachers currently in schools. Some teachers could assume new responsibilities, such as advisory roles within or across schools. Teachers close to retirement could be offered early retirement packages. At the same time, systems with an oversupply need to plan ahead, ensure an adequate renewal of the profession to provide the system with new ideas and perspectives, and address potential shortages in specific areas. Systems with an adequate supply of teachers have an opportunity to be more selective about those who enter the profession and initial teacher education (see Chapter 4).

312. Information about the competency needs of the system can also be useful both for teacher education institutions to define their offer and for graduates from secondary schools interested in teaching to gain a better picture of future opportunities to work in education.

Reducing rigidities in teacher labour markets and working towards adequate rates of teacher mobility

313. A number of systems struggle with inefficiencies and rigidities in their teacher labour market. To reduce such rigidities, teachers should be able to carry their statutory rights (pension entitlements and salary levels) with them when moving across sub-systems. Other administrative hurdles may also need to be cleared, such as processes for sub-systems to manage teacher transfers between authorities. Teacher mobility will also be important to adjust staffing levels to changing demographics across a school system as a whole. In systems with limited mobility of teachers between schools overall, incentives or regulations could be introduced to encourage such mobility.

314. In systems where schools are more directly involved in teacher recruitment and selection, a priority should be to improve information flows. Transparent and timely information systems can help close information gaps between teachers and schools. At the same time, schools should be required to advertise vacancies more widely.

Ensuring an adequate balance of permanent and temporary teaching staff
3.7.2. Matching staff to schools and students

Considering the extent of school autonomy for the recruitment of their staff

315. In a number of countries, schools have limited influence on staffing decisions, which may lead to misallocations and frustrations for both schools and teachers. Such systems could consider policies to give schools gradually greater autonomy to select their personnel. Schools could be able to express their preferences over a given number of candidates ranked in a central process who have expressed an interest in working at the school or be involved in the interview and selection process. Another option is to allow schools to select part of their teaching force while institutions above the school level remain in charge of recruiting and assigning the remaining part of the teaching force. In Germany, the use of such a mixed system is quite common, for example, which ensures that common standards are applied and that particular schools are not systematically disadvantaged. Such mixed systems could also take off some logistical and administrative demands that are associated with recruitment, such as screening applicants, managing databases of applicants, extending the formal job offer, and processing new hires.

316. Steps to give schools a greater say in the distribution of teachers will need to pay adequate attention to potential inequities resulting from such a policy change and other factors, such as the arrangement of funding teaching positions. More advantaged schools will be better able to attract the most qualified teachers. School autonomy for personnel decision requires sufficient leadership, managerial and administrative capacity, school resources and size, as well as sufficient incentives for teachers to be willing to work in disadvantaged contexts.

Implementing screening strategies for the selection of high-potential educators

Using teacher and school leader preparation programmes as a pipeline of human capital

Ensuring fairness and transparency in recruitment, allocation and transfers

Ensuring an adequate mix of staff with different profiles in schools

Sharing staff among schools (e.g. specialist support staff)

3.7.3. Ensuring equity in the distribution of staff across schools and students

Reviewing regulations and criteria for staff recruitment, allocation and transfers

317. In many systems, teachers’ interests rather than students’ needs drive the distribution of teachers. Rules and regulations for the selection and transfer of teachers, such as the weight of seniority in recruitment and allocation decisions, together with teachers’ preferences for working in particular contexts, often channel the best teachers to the most advantaged schools. Beginning teachers are then mostly assigned to schools that are more difficult, with potentially adverse effects on student learning and teacher attrition. Regulations that give priority to candidates with specific types of appointment or levels of experience may also make it more difficult to match the mix of experiences and
skills of teaching staff to school contexts. To address these concerns, it could prove useful to review such regulations, creating greater flexibility for appointments regardless of employment status or experience. Recognising experience in difficult or remote schools for teachers’ career progression is a further option.

Making schools supportive places for staff to work with children

Designing and evaluating financial incentive schemes

3.7.4. Building school capacity for human resource management

318. Making the best use of staff time and competencies requires sufficient attention to the human resource management capacity in schools (e.g. for coordinating and planning the coordination time between teachers and learning support staff). School leadership needs to be adequately prepared to manage staff assignments with the resources they have at their disposal and to assess and monitor the effects of their decisions on student learning. Peer learning is an especially powerful form of teacher development. Schools should also have the ability to develop their staff through arrangements such as team teaching and by matching effective with less effective teachers in their school.

Notes

References


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4. Developing human resources in school education

319. Creating a professional learning environment in which teachers and leaders feel individually and collectively supported is essential to unleash the potential of all educators to realise the transformative impacts of highly effective teaching and school leadership. This begins by preparing cohorts of teachers and leaders who are ready for the particular context in which they will work and providing them with rigorous, applied teacher and leader preparation programmes that require demonstration of in-classroom teaching or in-school leadership skills. It continues through the early years of new teaching and leading roles through a successful induction and mentorship programme that promotes rapid learning and skill development through a situated cognitive context.

320. Educator capacity development does not end after the initial years in a new position. Developing curricular, pedagogical and leadership skills in a school are the shared and ongoing responsibilities of its teachers and leaders. Schools must increasingly embrace processes that structure the school as a continuous learning organization where professional learning is an ongoing part of the day-to-day work of the organization, where educators work collaboratively to help each other learn, where systems exist to capture and codify knowledge, and where explicit supports exist to support leadership capacity development among all adults. Where educator development emerges from evaluation, systems should be designed to ensure that it accomplishes its growth-oriented intent. School and system leaders’ capacities for effective evaluation must be more rigorously developed and increased resources must be allocated to meet the time demands of evaluation.

321. This chapter begins with a summary of the recent educational human resource development research and policy, and then proceeds to a three-part analysis of the developmental continuum in schools: (i) initial preparation and induction; (ii) ongoing learning; and (iii) evaluation as a mechanism for improvement. The chapter concludes with a series of policy options that educational systems may consider valuable, while recognising that local context and implementation will need to be adapted to the particular needs of the educational system.

4.1. Recent Context for Human Resource Development

322. In the first modern wave of human resource policy reform in the 1980s and early 1990s, the research and policy community grew increasingly aware of the atomised nature of schools and the teaching profession. In response to the “egg-crate” model of teaching in which each teacher’s classroom was his or her domain, and each school operated largely independently from others, with little opportunity for peer feedback and collaboration, significant research interest developed in promoting cross-teacher and cross-school collaboration and professional development (Rosenholtz, 1985[1]) (Little, 1993[2]) (Sparks, 1994[3]) (Garet et al., 2001[4]).
322. In the second modern wave of human resource policy reform in the late-1990s and 2000s, increasing attention focussed on the potential of teacher and leader selection and evaluation as mechanisms to improve educator effectiveness. A widely publicised report from the Mckinsey & Company experts Michael Barber and Mona Mourshed (2007) highlighted strategies that high-performing school systems take to recruit high quality candidates into the teaching profession. According to the authors, a mix of high initial compensation, societal prestige and rigorous academic entrance requirements into teacher preparation programmes ensured that these school systems drew the top candidates. The report asserted that in high-performing school systems, entrants into teacher preparation programmes came from “the top 5 percent in South Korea, the top 10 percent in Finland, and the top 30 percent in Singapore and Hong Kong” (M. Barber & Mourshed, 2007). A follow-up report argued that the top-performing school systems in Singapore, Finland, and South Korea “recruit 100% of their teacher corps from the top third of the academic cohort,” (Auguste, Kihn, & Miller, 2010). Coincident with widely held concerns about the academic skills of prospective teachers entering teacher preparation programmes, the Mckinsey report led to a growing interest in increasing standards for entry into Initial Teacher Preparation (ITP). However evidence from Schleicher (2013) (discussed in more detail below) suggested that top performing educational systems, in fact, recruited teachers from across the skill distribution. Additionally, a large body of evidence indicates that test score levels, teacher certification, advanced tertiary degrees, competitiveness of post-secondary programme and most other externally observable indicators are poorly correlated with improvements in students’ test scores. Interestingly, some of the same proponents of increasing the academic skill levels of entrants into teaching preparation programmes, advocated for recruiting prospective school leaders based on observed task performance, rather than academic skill levels, precisely because of the fact that cognitive skills were weakly related to stronger leadership attributes (Michael Barber, Whelan, & Clark, 2011).

324. A separate strand of educational research during this same era focussed less on addressing input factors into schools and more on outputs. Early research on the impact of teachers on student outcomes, in the limited sub-national context of the U.S. state of Tennessee found that teachers have the largest in-school effect on student learning growth (Sanders and Rivers, 1996) (Sanders, Wright and Horn, 1997). This research was extended beyond Tennessee, and many studies found that teachers have a wide variability of impact on student learning growth, and contended that these differences could be reliably measured through the use of value-added metrics (Chetty, Friedman and Rockoff, 2014) (Jackson, Rockoff and Staiger, 2014) (Rockoff, 2004) (Hanushek and Rivkin, 2010) (Rivkin, Hanushek and Kain, 2005). Furthermore, variation in the effectiveness of teachers has a life-long impact on labour market outcomes (Chetty et al., 2011) (Chetty, Friedman and Rockoff, 2014). These joint findings prompted researchers to explore whether, rather than focus on recruitment strategies, education systems might better serve students by improving the quality of the overall teaching pool through human resource management policies including rigorous evaluation systems for teachers (Rockoff et al., 2012) (Rockoff and Speroni, 2011) (Jackson, Rockoff and Staiger, 2014) (Hanushek, 2009) (Taylor and Tyler, 2012).

325. These research findings intersected with ongoing policy concerns about the failure of school systems to meet the needs of their students, political impetus to counteract the influence of public-sector trade associations, and growing interest in infusing the education sector with management principles associated with the New Public Management (NPM) philosophy (Tolofari, 2005). These interests produced significant
reforms to teacher evaluation procedures as documented in the OECD’s 2013 report on *Synergies for Better Learning: An International Perspective on Evaluation and Assessment* (OECD, 2013[18]). Between 2008 and 2013, there was substantial growth in the proportion of teachers who reported there was a strong emphasis on student performance in the feedback they received, increasing from 67% of lower-secondary teachers to 87% during this window. 23 of 29 countries reviewed by the OECD in 2012 had policy frameworks in place to regulate teacher appraisal (OECD, 2013, p. Figure 5.3[18]). Some countries, notably Chile and the United States, underwent major overhauls of their teacher evaluation policies resulting in new systems in which teacher evaluation, informed by student test scores, had multiple implications, including continued employment, tenure, promotion through career pathways, and merit pay. Despite these significant policy reforms, in both Chile (Santiago et al., 2017[19]) and the United States (Kraft and Gilmour, 2017[20]), over 95% of teachers continued to be rated as satisfactory. In fact, there is minimal evidence that high-stakes teacher evaluation has resulted in any improvements in teaching practice, and may have even depressed the number of entrants into the teaching profession (Kraft et al., 2018). Despite increased use of formal evaluation systems, 43% of TALIS teachers report that teacher appraisal and feedback has little impact on classroom teaching, and 51% say it is undertaken to fulfill administrative requirements (OECD, 2014, p. 139[21]). These patterns are echoed in recent School Resources country reviews in which teacher stakeholder groups report little impact of teacher evaluation on their practice (e.g., (Santiago et al., 2016[22]); (Liebowitz et al., 2018[23])).

326. Thus despite different efforts to address the preparation, professional development and evaluation of school teachers and leaders over the past three decades, many questions remain unanswered about the most effective strategies. This chapter documents the importance of moving beyond simplified models for improvement to consider educator development as an evolutionary process. The chapter first addresses strategy and process improvements to initial teacher and leader preparation and induction. Next, it embeds ongoing educator development as part of a framework in which the School acts as a Learning Organisation (SLO) to unite and support collective improvement. Finally, while the chapter recognises the evaluation and appraisal process as part of the Learning Organisation framework, the chapter concludes by highlighting in greater depth the particular potential of evaluation to serve as a formative developmental tool (rather than an accountability mechanism) for most teachers and leaders. The chapter concludes with policy options.

4.2. Initial Preparation and Induction

327. As noted, many in the policy community have expressed concerns that entrants into Initial Preparation Programmes (ITP) are under-skilled compared to other disciplinary concentrations in institutions of higher education. This concern was evident in many of the School Resources Review countries; the most recent examples of this include Chile (Santiago et al., 2017[19]), Colombia (Radinger et al., 2018[24]) and Portugal (Liebowitz et al., 2018[23]). Some in international policy communities alluded to a small set of high-performing countries as examples in which all teaching candidates accepted into ITP were from the top of the skill distribution (Auguste, Kihn, & Miller, 2010). In fact, recent evidence from the 2015 Programme for International Student Assessment
(PISA) does corroborate that 15-year-olds intending to be teachers do on average have lower scale scores in math (16 points) and reading (12 points) (OECD, 2018b).

328. However, as Schleicher (2013) documents drawing on evidence from the OECD’s Programme for the International Assessment of Adult Competencies (PIAAC) 2013 Survey of Adult Skills, teacher skills are widely distributed and are “remarkably similar to the average worker with a college or university degree.” While in Japan and Finland, the average teacher has better numeracy skills than the average college graduate and in the Czech Republic, Denmark, Estonia, the Slovak Republic and Sweden they have worse numeracy skills, in no country are teachers drawn from either the top- or bottom-third of the skill distribution. In a more complete analysis, using both PIAAC and the OECD’s Adult Literacy and Life Skills (ALL) assessment, Golsteyn and Vermeulen (2016) find that the shape of the distribution of teachers’ skill profiles varies substantially by country, but in all cases teachers are above the countrywide average and compare favourably in many countries to the skill profiles of other highly educated workers.

329. Thus, if academic skill level is not the primary differentiating factor for teachers in top-performing school systems, and the best causal evidence suggests that these sort of criteria are not what make teachers most effective at improving student outcomes, other opportunities for improving Initial Teacher Preparation programmes are necessary besides simply changing the type of people who enter into teacher preparation programmes.

Box 4.1. ITP Study Key Findings

The OECD Initial Teacher Preparation (ITP) Study reached the following major substantive conclusions:

Recruiting New Teachers:
- Attention to supply and demand important to manage teacher labour markets
- More efforts are required to make the teaching profession attractive to prospective candidates
- Investments should be made to raise the status and quality of teacher educators

Improving ITP Systems:
- Develop and use rigorous evidence about effective ITP policies and practices
- Create systematic feedback loops to improve ITP programmes

Improving Stakeholder Partnerships with ITP Systems:
- Create deep partnerships with schools to support the ITP process
- Incentivise school-based research partnerships
- Facilitate learning opportunities for all stakeholders that benefit beginning teachers

Improving Quality of ITP Curriculum
- Embed new models of teaching and learning into ITP programming
- Design ITP in evidence-informed way
- Support teacher educators to reflect on and refine their practice

Improving Mentoring and Support
- Use mentors to bridge candidates’ experience in higher education and school settings
- Increase status and capacity of school-based mentors
330. In light of the critical role that ITP programmes play, the OECD launched in 2016 reviews of systems of teacher preparation as part of the Initial Teacher Preparation (ITP) Study (Box 4.1). As a result of the extensive lessons learned from the ITP Study, the OECD has planned a follow-up study for 2019-2021, the OECD Study on Supporting Teacher Learning for Quality Teaching, which will examine the continuum of teachers’ professional learning from initial teacher education through to first years in teaching and beyond. Given the extensive knowledge base already generated from seven country reviews, the ITP Study final report (planned release in 2019), and the dissemination of the work on the TeacherReady! Platform, the Human Resources Thematic Report summarises the key findings of the ITP Study (see Box 4.1 for key findings) and addresses dimensions of initial preparation and induction particular to the 18 School Resources Review countries as well as those topics not covered within the ITP study.

4.2.1. Challenges in the Initial Preparation of Teachers

331. Though large majorities of teachers report feeling prepared to teach the content, practice and pedagogy of their subject (OECD, 2014, p. Figure 2.2[21]), sizeable proportions of teachers in some countries and in some types of schools report completing their initial preparation feeling unprepared for the realities of the classroom. This is not unique to the education sector as various other categories of professionals begin with primarily theoretical training and continue to develop their skills over the course of the professional careers. However, the more skills ITP can impart that permit both short-term success as well as long-term capacity for growth, the more students benefit.

In many countries, teachers enter the profession having experienced minimal classroom-based learning opportunities

332. Expectations for pre-service school-based hour vary widely across education systems. Among the School Resources Review systems, the range for pre-service, school-based learning requirements varies dramatically. As Table 4.1 reveals, some countries such as Austria and Slovenia mandate in-school practicums with durations of between 6 months and a full academic year. On the other hand, other School Resources Reviews found either no system-wide requirements for the length of the in-school portion of pre-service training, or that they represent as little time as 2 weeks.

333. Across Europe, 16 European countries establish minimal European Credit Acquisition and Transfer System (ECTS) credit hours for student teaching in schools ranging from 5 to 60 credits; this amounts to between 125 and 1 800 hours of academic work (European Commission/EACEA/Eurydice, 2015[25]). The remaining 12 countries have no national requirements regarding the amount of ECTS credits must come from student teaching.

- Increase evidence base on effective mentoring

Table 4.1. Initial Teacher Preparation In-Classroom Requirements

<table>
<thead>
<tr>
<th>Country</th>
<th>Duration of In-Classroom Student Teaching Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1 year practicum</td>
</tr>
<tr>
<td>Belgium (Fl.)</td>
<td>Practice in a school corresponds to 45 credits (out of a total of 180 credits in initial teacher training)</td>
</tr>
<tr>
<td>Belgium (Fr.)</td>
<td>4 weeks in 2nd year, 10 weeks in 3rd year</td>
</tr>
<tr>
<td>Chile</td>
<td>1 semester internship in school</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2 weeks practicum</td>
</tr>
<tr>
<td>Denmark</td>
<td>n/a</td>
</tr>
<tr>
<td>Estonia</td>
<td>50 days practicum</td>
</tr>
<tr>
<td>Iceland</td>
<td>n/a</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>n/a</td>
</tr>
<tr>
<td>Lithuania</td>
<td>No set required hours</td>
</tr>
<tr>
<td>Portugal</td>
<td>No set required hours</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>n/a</td>
</tr>
<tr>
<td>Slovenia</td>
<td>6-10 months traineeship</td>
</tr>
<tr>
<td>Spain</td>
<td>n/a</td>
</tr>
<tr>
<td>Sweden</td>
<td>Duration of traineeship depends on education level</td>
</tr>
<tr>
<td>Uruguay</td>
<td>n/a</td>
</tr>
</tbody>
</table>


334. Failure to learn instructional skills in settings in which they will have to later apply them means prospective teachers lose opportunities to practice situated cognition (Brown, Collins, & Duguid, 1989). A rich body of literature suggests this may leave them unprepared to transfer learning from the higher education classroom to the primary and secondary context.

Teacher education programmes do not yet sufficiently prepare teachers for the diverse backgrounds of their students

335. The OECD’s Strength through Diversity (OECD, 2018c) project has documented several challenges in the match between teachers’ skills and the needs of their students, particularly those of an immigrant background. General strategies articulated in this project include adopting a holistic approach to immigrant students and identifying relationship development as key levers to create welcoming school environments for immigrant students. This is particularly salient as school climate, favouritism by teachers and lack of feedback have large impacts on students’ with immigrant backgrounds outcomes (OECD, 2018c).

336. In particular with respect to ITP curriculums, few ITP programmes include classes geared directly meet the needs of students with an immigrant or historically marginalised socio-cultural background.

Alternative pathways offer an accelerated route into teaching but the quality of preparation in these routes is uncertain

337. In recent years, in response to concerns about the quality of selection and curriculum into Initial Teacher Preparation (ITP) and Initial Leader Preparation (ILP)
programmes several alternative pathways have developed into the teaching and school leadership professions. These alternative pathways are generally characterised as operating completely or largely independently from Institutions of Higher Education (IHEs). They generally involve short-term trainings lasting anywhere from a few weeks to a few months, resulting in a form of certification permitting the holder to teach or manage a school. Some of these alternative pathways appeal to career-switchers at mid-career points, while others are intended to appeal to high-skill recent tertiary graduates who might not otherwise have considered teaching (e.g., Teach for All, a network of teacher-recruitment and development programmes in 45 countries that attracts teachers from non-traditional backgrounds).

4.2.2. Challenges in Initial Preparation of School Leaders

School leaders are faced with a wide variety of professional responsibilities; few systems’ preparation programmes address full scope of the role

As with teachers, initial preparation requirements vary substantially for school heads. Table 4.2 documents a wide range of pre-service training requirements for school leaders. Some systems have no requirements (e.g., Denmark, Kazakhstan, Belgium (Fl.) and Lithuania), others have no requirements to enter the position, but require training with a fixed amount of time once appointed to remain in the position (e.g., Austria, the Czech Republic, the Slovak Republic and Sweden), others require minor trainings prior to beginning the role (e.g., Uruguay), and still others have extensive pre-service school leadership preparation requirements (Belgium (Fr.), Chile, Estonia, Slovenia and Spain).

Table 4.2. School leader preparation requirements

<table>
<thead>
<tr>
<th>Country</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>No prior training requirement, school leader training required within 4 years of appointment</td>
</tr>
<tr>
<td>Belgium (Fl.)</td>
<td>No system-wide training requirements; schools establish standards for hiring</td>
</tr>
<tr>
<td>Belgium (Fr.)</td>
<td>120 hours for initial training, 2 year internship, 2 year probation appointment</td>
</tr>
<tr>
<td>Chile</td>
<td>1 year Principal Development Course required</td>
</tr>
<tr>
<td>Colombia</td>
<td>No prior training requirement, school leader training required within 2 years of appointment</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>No prior training requirement</td>
</tr>
<tr>
<td>Denmark</td>
<td>Offspring programme for school heads (2 years)</td>
</tr>
<tr>
<td></td>
<td>Management training programme (1 year)</td>
</tr>
<tr>
<td>Estonia</td>
<td>University programmes offered in management in the educational sector and general degrees in management</td>
</tr>
<tr>
<td>Iceland</td>
<td>No prior training requirement</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>No prior training requirement</td>
</tr>
<tr>
<td>Lithuania</td>
<td>No prior training requirement (candidate skills assessed but means of acquiring them are not regulated).</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>No prior training requirement; absolute priority given to candidates with education management training</td>
</tr>
<tr>
<td>Portugal</td>
<td>No prior training requirement, school leader training required within 3 years of appointment</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>National School of Leadership in Education courses; requirement to pass school leader examination</td>
</tr>
<tr>
<td>Slovenia</td>
<td>Training course on the development of management role by the Ministry of Education or educational authorities of the Autonomous communities</td>
</tr>
<tr>
<td>Spain</td>
<td>No prior training requirement; National School Leadership Programme, mandatory and has to be completed within four years of being a school leader (total of one term of full-time studies held over six terms; appr. 20% of working time)</td>
</tr>
<tr>
<td>Sweden</td>
<td>1 course on school management required</td>
</tr>
</tbody>
</table>

339. While there is widespread recognition that the demands placed on the current school leader are overwhelming, and there is likely no programme that could fully prepare prospective school leaders for the position (Pont, Nusche, & Moorman, 2008), it seems fairly evident that either no preparation requirements or minimal ones would leave school leaders with little chance of entering the role feeling prepared.

4.2.3. Strategies to Improve Initial Educator Preparation Programmes

Links between Initial Teacher Education programmes and schools

340. Many systems, cognizant of concerns about the disconnect between academic training and the realities of primary and secondary schools, have invested in developing stronger links between ITE programmes and schools. Box 4.2 presents just such an innovative partnership between ITE programmes and networks of schools in the Netherlands documented through the OECD’s TALIS Initial Teacher Preparation Study.

Box 4.2. Collaboration between ITEs and schools in the Netherlands

In the Netherlands, several ITP pathways require substantial time spent in classrooms. School-based primary education teacher preparation programmes require that 120 of 240 European Credit Acquisition and Transfer System (ECTS) credit hours take place in a primary classroom. Similarly, secondary teaching one-year master’s candidates must spend 50% of their time in a school-based practicum. To ensure that these extensive school-based experiences are successful, the Netherlands has initiated multiple school-ITE partnerships.

These partnerships are supported at the system level by requiring ITE programmes to demonstrate successful partnerships to maintain accreditation. In the Netherlands, an independent accreditation body, approves each school-university partnership before they are funded by the Ministry of Education, Culture and Science. The body determines if there is a clear vision, a shared focus on improvement, leadership, co-operation and self-management, and a commitment to improving learning for students.

To address concerns from schools and school boards about the “classroom readiness” of newly qualified primary teachers, the Netherlands Ministry of Education, Culture and Science launched a range of initiatives to improve the match between preparation programmes and school needs. These initiatives have included facilitating and funding much closer integration of universities with school boards, at the strategic level, and with individual schools at both the strategic and operational level.

Some examples of partnership activities that ensure schools and prospective teachers benefit include:

- The IHE employs a teacher educator to oversee the partnership and provide strategic leadership
- Schools and IHEs exchange staff and work in each other’s institutions
- School and IHE staff work closely together to develop and refine the ITE curriculum and delivery
- The school board and the IHE jointly design how to select candidates students and both have a role in the selection
The IHE provides training for teachers interested in being mentors
- The school grades the student teacher on their practice; the student must achieve a pass mark to receive their teaching certificate


**Targeted pre-service training for particular community needs**

341. Some teaching and school leadership skills cross all contexts. Others may be most relevant in particular contexts. Some school systems explicitly acknowledge these differences and design training sequences for pre- (and in-) service teachers that respond to these particular needs. Box 4.3 highlights two such programmes in Latvia and Malta.

**Box 4.3. Preparing for Diversity – Model programmes from Latvia and Malta**

**Latvia – Equal Treatment of Diversity**

In Latvia, the ‘Equal Treatment of Diversity’ (ETD) Master’s programme in Education Sciences and Pedagogy trains teachers with an interdisciplinary system of knowledge, skills and socio-pedagogical and psychological abilities to support the inclusion of students from diverse backgrounds in schools.

Compulsory courses include ‘International and comparative frame of educational treatment of diversity;’ ‘Educational treatment of special needs proceeding from cultural diversity;’ ‘Management and programmes of educational treatment of diversity;’ and ‘Guide for practical implementation in educational treatment of diversity.’

The master’s coursework places students in previously unfamiliar situations and challenges them to communicate across cultural differences. Evidence exists that these forms of inter-cultural exchanges positively and significantly affect the quality of student-student and student-staff interactions, as well as the quality of diversity-related experiences through students’ participation in problem-solving and information exchange during the learning process.

**University of Malta – Supporting student diversity**

In Malta, the initial teacher education module on ‘Responding to student diversity in the primary classroom’ at the University of Malta has become mandatory in the Master’s in Teaching and Learning. The module aims to prepare student teachers to include students with diverse backgrounds in their lessons and to help them blend theory and practice in responding to student diversity.

**Theoretical component:** In the first semester student teachers are first introduced to issues of student diversity and inclusion and how these can be addressed in the classroom, including using individual educational plans (IEPs). This is done mainly through reflection on one’s own background, discussion and group work.

**Practical component:** In the second semester, while student teachers are doing their six-
week block teaching practice, they identify a student who is having particular difficulties with classwork or in social adaptation, and they plan and implement a strategy for that student’s inclusion in their lessons.

The main strength of the measure is the blending of theory and practice. Student teachers are first prepared on how to recognise difference, how to draw up an individualised plan, how to modify the classroom environment and lesson content, process and products which they then have an opportunity to implement during teaching practice.


**Educator Residencies**

342. In many OECD countries, initial educator preparation is unduly focused on disciplinary knowledge at the expense of opportunities to practice pedagogical skill. Wide variety exists in country practice, but broad international agreement exists on the importance of opportunities to practice the skills required of teaching during initial teacher education (OECD, (n.d.)[27]).

343. Models of teacher residency exist in OECD countries developed based on the medical residency system (see 4.X for examples from the United States). These residencies integrate aspects of traditional university classroom preparation with the on-the-job learning of alternative pathways into an immersive learning experience.

344. Similar residency models exist for school leaders as well. One highly regarded model is the New Leaders residency programme for school leaders. In one of the few well-designed credibly estimates of the impact of school leadership preparation programmes, school leaders trained by the New Leaders residency preparation programme improved student learning outcomes in their schools compared to non-residency trained leaders, though the magnitude of these improved test score outcomes was relatively small (Gates et al., 2014).

**Box 4.4. Urban teacher residencies (UTRs) in the United States**

Urban teacher residencies (UTRs) integrate aspects of traditional and alternative teacher preparation programs. Typically run by a U.S. school district independently or in partnership with a non-profit organization, residency programs select teaching candidates to work alongside a mentor for a full year before becoming a teacher of record. Residents also complete a set of coursework leading to both state certification and a master’s degree from a partner university. In exchange for tuition remittance and a residency-year stipend, they commit to teaching in the district for a specified period, generally 3 to 5 years.

The UTR model has spread rapidly in the United States since the first programs were launched in Chicago, Boston, and Denver between 2002 and 2004, attracting substantial public and philanthropic investment. A 2016 survey of the residency landscape found at least 50 residency programmes nationwide (Guha, Hyler and Darling-Hammond, 2016[28]). The National Center for Teacher Residencies lists 28 programmes serving some of the largest U.S. school districts (e.g., Los Angeles, Chicago, New York) (National Center for Teacher Residencies, 2018[29]). The federal government has created targeted
funding programmes to support UTRs, and 15 states proposed in 2018 to leverage residencies to improve teacher effectiveness (National Center for Teacher Residencies, 2018[30]). The practice-based training model developed by UTRs has also influenced broader conversations about the reform of university-based teacher preparation programs, with an intra-state educator preparation accreditation governing body articulating clinical partnerships as one of five core principles of effective initial teacher education programmes (Council for the Accreditation of Educator Preparation, 2013[31]).

Most studies reveal improved retention outcomes for teachers entering the profession through these residencies, with potential but not definitive learning gains for students of teachers prepared through the residency pathway. Five empirical studies found teacher retention rates between 10% and 50% better than non-resident teachers in the same district (Guha, Hyler and Darling-Hammond, 2016[28]). The only existent causal evaluation of a UTR on student learning growth revealed mixed outcomes. Papay et al. (2012[32]) found that the Boston Teacher Residency produced graduates who were more likely to remain teaching in the Boston school district. However, they improved their students’ literacy skills at no higher rates than their early career peers who had not participated in a UTR. They initially underperformed their early career peers in improving their students’ maths performance, but by their 4th year of teaching outperformed them. The authors conclude that the programme’s overall effect was at best likely to improve overall student achievement only modestly.

Sources:

School Leader Preparation

345. In addition to the leadership residencies described above, clearer consistent expectations for pre-service preparation that combine instructional, management and operational skill development are critical.

346. Box 4.5 highlights programmes Singapore uses to develop early-career leaders (Management and Leadership Studies Programme) and promising mid-career leaders (Leaders in Education Programme). Critically, Singapore conceives of the progression of teachers interested in leadership opportunities as one requiring a sequential progression in which key skills must be acquired at benchmark points during their career development.

**Box 4.5. Preparing leaders in Singapore**

**The Management and Leadership Studies (MLS) Program**

The Management and Leadership Studies (MLS) Program is designed for teacher leaders who are department, grade or subject group heads. It comprises 17 weeks of funded
training, during which time they receive their full salary. Participants participate in a series of courses to develop leadership, teaming and operational management skills. They also spend a week travelling to another Asia-Pacific country to provide them with new perspectives on the Singaporean context (Keo, 2016[33]). From this programme, candidates become competitive for the positions of assistant principal or may move to the National Institute for Education (NIE), the Singaporean Ministry of Education.

The Leaders in Education Program (LEP)

The Singaporean Leaders in Education Program (LEP) is a highly selective programme that prepares highly effective assistant principals and ministry officials for the principalship. The programme was launched in 2001 by the National Institute for Education (NIE). Between 30 and 40 candidates are selected in each cohort for an intensive six-month executive education programme based on their prior performance appraisals, situational tests, a professional portfolio and selection interviews. Once selected, they receive a full salary, while participating full-time in the LEP programme. The programme aims to develop capacity that is, “values-based, purposeful, and forward looking, anchored on both strong people leadership and instructional leadership” (Jayapragas, 2016[34]). The curriculum draws on leaders in adult learning to develop five skill sets: the disciplined mind, the synthesising mind, the creating mind, the respectful mind and the ethical mind (Walker, Bryant and Lee, 2013[35]).

Every LEP cohort member is placed in a local school in Singapore where they are mentored by an experienced principal. In the school, they conduct a Creative Action Project to design an innovation alongside the school’s faculty with the goal of transforming the school over the long-term. Participants also take part in a two-week international study trip in order to gain comparative perspectives on school leadership.

The LEP has had positive participant feedback, but to date no formal evaluation exists assessing its impact on leaders’ future skills or on student learning outcomes.


4.2.4. Challenges in the Induction of Educators

Wide variability in access to and participation in induction programmes
Figure 4.1. New teachers’ access to and participation in formal induction programmes, 2013

Percentage of lower secondary education teachers who have less than three years of experience at their school and less than three years of experience as a teacher who are working in schools where the principal reports the following access to formal induction programmes and the percentage of teachers with the same characteristics who report having participated in formal induction programmes.

1. Data on access to induction programmes are derived from the principal questionnaire, while data on participation are derived from the teacher questionnaire. Teachers were asked about their participation in an induction programme in their first regular employment as a teacher.

2. Data presented in this graph are for formal induction programmes only, meaning they do not consider participation in or access to informal induction activities not part of an induction programme or a general and/or administrative introduction to the school.

Notes: Countries are ranked in ascending order, based on access to in induction programmes. Countries are not presented in this graph if the percentage of teachers with less than three years of experience at their school and less than three years of experience as a teacher is below 5%.

Source: OECD, TALIS 2013 Database, Table 4.28.Web.

347. [To be developed]

Weak articulation of links between pre-service training and induction programmes

348. [To be developed]

4.2.5. Strategies to Improve the Induction of Educators

349. [To be developed]

4.3. Policy Pathways to Schools as Learning Organisations

4.3.1. The Schools as Learning Organisations Framework

350. As the OECD has argued previously, understanding educator development as a series of disconnected activities such as individual courses, training sessions, group processes, ongoing licensure requirements and so on, will fail to systematically support improvement processes. Educator improvement must be contextualised in clear system-wide and school goals, and then schools must redefine themselves as learning
organizations for all adults as well as children (Kools and Stoll, 2016[36]). The community of Wales has undertaken a series of innovative policy and practice reforms to promote Schools as Learning Organisations (SLOs) at scale (see Box 4.X) (OECD, 2018).

351. The SLO framework articulates seven tenets to guide the development of organisational learning processes: (1) empowerment towards a shared vision; (2) continuous learning opportunities; (3) team learning and collaboration; (4) culture of enquiry and dialogue; (5) systems for capturing and sharing learning; (6) connection to the larger learning system; and (7) growing leadership capacity to promote learning (Kools and Stoll, 2016[36]).

352. The first tenet of the Schools as Learning Organisation framework relates to educator voice: Empowerment towards a shared vision. Chapter 2 addresses issues related to teacher professionalism, collective bargaining and voice, so is not addressed separately in this chapter. Instead, this chapter focusses on contextualising ongoing learning opportunities for educators, including formal professional development, in the remaining guiding principles of the SLO framework. There is no doubt that each of the tenets of the SLO framework should infuse the process of teacher and leader evaluation. Due to the centrality of evaluation in the policy dialogue, the chapter devotes a separate section to evaluation alone; however, it is evident that it represents an opportunity for continuous learning, can be promoted within the context of teams, requires important leadership skills, and insights gained from it should be systematically captured.

4.3.2. Continuous Learning Opportunities

Challenges with Developing Continuous Learning Opportunities

353. Despite widespread stated interest in shifting from single course offerings towards systems of job-embedded professional development, comparatively few resources are invested in professional development for teachers in the OECD, and many continue to report unmet demand for professional development (OECD, 2014, p. 109[21]).

354. Figure 4.2 reveals key areas in which educators express additional needs for professional development, namely teaching SEN students, integrating new technologies and supporting the socio-emotional learning needs of children.
Figure 4.2. Teachers’ needs for professional development, 2013

Percentage of lower secondary education teachers indicating they have a high level of need for professional development in the following areas

Note: Special needs students are not well defined internationally but usually cover those for whom a special learning need has been formally identified because they are mentally, physically or emotionally disadvantaged. Often, special needs students will be those for whom additional public or private resources (personnel, material or financial) have been provided to support their education. “Gifted students” are not considered to have special needs under the definition used here and in other OECD work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to ensure a more objective judgment of who is a special needs student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database, Table 4.12.

355. However, relatively minimal requirements exist with respect to teachers professional development experiences. As Table 4.3. describes, in only 5 of 18 School Resources Reviews do requirements exist for teachers to pursue professional development for regular career advancement opportunities. In an additional 5 countries, incentives are in place for teachers to pursue professional learning opportunities.
### Table 4.3. Teacher professional development requirements

<table>
<thead>
<tr>
<th>Country</th>
<th>Requirement Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>No, but may be required based on appraisal</td>
</tr>
<tr>
<td>Belgium (Fl.)</td>
<td>No, but can positively affect salary</td>
</tr>
<tr>
<td>Belgium (Fr.)</td>
<td>Yes, for 6 half days per school year Hours beyond that are on a voluntary basis</td>
</tr>
<tr>
<td>Chile</td>
<td>No, but there are pay incentives</td>
</tr>
<tr>
<td>Colombia</td>
<td>Yes (entitled to 12 days of leave for self-study purposes per year)</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Yes (entitled to 160 hours every five years)</td>
</tr>
<tr>
<td>Denmark</td>
<td>No</td>
</tr>
<tr>
<td>Estonia</td>
<td>Yes (80 hours each year)</td>
</tr>
<tr>
<td>Iceland</td>
<td>Yes (80 hours each year)</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>N/A</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Yes (may use at least 5 days per year for PD)</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Yes (may use at least 5 days per year for PD)</td>
</tr>
<tr>
<td>Portugal</td>
<td>Yes, required to progress to through career steps</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>No (but is free of charge, up to 5 working days may be used for PD if done for certification process, leads to pay raise)</td>
</tr>
<tr>
<td>Slovenia</td>
<td>Yes (5 days of in-service training a year; 15 days over three years)</td>
</tr>
<tr>
<td>Spain</td>
<td>No, but can positively affect salary</td>
</tr>
<tr>
<td>Sweden</td>
<td>No</td>
</tr>
<tr>
<td>Uruguay</td>
<td>No (but may be taken during “co-ordination hours”)</td>
</tr>
</tbody>
</table>

*Note: Add the note here. If you do not need a note, please delete this line.
Source: OECD School Resources Review Country Background Reports and Country Reviews.*

### Strategies to Promote Continuous Learning Opportunities

356. In the large majority of OECD countries, substantial time in teachers’ schedules exists outside of mandatory teaching hours. As Figure 4.3 shows, in only 5 of 24 OECD countries do teachers spend more than 50% of their total statutory working time teaching. While teachers schedules are clearly taxed with many responsibilities outside of time spent teaching in front of students, ample room exists to restructure grading, administrative and other requirements to provide additional release time opportunities to pursue professional learning.

357. Assigning individualised, structured instructional coaching to teachers, either with designated positions (Blazar and Kraft, 2015[37]) or matching effective teachers with less effective ones (Papay et al., 2016[39]). Evidence shows these approaches improve teaching practices and student learning outcomes, though the larger the scale of programmes, the weaker their positive impacts (Kraft, Blazar and Hogan, 2017[40]).
Figure 4.3. Percentage of lower secondary teachers’ working time spent teaching, 2017

Net teaching time (typical annual number of hours) as a percentage of total statutory working time in general programmes in public institutions

1. Average planned teaching time in each school at the beginning of the school year.
2. Actual teaching time.
Notes: Lithuania was not an OECD Member at the time of preparation of this data. Accordingly, Lithuania does not appear in the list of OECD Members and is not included in the zone aggregates.

4.3.3. Team Learning and Collaboration

Challenges with Team Learning and Collaboration

358. Large proportions of teachers report never receiving feedback from either assigned mentors (81% of TALIS 2013 teachers) or other teachers (58% of TALIS teachers). This is echoed in School Resource Reviews (e.g., Czech Republic, Belgium (FL), Uruguay). In fact, as Table 4.4 demonstrates, minimal systemically supported opportunities exist for teacher collaboration on teams or to provide each other regular feedback.

359. Supporting collaborative working environments in teachers’ schedules with evidence-based structures to make these teams effective is crucial. Done well (Charner-Laird et al., 2017[41]), this can increase teachers’ job satisfaction and increase students’ growth (Moore Johnson, Kraft and Papay, 2012[42]) (Kraft and Papay, 2014[43]).
<table>
<thead>
<tr>
<th>Country</th>
<th>Teacher team work</th>
<th>Peer Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Team teaching in the subjects German, Mathematics and English</td>
<td>No system exists to promote peer feedback</td>
</tr>
<tr>
<td>Belgium (Fl.)</td>
<td>No system exists to promote</td>
<td>No system exists to promote peer feedback</td>
</tr>
<tr>
<td>Belgium (Fr.)</td>
<td>“Plan d’action collective” (Collective Action Plan) required from school</td>
<td>No system exists to promote peer feedback</td>
</tr>
<tr>
<td>Chile</td>
<td>Technical meetings with peers by department, cycle, or level</td>
<td>No system exists to promote peer feedback</td>
</tr>
<tr>
<td>Colombia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Some schools have subject commission meetings (4-10</td>
<td>Peer review system (in some schools)</td>
</tr>
<tr>
<td>Denmark</td>
<td>Sometimes between teachers and coaches</td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>No system exists to promote</td>
<td>No system exists to promote peer feedback</td>
</tr>
<tr>
<td>Iceland</td>
<td>No requirement, but team of teachers have joint responsibility for common students in 30% of classes in the compulsory schools</td>
<td>No system exists to promote peer feedback</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>No system exists to promote</td>
<td>No system exists to promote peer feedback</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Programme for Creation of the Model of Learning School Network promoting teacher collaboration across schools</td>
<td>No system exists to promote peer feedback</td>
</tr>
<tr>
<td>Luxembourg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>Collaboration time created in weekly schedule (ranges from 0.5-2.5 hours)</td>
<td>No system exists to promote peer feedback</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>Supported by school leader’s advisory bodies (pedagogical board and methodology bodies)</td>
<td>During meetings of the advisory bodies</td>
</tr>
<tr>
<td>Slovenia</td>
<td>No system exists to promote within schools</td>
<td>No system exists to promote peer feedback</td>
</tr>
<tr>
<td>Spain</td>
<td>Framework for Professional Teacher Development exploring new modalities of training to facilitate professional collaboration</td>
<td>No system exists to promote peer feedback</td>
</tr>
<tr>
<td>Sweden</td>
<td>National Agency for Education: teachers can collaborate by solving problems and critically scrutinise each other’s work so that methods, assessment and grading is improved through the creation of system</td>
<td>Learning Studies and Lesson Studies</td>
</tr>
<tr>
<td>Uruguay</td>
<td>“Co-ordination” meetings, which are organised in Aprender. Focus on administrative issues</td>
<td>No system exists to promote peer feedback</td>
</tr>
</tbody>
</table>

**Note:** Add the note here. If you do not need a note, please delete this line.

**Source:** Source: OECD School Resources Review Country Background Reports and Country Reviews.

### Strategies to Promote Team Learning and Collaboration

360. Box 4.6 describes successful collaboration practices in Ontario, Canada. Creating resources, protocols and providing technical support have been critical tools in the spread of such practices.
**Box 4.6. Types of teacher collaboration in schools in Ontario, Canada**

The Canadian province of Ontario has invested significant energy in supporting teachers to successfully and effectively collaborate. The Ontario Ministry of Education produces a series of *Capacity Building* briefs that share actionable strategies for teachers and leaders to improve their practice. The ministry supports a process of “collaborative inquiry” in which teachers working in teams at their school research problems of practice. They generate evidence of what is and is not working at their school, make decisions about interventions, take action and then evaluate the effectiveness of their intervention before starting the cycle over again (Ontario Ministry of Education, 2014[44]) – a modified version of Deming’s Plan-Do-Study-Act cycle (Deming, 2000[45]).

Among other actions that teachers are encouraged to participate in through collaborative inquiry include:

1. Co-teaching classes: involves a small group of teachers co-planning a lesson, co-teaching that lesson with assigned roles and reflecting on the student learning outcomes of the learning experience, including naming evidence of the impact on student learning.

2. Teaching Learning Critical Pathway: inquiry involving the gathering of data, analysing it to determine area of greatest student need, identifying relevant curriculum, reviewing current practice, determining assessments to be used to monitor student learning, planning a teaching block of time (approximately six weeks), sharing evidence of student learning with other teachers, developing and administering a culminating task, engaging in teacher moderation of student work from the task and reflecting on what has been learned and what are the next steps are in teacher learning.

3. Looking at Student Work (LASW): educators collaboratively discuss student work based on common assessment criteria.

4. Deconstructing curriculum: educators examine curriculum expectations in order to understand what is written as it might be translated into what students learn.

5. Examining student learning progression: deconstruct a curriculum concept from when a child enters schools through many grades or levels to understand what a student is expected to learn at each level of the system.

6. Monitoring marker students: teachers pick a small number of students in a class, grade or school, share their assessment results with others in the school and document the use of teaching strategies against the learning outcomes for these students.

**Sources:**
4.3.4. Systems for Benefiting from Internal and External Knowledge Development

Challenges to Embedding Internal and External Knowledge Development

361. [To be developed]

Strategies to Promote Internal and External Knowledge Development

362. Importance of codifying knowledge about teaching and learning processes so that schools retain and build on knowledge base, even when staff transitions occur.

363. Networks for collaborating across schools and sharing knowledge are critical. Of particularly salient interest are networks for collaboration and capacity development across schools for leaders in the Flemish Community of Belgium (see Box 4.7).

Box 4.7. Networks for school leaders in the Flemish Community of Belgium

In 1999, the authorities of the Flemish Community of Belgium launched a policy to encourage school leader collaboration through the establishment of “school associations” (scholengemeenschappen) in secondary education. In 2003, school associations were also introduced in the primary sector. School associations are collaborative partnerships between schools in the same geographical area. On average, school associations comprise between 6 and 12 schools. In 2010, the vast majority of schools (96.7%) belonged to a school community. The key goal of this initiative is to strengthen schools’ organisational and leadership capacities through increased co-operation. In secondary education, the policy also aims to improve the co-operation of schools in the supply of study options, career guidance and efficient use of resources. Joining a school association is voluntary, but the Flemish Ministry of Education and Training provides incentives for schools to join an association by attributing resources to the association, and granting more organisational flexibility in the case of secondary schools. School associations receive a package of points for the management and support staff in their schools, which are then redistributed among the individual schools in the community based on a repartition system agreed between the schools forming the community. In elementary education, some of these points may be used to appoint a co-ordinating principal of the school community, and in secondary education, the school community can retain up to 10% of the points to ensure its own functioning.

In some respects, Portugal’s school clusters reproduce many of the same possibilities for leadership capacity development as the Flemish Community’s school associations. Several key differences exist, however. First, formal opportunities and resources exist for leadership development in the Flemish Community, but these are absent in Portugal. Second, Flemish schools participating in school associations preserve their building-level principal in addition to benefiting from the co-ordinating principal. This additional resource performs the full duties of instructional improvement, strategy development, etc. This is an important distinction with the current responsibilities of the school coordinator within Portuguese school clusters.

4.3.5. **Leading for Inquiry, Dialogue and Learning**

**Challenges to developing leadership for learning**

364. [To be developed]

**Strategies to develop leadership for learning**

365. Table 4.5 presents the various opportunities school leaders in the School Resources Review countries may avail themselves of.

<table>
<thead>
<tr>
<th>Country</th>
<th>School leadership professional development opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Leadership Academy founded in 2004 PD offered by university colleges of teacher education (PH) Meetings with provincial school board, school inspector to exchange on management and pedagogical issues</td>
</tr>
<tr>
<td>Belgium (Fl.)</td>
<td>“Training Fund for School Principals” is 1500 euro during a career</td>
</tr>
<tr>
<td>Belgium (Fr.)</td>
<td>Ongoing training offered in administrative, financial and educational aspects</td>
</tr>
<tr>
<td>Chile</td>
<td>School Leadership Centres</td>
</tr>
<tr>
<td></td>
<td>Network of School Improvement</td>
</tr>
<tr>
<td>Colombia</td>
<td>Professional activities to improve management</td>
</tr>
<tr>
<td>Czech Republic</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>Trainings vary across municipalities</td>
</tr>
<tr>
<td>Estonia</td>
<td>Programme for novice heads of schools</td>
</tr>
<tr>
<td>Iceland</td>
<td>Paid study leave offered after 10 years working as leader in schools</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>Offered at various Institutions of Higher Education (IHEs)</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Professional development programme for school principals and deputy principals</td>
</tr>
<tr>
<td></td>
<td>Personal mentorship of experienced heads of schools</td>
</tr>
<tr>
<td></td>
<td>Entitled to at least 5 working days of professional development per year</td>
</tr>
<tr>
<td></td>
<td>Participation is voluntary</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Educational management courses offered at various IHEs</td>
</tr>
<tr>
<td>Portugal</td>
<td>Courses in team leadership, stress management and strategic HR management, audit (i.e. personal audit, organizational audit, process audit, etc.) and project management</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>National School of Leadership in Education – lifelong learning programmes; individual companies and teachers’ trade unions also provide training</td>
</tr>
<tr>
<td>Spain</td>
<td>Training course on the development of the management role</td>
</tr>
<tr>
<td></td>
<td>Ongoing system of certification of skills, through completion and passing the refresher courses for managerial responsibilities</td>
</tr>
<tr>
<td>Sweden</td>
<td>Programme for Professional Development for School Leaders focuses on pedagogical leadership within steering and guidance.</td>
</tr>
<tr>
<td>Uruguay</td>
<td>Mentioned in inspectorate guidelines, but not widely utilised</td>
</tr>
</tbody>
</table>

Source: School Resources Reviews Country Background Reports and Country Reviews.
4.4. Evaluation and Appraisal

- Note: This section is yet to be further developed

366. In 2013, 93% of teachers across TALIS countries worked in a school where the principal reported some form of formal teacher appraisal occurred (OECD, 2014[21]). Similarly, “95% of TALIS teachers work in schools where formal teacher appraisal includes direct observations of their classroom teaching and 95% work in schools where formal teacher appraisal includes an analysis of student test scores (Table 5.2)” (OECD, 2014, p. 124[21]).

4.4.1. Multiple Purposes for Evaluation of Educators

367. One central question related to evaluation and appraisal of educators is how to align appraisal with development to address current mismatch between growth-orientation goals of evaluation systems and punitive actions required for high-will, low-skill educators.

368. In Lithuania and Estonia, despite well-developed educator appraisal systems, few links exist between the results of the evaluation system and professional development opportunities for teachers (Shewbridge, Godfrey, Hermann, & Nusche, 2016); (Santiago, Levitas, Radó, & Shewbridge, 2016). In Uruguay, despite defined lesson observation protocols, frameworks for teaching excellence and expectations regarding instructional coaching from observers, evaluation continues to be seen as only a high-stakes accountability tool, rather than an opportunity for developmental growth (Santiago et al., 2016[22]).

369. Despite the shortcomings in many appraisal systems, there is clear interest on the part of teachers in receiving high quality feedback. In fact, 61% of TALIS teachers report improvements in public recognition, 63% in job satisfaction, 65% in job motivation, and 71% in confidence in teaching abilities after receiving feedback (OECD, 2014, p. 136[21]).

370. As Table 4.6 indicates, Schools Resources Review countries have a wide range of functions and purposes for which the appraisal process serves. In some cases it may influence teachers’ eligibility to progress through career steps, in others it may impact their ability to earn additional pay. The target populations of evaluation range from only teachers at the beginning of their career to all teachers. While there are some exceptions, in most cases, appraisal is relatively low stakes in the field of education. That said, its function as a formative tool to build capacity is underdeveloped in many systems. As Table 4.6 also indicates, in many systems, appraisal occurs rarely or not at all. In several school systems, it is entirely voluntary.

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2 The percent of teachers who never received an evaluation from their principal declined from 23.6% in 2008 to 18.5% in 2013 in the 16 countries that participated in both administrations of TALIS, though care should be taken because the 2008 data come from teacher reports and those in 2013 from principals.
## Table 4.6. Appraisal Policies – Teachers

### School Resources Review Countries, 2015-2018

<table>
<thead>
<tr>
<th>Country</th>
<th>Appraisal responsibility</th>
<th>Appraisal purpose and implications</th>
<th>Appraisal methodology</th>
<th>Appraisal frequency</th>
<th>Appraisal requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Inspectors (external)</td>
<td>External:</td>
<td>Observations</td>
<td>Once a year</td>
<td>For temporary teachers</td>
</tr>
<tr>
<td>Austria</td>
<td>School leader (internal)</td>
<td>Internal:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium (Fl.)</td>
<td>School leader</td>
<td>Self-evaluation</td>
<td>Varies by school</td>
<td>Once every 4 years</td>
<td>Yes</td>
</tr>
<tr>
<td>Belgium (Fr.)</td>
<td>School leader</td>
<td>Required for permanent position</td>
<td>n/a</td>
<td>Once every 5 years</td>
<td>Yes</td>
</tr>
<tr>
<td>Chile</td>
<td>School leader</td>
<td>Required for permanent position, promotion, merit pay and career advancement</td>
<td>Student assessment results</td>
<td>Once a year</td>
<td>Yes</td>
</tr>
<tr>
<td>Colombia</td>
<td>School leader</td>
<td>Limited implications</td>
<td>Varies by school</td>
<td>No periodic rhythm</td>
<td>No</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>School leader</td>
<td>Limited, varies by school</td>
<td>Guideline by municipality, practice varies by school</td>
<td>Voluntary</td>
<td>No</td>
</tr>
<tr>
<td>Denmark</td>
<td>School leader</td>
<td>Certification process</td>
<td>Varies by school</td>
<td>Regular (?)</td>
<td>Yes</td>
</tr>
<tr>
<td>Estonia</td>
<td>School leader</td>
<td>Progression through career steps</td>
<td>Employee interview</td>
<td>Annual</td>
<td>No</td>
</tr>
<tr>
<td>Iceland</td>
<td>School leader</td>
<td>Formative function</td>
<td>Student assessment results</td>
<td>Once every 5 years for certification</td>
<td>Yes</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>School leaders</td>
<td>Formative function</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>School leader, peers from another school</td>
<td>Certification process</td>
<td>Varies by school</td>
<td>Depends on school</td>
<td>No</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>School leaders</td>
<td>Certification process</td>
<td>Varies by school</td>
<td>Every 4 years for career progression</td>
<td>Yes</td>
</tr>
<tr>
<td>Portugal</td>
<td>School leaders</td>
<td>Progression through career steps</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>Certification committee (external)</td>
<td>Formative function</td>
<td>Defence of a thesis (external)</td>
<td>Once a year</td>
<td>Yes</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>School leader (internal)</td>
<td>Profession through career steps May influence salary</td>
<td>Classroom observations (internal)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>School leader</td>
<td>Promotion</td>
<td>Classroom observation</td>
<td>Every three years</td>
<td>No</td>
</tr>
<tr>
<td>Spain</td>
<td>School leader</td>
<td>Required for permanent position</td>
<td>Classroom observation</td>
<td>Voluntary</td>
<td>No</td>
</tr>
<tr>
<td>Sweden</td>
<td>School leader</td>
<td>n/a</td>
<td>n/a</td>
<td>Voluntary</td>
<td>No</td>
</tr>
<tr>
<td>Uruguay</td>
<td>Inspectors (external)</td>
<td>School leaders (internal)</td>
<td>Results in rank ordering of teachers</td>
<td>Varies by school</td>
<td>Once a year</td>
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</tbody>
</table>

*Source: School Resources Reviews Country Background Reports and Country Reviews.*
While appraisal systems for teachers are relatively infrequent and generally low stakes, the appraisal process for school leaders, while varied, is more consistently frequent and high stakes. As Table 4.7 highlights, school leaders are often evaluated as part of a school inspection and supervision process. In some cases, renewal in the position of school leader is contingent on a successful appraisal (e.g., the Czech Republic, Spain, Uruguay among others).

Table 4.7. Appraisal Policies - School Leaders

<table>
<thead>
<tr>
<th>School Resources Review Countries, 2015-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
</tr>
<tr>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Austria</td>
</tr>
<tr>
<td>Belgium (Fl.)</td>
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<tr>
<td>Belgium (Fr.)</td>
</tr>
<tr>
<td>Chile</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Colombia</td>
</tr>
<tr>
<td>Czech Republic</td>
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<tr>
<td>Denmark</td>
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<tr>
<td>Estonia</td>
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<tr>
<td>Iceland</td>
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<tr>
<td>Kazakhstan</td>
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<tr>
<td>Lithuania</td>
</tr>
<tr>
<td>Luxembourg</td>
</tr>
<tr>
<td>Portugal</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
</tr>
<tr>
<td>Slovenia</td>
</tr>
<tr>
<td>Spain</td>
</tr>
<tr>
<td>Sweden</td>
</tr>
<tr>
<td>Uruguay</td>
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<td></td>
</tr>
</tbody>
</table>

*Note: Add the note here. If you do not need a note, please delete this line.
Source: School Resources Reviews Country Background Reports and Country Reviews.*
4.4.2. Challenges with the Implementation of Educator Evaluation Systems

Time and Resource Constraints

372. How can resources be redistributed to shift responsibilities of evaluation and school management to permit those responsible for evaluation to be able to do so effectively? Many School Resources Reviews found principals’ time was taken up by administrative and managerial tasks (e.g., Czech Republic, Austria). In many places the school leader role is seen as unattractive, (e.g., Lithuania, Estonia, Uruguay)

Capacity Constraints

373. Evaluators (largely school heads and assistants) report having limited time to engage meaningfully in evaluation and require additional training (Kraft and Gilmour, 2016[48]) (Shewbridge et al., 2016[49]) (Nusche et al., 2016[50])

374. How to provide more intensive professional development to evaluators to ensure high level of skill in observing, documenting, coaching and evaluating teacher practice?

Measurement Constraints

375. There are numerous methodological challenges to the use of test scores in teacher evaluation (Rothstein, 2017[51]) (Rothstein, 2010[52]) (American Statistical Association, 2014[53]) (Papay, 2011[54]) (Koedel and Betts, 2011[55]) (Ballou and Springer, 2015[56]) (Guarino, Reckase and Wooldridge, 2015[57]), most notably that different models and tests produce different ratings for teachers, the student composition of classrooms affects the results, and there is potential for gaming the scores by teaching to the test [though note responses: (Chetty, Friedman and Rockoff, 2017[58]) (Chetty, Friedman and Rockoff, 2014[59])]

376. Furthermore, recent evidence indicates that teachers’ impacts on test-score outcomes do not correlate well with teachers’ impact on other desirable outcomes such as student attendance (Gershenson, 2016[60]) and non-cognitive skills such as resilience, growth mindset, self-efficacy and behaviour in class (Blazar and Kraft, 2017[61]) (Kraft, 2017[62]); these other non-cognitive skills are, in turn, more predictive of secondary school completion and long-run outcomes (Jackson, Forthcoming[63])

377. How to incorporate valid and reliable sources of student and family feedback in evaluation, in light of strong association with student learning gains (Kane and Staiger, 2012[64]) though caution must be used to avoid unintended consequences (Isoré, 2009[65])?

378. Minimal efforts are made to evaluate the validity and reliability of teacher ratings (Herlihy et al., 2014[66])

Political and Policy Constraints

379. How to address persistent challenges in dismissing low-to-mediocre performers (44% of TALIS 2013 teachers worked in schools in which poor appraisals never led to “dismissal or non-renewal of contract)?

Cultural and Normative Constraints

380. Even in contexts where recent reforms to evaluation have been undertaken, there frequently exist a continued lack of differentiation in the actual ratings assigned. What
additional training and requirements are required to improve the reliability and validity of educator assessment and evaluation?

381. Large-scale teacher evaluation reforms continue to return nearly universally positive appraisals for teachers (Kraft and Gilmour, 2017[^20^]), particularly in high-stakes environments (Grissom and Loeb, 2017[^67^])

### 4.4.3. Strategies to Maximise the Value of Evaluation as a Tool for Capacity Development

382. [To be developed]

### 4.4.4. Strategies to Maximise the Value of Evaluation as a Tool for Accountability

383. [To be developed]

### 4.4.5. Strategies to Develop Reliable and Valid Measures and Metrics for Evaluation

384. [To be developed]

### 4.5. Policy Options

Note: The policy options are yet to be fully developed/

#### 4.5.1. Initial Teacher Preparation and Induction

*Design pre-service requirements to ensure pre-service candidates have extensive opportunities for situated learning in primary and/or secondary school settings*

*Invest in teacher and leader residency programmes*

*Mandate or strongly incentivise induction programmes for new or new-to-school teachers and leaders*

*Create formalised roles for early career mentors with rigorous selection processes and support curriculums geared to adult learners*
4.5.2. Schools as Learning Organisations

Create supports for schools to develop coherent learning goals and design embedded learning opportunities for teachers and leaders directed towards these goals.

Support schools to contextualise learning goals to specific community they serve.

Identify opportunities to create and support school-based learning teams.

Invest in high-quality, individualised coaching for teachers and leaders.

Invest in digital progress monitoring tools to permit schools to capture teaching and learning strategies that work, and those that do not.

4.5.3. Evaluation and Appraisal

Invest in resources to train evaluators and distribute responsibilities.

Use the appraisal process to reflect meaningful differences in educator skill and effectiveness.

Use multiple measures, including observations, classroom or school processes, student outcomes and surveys, to conduct holistic appraisal.

Link results of the appraisal process to professional development with stakes focussed on developmental plans.

Partner with professional associations to develop fair, legal and timely dismissal mechanisms for weakest educators.
References


