

Chapter 5

The teaching workforce in Estonia

This chapter is about policies to improve the effectiveness of the teaching workforce. It deals with the size of the teaching workforce and its geographical distribution. Furthermore, it discusses teacher preparation, recruitment, career development and use of time. The chapter places particular emphasis on areas of priority for Estonia such as the low status of the teaching profession, teacher compensation, teacher professional development and the career structure. The chapter also reviews the management of the teaching workforce, teacher appraisal processes and the use of teaching assistants.

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

This chapter addresses policies to improve the effectiveness of the teaching workforce. Among other things, it analyses the size of the teaching workforce and its geographical distribution; how teachers are prepared and improve their skills while in the profession (e.g. initial preparation, professional development); how teachers are recruited and distributed across individual schools; how teacher resources and teaching time are allocated to students so that they optimally respond to improvement priorities (e.g. class size, teacher-student ratios, use of teachers' time); and how teachers are incentivised to perform at a high level (e.g. teacher evaluation, teacher certification, recognition and compensation).

Context and features

Profile of the teaching workforce

Size of the teaching workforce and its main characteristics

In 2013/14, 7 869 teachers worked in pre-primary education for an equivalent of 7 500 full-time positions. In 2008/09, the respective numbers were 7 486 and 7 175, reflecting a growth of 5.1% in the number of teachers and 4.5% in the number of full-time equivalent positions during this period. In general education, in 2013/14, the number of teachers was 14 226 for a full-time equivalent of 11 739 positions. In 2008/09, the respective numbers were 14 682 and 12 452, reflecting a decrease of 3.1% in the number of teachers and of 5.7% in the number of full-time equivalent positions during this period. In vocational education, in 2013/14, the number of teachers was 2 129 for a full-time equivalent of 1 427 positions. In 2008/09, the respective numbers were 2 096 and 1 824, reflecting an increase of 1.6% in the number of teachers and a decrease of 21.8% in the number of full-time equivalent positions. In general education, in 2013/14, 42.4% of teachers worked a full workload, 18.2% less than a half workload, 27.0% between a half workload and less than a full workload, and 12.4% more than one full workload (Ministry of Education and Research, 2015).

A major feature of the teaching profession in Estonia is its high degree of feminisation: the proportion of females in 2012 reached 100% in pre-primary education (against an OECD average of 97%), 92% in primary education (OECD average of 82%), 81% in lower secondary education (67% within the OECD), 78% in general upper secondary education (OECD average of 59%) and 64% in vocational upper secondary education (OECD average of 53%). In lower secondary education, Estonia had the highest proportion of female teachers among OECD countries, while in upper secondary education it had the 2nd highest such proportion (OECD, 2014a).

The teaching profession in Estonia is considerably aged when compared to the OECD average. In 2012, the proportion of teachers aged less than 30 was 9%, 8% and 8% in primary, lower secondary, and upper secondary education respectively, against OECD averages of 13%, 11% and 9%. The proportion of teachers aged 50 and over was 37%, 48%

and 50% in primary, lower secondary, and upper secondary education respectively, the 5th, 3rd and 3rd highest such proportions among OECD countries (against OECD averages of 30%, 34% and 38%) (OECD, 2014a).

Class size and student-teacher ratio

In 2012, class size was relatively low in Estonia at 17 (2nd lowest figure in OECD area) and 16 (lowest figure among OECD countries) for primary and general lower secondary education respectively (the OECD average was 21 and 24 for the same educational levels, OECD, 2014a). This masks considerable variation across sectors, as the respective averages for the private sector were 15 (2nd lowest figure) and 12 (lowest figure) (OECD, 2014a).

Student-teacher ratios in Estonia are also below the OECD average (except for upper secondary education). In 2012, the average student-teacher ratio was 7, 13, 10 and 14 in pre-primary, primary, lower secondary and upper secondary education respectively, which compare to the following OECD country averages: 14, 15, 14 and 14. According to data provided by the Ministry of Education and Research, the student-teacher ratio in pre-primary education increased from 8.9 in 2005/06 to 9.2 in 2013/14; decreased in general education from 13.2 in 2005/06 to 12.0 in 2013/14; and increased in vocational education from 15.1 in 2005/06 to 18.0 in 2013/14, which is mostly explained by the reorganisation of the vocational education schools network (see Chapter 1).

Qualifications of teachers

In international comparison, Estonian teachers have average educational attainment. According to TALIS data, in 2013, 88.5% of Estonian lower secondary teachers had a university degree (ISCED 5A) or higher, the 9th lowest figure among the 34 TALIS participating countries (against a TALIS average of 89.5%). Also, by 2013, 94.4% of Estonian lower secondary teachers had completed a teacher education programme, the 12th highest figure among the 34 TALIS participation countries (against a TALIS average of 89.8%) (OECD, 2014b).

Initial preparation

In Estonia, an individual can acquire qualifications for teaching in three distinct ways:

- Completing an initial teacher education programme at either the bachelor's or master's degree level.
- Completing a pedagogy master's level programme after obtaining a bachelor's degree in another field.
- Through the professional qualifications system, by having teacher professional competencies validated by a teacher professional body, involving specific assessments (being currently introduced, see below under "career structure").

At the pre-primary education level, a teaching qualification requires the completion of a bachelor's degree with a typical duration of three years. In 2013, all new teachers had qualifications at this level while only about 62% of the totality of teachers had qualifications at this level (OECD, 2014a). In general education, both at the basic and upper secondary levels, a teaching qualification requires the completion of a master's degree with a typical duration of five years. However, teachers of elective subjects are only required to have a higher education degree (either at bachelor's or master's level). In 2013, about 93% of the totality of teachers in general education had qualifications at master's level (OECD, 2014a). While for primary education, initial teacher education is mostly concurrent (subject

knowledge acquired at the same time as pedagogical competencies), for lower and upper secondary education, initial teacher education is generally consecutive (pedagogical competencies acquired after subject knowledge). In vocational education, at the upper secondary level, a teaching qualification requires the completion of a bachelor's degree with a typical duration of three years. In 2013, all new teachers had qualifications at this level while about 77% of the totality of teachers had qualifications at this level (OECD, 2014a). A pre-condition to teach in a vocational school is to have graduated from an upper secondary school or to have work experience of the specific field taught. In order to support students to acquire practical skills in vocational education, the school director can hire experts from the labour market with only a secondary vocational education qualification but teachers with such qualifications can only constitute up to 20% of the whole teaching body of the school (Ministry of Education and Research, 2015).

An initial teacher education degree certifies teachers as fit to enter the profession. There are no other requirements to enter the profession. Access to initial teacher education programmes follows the general rules to access higher education. Students access initial teacher education following completion of secondary education and there is generally no specific selection process except possibly for an interview and the requirement of a minimum grade point average (OECD, 2014a). In all initial teacher education programmes, teacher practicum involves a minimum of 50 days spent at a school acquiring some teaching experience. In 2013, there was a curricular reform in initial teacher education.

In order to attract young talented people to initial teacher education, the Estonian government established a teacher education scholarship to support the acquisition of teaching qualifications to promising candidates. The amount of the scholarship is EUR 160 per month.

Recruitment into teaching

The main requirement to apply for a job as a teacher is to hold a teaching degree for the relevant level of education and field of study. Teachers are hired into schools through an open recruitment procedure organised at the school level and led by the school director. Schools have autonomy in teacher appointment, deployment and dismissal. However, schools need to follow regulations regarding teacher required standard qualifications and procedures for job placement. Teachers apply directly to schools and the hiring procedure typically involves interviews at the school with a panel organised at the school level.

Career structure

In Estonia, teachers do not have civil servant status and are employees of the state, the municipality or the private entity managing the private school. In Estonia, the majority of teachers have tenure (indefinite length of position) but there are also teachers on fixed-term contracts, mainly as substitutes for teachers who are absent for a long time. According to TALIS data, in 2013, 84.5% of lower secondary teachers had tenure (against a TALIS average of 82.5%), 6.0% had a fixed-term contract for more than one school year and 9.5% had a fixed-term contract for one school year or less (OECD, 2014b).

The teaching profession in Estonia has typically been differentiated vertically through a multi-step career structure. This was originally implemented through an attestation career system which is being progressively replaced by a new competency-based career structure.

Until the end of 2013, the career structure of teachers was based on an *attestation* system. The *attestation* system was based on four career stages: i) junior teacher; ii) teacher; iii) senior teacher; and iv) methodologist teacher. While the “junior teacher” and “teacher” stages were awarded indefinitely, the “senior teacher” and “methodologist teacher” stages were awarded for five years. As an example, in order to access the rank of “senior teacher”, the teacher needed, as eligibility criteria, to accumulate 160 hours of professional development courses and contribute to education events/conferences in the previous five years. The attestation procedure then entailed a self-evaluation, an internal evaluation with an attestation committee formed at the school level and an external evaluation with an attestation committee formed by the Ministry of Education and Research. While this system no longer exists in general education, it is still available for pre-primary education teachers. The objective is to also discontinue teacher attestation in pre-primary education in a few years.

As of 2013, a new system of teacher professional qualifications has been introduced in association with a new career structure. Unique features of the career structure are that it has no formal links to salary levels and access to its higher levels is voluntary. Its main aim is to serve as a reference for teachers’ competency development. There are four career grades, which reflect different levels of professional competencies and experience:

- **Teacher (level 6):** applies only to pre-primary teachers upon entrance in 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. This career stage is awarded indefinitely.
- **Teacher (level 7.1):** is awarded upon entrance in 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. This career stage is awarded indefinitely.
- **Senior teacher (level 7.2):** is awarded to a teacher who, in addition to conducting teaching activities, supports the development of the school and of other teachers and is involved in methodological work at the school level. This career stage is awarded for five years, period after which the teacher needs to submit a new application.
- **Master teacher (level 8):** is awarded to a teacher who, in addition to conducting teaching activities, participates in development and creative activities in and outside his or her school and closely co-operates with a higher education institution. This career stage is awarded for five years, period after which the teacher needs to submit a new application.

The career structure is associated with a set of teacher professional standards, which define the competencies associated with each career stage. The development of the teacher professional standards is the responsibility of the Estonian Qualifications Authority while the certification processes to reach the different career stages are the responsibility of a teacher professional organisation (the Estonian Association of Teachers). Teachers can apply for certification at any of the levels twice a year (April and November). The certification procedure involves two stages: i) an evaluation of a set of documents submitted by the candidate; and ii) an interview. The certification procedure is undertaken by a three-member committee (see below).

A separate career structure, based on a distinct set of professional standards, exists for teachers in vocational education who teach vocational subjects. There are three career grades, which reflect different levels of professional competencies and experience:

- **Vocational teacher (level 5):** at this level, teaching involves mainly practical work methods to develop students' practical skills and work habits.
- **Vocational teacher (level 6):** at this level, the teacher conveys theoretical knowledge and teaches practical working skills. In co-operation with companies and professional associations, the teacher develops professional training at school.
- **Vocational teacher (level 7):** at this level, in addition to the tasks expected at the previous career stage, the teacher contributes to the development of the vocation/profession he or she teaches outside the school. At this level, the teacher supervises and mentors other colleagues and contributes to improve the reputation of vocational education.

Upon entrance into teaching, a 12-month induction programme is mandatory. The induction programme provides for a mentor to supervise the work of the beginning teacher. The mentor, who is a teacher at the receiving school, is appointed by the school director and has at least three years of experience in pedagogical work and passed a specific training in supervision. The mentor is also required to provide feedback to the initial teacher education institution from which the beginning teacher received his or her qualification. During the induction year, the beginning teacher prepares an individual development chart which contains a self-evaluation of his or her experience.

In Estonia, there is also room for teachers to diversify their roles in schools. A teacher can become the head of a subject section, co-ordinate a subject in the school, or be invited by the school director to management roles such as deputy-director. Other possible roles include mentor of a beginning teacher, curriculum development, class teacher (taking co-ordination and communication responsibilities for one specific class), co-ordination of professional development at the school, preparation of study materials, etc.

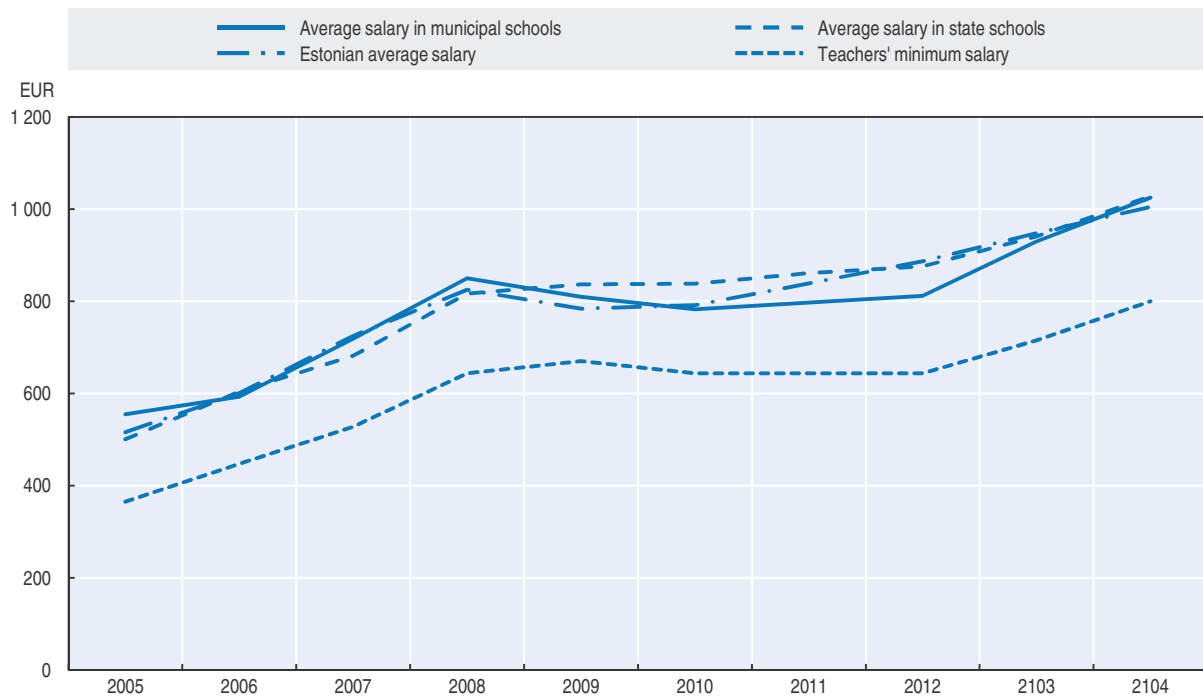
Compensation

There are no teacher salary scales defined at the national level. Only the minimum teacher salary is established by the national government following collective negotiations between the government and teacher unions. The minimum teacher salary also applies to private schools. Actual compensation of individual teachers is defined at the school level by the school director. In some municipalities, there are also collective agreements with teacher unions which school directors then need to respect. This approach to teacher compensation gives considerable room for variation of teacher salaries across subsystems (state, municipal, private) and across municipalities. Table 5.1 illustrates differences of average teacher salaries across municipal and state schools. It also shows efforts by the

Table 5.1. **Monthly teacher salaries, in EUR, 2005-14**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Average teacher salary in municipal schools	555	593	719	850	810	783	797	812	930	1 025
Average teacher salary in state schools	501	604	682	817	837	838	861	876	941	1 028
Estonian average salary	516	601	725	825	784	792	839	887	948	1 005
Teachers' minimum salary	365	447	528	644	670	644	644	644	715	800

Source: Ministry of Education and Research (2015), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools: Country Background Report for Estonia*, www.oecd.org/education/schoolresourcesreview.htm.

Figure 5.1. **Monthly teacher salaries, 2005-14**

Source: Ministry of Education and Research (2015), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools: Country Background Report for Estonia*, www.oecd.org/education/schoolresourcesreview.htm.

government to increase teachers' minimum salary and the fact that average teacher salaries are now around the level of the Estonian average salary (see Figure 5.1). The increase in teachers' salaries in the last few years in Estonia has been the most significant among the OECD countries for which data are available (see Figure 5.1).

In addition, teachers may also receive special allowances for a number of reasons, upon the decision of the school director. Compensation defined at the school level typically takes into account the years of teaching experience, extra qualifications, professional development activities, management responsibilities in addition to teaching, extra working hours, special tasks such as career guidance, teaching students with special educational needs and outstanding performance (OECD, 2014a).

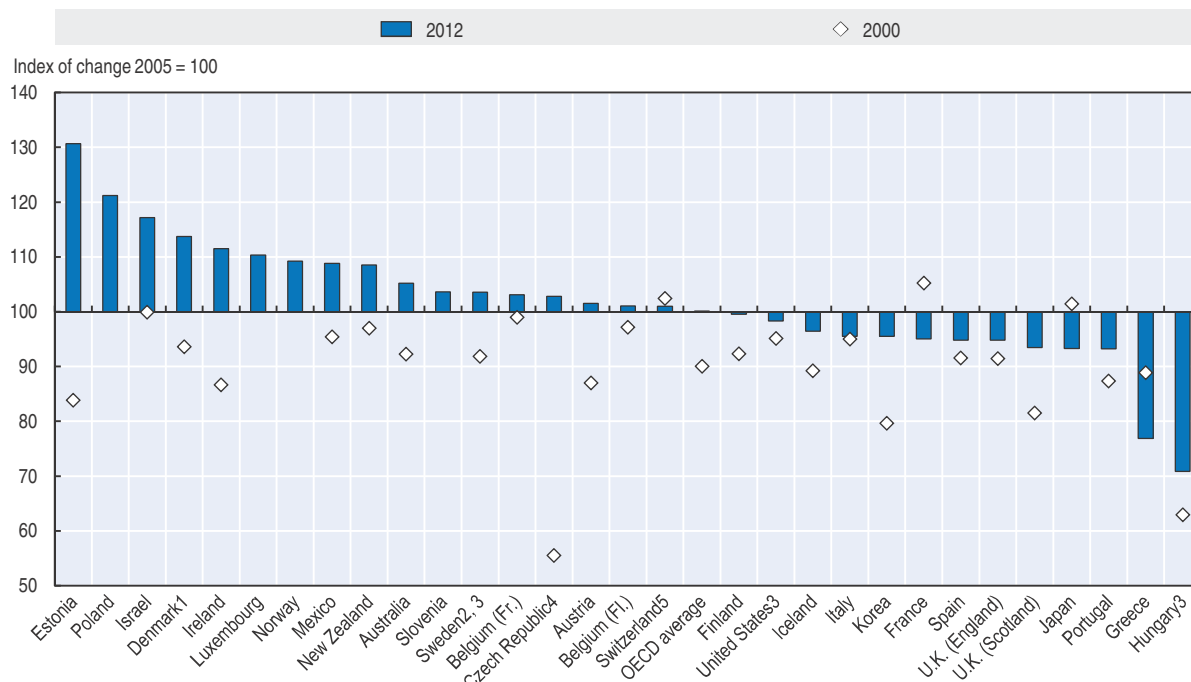
Furthermore, there are some incentives from the national government to work outside large cities. The Beginners Allowance is targeted at qualified teachers who are appointed to a school for the first time within 18 months of completing initial teacher education on the condition that the school is located outside Tallinn or Tartu. In 2014, the one-off allowance was of EUR 12 783, paid in three instalments, and required the teacher to stay at the school for five years.

Workload and use of teachers' time

In Estonia, as of the 2013/14 school year, teacher employment is conceived on the basis of a workload system, i.e. regulations, as stated in the Working Time of Educational Staff Act, stipulate the total number of working hours and define the range of tasks teachers are expected to perform beyond teaching itself. Previously, teachers were employed under a teaching load system, whereby only teaching contact hours were defined. The total annual

Figure 5.2. **Change in lower secondary teachers' salaries, 2000, 2005 and 2012**

Index of change between 2000 and 2012 (2005 = 100, constant prices),
for teachers with 15 years of experience and minimum training



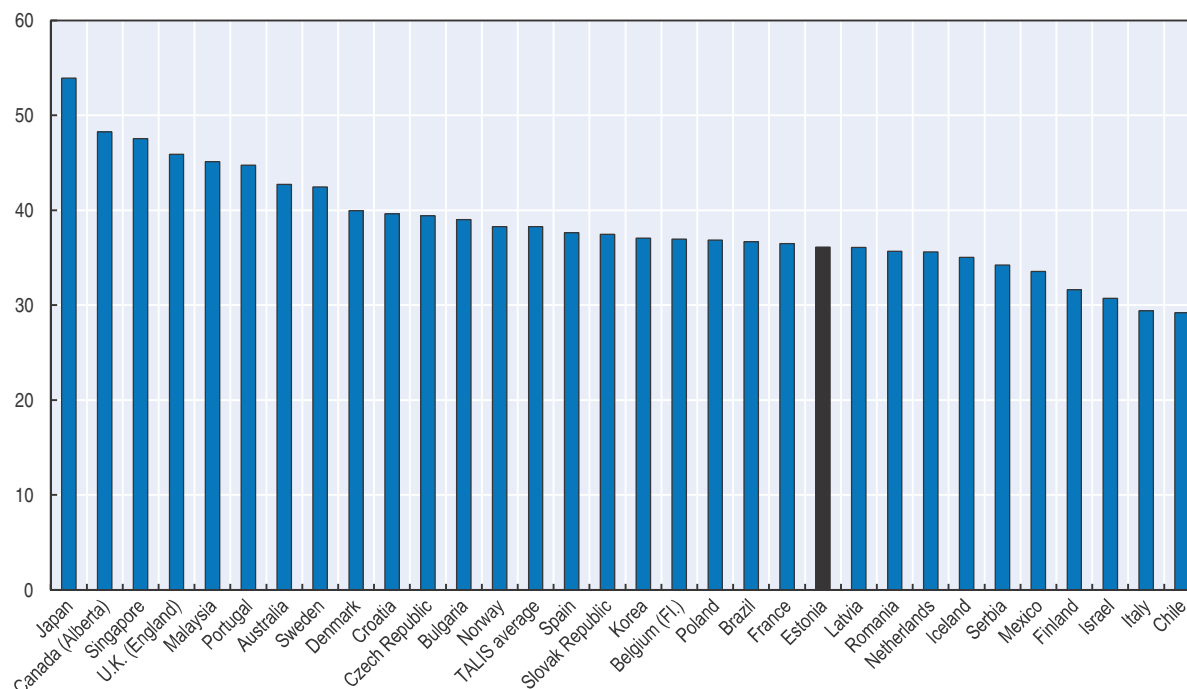
Notes: Countries are ranked in descending order of the index of change between 2005 and 2012 in the salaries of lower secondary teachers with 15 years of experience.

1. Break in time series following methodological changes in 2009.
2. Year of reference 2011 instead of 2012.
3. Actual base salaries.
4. Break in time series following methodological changes in 2012.
5. Salaries after 11 years of experience.

Source: OECD (2014a), *Education at a Glance 2014: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2014-en>.

number of statutory working hours is 1 540 for all education levels (except for pre-primary education), slightly below the OECD averages of 1 649 (primary education), 1 649 (lower secondary education) and 1 643 (general upper secondary education) (OECD, 2014a). In pre-primary education the number of statutory working hours is 1 610, below the OECD average of 1 654 (OECD, 2014a). In Estonia, the number of statutory working hours also corresponds to the number of working hours that need to be performed at the school. Figure 5.3 reflects self-reports of lower secondary teachers regarding actual hours worked during a week, positioning Estonian teachers below the TALIS average. Up until recently, teaching time was also regulated, with the maximum being set at 1 320 annual hours in pre-primary education (well above the OECD average of 1 001 hours), 619 hours in primary education (below the OECD average of 782 hours), 619 hours in lower secondary education (below the OECD average of 694 hours) and 568 hours in general upper secondary education (below the OECD average of 655 hours) (OECD, 2014a). However, as of the start of the 2013/14 school year, there are no regulations concerning teaching hours, only the maximum workload for a full-time teacher is defined.

Figure 5.3. **Number of hours teachers report having worked during the most recent complete calendar week, lower secondary education, 2013**



Notes: A “complete” calendar week is one that was not shortened by breaks, public holidays, sick leave, etc. Also includes hours worked during weekends, evenings or other off-classroom hours. The sum of hours spent on different tasks (shown in Figure 5.4) may not be equal to the number of total working hours because teachers were asked about these elements separately. It is also important to note that data presented represent the averages from all the teachers surveyed, including part-time teachers.

Source: OECD (2014b), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, <http://dx.doi.org/10.1787/9789264196261-en>.

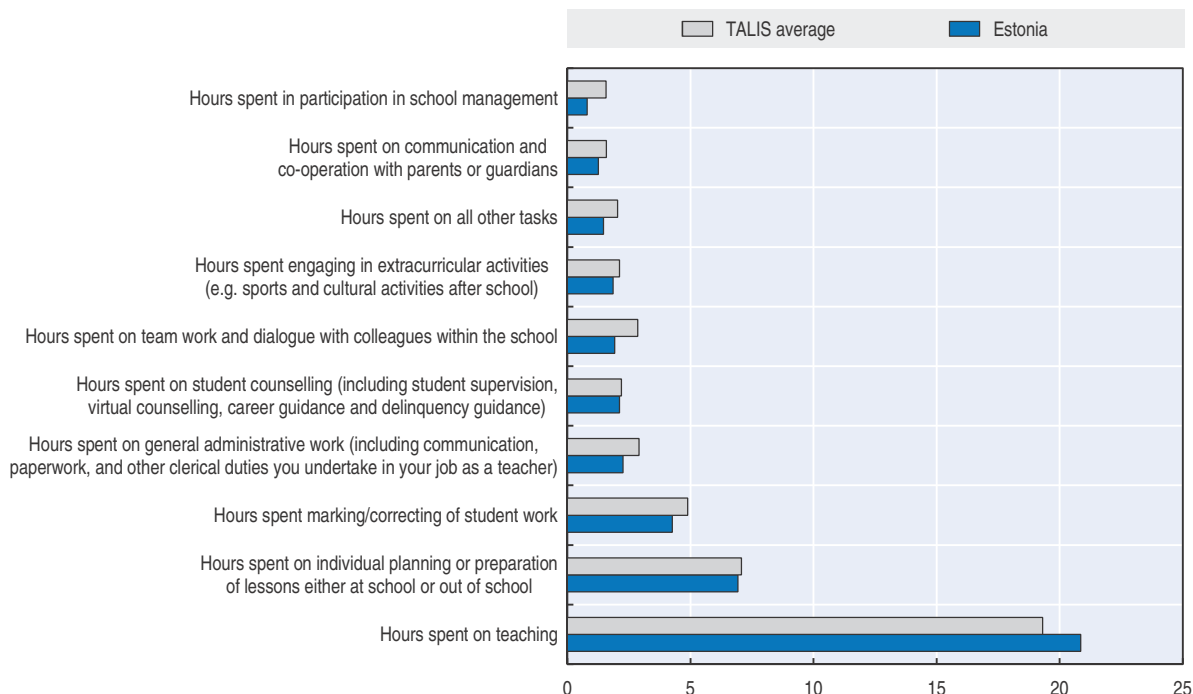
As of 2013, regulations stipulate that, for all educational levels, in addition to teaching, the following tasks were expected to be undertaken at the school by teachers while not specifying the associated required time (OECD, 2014a):

- individual planning or preparing lessons
- teamwork and dialogue with colleagues
- marking student work (except in pre-primary education)
- supervising students during breaks (except in pre-primary education)
- providing counselling and guidance to students (except in pre-primary education)
- participating in school management
- general administrative communication and paperwork
- communicating and co-operating with parents or guardians
- engaging in extracurricular activities after school
- engaging in professional development activities.

The distribution of tasks for single teachers across the stipulated workload depends on school-level arrangements and decisions by the school management. All that is regulated is total working hours (35 hours a week). In addition to the tasks listed above, teachers can also develop subjects’ syllabi, prepare students for competitions such as Olympiads and give substitution classes.

Figure 5.4 shows the average number of hours lower secondary teachers report having spent on a variety of tasks for both Estonia and the average among TALIS countries. It highlights the fact that Estonian teachers spent relatively more time than teachers in other countries on the core aspects of a teacher's work such as teaching itself and preparing lessons while they spend relatively less time in other tasks such as participation in school management, communication with parents or extracurricular activities (OECD, 2014b).

Figure 5.4. Number of hours teachers report having spent on the following activities during the most recent complete calendar week, lower secondary education, 2013



Notes: 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. The sum of hours spent on different tasks may not be equal to the number of total working hours (shown in Figure 5.3) because teachers were asked about these elements separately. It is also important to note that data presented represent the averages from all the teachers surveyed, including part-time teachers.

Source: OECD (2014b), TALIS 2013 Results: An International Perspective on Teaching and Learning, <http://dx.doi.org/10.1787/9789264196261-en>.

Teacher appraisal

Teacher appraisal for in-service teachers in Estonia occurs in two specific contexts: as regular appraisal for performance management in schools and, on a voluntary basis, as part of certification processes to reach the higher levels of the professional career structure.

Regular appraisal for performance management

School directors typically appraise their pedagogical staff on a regular basis. The school director is responsible for regular internal appraisal, but may delegate this authority to lower positions in the school, such as the deputy school director. Other individuals, including the chairs of subject sections and methodology associations, may also participate in the process, depending on the size and organisational structure of the school. Schools have a high degree of autonomy regarding the way they implement regular teacher appraisal for performance management. School directors are expected to determine the aims, criteria and methods of appraisal, while accounting for the school's

specific context, educational programme and priorities. The appraisal generally involves classroom observation. School directors may write an evaluation report regarding the performance of each teacher and store it within the teacher's file.

The primary aim of the internal teacher appraisal process is formative, i.e. the appraisal should provide feedback on the teacher's performance and inform teachers' competency development. At the same time, appraisal results may also influence teachers' salary levels as these are defined at the school level by the school director. However, school directors appear to have little room for manoeuvre in awarding such bonus payments due to resource constraints at the school level. Sanctions are only applied in rare cases. If teachers underperform on the internal appraisal, school directors are more likely to provide recommendations for improvement measures and give time to the teacher to develop and show improvement. In cases of serious underperformance or violation of legal regulations, it is possible for the school leader to dismiss teachers.

External appraisal for certification

The voluntary teacher certification process, organised by the Estonian Association of Teachers, involves an evaluation based on two instruments: i) a portfolio prepared by the teacher which includes a self-evaluation, examples of own work, lesson plans and might also include appraisals by the school director; and ii) a 30-minute interview with the 3-member appraisal committee, who also analyses the portfolio. Classroom observation is not required but either the candidate or the appraisal committee can request it. Appraisal committees are formed from a pool of about 30 experienced teachers organised by the Estonian Association of Teachers. The certification process may also involve some feedback to the candidates which they can use for their own professional development.

Teacher professional development

The mandatory requirement for teachers to undertake professional development (160 hours every five years), which was established in 2000, is currently being discontinued. The objective is to move to a system whereby teachers have the incentive to undertake professional development to gain the competencies needed to access the higher stages of the teaching career and perform new roles at schools.

While teachers ultimately choose the professional development activities they undertake, school directors guide this choice and validate those professional development activities which are partially or fully publicly funded. The school owner (state, municipality, private) may also advise taking specific professional development activities. The teacher establishes a professional development plan which, in part, takes into account the school development plan.

Co-ordination of professional development provision has been, to some extent, recentralised recently. While in the past school owners (municipalities and private providers) used to receive the equivalent to 3% of the "salary budget" (see Chapter 3) as earmarked funds for professional development of teachers and school leaders, this proportion was changed to 1% of such budget, which they prioritised in light of their school development plan. The other 2% remained available for teacher professional development but became centrally managed by institutions such as the Innove Foundation in the context of large development projects for teachers. These are often supported by EU structural funds such as the ESF co-financed programme "Raising the qualification of teachers in general education from 2008 to 2014", managed by Innove. In the context of

these projects, Innove accredits service providers which design professional development activities which fit the objectives of the programme. Another example is the EDUKO programme, another ESF co-funded project, which seeks to improve the education of sciences through the development of science teachers in both teacher education institutions and schools. Meanwhile, since 2015, earmarked funds for professional development activities of teachers and school leaders are no longer linked to the “salary budget”. Instead these are determined on the basis of a per student model (EUR 12 per student per year).

However, there is no central public agency to co-ordinate teacher professional development in the country. Professional development is provided by a range of different institutions including higher education institutions, teacher education institutions, individual schools, teachers’ professional organisations, municipalities and private companies. Information about available programmes is typically provided by municipalities and school management (OECD, 2014a). Schools and teachers select professional development in the free professional development market using their own budgets for professional development and have access to the variety of programmes free of charge proposed centrally as part of the centrally-managed budget for professional development (as described above).

Other school staff

In addition to teachers and school leaders, other types of school staff are hired. These include support specialists, administrative staff (e.g. secretaries, accountants) and maintenance staff (e.g. cooks, repairmen). The owners of schools recruit support staff on the basis of the financial capacities and needs of the schools.

As support specialists, schools typically employ special education teachers, school psychologists, speech therapists and social pedagogues. Support specialists have specific higher education qualifications in their field (e.g. a special education teacher has higher education in special education). A special education teacher guides the development of a child with educational special needs (either at a special school or at a mainstream school). A school psychologist is involved in the individual counselling of students as a result of learning difficulties or behavioural problems. A speech therapist works with children who have difficulties in communicating. A social pedagogue develops the social abilities of students with learning difficulties and at risk of social exclusion. The number of support specialists is provided in Table 5.2.

Table 5.2. Number of support specialists, 2013/14

Type of support specialist	Pre-primary schools	General education schools	Vocational schools
Special education teacher	86	153	10
School psychologist	-	169	7
Speech therapist	343	279	-
Social pedagogue	-	227	10
Total support specialists	429	828	27
Number of schools	652	540	40

Source: Ministry of Education and Research (2015), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools: Country Background Report for Estonia*, www.oecd.org/education/schoolresourcesreview.htm.

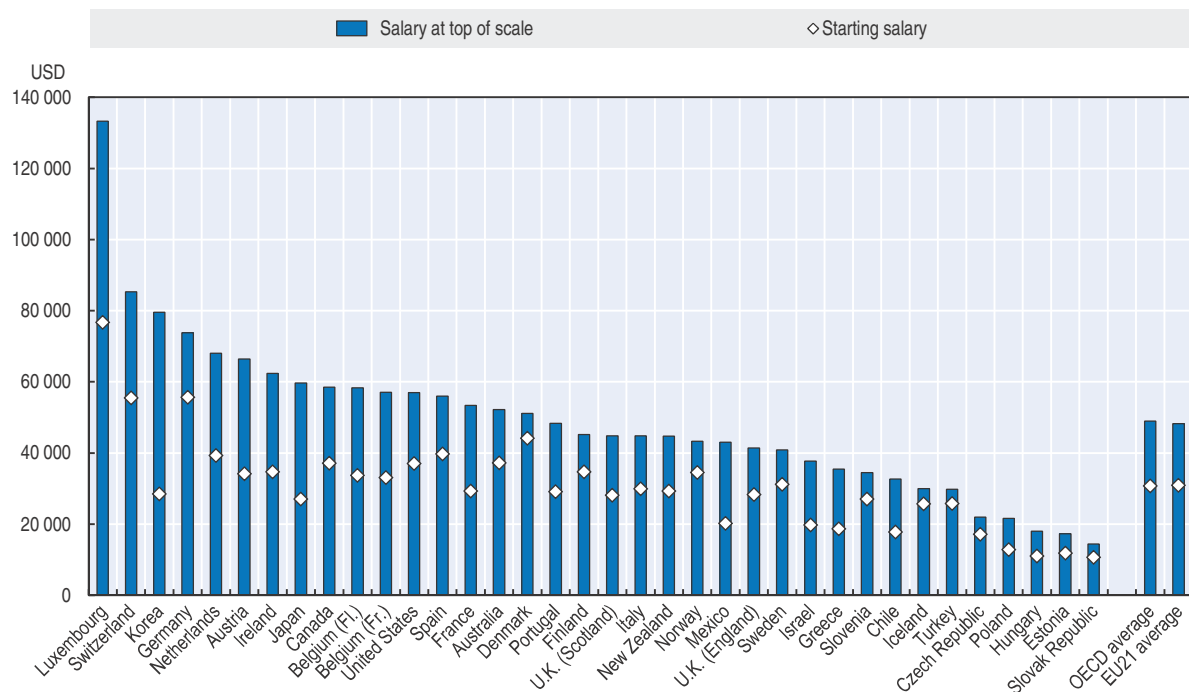
Strengths

Efforts made to increase teacher salaries send important signals about the importance of teaching

In recent years, there have been considerable efforts on the part of the Estonian government to increase teacher salaries. Salaries increased, in real terms, by 30% between 2005 and 2012 (for lower secondary teachers with 15 years of experience, see Figure 5.2), the highest such increase in OECD countries for this period. In 2013 and 2014 there were also increases of teachers' minimum salary by 11% and 11.8% respectively, in nominal terms (see Table 5.1). This reflects a commitment to bring teacher salaries to more adequate levels. There is a clear awareness that the salaries of Estonian teachers remain among the lowest within the OECD area, both at the start of the career and at the top of the scale (see Figure 5.5). Salaries of Estonian teachers are also low when compared to those of tertiary-educated workers in Estonia in the context of the OECD area (see Figure 5.6): they reach 61% and 84% in pre-primary and lower secondary education respectively, of the average salary of tertiary-educated workers against OECD averages of 80% and 88% (OECD, 2014a).

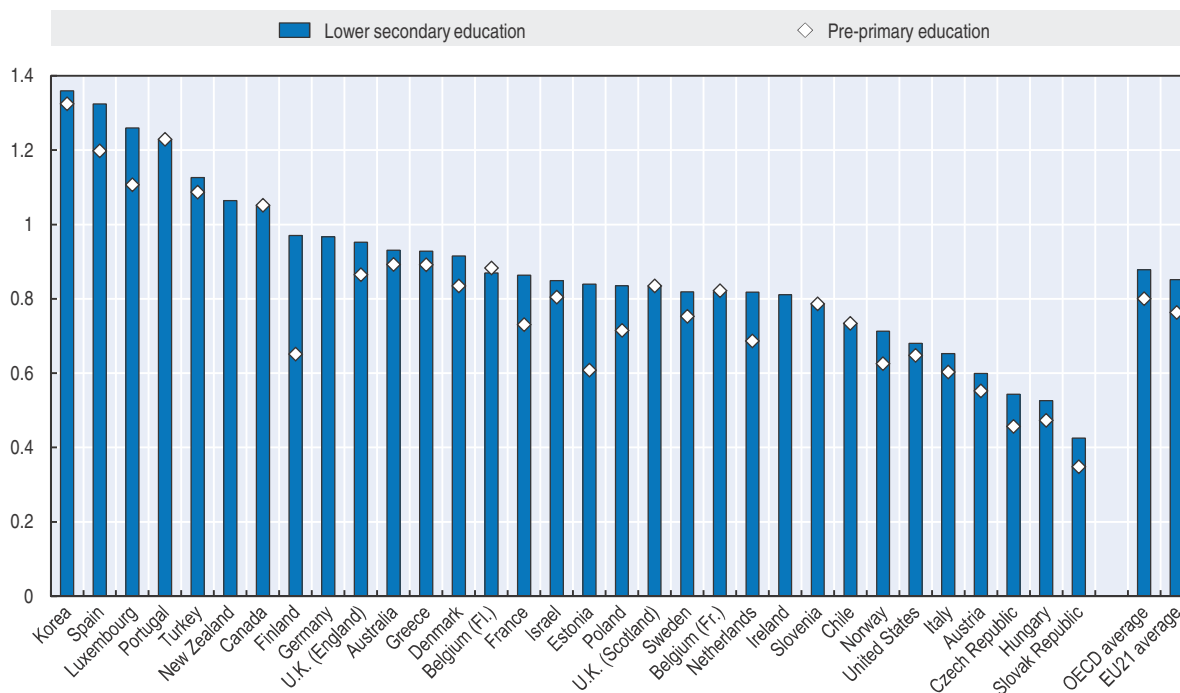
While there is no general shortage of teachers in the Estonian school system, low salaries have detrimental effects on the motivation levels of teachers (see below) and considerably limit the ability of the system to attract high-quality entrants and more males into the profession (OECD, 2005). Hence, it is important that the Estonian government is

Figure 5.5. **Teacher annual salaries at start of career and at top of the scale, lower secondary education, public institutions, 2012**



Notes: Salaries are in equivalent USD converted using PPPs (purchasing power parity) for private consumption. Data refer to statutory salaries for teachers with minimum qualifications. For Hungary, Sweden and the United States, data refer to actual salaries. For Sweden, reference year is 2011. EU21 average refers to the average for the 21 European Union member states which are also members of the OECD. Source: OECD (2014a), *Education at a Glance 2014*: OECD Indicators, <http://dx.doi.org/10.1787/eag-2014-en>.

Figure 5.6. **Teachers' salaries relative to earnings for tertiary-educated workers aged 25-64, public institutions, pre-primary and lower secondary education, 2012**



Notes: Data refer to actual salaries except for the following countries, for which statutory salaries were used: Austria, Canada, Ireland, Korea, Portugal, the Slovak Republic, Slovenia, Spain and Turkey. The "Actual" method refers to the 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. The "Statutory" method refers to the ratio of teachers' statutory salary after 15 years of experience and minimum training (regardless of age) to earnings for full-time, full-year workers with tertiary education aged 25-64. For Belgium (French Community), Belgium (Flemish Community), England and Scotland, data on earnings for full-time, full-year workers with tertiary education refer to Belgium and the United Kingdom respectively. Scotland includes all teachers, irrespective of their age. For Sweden, average actual teachers' salaries do not include bonuses and allowances. EU21 average refers to the average for the 21 European Union member states which are also members of the OECD.

Source: OECD (2014a), *Education at a Glance 2014: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2014-en>.

committed to improve teachers' salary conditions. Given the tight budget constraints, the approach has consisted of increasing teacher salaries as efficiency gains are achieved in the school system.

Teaching standards have been developed

As part of the overall development of the qualifications framework, in the context of an ESF co-financed programme, the Estonian Qualifications Authority has developed professional standards for teachers, both for general education and vocational education. The professional standards are differentiated for the different career stages in both general education (teacher-level 6; teacher-level 7.1; senior teacher-level 7.2; and master teacher-level 8) and vocational education (vocational teacher levels 5 to 7). For general education, the standards cover the following aspects: i) planning and preparation; ii) the learning environment; iii) instruction and supporting learning; iv) reflection and professional development; v) student counselling and communication with parents; vi) methodological work and mentoring at school level (for levels 7.2 and 8); and vii) methodological work and project management at the level of the profession (for level 8). The standards describe key competencies for each of these dimensions and for each stage of the teacher career. The

intention is that the standards guide teachers' professional development and career advancement through their link to the internal and certification appraisal processes of teachers.

The establishment of teaching standards that provide a clear and concise profile of what teachers are expected to know and be able to do is a very positive development. Teaching standards are essential mechanisms for clarifying expectations of what systems of teacher education and professional development should aim to achieve, offering the credible reference for making judgements about teacher competence, guiding teacher professional development, and providing the basis for career advancement. Clear, well-structured and widely supported teaching standards are a powerful mechanism for aligning the various elements involved in developing teachers' knowledge and skills (OECD, 2005).

There is considerable autonomy for the management of the teaching workforce at the local level

In Estonia, there is considerable autonomy for the management of the teaching workforce at the school level (see also Chapter 4). According to TALIS 2013 data, 100%, 99.7%, 95.4% and 83.8% of lower secondary Estonian teachers worked in schools where principals reported that they had considerable responsibility for appointing/hiring teachers, dismissing/suspending teachers from employment, establishing teachers' starting salaries and determining teachers' salary increases respectively, compared to TALIS averages of 74.7%, 68.4%, 35.9% and 37.1% respectively (OECD, 2014b). Similarly, according to PISA 2012 data, 84% of 15 year-olds attended schools whose principals reported that only principals and/or teachers had a considerable responsibility for selecting teachers for hire, against an OECD average of 49% (OECD, 2013a, Figure IV.4.2). The equivalent figure for responsibility for dismissing teachers was 90%, against an OECD average of 36% (OECD, 2013a, Figure IV.4.2). However, according to the PISA data, only 11% and 14% of 15 year-olds attended schools whose principals reported that only principals and/or teachers have a considerable responsibility for establishing teachers' starting salaries and determining teachers' salary increases respectively, against OECD averages of 11% and 12% (OECD, 2013a, Figure IV.4.2). This is explained by the fact that while school principals have an important influence in setting salaries, they need to follow regulations, in particular the minimum teacher salary established at the national level.

This autonomy of local management of the teaching workforce is a strength in a system where schools are individually judged on their ability to improve student learning. In teacher recruitment, a direct interaction with the applicants takes place, typically through interviews, and allows the use of a more complete set of criteria to match individual applicants' characteristics to schools' specific needs. The process of open recruitment also offers advantages to applicants since they can more directly choose the school and identify with the school's educational project. As a result, the process is more likely to build a sense of commitment of teachers to the schools where they are recruited. Wößmann (2003) used data from the Trends in International Mathematics and Science Study (TIMSS) to examine the relationship between different aspects of centralised and school-level decision-making and student performance. He concluded that students in schools with autonomy in deciding on the hiring of teachers performed statistically significantly better in mathematics and science, as did students in schools that could determine teacher salaries themselves.

However, it is important to note that school autonomy in teacher recruitment involves some complexity as there is the potential for an inequitable distribution of teachers (as schools with more resources and located in advantaged areas have greater potential to attract high quality teachers, see below) and opportunities for favouritism in teacher selection by schools. The latter requires transparency in recruitment processes through making information about existing teaching openings publicly available.

In addition to recruitment, school leaders have considerable room to develop the competencies of their teaching bodies through internal teacher appraisal. However, they seem not to be doing it to a great extent. According to TALIS 2013 data, only 58% of school directors of lower secondary schools reported having worked on a professional development plan for the school in the 12 months prior to the survey, the fifth lowest figure among TALIS countries against an average of 79.1% (OECD, 2014b). Also, the autonomy from which schools benefit to allocate their budgets to teacher resources (deciding on the number of teachers and the distribution of tasks across individual teachers) grants them with the ability to select the optimal number and mix of school staff for their schools.

Teachers resources seem to be equitably distributed across schools and school locations

As explained above, recruitment at the school level combined with differences in resources across schools has the risk of leading to an inequitable distribution of teachers across schools. In Estonia, there are indications from TALIS and PISA data that there is no inequitable distribution of teachers across schools and school locations. For instance, according to TALIS 2013 data, the proportion of lower secondary teachers with five years of experience or less working in schools located in areas with 15 000 people or fewer was 10.9%, only slightly above the equivalent proportions in schools located in areas with 15 001 to 100 000 people (10.0%) and in schools located in areas with more than 100 000 people (10.2%). Similarly, the proportion of teachers with a highest level of education of ISCED 5A or above was 86.3%, 91.8% and 93.1% for the same types of areas (from smaller to larger) (OECD, 2014b).

The proportion of teachers with five years teaching experience or less is also similar across: levels of school disadvantage (14.4% working in schools with more than 30% of socio-economically disadvantaged students; 10.1% working in schools with 30% or less of socio-economically disadvantaged students); proportion of students with special needs (12.7% working in schools with more than 10% of students with special needs; 9.7% working in schools with 10% or less of students with special needs); and proportion of students with different first language (10.8% working in schools with more than 10% of students whose first language is different from the language of instruction; 10.6% working in schools with 10% or less of students whose first language is different from the language of instruction) (OECD, 2014b). The proportion of teachers with a highest level of education of ISCED 5A or above across schools with these same characteristics are also similar (OECD, 2014b).

In addition, in schools attended by 15 year-olds, according to PISA data, student-teacher ratios tend to be more favourable in smaller locations and socio-economically disadvantaged areas while the intensity of professional development among teachers is similar across the size of the areas in which schools are located and across levels of school social disadvantage (Tables IV.3.9 and IV.3.13, OECD, 2013a).

Teacher employment under a workload system improves efficiency in the teacher labour market

Estonia has recently made a positive move towards conceiving teacher employment on the basis of a workload system, whereby compensation is associated with a teacher's working load. This is likely to improve efficiency in the teacher labour market. This is in contrast with countries which conceive teacher employment on the basis of a teaching load only. Employment under a workload system recognises that teachers need time for engaging in a range of other tasks, including the adequate preparation of lessons. This is likely to make the profession more attractive, by recognising the variety of tasks a teacher performs, and to reduce the number of teachers seeking a high teaching load if pay was directly associated with the number of teaching hours. At the same time, this allows teachers to engage in activities other than teaching, in light of school priorities, including through the requirement to stay at the school outside teaching hours (and within working hours) as is the case in Estonia. This also fosters teacher engagement at the school and provides greater opportunities for collaboration among teachers.

As explained in OECD (2005), teachers are now expected to have much broader roles. Some examples of areas of broadened teacher responsibility are: initiating and managing learning processes; responding effectively to the learning needs of individual learners; integrating formative and summative assessment; teaching in multicultural classrooms; introducing new cross-curricular emphases; integrating students with special needs; working and planning in teams; evaluation and systematic improvement planning; ICT use in teaching and administration; projects between schools; management and shared leadership; providing professional advice to parents; and building community partnerships for learning (OECD, 2005). These broaden responsibilities necessitate a conception of teacher employment which recognises the whole range of activities of a teacher in addition to teaching.

A new competency-based career structure has been introduced

A career structure based on the acquisition of competencies both for general education teachers (four levels) and for vocational education teachers (three levels) has been introduced. This is a positive move to get away from the previous complex and resource intensive system of teacher attestation. The new certification model has a range of advantages. First, teacher certification to reach the different career stages is a competency-based process, i.e. it directly assesses whether a teacher has acquired the competencies needed to perform at the different stages of the career, using as a reference teacher professional standards. Instead, teacher attestation processes focussed on the acquisition of qualifications with no professional standards as a reference. Second, the new teacher certification model has better links to teaching practice, in particular through the analysis of the teacher portfolio and, in some cases, through classroom observation. Previously, the teacher attestation model was too resource intensive and resembled an academic exercise not concentrated on the core work of teachers. Third, the new certification system is owned by the profession through the leadership of the Estonian Association of Teachers, which is the awarding body.

In the new model, teachers, as they access higher stages of the career structure, are expected to have deeper levels of knowledge, demonstrate more sophisticated and effective teaching, take on responsibility for curricular and assessment aspects of the school, assist colleagues and so on. Given the potential greater variety of roles in schools as

the teacher goes up the career ladder, the career structure has the potential to generate greater career diversification. Such opportunities for diversification already exist in Estonian schools as with management responsibilities, developers of professional development activities, or mentors of beginning teachers. These roles, which do not necessarily involve differentiated pay but instead release time from classroom teaching, provide more opportunities and recognition for teachers and meet school needs (OECD, 2005). Another strength of the new certification model is the requirement for re-certification at the highest certification levels. As a result, the teacher needs to periodically demonstrate being fit to perform at the higher certification stages, providing incentives to update his or her knowledge and skills continuously.

Another positive feature of the organisation of the teacher career in Estonia is that beginning teachers are supposed to benefit from a 12-month mentoring programme which provides them with support and additional training as they enter the profession. Beginning teachers should be assigned a more experienced colleague as a mentor. However, TALIS data seem to indicate that this practice is not yet widely spread across Estonian schools. In TALIS 2013, 58.6% of Estonian lower secondary teachers were in schools where the principal reported that no formal induction programme was available for new teachers, compared to the international average of 34.2%; and 88% reportedly were in schools with informal induction activities, compared to 77% internationally (OECD, 2014b). There is ample evidence suggesting that there are benefits beginning teachers gain from mentoring while mentors also derive substantial benefits from the mentoring experience (OECD, 2005).

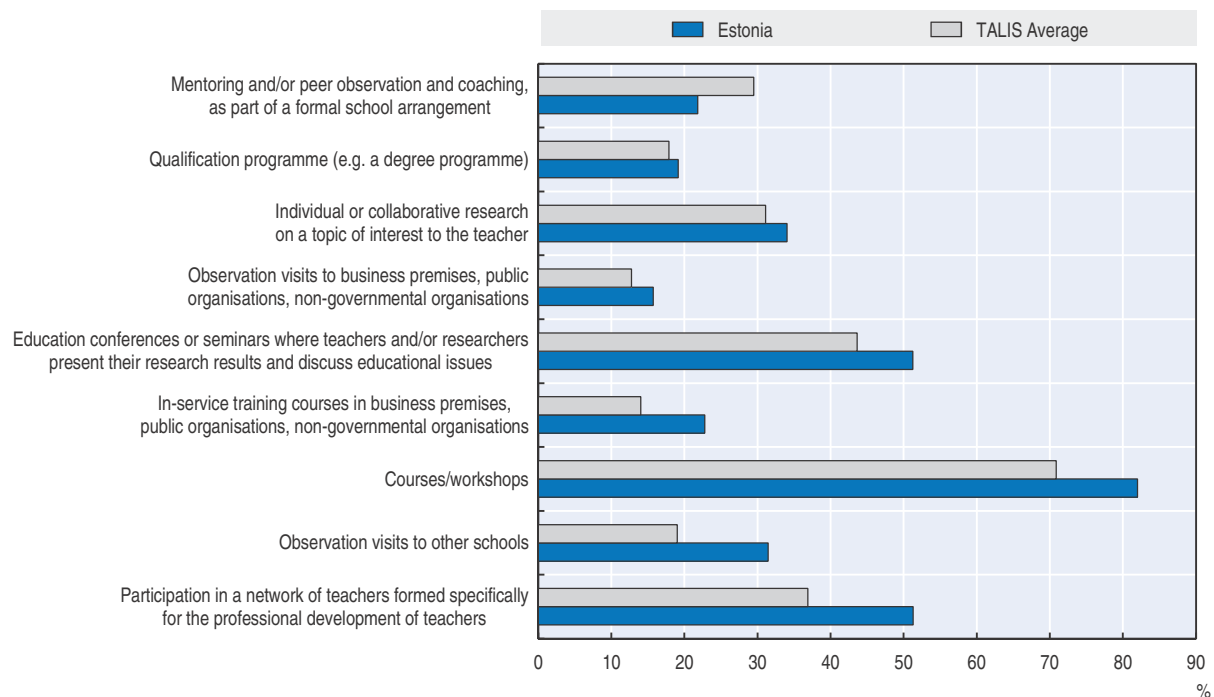
Professional development is demand-led and associated with the acquisition of teacher competencies

In international comparison, the participation rates of Estonian teachers in professional development are high. According to TALIS 2013 data, 93.0% of Estonian lower secondary teachers reported having participated in at least one professional development activity in the previous 12 months, the 10th highest figure among TALIS participating countries, against a TALIS average of 88.4% (OECD, 2014b). Compared to teachers in other systems, Estonian lower secondary teachers in 2013 reported the highest levels of participation in activities such as courses or workshops, participation in a network of teachers formed for professional development and education conferences and seminars (see Figure 5.7).

Hence, professional development is well established among Estonian teachers and benefits from a wide supply of programmes offered by a variety of providers. Schools have dedicated budgets for professional development and the market for the provision of professional development seems to be responding to schools' demands.

Another positive feature of the approach to teacher professional development in Estonia is that it is understood as a mechanism to update, develop and broaden teachers' competencies in agreement with his or her professional aspirations, needs and specific school context. With the development of the new career structure, professional development is conceived as a means to acquire the new competencies necessary for professional growth and career advancement. This approach leads teachers to engage in professional development through the adequate incentives rather than making it mandatory or linking it directly to a salary allowance.

Figure 5.7. **Type of professional development recently undertaken by lower secondary teachers, Estonia and TALIS average, 2013**



Notes: Participation rates for each type of professional development reported to be undertaken by lower secondary education teachers in the 12 months prior to the survey.

Source: OECD (2014b), TALIS 2013 Results: An International Perspective on Teaching and Learning, <http://dx.doi.org/10.1787/9789264196261-en>.

Teacher evaluation internal to the school seems to be established

Another positive aspect of the teaching career in Estonia is the internal teacher appraisal which typically takes place in schools. Results from TALIS show that, in 2013, 98.3% of lower secondary Estonian school directors reported that appraisal was used in the school where the teacher worked, against a TALIS average of 92.6%. Internal teacher appraisal helps teachers learn about, reflect on, and improve their practice in the specific school context in which they teach. It also grants them the opportunity to identify areas for improvement. In the course of its visit, the OECD review team formed the impression that the principle that teachers are appraised is moderately valued and accepted among teachers. According to TALIS 2013 data, 55.7% of Estonian lower secondary teachers reported a “moderate” or “large” positive change in their motivation following teacher appraisal, somewhat below the TALIS average of 64.7%.

A key strength of teacher appraisal in Estonia is that the process includes evaluating actual teaching practices in the classroom. Results from TALIS show that, in 2013, 98.6% of lower secondary teachers worked in schools where school directors reported that direct observation of classroom teaching was used as a method of teacher appraisal, compared to an international average of 94.9% (OECD, 2014b). While school directors vary in their approaches to teacher appraisal, it appears that they typically operate an approach whereby they observe the classroom practice of most of their teachers with a certain periodicity (or delegate such task to other levels of management). The process is strongly school-based and school-level professionals have ownership of methods and criteria.

Challenges

The status of the teaching profession is low

Many of the stakeholders interviewed by the OECD review team commented on the low status of the teaching profession. There is an overall feeling among Estonian teachers that society does not value their work. According to TALIS 2013 data, only 13.7% of lower secondary Estonian teachers reported that they agree or strongly agree that the teaching profession is valued in society, the 10th lowest figure among 34 TALIS participating countries (the TALIS average being 30.9%). Similarly, only 69.3% of lower secondary teachers in Estonia reported that they agree or strongly agree that the advantages of being a teacher clearly outweigh the disadvantages, the 9th lowest figure among TALIS countries (against a TALIS average of 77.4%). A significant proportion of them (37.0%) also wonder whether it would have been better to choose another profession, the ninth such proportion against a TALIS average of 31.6%. Nonetheless, 90.0% of Estonian lower secondary teachers also reported that they are satisfied with their job, against a TALIS average of 91.2% (OECD, 2014b). The status of pre-primary education teachers is of particular concern as their salaries are considerably lower than those at other educational levels.

Clearly, there are concerns about the image and status of teaching in Estonia, and teachers often feel that their work is undervalued. This is related to the low relative salaries of teachers (see above) which, to a great extent, determine the teaching profession's social standing. As a result, the teaching profession is not competitive in the labour market, causing difficulties in attracting young people and males to the teaching profession and in keeping motivated those already on the job (see OECD, 2005, for evidence on the impact of salaries on the supply of teachers).

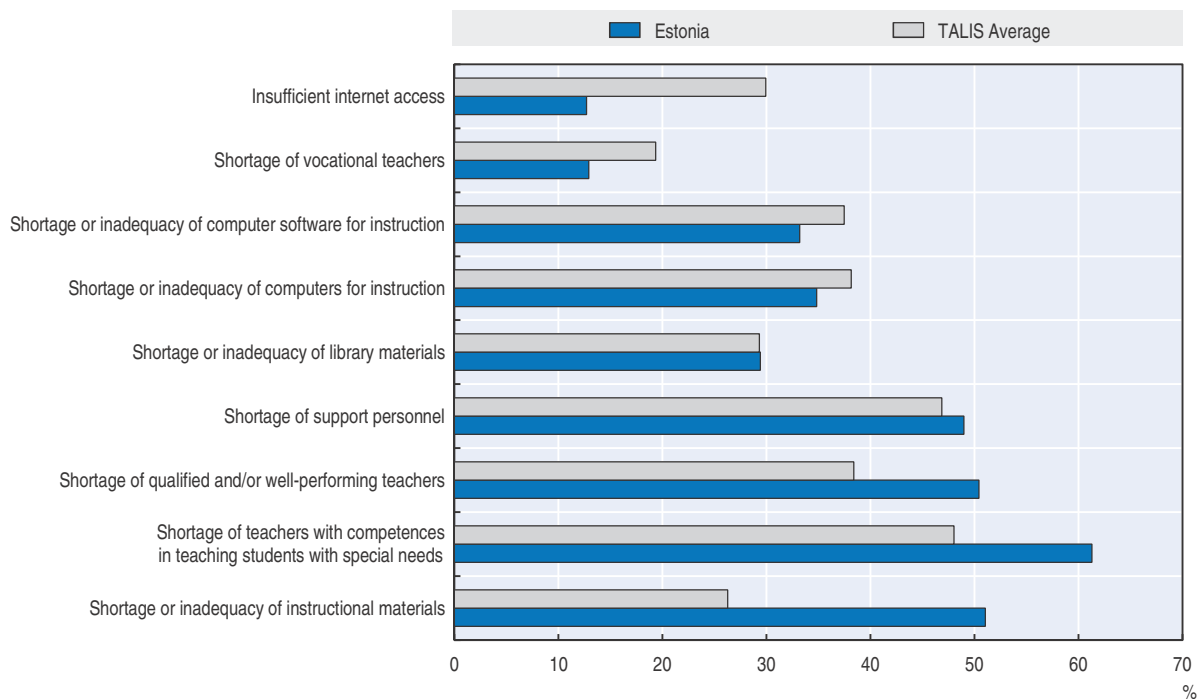
There are also concerns regarding working conditions, namely in terms of accessing adequate instructional materials and benefiting from support personnel at schools. According to TALIS 2013 data, Estonian school directors identify the inadequacy of instructional materials as the second main resource issue hindering the school's capacity to provide quality instruction, a problem perceived as much more acute than in other countries participating in TALIS (an issue affecting 51.1% of Estonian teachers, the fourth highest figure among TALIS countries, with a TALIS average of 26.3%) (see Figure 5.8). The equivalent figure for shortage of support personnel is 49.0% against a TALIS average of 46.9% (OECD, 2014b).

There are indications of an oversupply of teachers

Analysis of class size and student-teacher ratios in Estonia provide indications that, compared to the situation in other OECD countries, on the whole, Estonia has an oversupply of teachers. As described earlier, average class size and student-teacher ratios are low compared to the OECD average. PISA 2012 data, according to the perceptions of school directors, also provide little evidence of the existence of quantitative teacher shortages in Estonia (Table IV.3.11, OECD, 2013a). Quantitative shortages may only arise in very specific situations such as science teachers in rural areas and Estonian language teachers in regions where Russian as a mother tongue is prevalent.

However, there might be specific instances of qualitative shortages of teachers. According to TALIS 2013 data, 50.4% of lower secondary teachers were working in schools whose school directors reported that a shortage of qualified and/or well-performing teachers hindered the school's capacity to provide quality instruction, against a TALIS

Figure 5.8. **Percentage of teachers whose school principal reports that the following resource issues hinder the school's capacity to provide quality instruction, lower secondary education, 2013**



Notes: Includes principals reporting that the resources issues hindered quality instruction “a lot” or “to some extent”.

Source: OECD (2014b), TALIS 2013 Results: An International Perspective on Teaching and Learning, <http://dx.doi.org/10.1787/9789264196261-en>.

average of 30.4% (OECD, 2014b). As explained in Chapter 4, the perception of shortage of qualified and/or well performing teachers appears to be dominated by the notion of “performance” shortages (see Table 4.7). In addition, as concluded earlier, there is also a low rate of teacher renewal, with few new teacher education graduates entering a profession that keeps ageing.

The criteria used to establish actual teacher compensation lack transparency

In Estonia, career advancement and actual teacher salaries are typically defined at the school level by the school director even if, in some municipalities, school directors may need to follow a municipal framework for teacher compensation, especially if it is set by a collective agreement with teacher unions. Only the minimum teacher salary is defined at the national level. According to TALIS 2013 data, 33.3% and 55.6% of Estonian lower secondary school directors reported a shared responsibility for establishing teachers’ starting salaries (including setting pay scales) and determining teachers’ salary increases respectively, the 5th and 2nd highest such figures among TALIS countries, considerably above the TALIS averages of 14.2% and 17.5% respectively (OECD, 2014b). Similarly, 73.9% and 63.7% of lower secondary teachers were working in schools where the school director reported that a change in teachers’ salary (or a payment of a financial bonus) and a change in the likelihood of career advancement occurred “sometimes”, “most of the time” or “always” after formal teacher appraisal respectively, against TALIS averages of 34.3% and 55.7% respectively (OECD, 2014b). There are some potential benefits of managing the teaching workforce mostly at the school level. It can allow school directors to do proper staff planning and reward, retain and motivate teachers, in the specific context of the school.

However, there are concerns about the transparency and subjectivity of the criteria used to determine actual individual teacher salaries (or the amount the school may pay above the minimum teacher salary) and the school-level (or municipal-level) rules for career advancement and recognition of teacher professional growth. Many of the teachers the review team spoke to indicated that rules for salary growth and potential salary rewards were not transparent. Teachers often did not know how the extra compensation (i.e. above the minimum teacher salary) was determined and whether it was based on their performance, experience, extra tasks or other aspects of their work.

A major reason for the lack of transparency in defining teachers' salaries is the absence of national regulations about a teacher career structure and ways to link teacher compensation to career advancement and responsibilities at the school. As explained earlier, the recently introduced competency-based career structure is only to be accessed by teachers on a voluntary basis and offers no links to a salary structure. Schools have not embraced this competency-based career structure in the management of their own teaching bodies. At the same time, in order to appraise teacher performance, schools generally do not use a common set of reference standards (such as the teacher professional standards developed by the Estonian Qualifications Authority). Some schools might even use criteria that raise concerns such as student examination results or results at student Olympiads. For this reason, in fact, school directors may feel inhibited to establish a closer linkage between pay and performance and increase teacher compensation more as a result of the extra responsibilities and tasks teachers assume in the school.

In addition, according to some of the school directors the review team spoke to, there is little scope for school directors to award performance-related extra payments (or go much above the minimum teacher salary) because of the limited extra money available in their budgets.

Teachers lack incentives to access higher levels of the competency-based career structure

The potential of the existing competency-based career structure, for both general and vocational education teachers, is not being adequately used. During the visit, the review team formed the impression that most teachers were not well-informed about both the teacher professional standards and the teacher qualification stages to which they could access through a certification process. Those who knew about these new processes showed little interest in engaging in them as they lacked incentives to do so. At the same time, school directors seemed to take little account of the qualification stages in the context of salary setting at the school level. Generally, the schools visited were not using the competency-based career structure as a reference to distribute roles and tasks among teachers within schools. Hence, the career structure is yet to penetrate schools' teacher management practices.

In other countries, the existence of a career structure for the most part accomplishes two important functions: the recognition of experience and advanced teaching skills with a formal position and additional compensation; and the potential to better match teachers' skills to the roles and responsibilities needed in schools, as more experienced and accomplished teachers may be given special tasks within schools (e.g. mentor teacher). These convey the important message that the guiding principle for career advancement is merit and have the benefit of rewarding teachers who choose to remain in the classroom. It happens that, in Estonia, the recently introduced competency-based career structure is

not achieving these functions. It essentially is an instrument to formally recognise teacher competencies but with no direct association with compensation and the specific roles performed at the school.

Given that the current system of teacher certification is voluntary for teachers, there is no mechanism to periodically attest that teachers are fit for the profession. Another challenge is the fact that teacher certification is mostly disconnected from school-based teacher appraisal. These processes do not inform each other, except when the teacher applying for certification includes the results of school-based appraisal in his or her portfolio.

There are a number of concerns about the operation of professional development

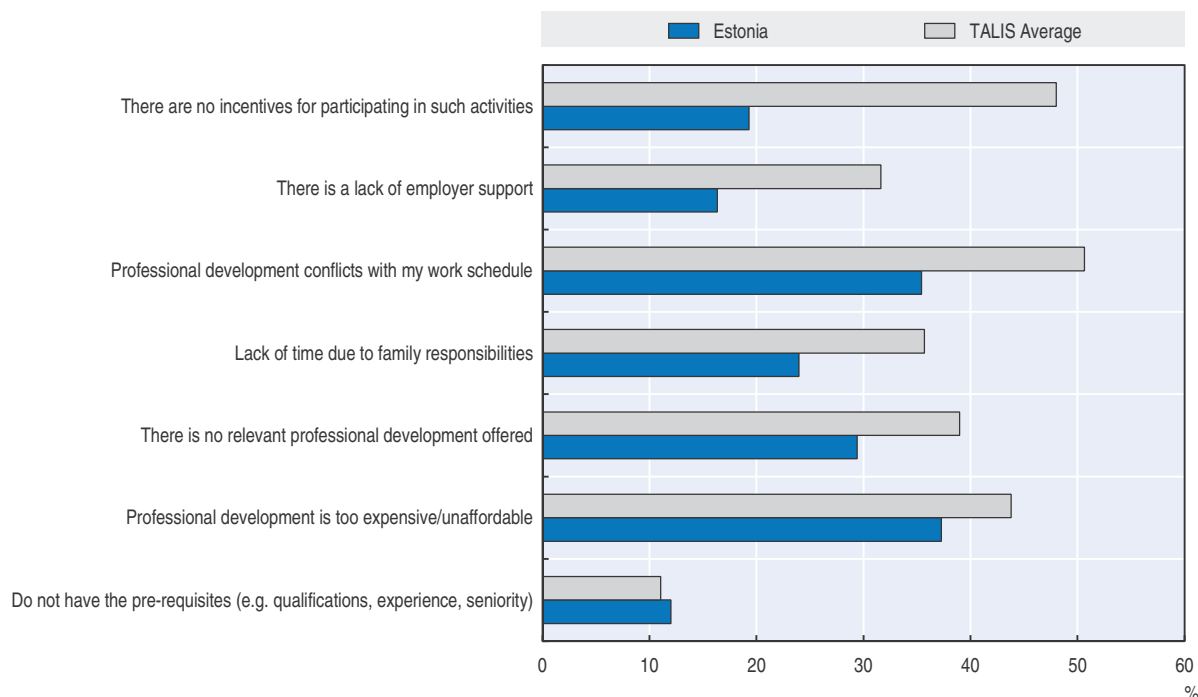
There are some concerns about the operation of teacher professional development. First, the use of results from school-based teacher appraisal to inform the teacher's professional development plan seems limited in international comparison. According to TALIS 2013 data, in Estonia only 57.4% of lower secondary teachers agree or strongly agree that teacher appraisal and feedback systems in their school are used to establish a development or training plan to improve their work as a teacher, against a TALIS average of 59.1% (OECD, 2014b). Similarly, only 46.4% of lower secondary Estonian teachers report a moderate or large positive change in the amount of professional development after they received feedback on their work at school, against a TALIS average of 45.8% (OECD, 2014b). There is clearly further room in Estonia for better linking teacher appraisal to individual professional development, which is desirable given that teacher development is one of the main goals of teacher appraisal (OECD, 2013b).

Second, even if schools organise internal processes for teacher appraisal, there seems to be limited alignment to school development plans. As explained earlier, according to TALIS 2013 data, only 58% of school directors of lower secondary schools reported having worked on a professional development plan for the school in the 12 months prior to the survey, against an average of 79.1% (OECD, 2014b). Also, only 43.4% of lower secondary Estonian teachers report a moderate or large positive change in their role in school development initiatives after they received feedback on their work at school, against a TALIS average of 50.9% (OECD, 2014b). The link between, teacher appraisal, teacher professional development and school development is essential to ensure teachers give priority to acquiring those competencies that better fit the needs of the schools (OECD, 2013b).

Third, the unaffordability of courses, conflicts with the work schedule and lack of relevance of teacher professional development activities seem to be important barriers for some Estonian teachers to engage in professional development. This is what Estonian lower secondary teachers expressed in TALIS 2013, as shown in Figure 5.9: respectively 37.3%, 35.4% and 29.4% of them agreed or strongly agreed with these three barriers, against TALIS averages of 43.8%, 50.6% and 39.0% respectively.

Fourth, even though professional development is provided in an open market with a diversity of providers, there is no process to accredit professional development programmes. Hence, the quality of the programmes is not guaranteed and little use is made of any analysis of the programmes' impact.

Figure 5.9. **Barriers to teachers' participation in professional development, lower secondary education, Estonia and TALIS average, 2013**



Notes: Percentage of lower secondary education teachers indicating that they “agree” or “strongly agree” that the reasons depicted above represent barriers to their participation in professional development.

Source: OECD (2014b), TALIS 2013 Results: An International Perspective on Teaching and Learning, <http://dx.doi.org/10.1787/9789264196261-en>.

There is no external validation of internal teacher appraisal processes

For regular teacher appraisal internal to the school, schools are free to use their own reference standards and appraisal criteria. Schools are not required to use the teacher professional standards developed by the Estonian Qualifications Authority as the reference for their internal teacher appraisal processes. In fact, little is known nationally regarding the actual aspects appraised and criteria used across schools for teacher appraisal.

As a result, internal teacher appraisal practices are likely to vary across schools in terms of the criteria applied and the way the results are used for professional development and teacher rewards. In this context there is a risk of potential bias or arbitrariness of teacher appraisal implemented by school directors, especially where the focus is not only on the teachers' performance but also on their personality. In the absence of widely used teaching standards and of an external validation of internal teacher appraisal processes, there are risks that teacher appraisal lacks consistency and coherence across schools.

There is a limited role for learning support staff

In recent years, Estonia has promoted the introduction of support specialists such as special education teachers, psychologists, speech therapists and social pedagogues in schools to assist with the learning of students with special needs and students with behavioural problems. This is part of the overall strategy to improve the integration of students with special needs in mainstream schools and to support the learning of students with behavioural problems. This is a move in the right direction in order to strengthen the ability of schools to respond to students' individual needs. However, the scale of such

support remains limited. For instance, as of 2013-14, a special education teacher was working in one of each four general education schools and a school psychologist was working in one out of each three general education schools (see Table 5.2). According to TALIS 2013 data, 28.8% of Estonian lower secondary teachers were working in schools with more than 10% of students with special needs, against a TALIS average of 25.5% (OECD, 2013b). More generally, there is no tradition in Estonian schools to employ learning support staff, i.e. school staff whose main function is to assist the work of teachers. Such learning support staff provide support for teachers and students and to the overall learning-related activities of schools.

There are challenges in preparing teachers for special needs education

There are indications that teachers in mainstream schools are not adequately prepared to instruct students with special educational needs. Estonian lower secondary school directors identify the shortage of teachers with competencies in teaching students with special needs as the main resource issue hindering the school's capacity to provide quality instruction, a problem perceived as much more acute than in other countries participating in TALIS (an issue affecting 61.3% of Estonian teachers, the eight highest figure among TALIS countries, with a TALIS average of 48.0%) (see Figure 5.8).

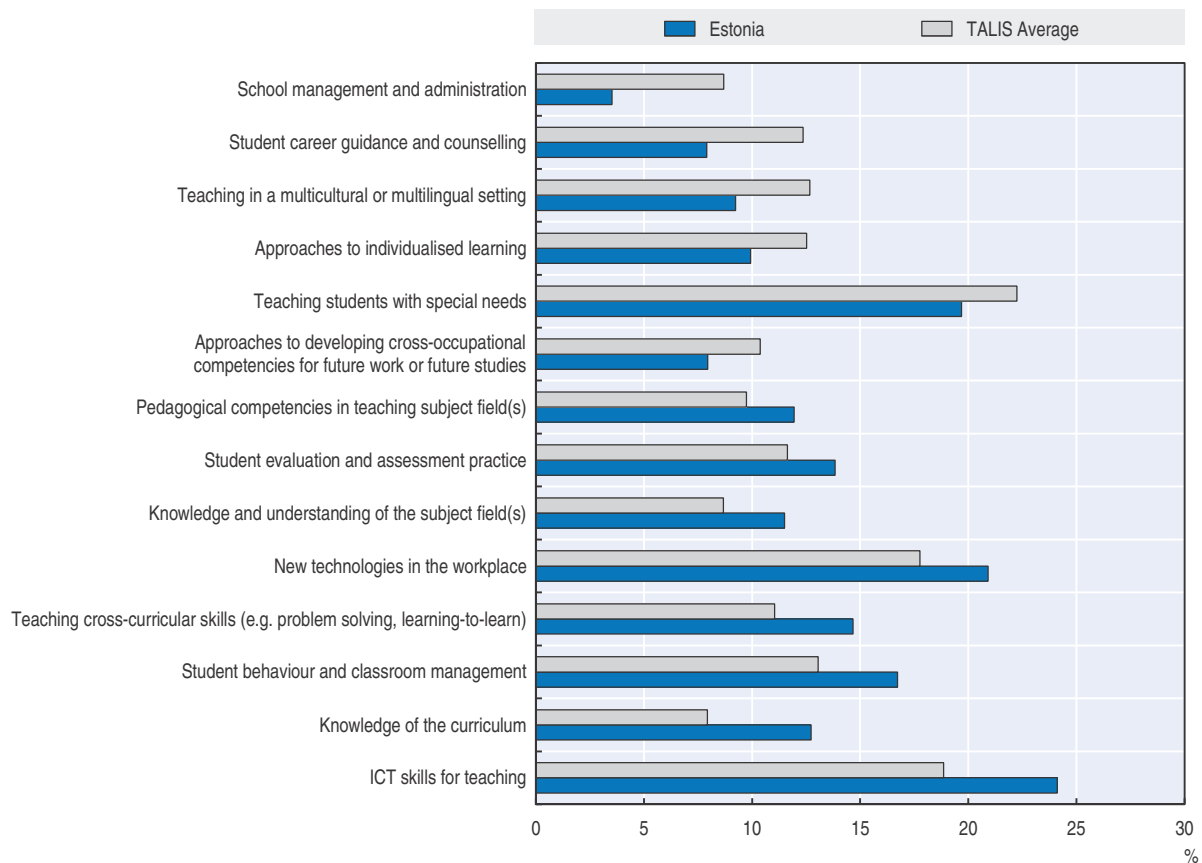
At the same time, teaching students with special needs has been identified by Estonian lower secondary teachers as one of their main needs for professional development, according to TALIS (see Figure 5.10), which might potentially indicate some shortcomings in these areas in teacher education and professional development programmes.

Policy recommendations

As school rationalisation proceeds rethink the organisation of school staff and make the teaching profession more selective

As further resources become available to the school system and as efficiency gains are realised through the school rationalisation process (see Chapter 3), a clear priority becomes the re-thinking of the organisation of school staff. First, school rationalisation is likely to require a certain degree of teacher redundancy. This entails developing strategies for reallocating, redeploying and retiring teachers currently employed in schools who will be affected by school (or class) consolidation. In part, teacher redundancy will be made easier by the high proportion of teachers who are close to retirement age. It will be important to ensure teachers who reach retirement age actually retire. Also, for teachers moving to sectors outside education, it would be important to provide them with adequate advanced notice for them to prepare their professional conversion. This could go alongside some financial support for specific training which could facilitate their transition to other sectors of activity. Also, for some teachers, there are a number of areas in which teachers made redundant by school consolidation could assume new responsibilities in schools in view of strengthening schools' ability to respond to a greater variety of needs. These include engaging them to help integrate special needs students in mainstream schools and classes; using them to implement strategies to individually support students with learning difficulties; and involving them in advisory roles within or across schools. This could go alongside offering early retirement packages for some teachers who are close to retirement age.

Figure 5.10. **Teachers' needs for professional development, lower secondary education, Estonia and TALIS average, 2013**



Note: Percentage of lower secondary education teachers indicating they have a high level of need for professional development in the areas indicated.

Source: OECD (2014b), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, <http://dx.doi.org/10.1787/9789264196261-en>.

Second, in spite of the fact that there is an overall oversupply of teachers in the Estonian school system, it is important for the school system to ensure a given rate of teacher renewal so the school system is continuously provided with new ideas and perspectives. It is important that newly educated teachers are not lost for the profession. But, clearly, Estonia has the opportunity to be more selective about those who are employed and those who enter the profession and initial teacher education. Given that not a lot of new teaching posts are likely to be available in the coming years, it is clear that entry into preparation programmes can be much more selective to ensure only high-quality graduates fill the available teaching posts. Potentially useful initiatives include: providing more information and counselling to prospective teacher trainees so that better informed enrolment decisions are made; procedures that try to assess whether the individuals wanting to become teachers have the necessary motivation, skills, knowledge and personal qualities (specific assessments); incentive schemes to recruit candidates with high-level competencies (such as the currently offered teacher education scholarship); and flexible programme structures that provide students with school experience early in the course, and opportunities to move into other courses if their motivation towards teaching changes. This could go alongside initiatives at the starting

point of the teacher's career strengthening requirements to enter the profession, in addition to better incentives for beginning teachers, to ensure high-quality graduates actually enter the teaching profession.

Third, a priority is also to improve the working conditions in Estonian schools. There is room to improve the salaries of pre-primary education teachers to bring them closer to the salaries of other teachers. At the same time, greater efforts are needed to better resource individual schools so they are able to provide better instructional materials to teachers, more relevant professional development for teachers (see below), and better conditions for individual student support. The latter may include the expansion of learning support staff in schools which should be part of an overall agenda to improve the ability of schools to provide individual support for students with special needs and learning difficulties. There are several mechanisms through which learning support staff can have a positive impact on student attainment. With an additional professional in class, students receive more individual help and attention from either the learning support staff or the teacher. Therefore, students' learning needs are more likely to be met, which is likely to lead to greater achievement. 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 (Masdeu Navarro, 2015).

Make external periodic teacher certification a requirement for teachers

A competency-based career structure has recently been introduced and is currently offered, on a voluntary basis, by the Estonian Association of Teachers, as the awarding body. The career structure distinguishes between several career stages associated with given competencies described in teacher professional standards developed by the Estonian Qualifications Authority. However, as it currently stands, the competency-based career structure is not achieving the most typical functions of a teacher certification process: quality assurance; association of greater experience and skills with a formal position and additional compensation; and association of career stages with formally recognised roles and tasks within schools. Hence, the current system is not being used to its potential and, as a result, it does not provide incentives for teachers to access it.

It would be beneficial to make external periodic teacher certification a requirement for teachers using the existing competency-based career structure. Teacher certification, to access the different stages of the career, would have as its main purposes providing public assurance with regard to teachers' standards of practice, determining advancement in the career, and informing the professional development plan of the teacher. This approach would convey the message that reaching high standards of performance is the main road to career advancement in the profession. At the same time, a teacher certification system should provide incentives for teachers to update their knowledge and skills and reward teachers for their performance and experience. The suggestion is not to replicate the previous attestation system. The attestation system was not a competency-based process (but rather a process based on the acquisition of qualifications and professional development credits), it was too resource-intensive and it did not concentrate on the core work of teachers. It is also recognised that schools and their leadership need time to understand the value of the competency-based career structure and the associated certification processes. The idea is that, in the medium-term, the certification process

(alongside the competency-based career structure) is integrated, in ways to be defined by individual schools, in school-based approaches to human resource management, as suggested below.

Access to career stages beyond “Teacher (level 7.1/level 6)” could be through a voluntary application process, and teachers not applying for such promotion should be required to maintain their basic certification status as Teacher (level 7.1/level 6). This would involve each permanent teacher periodically (e.g. every four years) being subject to a formal appraisal for certification, or re-certification. The purpose would be to confirm the teachers as fit for the profession. The results of the certification process could influence the speed of career and salary progression, as dictated by school-level (or municipal-level) salary progression rules (see below). The certification appraisal should also constitute an opportunity to identify underperformance.

Given the proposed high stakes of teacher certification, it is appropriate to use a national framework (such as the teacher professional standards) and standard procedures as well as an external component (such as the certification committees organised by the Estonian Association of Teachers) to ensure objectivity and fairness (Santiago and Benavides, 2009). Also, instruments used in teacher certification need to capture the quality of teachers’ practices in the classroom, namely classroom observation and teacher portfolios providing evidence of teachers’ work. Hence, classroom observation could become a systematic instrument used in teacher certification.

Link teacher certification to school-based teacher appraisal

School-based teacher appraisal for professional development and appraisal for certification cannot be disconnected from each other. A possible link is that appraisal for certification needs to take into account the qualitative assessments produced through school-based teacher appraisal, including the recommendations made for areas of improvement. School-based teacher appraisal should also have a function of identifying sustained underperformance. Similarly, results of teacher certification appraisals can also inform the professional development of individual teachers.

Require schools or municipalities to design career advancement systems that recognise teacher certification levels

An approach to make actual teacher compensation more transparent at the school level is to require schools and/or municipalities to design salary scales which recognise the competency-based career structure defined nationally by the Estonian Qualifications Authority. This would mean that salary scales defined at the school or municipal level should ensure that career progression as dictated by certification levels should be associated with salary progression. Within this regulation, schools and municipalities would still have enough freedom to associate pay levels with other aspects of a teacher’s work such as the roles and responsibilities performed at the school, years of experience or performance as appraised at the school level.

Another requirement for the schools and municipalities would be to formally recognise specialised roles at the school (e.g. mentor teacher; co-ordinator of professional development) and associate them with the different certification levels (Teacher, Senior Teacher, Master Teacher), i.e. the acquisition of certain certification levels should be a requirement to perform given roles at the school level. Also, in order to ensure transparency, school-level or municipality-level salary progression rules should be approved by the board of trustees and be made public.

Promote the use of teacher professional standards across the system

The review team strongly encourages the Estonian education system to promote the use of the teacher professional standards developed by the Estonian Qualifications Authority. These standards can become a powerful mechanism for aligning the various elements involved in developing teachers' knowledge and skills. They should provide a common basis for initial teacher education, mentoring of beginning teachers, regular school-based teacher appraisal, teacher certification, professional development and career advancement (OECD, 2013b). This would provide coherence for the teaching profession and a more consistent application of teacher appraisal, professional development and career advancement across teachers and schools.

The promotion of professional standards for teachers should include a strategy for disseminating them: a variety of actors at different levels and from different contexts should participate in information and discussion sessions, to generate knowledge and ownership of standards across the country. This should go alongside the preparation of tools and guidelines to use the standards for a range of purposes such as teacher appraisal. There is also a need to ensure appropriate feedback mechanisms: following implementation, standards can have periodical revisions to ensure that they remain aligned with other elements of the system, and that they are useful in the promotion of teacher professionalism. Another objective is that these standards are clear to teachers. This "making sense" of standards by teachers is essential to transform their practice. Extensive socialisation of standards for teachers can be done at several stages of teachers' careers (NBRC, 2010):

- During initial teacher education courses so that beginning teachers already have a clear understanding of what is expected from them.
- In mentoring programmes to ease the transition between initial education and school-level practice (Hobson, 2009).
- In-service teachers must receive training on the use of standards and their implications for classroom practice.

Strengthen school-based teacher appraisal as the main process for teacher development

The tradition of school-based teacher appraisal is a key strength of the Estonian approach to the management of the teaching workforce. The current system for internal appraisal is based on a non-threatening evaluation context, a focus on classroom observation, supportive school leadership and a culture of feedback. This emphasis on teacher appraisal which is predominantly for teacher development should be maintained and strengthened through the following improvements:

- *Ensuring the teacher professional standards are used:* The use of teaching standards will bring the necessary reference to guide teachers through their development and will better link school-based teacher appraisal to other aspects of teacher policy such as appraisal for certification, career advancement and professional development. It will also make school-based teacher appraisal more coherent and consistent across schools given that a common reference would be used.
- *Ensuring teacher appraisal results shape individual teachers' professional development plan:* For teacher appraisal to have an impact on learning outcomes in the school, it needs to be closely connected to professional development. This link is not yet systematic in Estonian

schools. The focus of teacher appraisal should be to contribute to a knowledge-rich teaching profession in which teachers engage actively with new knowledge and benefit from support structures to generate improvement (Santiago and Benavides, 2009).

- *Ensuring teacher professional development links to school development:* In order to meet the school's needs, the professional development opportunities of an individual teacher should also be aligned with the school's development plan. In Estonia, there is room to reinforce this link.
- *Ensuring school leaders strengthen their instructional leadership skills:* School-based teacher appraisal would benefit from the enhancement of school leaders' appraisal and evaluation competencies, as suggested in Chapter 4. This would imply improving school leader's skills for effective observation, feedback and coaching for their teachers and whole-school evaluation processes (see also Chapter 4).

The main purpose of school-based teacher appraisal should continue to be continuous improvement of teaching practices. It should be an internal process carried out by line managers, senior peers and the school director with a focus on teachers' practices in the classroom. The main outcome would be feedback on teaching performance and contribution to school development, which should lead to an individual plan for professional development. It can be low-key and low-cost and include a mix of methods appropriate to the school. Some of the elements should be individual goal-setting linked to school goals, self-appraisal, peer appraisal, classroom observation, structured conversations with the school directors and peers.

In order to guarantee the systematic and coherent application of school-based teacher appraisal across Estonian schools, it would be important to undertake the external validation of the respective school processes. An option is for inspection processes conducted at the county level to include the audit of the processes in place to organise teacher appraisal, holding the school director accountable as necessary. While the use of professional teaching standards as the main reference for teacher appraisal will support the consistency of school-based teacher appraisal across schools, there is still a need to ensure these processes are appropriately conducted in all schools. This could be part of a greater externality to evaluating school processes, as suggested in Chapter 4.

Ensure the relevance of professional development for teachers and accredit programmes

As analysed earlier, Estonian teachers express some concerns about the unaffordability of professional development courses as well as their lack of relevance. This might result from the fact that those programmes they consider more relevant are not offered free of charge. At the same time the lack of relevance might result from a lack of information of providers about professional development needs of teachers as identified at the school level. In part, this might be explained by the limited connection between school-based teacher appraisal, professional development of individual teachers and school development strategies. As suggested above, these connections need reinforcement. At the same time, suppliers of professional development programmes need to better connect to the professional development needs identified by individual schools. Possibly, the recent "recentralisation" of provision, co-ordinated by institutions such as the Innove Foundation will help ensure professional development offerings are more relevant for Estonian teachers.

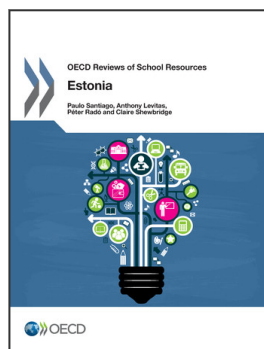
In this context, it is particularly important to introduce a process for accrediting individual professional development programmes. The accreditation would ensure the quality of programmes and give special attention to their relevance to Estonian teachers. It should engage in an assessment of the impact of individual programmes and take into account the level of satisfaction of teachers.

Strengthen the preparation of teachers to instruct students with special needs

There is a clear need to strengthen the preparation of teachers to instruct students with special educational needs. This is an important dimension to the current efforts to integrate students with special needs in mainstream schools. It calls for initial teacher education institutions to ensure that special needs becomes a regular area for the initial education of any teacher, regardless of the type of school at which he or she will teach. This would respond to a strong need in schools for these particular skills. In addition, it is also important to foster professional development programmes targeted at developing skills to integrate special needs students in mainstream schools.

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