Chapter 1

### **School education in Estonia**

School governance in Estonia is fairly decentralised and involves two levels of administration: the state and municipalities. While the government and the Ministry of Education and Research are responsible for national education policy and the overall strategy for the education system, three types of providers offer competing education services: the state (dominant in vocational education), the municipalities (dominant in pre-primary and general education) and private. The large majority of children attend public schools, although private providers receive public funding on a similar basis than public schools. The Estonian school system is high-performing. Coverage rates in pre-primary education are high, participation in schooling is almost universal, the performance of students at the secondary level is among the best in Europe and adults have literacy and numeracy skills above the OECD average. In addition, at the secondary level, students' socio-economic background has a smaller impact on performance in Estonia than in other OECD countries. However, there are concerns about the performance of students in Russian language schools.

This chapter provides the key contextual aspects – political, demographic and economic – for the subsequent analysis. It includes a detailed description of the organisation of school education in Estonia, including of its governance arrangements. In addition, it provides an account of the main trends and concerns within the Estonian education system.

#### Context

#### Geography

Located by the Baltic Sea, Estonia has a territory of 45 227 km<sup>2</sup> and a population of 1.3 million. It is bordered to the north by the Gulf of Finland, to the west by the Baltic Sea, to the south by Latvia, and to the east by Lake Peipus and Russia. Across the Baltic Sea lies Sweden in the west and Finland in the north. Estonia's capital and largest city is Tallinn.

Estonia is a developed country with an advanced, high-income economy. It ranks very high in the Human Development Index (UNDP, 2014). In the OECD context, according to OECD wellbeing indicators, Estonia performs favourably in measurements of education, environment, work-life balance and gender equality but lags behind with respect to subjective life satisfaction as well as household disposable income and health indicators (OECD, 2015).

#### Governance and administration

#### Administrative units

Estonia restored its independence in 1991 and is a sovereign democratic republic wherein the supreme power of the State is vested in the people. Estonian political system is primarily comprised of the following institutions: i) the people; ii) the Riigikogu (parliament); iii) the president; and iv) the government. The territory of Estonia is divided into counties (*Maakonnad*). Each county is further divided into municipalities (*omavalitsus*), which is the smallest administrative subdivision of Estonia. There are two types of municipalities: an urban municipality – *linn* (town), and a rural municipality – *vald* (parish). There are 15 counties (see Table 1.1) and, as of 2015, 213 local government units in Estonia: 30 towns and 183 rural municipalities (Ministry of Education and Research, 2015).

The county government (*Maavalitsus*) is led by a county governor (*Maavanem*), who represents the national government at the regional level. Governors are appointed by the government of Estonia for a term of five years.

All issues concerning local life are decided and managed by local municipalities. Each municipality is a unit of self-government with its representative and executive bodies. Municipalities are represented by a council (*volikogu*) that is elected for four years in local elections. The council has the right to make decisions within local government's areas of competence. Local government has an independent budget and the right to levy and collect taxes (see Chapter 3 for further details). Local government has the right to establish alliances and joint agencies with other local governments. Such co-operation contributes

Counties	Capital	Area (km <sup>2</sup> )	Population (2015)
Harju County	Tallinn	4 333	572 103
Hiiu County	Kärdla	989	8 589
Ida-Viru County	Jõhvi	3 364	149 483
Järva County	Paide	2 623	30 425
Jõgeva County	Jõgeva	2 604	31 145
Lääne County	Haapsalu	2 383	24 323
Lääne-Viru County	Rakvere	3 627	59 583
Pärnu County	Pärnu	4 807	82 829
Põlva County	Põlva	2 165	27 641
Rapla County	Rapla	2 980	34 676
Saare County	Kuressaare	2 673	31 756
Tartu County	Tartu	2 993	152 188
Valga County	Valga	2 044	30 176
Viljandi County	Viljandi	3 422	47 476
Võru County	Võru	2 305	33 426

Table 1.1. Counties of Estonia

Source: Statistics Estonia (2015), Statistics Estonia Homepage, www.stat.ee/en.

to the development of rural municipalities and towns and enables a more effective representation and protection of joint interests at different levels of public authority (Ministry of Education and Research, 2015). A municipality may contain one or more sub-units. For instance, Tallinn is divided into eight districts (linnaosa) with limited self-government. Municipalities range in size: from Tallinn with over 400 000 inhabitants to Ruhnu with as few as 60 inhabitants. Over two-thirds of the municipalities have a population of under 3 000. The second and third largest cities are Tartu (about 100 000 inhabitants) and Narva (about 60 000 inhabitants).

#### National goals and priorities

The government of Estonia has adopted the National Reform Programme "Estonia 2020", which establishes national goals in the context of the Europe 2020 strategy. Its main aim is to ensure the sustained socio-economic development of country up to 2020. The two central objectives are increasing productivity and employment in Estonia, which gives education and employment policies high priority. The Estonia 2020 Action Plan 2014-18 serves as an important basis for targeting national investments as well as European Union structural and investment funds. "Estonia 2020" comprises 17 objectives divided into four fields (Government of Estonia, 2014):

- **Educated population and cohesive society:** the quality and availability of education and labour force supply, lifelong learning strategy.
- **Competitive business environment:** policy that supports the improvement of the long-term competitiveness of businesses, creative industry, international competitiveness of research and development and business-supporting infrastructure.
- Environmentally friendly economy and energy: energy savings and resource savings.
- **Sustainable and adaptive state:** sustainability of public finances, ability to react to changing circumstances and imbalances, tax policy supporting the development of the economy and modernisation of the government sector.

#### Demographic characteristics

#### Population

The population density is low (30 inhabitants/km<sup>2</sup>), differing greatly between counties (132 inhabitants/km<sup>2</sup> in Harju compared to 8.4 inhabitants/km<sup>2</sup> in Hiiu). The existence of 1 521 islands adds to this complexity, only 19 of which are inhabited, Saaremaa being the most populous with 29 753 inhabitants. Approximately 25 000 km<sup>2</sup> or 55% of Estonia's 45 227 km<sup>2</sup> are uninhabited. A tenth of the territory is sparsely populated with only 1-2 inhabitants/km<sup>2</sup>. According to the 2011 census, the most densely populated area is the Linnamäe-Kärber area in the Lasnamäe district of Tallinn with 15 800 inhabitants/km<sup>2</sup> (Statistics Estonia, 2015).

The Estonian population pyramid (Figure 1.1) shows the effects of two phenomena: a population decrease and the ageing of the population. After the end of World War II the population of Estonia started to increase and reached its peak in 1990, with 1.6 million people (Statistics Estonia, 2015). Following independence in 1991, a significant proportion of the people originally from other Soviet Republics left the country and, in 1992, over 43 000 people emigrated from Estonia. Emigration increased significantly again after Estonia's accession to the European Union in 2004, mostly to Finland, resulting in an important loss of young females (in 2013, there were 311 792 women under age 40 compared to 329 619 men) who, contrasting with men's patterns, tend often not to return to the country. Yet, there are more women (704 007, in 2013) than men (616 167) in Estonia, mainly due to the fact that the proportion of women at age 65 and above is significantly higher. All in all, the size of the population has decreased significantly in 20 years (12.6%), and will probably keep dropping.





Source: Statistics Estonia (2015), Statistics Estonia Homepage, www.stat.ee/en.

Furthermore, the Estonian population has been increasingly ageing, partly due to the decline in the number of women in fertile age and the birth rate reduction. The latter is particularly notable in comparison to the end of the 1980s (see Figure 1.2). It is likely that the birth rate will keep dropping, in part because the number of women in fertile age is declining annually and also because the current emigration trends indicate that young women in birth-giving age keep leaving Estonia.



Figure 1.2. Number of births from 1988 to 2013 and forecast to 2023

Note: Data from 1988 to 2014 refer to actual births while data from 2015 consist of estimates. Source: Reproduced from Ministry of Education and Research (2015a), OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools: Country Background Report for Estonia, www.oecd.org/education/schoolresourcesreview.htm.

Population ageing, emigration and the notable cutback in the birth rate deeply affect education. Figure 1.3 shows the dramatic decline in the school-age population since 1990, which has been far more pronounced than in the EU or in the OECD area. In the short-term, the demand for pre-school child care services has increased, but in the long run the number of students in the school system will keep dropping and the need for adult education and training will keep growing (Ministry of Education and Research, 2015).

#### Cultural and language diversity

Estonian is the official language of the country, though there is considerable cultural and language diversity among the population. Ethnic Estonians are the main group, making up 69.7% of the population, according to the 2011 census (67.9% in 2000 census, 61.5% in 1989 census). In 2012, the share of Estonians among births was 72.4%. Russians are the second largest ethnic group, and represent 25.2% of the population while other groups include Ukrainians (1.7%), Belarusians (1%) and Finns (0.6%). Other minority ethnic



### Figure 1.3. Variation in school age population in Estonia compared to the OECD and the EU

Source: OECD (no date), Historical population data and projections (1950-2050) statistical database, http://stats.oecd.org/.

groups account for 1.6% of the population (whereas 0.1% of the population could not define their ethnic nationality in the 2011 census). Among people aged 40 or less the share of Estonians increases to 73.3% and the share of Russians and other ethnicities drops. The share of ethnic groups other than the main ethnic group is the highest among people aged 50 and above – a phenomenon attributable to the Soviet era when Estonia was a destination country for the other Soviet Republics (Ministry of Education and Research, 2015). Immigration figures are low: an average of 3 482 immigrants per year during 2011-13 while, on average, 6 425 people left Estonia during the same period. Most migrants originated from the EU member states whereas a considerable share of migrants still arrived from Russia and Ukraine.

According to the 2011 census, 85.2% of inhabitants have Estonian citizenship and 7% Russian citizenship. Estonian citizenship is: i) acquired at birth if at least one parent has Estonian citizenship; ii) obtained through naturalisation; and iii) restored to a person who had lost Estonian citizenship as a minor. Estonian citizens may not simultaneously be citizens of another country. 6.6% of the population has no determined citizenship. A person with undetermined citizenship is a person who has lost an earlier citizenship due to the cessation of his or her country of citizenship (e.g. citizens of the former Soviet Union and Yugoslavia) and has not realised his or her opportunity to become a citizen of a successor state (Ministry of Education and Research, 2015).

#### Economy

#### Economic growth

Estonia has experienced a considerable economic growth in the last 15 years (see Figure 1.4). Between 2000 and 2008, the Estonian economy grew, on average, 7% per year, being one of the three countries in the EU with the fastest GDP growth, and increased its GDP per capita from 45% of the EU27 average to 67% during this period (Estonia.eu, 2015). The situation drastically changed with the financial crisis, and the Estonia's economy experienced a 14% drop between 2008 and 2009, compared to an OECD drop of 3%, ranking first among the OECD countries for GDP decrease. Economic growth turned positive in 2010, and the GDP grew by 8% in 2011, 4.6% in 2012 and 1.6% in 2013 against an average OECD GDP growth of 1.9%, 1.3% and 1.4% respectively (OECD, 2014a).



Figure 1.4. Evolution of GDP growth in Estonia and the OECD, 1996-2013

In 2013, the GDP of Estonia at current prices was EUR 18.7 billion, of which the share of Harju county was EUR 11.5 billion and that of Tallinn EUR 9.3 billion, followed by Tartu and Ida-Viru counties, with a share of GDP of 10% and 7.6% respectively. In 2013, 67% of the total value added of Estonia was created in services, 29% in industry and construction and 4% in agriculture, forestry and fishing. The service sector was the biggest sector in all counties except for Ida-Viru. The share of services was the largest in Harju (75%) and Tartu (69%) counties, mainly due to the high input of the cities of Tallinn and Tartu. Agriculture, forestry and fishing share was the highest in Jõgeva County (22%). Finally, the share of industry and construction was the largest in Ida-Viru County (53%), which shows the important role of mining and energy in this county's economic activity. The GDP per capita was EUR 14 218 in 2013, an EUR 884 increase compared to 2012, Harju being the county with the highest GDP per capita, exceeding Estonia's average by 42%. Harju was followed by

Tartu and Lääne-Viru Counties, where the GDP per capita was 86% and 73% of the Estonian average respectively. The indicator was the lowest in Põlva County, where the GDP per capita was less than half of the Estonian average (Statistics Estonia, 2015).

#### Unemployment

Labour market conditions in Estonia vary depending on educational attainment. Between 2010 and 2012, unemployment rates for 25-64 year-olds who had not attained an upper secondary education fell by 5.6 percentage points to 22%, while the EU21 (EU member states which are also members of the OECD) average kept increasing to reach 17%. Moreover, unemployment rates for 25-64 year-olds with a higher education degree decreased by three percentage points between 2010 and 2012 from 9.1% to 6.1%, while the EU21 average kept increasing to reach 5.7% (OECD, 2014b). The unemployment rate is significantly higher among young people, though it has decreased in the last four years, from a peak of 32.9% of unemployment in 2010 to 18.7% in 2013. Furthermore, 12.5% of 15-24 year-olds were not in education, employment or training (NEETs) in 2012 (OECD, 2014b; Ministry of Education and Research, 2015). Finally, while labour market statistics by language background are not available, the unemployment rate of ethnic non-Estonians (whose large majority are ethnic Russians) was 12.4% whereas for Estonians it was 6.8% in 2013, despite broadly similar educational attainment levels (OECD, 2015).

#### State budget

In 2013, the state budget amounted to EUR 7.74 billion. In this year, the main sources of income for the state budget were receipts from various taxes, with the largest revenue coming from the social tax (27.6% of budget revenues), followed by value added tax (20%) and excise duties (10%). Grants accounted for the largest proportion of expenditure (52%), followed by operating expenses (28%) and expenditure on labour costs and administration (10%). In general, Estonian governments have been pursuing a balanced policy whereby the state budget has been more or less balanced or in surplus. Reserves that had accumulated from budget surpluses enabled the Estonian government to avoid borrowing during the financial crisis. Because of that, the Estonian burden of debt was among the lowest in Europe. During the recession of 2009, the government was forced to increase taxes and cut spending to decrease the deficit, leading to a deficit that was very modest compared to the rest of the European Union, just 1.7% of GDP (Ministry of Education and Research, 2015).

#### The governance of the school system

#### An important regulatory role for the central government

School governance is fairly decentralised and involves two levels of administration: the central government and municipalities (rural municipalities and cities/towns). The government and the Ministry of Education and Research are responsible for national education policy and the overall strategy for the education system. The responsibilities of the Ministry include the supervision and development of the education system, establishing the framework for student learning objectives (national curriculum, see below), defining the levels and terms of funding, setting the requirements for the professional and pedagogical competence of educational staff, determining minimum salaries of teachers and managing the register of schools which are part of the school network.

The Ministry of Education and Research, with about 270 staff (as of March 2014), comprises departments in charge of areas such as planning, financing, analysis, teachers, external evaluation, state property and school network in addition to the ones associated with education levels. Some foundations also complement the work of the Ministry such as the Estonian Oualifications Authority (Kutsekoda) and the Innove Foundation. The Estonian Qualifications Authority takes responsibility for the occupational qualifications system as an interface between the labour market and the lifelong learning system enhancing the development, assessment and recognition of individuals' occupational competences. It keeps a register of occupational qualifications and co-ordinates the activities of sector skills councils. The Innove Foundation, with about 500 staff, has a large portfolio. It develops and implements qualifications and curricula in general and vocational education; co-ordinates career services; implements education projects supported by EU structural and investment funds; develops training and competency descriptions for school leaders; designs and offers professional development for teachers; supports student integration processes including for non-native speakers (Estonian language immersion classes); develops and implements external student assessment (full cohort Year 9 and Year 12 examinations and sample-based assessments in Year 3 and Year 6); collects and disseminates information about national examinations; and provides support to individual schools in a range of areas (e.g. language immersion).

Each county government, which represents the national government in the respective county territory, has an education department which essentially assumes a supervision, information and co-ordination role, often serving as a liaison between municipalities and the Ministry of Education and Research. The county education department may assume a role of co-ordination of education provision within the county in case municipalities welcome such initiative. However, this type of co-ordination is often limited to the organisation of networks of teachers and school leaders and the provision of information to parents and schools. The county education department has a more prominent role in the supervision of education services, through its inspection services, which operate under the guidance of the External Evaluation Department of the Ministry of Education and Research.

Bigger cities such as Tallinn, Tartu and Narva have greater capacity to organise an education department within their municipality, which can include quality assurance activities, co-ordination of the school network, and provision of assistance to schools (e.g. management of school budgets).

#### A mixed provision of education services

Three types of providers of education services exist: the state, the municipality and private. While for pre-primary education provision is granted by private providers and municipalities, in general and vocational education, the three types of providers offer competing education services. However, municipal provision is dominant in general education while state provision is dominant in vocational education. Private providers maintain a small proportion of students in each pre-primary, general and vocational education.

#### A range of policy consultation processes

The development of educational policies led by the Ministry of Education and Research involves a range of consultations with stakeholders. Legislative drafts on education policy are developed by the Ministry. The Ministry participates in the first phase of legislative drafting, i.e. develops the concept, structure, scope of application, and initial text of the draft, and sets out the definitions. Stakeholders are consulted as the drafts are prepared. Stakeholders involved include the Association of Municipalities of Estonia, the Association of Estonian Cities, the Estonian Association of Heads of Schools, the Association of Teachers and Estonian Education Personnel Union, the Estonian School Student Council's Union, the Association of Parents, associations of private schools and representatives of businesses and employers.

Collaboration is also established through co-operation platforms. The Estonian Co-operation Assembly was established in 2007 as a co-operation network for non-governmental organisations. It monitors areas which influence Estonia's long-term development and develops proposals and policy advice for discussion with the government. The Education Forum, a non-governmental organisation, is a platform bringing together teacher organisations, local governments and education experts and practitioners to foster the discussion of education issues. The Estonian Co-operation Assembly and the Education Forum were the two partners of the Ministry of Education and Research for the elaboration of the "Estonian Lifelong Learning Strategy 2020" (see below).

#### **Educational goals**

#### General goals, policy objectives and targets

The Estonian Lifelong Learning Strategy 2020 (LLS) is the guiding document for the development of education policy for the period 2014-20. The LLS is aligned to the National Reform Programme "Estonia 2020", the Estonian national strategy for sustainable development ("Sustainable Estonia 21") and the education-related goals of the "National Security Concept of the Republic of Estonia". Five strategic goals have been established in the LLS:

- Change in the approach to learning: Implementation of an approach to learning that supports each learner's individual and social development, the acquisition of learning skills, creativity and entrepreneurship at all levels and in all types of education.
- Competent and motivated teachers and school leadership: The compensation of teachers and school leaders including their salaries are consistent with the qualification requirements for the job and the work-related performance.
- Alignment of lifelong learning opportunities with the needs of the labour market: Lifelong learning opportunities and career services that are diverse, flexible and of good quality, resulting in an increase in the number of people with professional or vocational qualifications in different age groups, and an increase in the overall participation in lifelong learning across Estonia.
- A digital focus in lifelong learning: Modern digital technology is used for learning and teaching effectively and efficiently. An improvement in the digital skills of the total population has been achieved and access to the new generation of digital infrastructure is ensured.
- Equal opportunities and increased participation in lifelong learning: All individuals are granted equal opportunities to participate in lifelong learning.

The LLS contains targets to be attained by 2020. These are indicated in Table 1.2.

Indicator	Target level 2020 (%)	Starting level (2012) (%)
Key indicators		
Participation rate in lifelong learning among adults (percentage of 25-64 year-olds who stated that they received education or training in the four weeks preceding survey	20	12.9
Percentage of adults (25-64) with general education only (no professional or vocational education)	≤ <b>25</b>	30.3
Early school leavers (percentage of the population aged 18-24 with at most lower secondary education	_	
and not in education)	< 9	10.5
lop achievers in basic skills in:	10	0.4
Reduilig	10	8.4
Mathematics	14.4	14.0
Employment rate of recent graduates (20-34 years old graduates: one to three years after leaving education)	Δt least 82	73.9
Dinital competencies (individuals and 16-74 with computer skills)	80	65
Comparative general education teachers' salaries (ratio of teachers' salaries to earnings for full-time,		
full-year workers with tertiary education aged 25-64)	≥ 1.0	0.84 (2011)
Stakeholders' satisfaction with lifelong learning	Satisfaction has increased	-
I – Change in the approach to learning		
Low achievers in basic skills in:		
Reading	7.5	9.1
Mathematics	8	10.5
Science	5	5.0
Drop-out rate from lower-secondary compulsory education	< 1	0.6
Drop-out rate from:		
Vocational schools	< 20	25.8
General upper secondary education	< 0.8	1.1
Higher education institutions	< 15	21.3 (2011)
II – Competent and motivated teachers and school leadership		
Percentage share of teachers who are aged 30 or below	> 12.5	10.3
Competition for study places in teacher education	Competition has increased	-
Gender distribution of teachers in general education (female:male)	75:25	85.7:14.3
III – Alignment of lifelong learning opportunities with the needs of the labour market		
Share of tertiary graduates in Mathematics, Science and Technology as a percentage of all tertiary graduates	25	22
Share of basic education graduates who passed the career counselling	100	
Share of basic education graduates who continue their studies in vocational upper secondary education	35	28.6
Percentage distribution of upper secondary students by orientation (general:vocational)	60-40	67-33
Student mobility	10	3.5
IV – Digital focus in lifelong learning		
Share of students (ISCED 1-6) who use computers, digital and mobile personal devices for studies		
every school day	100	
Share of Year 8 students at digitally supportive schools	100	33
Share of Year 8 students in schools with a virtual learning environment	100	54
Share of basic education graduates whose ICT basic skills are assessed and certified	IUU	
V – Equal opportunities and increased participation in lifelong learning		
Tertiary education attainment, age group 30-34	40	39.1
Participants in early education (aged between 4 and compulsory starting age)	95	89.1 (2011)
Share of Russian-language school graduates who master the Estonian language at B1 level	90	56.5
Share of labour costs of governmental education expenditures	60	55 (2011)
Share of teachers' labour costs of governmental expenditures on general education	50	38 (2011)
Uptimisation of the use of space in educational institutions (m <sup>2</sup> )	3 million	3.5 million

Table 1.2.	2020 targets	established	by the Li	felong l	Learning	Strategy
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Source: Ministry of Education and Research, the Estonian Co-operation Assembly and the Education Forum (2014), The Estonian Lifelong Learning Strategy 2020, www.hm.ee/sites/default/files/estonian\_lifelong\_strategy.pdf.

#### Student learning objectives

The Ministry of Education and Research establishes binding national curricula. The recently implemented 2011 curriculum reform defines standard-based learning targets to be achieved at the end of each three-year pedagogical cycle (Years 3, 6, 9, 12). The school is then required to develop a school-level curriculum within the framework of the national curriculum. The school-level curriculum is approved by the school director but involves the school staff and requires the advice of the board of trustees, the student council and the teacher council. Pre-primary schools as well as general and vocational education schools have, in addition to the curriculum, a development plan, which establishes the main development directions for the school and a plan of activities. The Innove Foundation also develops syllabuses for specific subjects/fields of study on the basis of the curriculum as well as methodological materials which are made available to schools and teachers through the dedicated website *www.oppekava.ee.* The preparation of school-level curricula is supervised by the Innove Foundation.

A new standard for vocational education was established on 1 September 2013. As of 1 September 2017, new students will be admitted only to school curricula that have been harmonised with this new standard. The new standard divides vocational education into qualification levels from second to fifth. The aim of the new approach is to ensure better linkages between work and education – new curricula will be prepared on the basis of professional standards and will be more practical, shorter and with a more flexible organisation of studies than current curricula. New output-based curricula will describe the content of studies as study outputs which will correspond to the competences required in the world of employment (Ministry of Education and Research, 2015). The learning outcomes of vocational training, the curricula, the requirements for the commencement and completion of studies, the structure and volume of the studies, and the principles for recognition of prior learning and professional experience are established at the national level (Ministry of Education and Research, 2015).

#### The organisation of the school system

#### Overview

The school system in Estonia is organised in three sequential levels: pre-primary education (ISCED 0, up to 7 years of age), basic education (ISCED 1 and 2, typical ages: 7 to 16); and upper secondary education (ISCED 3, Years 10-12/13, typical ages: 16 to 18/19). Basic education is organised according to two stages: primary education (ISCED 1, Years 1-6); and lower secondary education (ISCED 2, Years 7-9) (see Figure 1.5). School attendance is compulsory until acquiring basic education or attaining age 17.

Upper secondary education is of two types:

- General upper secondary education, mainly geared to the continuation of studies at higher education level (ISCED 3A programmes, Years 10-12).
- Vocational upper secondary education with two major strands:
  - Vocational secondary education, geared to working life or the continuation of studies at higher education level (ISCED 3B programmes, 3 to 4 years duration).
  - Vocational secondary courses based on basic education, geared towards an initial qualification for students, giving priority to their entering the job market while, at the same time, allowing them to study further (but with no direct transition to higher education) (ISCED 3C programmes, 2 to 2.5 years duration).



#### Figure 1.5. The Estonian education system

#### **Pre-primary education**

There are three types of pre-primary institutions:

- crèche (for children up to 3 years of age)
- pre-primary school (for children up to 7 years of age)
- pre-primary school for children with special needs (up to 7 years of age).

In pre-primary schools, groups are organised according to the age of children: younger (between 3 and 5 years of age); medium-aged (between 5 and 6 years of age), and older ones (between 6 and 7 years of age). If the pre-school is not large enough to organise groups based on age, a mixed group can be formed to accommodate children of different ages. The size of each group is regulated by the Preschool Child Care Institutions Act, as follows:

- up to 14 children in a crèche group
- up to 20 children in a pre-school group
- up to 18 children in a mixed group.

The number of children in a *crèche* group can be increased by two, in the pre-school group by four and in a mixed group by two if the board of trustees of a pre-primary institution requests it.

Responsibility for providing public pre-primary education lies with the municipalities, including its financing. The Preschool Child Care Institutions Act requires the municipality to provide pre-primary education services to all children aged 1.5-7 years. This provision is complemented by privately-run pre-primary education (only about 4% of enrolled students in 2013-14) (see Table 1.3 and Figure 1.6). More than half of the privately-owned pre-primary schools are located in Harju County and Tartu County which have the highest demand for pre-primary education places. In the recent years, municipalities have faced difficulties in providing pre-primary education for all who demand it, which explain the expansion of children in private pre-primary schools.

Cohool year		Number of schools		Total number	Proportion	Proportion of students	
School year	Municipal	Private	Total	of students	Municipal	Private	
2004/05			609	54 560			
2005/06			620	56 953			
2006/07			624	58 934			
2007/08			636	62 116			
2008/09	591	46	637	62 110	96.6	3.4	
2009/10	592	43	635	62 804	96.9	3.1	
2010/11	596	42	638	64 259	96.6	3.4	
2011/12	597	46	643	66 207	96.3	3.7	
2012/13	596	48	644	67 034	96.2	3.8	
2013/14	595	57	652	68 684	95.9	4.1	

Table 1.3.	Number of schools and students	, by ownership,	, pre-primary e	ducation,
	2004/05 to	2013/14		

.. Not available.

Source: Ministry of Education and Research (2015a), 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 1.6. Number of children enrolled in pre-primary education, by type of ownership, 2004/05 to 2013/14

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

Municipalities are allowed to charge fees for pre-primary education attendance, even if many of them do not. According to the Law, if a tuition fee applies, the contribution payable by parents per one child may not exceed 20% of the nationally established minimum salary (in 2014, EUR 71 per month). In private pre-primary schools, the tuition fee is usually higher than in municipal ones (Ministry of Education and Research, 2015).

Enrolment in pre-primary education has grown considerably in the last few years. From 2005 to 2014, the number of pre-primary institutions grew by 7.1% (by 43 institutions) and the number of children attending pre-primary institutions grew by 25.9% (by 14 124 children) (Ministry of Education and Research, 2015). Figure 1.6 shows the enrolment growth from 2004/05 to 2013/14. Enrolment in pre-primary education is above the OECD average and has increased in recent years. In 2012, the enrolment rates were 89%, 91% and 91% at ages 3, 4 and 5 against OECD averages of 70%, 84% and 94% respectively. In 2005, the respective enrolment rates were 81%, 84% and 88% (OECD, 2014b).

#### **General education**

All children attaining age 7 before 1 October of the current year must attend school. Basic education (primary and lower secondary education) consists of a single school stage, from Year 1 to Year 9, providing comprehensive general education to students. General education includes basic education as well as general upper secondary education. Upper secondary education is not compulsory, though is attained by the vast majority of the population (see below). In general education (at either the lower or upper secondary levels), students have the possibility of acquiring preliminary vocational knowledge in the form of elective subjects amounting to 15-40 study weeks. A large share of students take advantage of this form of education and acquire vocational knowledge, the most popular areas being music, hotel industry, tourism management and metalwork. However, the wider provision of preliminary vocational training is impeded mainly by the limited level of interest expressed by general education schools (Ministry of Education and Research, 2015).

At general education schools, students are divided into groups usually according to age. In basic education, the maximum number of students in a class is 24, even if with the agreement of the school's board of trustees it can reach 26. In upper secondary education, student groups may also be formed on the basis of students' choices to study certain elective courses (Ministry of Education and Research, 2015). The maximum weekly workload of a basic school student is regulated nationally, standing at the following number of lessons: Year 1: 20; Year 2: 23; Years 3-4: 25; Year 5: 28; Years 6-7: 30; and Years 8-9: 32.

General education schools can be state, municipally or privately owned. The majority of general education schools are municipally owned. However, the number of municipal schools has dropped due to the decrease in the number of students, whereas the number of private schools has increased. The latter are usually located in major cities, where the total number of students has grown due to internal migration (see Table 1.4).

	School ownership						
School year	State	Municipal	Private	Total			
2005/06	31	537	33	601			
2006/07	31	527	31	589			
2007/08	31	517	29	577			
2008/09	30	506	34	570			
2009/10	29	501	33	563			
2010/11	29	487	33	549			
2011/12	29	479	36	544			
2012/13	29	470	37	536			
2013/14	30	467	47	544			

Table 1.4. Number of schools by ownership, general education, 2005/06 to 2013/14

Notes: Data refer to "stationary studies" (aimed at individuals compelled to attend school or whose learning is both a full-time activity and the related school-level instruction is more important than independent learning). Data include all general education, including adult upper secondary schools and special schools.

Source: Ministry of Education and Research (2015b), Haridussilim (The Eye of Education), www.haridussilm.ee, based on the Estonian Education Information System (Eesti Hariduse InfoSüsteem, www.ehis.ee).

Enrolment in general education has decreased considerably in the last decade. This is the case for each primary, lower secondary and general upper secondary education (see Table 1.5 and Figure 1.7). The great majority of students in general education attend municipally-owned schools in spite of a small increase in private provision in basic education and a more significant increase of provision by the state in upper secondary education between 2005/06 and 2013/14 (see Table 1.5 and Figure 1.8).

After graduating from basic school, 68% of graduates attend general upper secondary education, 28% attend vocational upper secondary education and 4% do not pursue further studies (based on averages for 2005-14, Ministry of Education and Research, 2015). Regarding the transition between basic and upper secondary school, 43% of the students

### Table 1.5. Number of students by education level and school ownership, general education,2005/06 to 2013/14

School year —		Education level			School ownership		Total
	Primary	Lower secondary	Upper secondary	State	Municipal	Private	TOTAL
2005/06	79 561	57 531	36 730	3 794	165 636	4 392	173 822
2006/07	76 005	51 894	36 125	3 560	156 047	4 417	164 024
2007/08	74 618	46 787	33 666	3 434	146 951	4 686	155 071
2008/09	73 555	42 699	31 265	3 294	138 502	5 723	147 519
2009/10	72 947	40 136	28 719	3 191	133 022	5 589	141 802
2010/11	73 035	38 420	26 993	3 215	129 604	5 629	138 448
2011/12	74 231	36 699	25 174	3 121	127 120	5 863	136 104
2012/13	75 624	35 711	23 640	3 442	125 310	6 223	134 975
2013/14	77 200	35 683	22 509	3 862	124 657	6 873	135 392

Notes: Data refer to "stationary studies" (aimed at individuals compelled to attend school or whose learning is both a full-time activity and the related school-level instruction is more important than independent learning). Data include all general education, including adult upper secondary schools and special schools.

Source: Ministry of Education and Research (2015b), Haridussilim (The Eye of Education), www.haridussilm.ee, based on the Estonian Education Information System (Eesti Hariduse InfoSüsteem, www.ehis.ee).



#### Figure 1.7. Number of children enrolled in primary, lower secondary and general upper secondary education, 2005/06 to 2013/14

Notes: Data refer to "stationary studies" (aimed at individuals compelled to attend school or whose learning is both a full-time activity and the related school-level instruction is more important than independent learning). Data include all general education, including adult upper secondary schools and special schools.

Source: Ministry of Education and Research (2015b), Haridussilim (The Eye of Education), www.haridussilm.ee, based on the Estonian Education Information System (Eesti Hariduse InfoSüsteem, www.ehis.ee).

remain in the same school, 23% move to another school in the same municipality, 18% move to another school in the same county, 11% move to another school in another county while 4% do not pursue further studies (based on averages for 2005-11, Ministry of Education and Research, 2015a).



### Figure 1.8. Distribution of general education students according to school ownership, 2005/06 and 2013/14

Notes: Data refer to "stationary studies" (aimed at individuals compelled to attend school or whose learning is both a full-time activity and the related school-level instruction is more important than independent learning). Data include all general education, including adult upper secondary schools and special schools. Source: Ministry of Education and Research (2015b), Haridussilim (The Eye of Education), www.haridussilm.ee, based on the Estonian Education Information System (Eesti Hariduse InfoSüsteem, www.ehis.ee).

#### Vocational education

There is a range of options to acquire vocational education in Estonia. As explained earlier, at the upper secondary level, following completion of basic education, students can opt for vocational secondary education (geared to working life or tertiary education, ISCED 3B) or vocational secondary courses based on basic education (targeted at acquiring a profession, ISCED 3C). However, vocational education can also be acquired at two other distinct levels:

- Post-secondary non-tertiary level (ISCED 4B), acquisition of a profession following general or vocational secondary education.
- Lower-secondary level (ISCED 2C), acquisition of a profession for students who have not acquired basic education and who are past the age of compulsory school attendance (older than 17), giving the possibility of completing basic education.

Vocational education is provided by the state, municipalities and private entities. Provision by the state is dominant (see Table 1.6). In addition, vocational education can be acquired in institutions of professional higher education.

School year		Number o	f schools		Number of students			
	State	Municipal	Private	Total	State	Municipal	Private	Total
2007/08	32	3	12	47	15 811	2 665	285	18 761
2008/09	31	3	11	45	15 535	2 760	272	18 567
2009/10	31	3	11	45	15 596	2 816	233	18 645
2010/11	30	3	10	43	14 974	2 682	176	17 832
2011/12	30	3	9	42	13 689	2 625	135	16 449
2012/13	29	3	9	41	12 894	2 522	123	15 539
2013/14	29	3	8	40	12 133	2 369	119	14 621

### Table 1.6. Number of schools and students in vocational secondary educationby school ownership, 2007/08 to 2013/14

Source: Ministry of Education and Research (2015b), Haridussilim (The Eye of Education), www.haridussilm.ee, based on the Estonian Education Information System (Eesti Hariduse InfoSüsteem, www.ehis.ee).

The number of students in vocational education decreased about 22% between the 2007/08 and the 2013/14 school years, with decreases of 23%, 11% and 58% in the state, municipal and private sectors respectively (see Figure 1.9). This was mostly due to the decrease in the number of students graduating from basic school (Ministry of Education and Research, 2015a).





Source: Ministry of Education and Research (2015b), Haridussilim (The Eye of Education), www.haridussilm.ee, based on the Estonian Education Information System (Eesti Hariduse InfoSüsteem, www.ehis.ee).

The network of vocational schools administered by the state has undergone major changes since Estonia regained independence. Today, all state-owned vocational schools are managed by the Ministry of Education and Research. Previously, vocational schools were also under other ministries such as the Ministry of Agriculture, the Ministry of Defence and the Ministry of the Interior. The number of state-owned vocational schools peaked in 1994 when all ministries together administered 77 vocational schools.

There are currently three municipal vocational schools in Estonia, including the Tartu Vocational Education Centre which is the largest by far among the vocational establishments in Estonia. The lack of interest of municipalities in running vocational schools results from their low administrative capacity as well as their limited possibilities of investing in and developing the schools. The first private vocational schools in Estonia were established in 1994 and their number grew fast – reaching 26 by 2002. Mostly, the specialties available in private institutions of vocational education include IT, catering and hair dressing. Over the years, students of private vocational schools have formed no more than 3% of the total number of vocational education students and 1.5% of state-financed commissioned education (Ministry of Education and Research, 2015a).

Considerable investments were made between 2004 and 2011 in improving vocational education infrastructure. For example, facilities were renovated in ten vocational educational institutions with funds from the European Regional Development Fund (ERDF). Then, during 2009-11, further investments were made on vocational educational institutions to modernise the learning environment, mostly financed from the European Social Fund (ESF) (Ministry of Education and Research, 2015a).

#### School providers and school types

A state school is established by the Minister of Education and Research. A municipal school is established by the rural municipality or city/town council and a private school is established by a private organisation. The establishment of a school involves a licensing process.

There are various types of general education schools (see Table 1.7). For example, there are preschool/schools which combine the provision of pre-primary and general education, including Years 1-4, 1-6 or 1-9, as well as primary schools accommodating Years 1-4 or 1-6. Moreover, general education can also be acquired in basic schools (Years 1-9), full cycle schools (Years 1-12) and upper secondary schools (Years 10-12).

Type of school (educational levels covered)	Number
Primary school with pre-primary education (pre-primary and primary education)	37
Primary school (primary education only)	36
Basic school with pre-primary education (pre-primary, primary, and lower secondary education)	14
Including schools for special needs	2
Basic school (primary and lower secondary education)	251
Including schools for special needs	36
Full-cycle schools (primary, lower and upper secondary education)	189
Including schools for special needs	4
Upper secondary school (general upper secondary education only, also called Gymnasium)	13

#### Table 1.7. Number of general education schools by type, 2013/14

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

#### Extracurricular activities

Basic schools typically organise "long day groups" after regular curricular instruction. Long day groups are offered to students in Years 1 to 9 and are formed at the request of the parents. They are designed to assist students in doing their homework, and to engage them in a variety of recreational activities. Students in long day groups must be provided an additional meal at the school which is paid for by parents (Ministry of Education and Research, 2015a).

#### Language of instruction

The language of instruction in schools is generally Estonian. However, given its large Russian-speaking community, the Estonian school system also provides for instruction in Russian language. Estonia has pre-primary, basic and vocational schools where instruction is provided in Russian language and where Estonian is offered as a foreign language. Schools with these provisions are primarily located in Tallinn and Ida-Viru County (north-east of Estonia) where most of the Russian-speaking population lives. In 2007 new regulations stipulated that Russian, as a language of instruction in general upper secondary education, would be progressively replaced by bilingual instruction (content taught in Estonian and Russian, with at least 60% of the content in Estonian), with most of the implementation occurring in the 2011/12 school year. In addition to Russian, general education can also be acquired in English and Finnish, with this opportunity being available only in the two largest cities – Tallinn and Tartu (Ministry of Education and Research, 2015a).

The most important initiative aimed at improving the Estonian language competencies of Russian-speaking children in basic education has been the network of schools with the Estonian Language Immersion programme (*Keelekümblus*). The programme was funded and supported by the Canadian International Development Agency (CIDA) and was based on a language immersion programme launched in 1965 in Quebec, Canada. The Integration Foundation that operates the programme was established by the Estonian government in 1998 and its implementation started in a small number of schools in 2000. As of 2013/14, about 40 schools were participating in the programme on a voluntary basis.

The language immersion programme introduced the rule of 60% of content taught in Estonian, which later became one of the most important pillars of the new 2007 regulations for general upper secondary education. The programme is operated in pre-primary schools and basic schools and comes in two variants: early immersion in which education starts with full Estonian language instruction in the late years of pre-primary education or in Year 1, and 10% Russian language instruction gradually increases up to Year 6 (when 44% of subjects are taught in Russian). In 2003 the programme was supplemented with a late immersion version from Year 6 (or Year 5, in some schools), in which the annual proportion of content taught in Estonian up to the end of basic education is 33%, 76%, 76% and 60% in Years 6, 7, 8 and 9 respectively. The programme, financed by the Ministry, has built a support system of teaching materials, trainers and counsellors.

Figure 1.10 displays the distribution of students according to the language of instruction in primary and lower secondary education for the 2007/08 and 2013/14 school years. Russian is the language of instruction for about 20% of the student population at these educational levels while the language immersion programme has expanded only slightly



### Figure 1.10. Distribution of students according to language of instruction, primary and lower secondary education, 2007/08 and 2013/14

Notes: A student is considered as having Estonian (Russian) as the language of instruction if at least 60% of the subjects are taught in Estonian (Russian). A student is considered as having "Estonian (language immersion)" as the language of instruction if he or she is part of the Language Immersion programme.

Source: Ministry of Education and Research (2015b), Haridussilim (The Eye of Education), www.haridussilm.ee, based on the Estonian Education Information System (Eesti Hariduse InfoSüsteem, www.ehis.ee).

between 2007/08 and 2013/14. Figure 1.11 displays the distribution of students according to the language of instruction in upper secondary education for the 2007/08 and 2013/14 school years. In general upper secondary education, the results of the 2007 reform are visible as the proportion of students with Russian as the language of instruction declined from 22% to 3% between 2007/08 and 2013/14 while the language immersion programme remains marginal. By contrast, in vocational upper secondary education, in 2013/14, the proportion of students taught in Russian remained significant (24%).

Also, in schools with enough concentration of students whose native language is not the language of instruction, the Ministry of Education and Research also organises language and cultural instruction in the relevant language. In addition to the Estonian Language Immersion programme (*Keelekümblus*), the Ministry of Education and Research also supports and finances Estonian language-related professional training for teachers and informal activities for students in schools with Russian as the language of instruction.

### Figure 1.11. Distribution of students according to language of instruction, upper secondary education, 2007/08 and 2013/14



Note: A student is considered as having Estonian (Russian) as the language of instruction if at least 60% of the subjects are taught in Estonian (Russian). A student is considered as having "Estonian (language immersion" as the language of instruction if he or she is part of the Language Immersion programme. Source: Ministry of Education and Research (2015b), Haridussilim (The Eye of Education), www.haridussilm.ee, based on the Estonian Education Information System (Eesti Hariduse InfoSüsteem, www.ehis.ee).

#### Career guidance

As of 1 September 2014, new regional counselling centres (*Rajaleidja* centres, also called Pathfinder centres), managed by the Innove Foundation, started operating in all counties. They provide career and study counselling services for children and young people up to 26 years of age, for whom the service is free. These centres provide advice in a range of areas such as career guidance, special education, psychology, speech therapy and social pedagogy. Services require collaboration with school staff, parents and special needs practitioners. Regional counselling centres are under the umbrella of Innove's Agency for Lifelong Guidance. The Agency provides lifelong guidance, develops career guidance services and counselling services for special educational needs and supports guidance practitioners. It has a range of roles such as quality assurance of lifelong guidance; training of guidance practitioners; information materials and methodologies; and co-operation

with stakeholder networks. Municipalities (particularly smaller ones) and schools have the opportunity to contract for support specialists (e.g. special educators, psychologists) and services from the regional counselling centres.

Each counselling centre *Rajaleidja* also operates a Counselling Committee entrusted with guiding students with special educational needs and learning difficulties. For instance, they make recommendations on the postponement of school attendance, admission to school of a child below seven years of age, and the organisation of the teaching for students with special educational needs. It is planned to move the diagnostic of special needs to the regional counselling centres.

Counselling for special education needs is of four kinds:

- Special education counselling: recommending appropriate teaching methodologies, individual curriculum changes, teaching forms, materials and learning strategies for a child with special educational needs.
- Speech therapy: diagnosing speech disorders, developing and improving formation and understanding abilities of a child's oral and written speech.
- Psychological counselling: assessing the child's psychological development and factors influencing it, supporting appropriate development in co-operation with teachers, parents, and other specialists.
- Socio-pedagogical counselling: supporting the child's development and education in case of social problems, co-ordinating activities for pedagogical problems prevention and solution.

#### Students with special needs

Students with special needs learn in four possible settings: i) regular classes in mainstream schools; ii) special classes formed in mainstream schools; iii) special education schools; and iv) at home. Current policy encourages the integration of students with special needs in regular classes but this only occurs when deemed feasible. The state and municipalities take responsibility for finding the appropriate option for a student with special needs to be integrated in mainstream schooling. If the school nearest to the residence of the student with special needs does not have the conditions to meet her or his needs, the student has the right to study at the nearest school which meets them, while the municipality of the student's residence covers the transportation costs involved.

In Estonia, children with special educational needs are defined as those whose talent, specific learning difficulties, health status, disability, behavioural and emotional disorders, longer-term absence from studies or insufficient proficiency in the language of instruction of a school, bring about the need to make changes or adjustments in the subject matter, process, duration, workload, environment of study (e.g. teaching materials, teachers who have received special training) or in the expected children's learning outcomes (Ministry of Education and Research, 2015a). The identification of a special educational need involves pedagogical-psychological assessment, behaviour observation and medical examinations. Gifted students are identified on the basis of standardised tests carried out by licensed specialists, results in national or international subject Olympiads, and other assessments. These processes are supervised by the Counselling Committees operated by the regional counselling centres, which make recommendations regarding the best approach to address the special needs of a student. A child development observance chart is prepared for each

student with special educational needs, which allows the monitoring of his or her development. Gifted students benefit from the development of an individual curriculum and, when necessary, additional instruction by subject teachers or other specialists.

In mainstream schools, the school director typically appoints a special educational needs co-ordinator who organises the provision of education services for students with special educational needs, including ensuring proper co-ordination between support specialists and teachers. The special needs co-ordinator also supervises the identification of special needs at the school and liaises with support specialists, teachers, parents and the Counselling Committee.

Special education schools, with specific facilities, are attended by students with special education and behavioural needs, who mostly have visual, speech or hearing impairments, mobility disability, intellectual disability, emotional and behavioural disorders or who require special treatment. Most of these schools are state or municipally owned, and very few private schools exist (see Table 1.8). Yet, the state provides support to all special education schools, regardless of whether these schools are state, municipally or privately owned, depending on the number of students and the severity of their disability. In the 2013/14 school year, the average size of a special school was 81 students (Ministry of Education and Research, 2015a).

School year –		Number o	f schools		Number of students			
	State	Municipal	Private	Total	State	Municipal	Private	Total
2007/08	27	14	4	45	2 291	1 778	108	4 177
2008/09	26	14	5	45	2 119	1 750	141	4 010
2009/10	25	13	5	43	2 011	1 651	138	3 800
2010/11	25	13	5	43	2 008	1 630	131	3 769
2011/12	25	13	6	44	1 890	1 565	161	3 616
2012/13	24	13	6	43	1 772	1 573	145	3 490
2013/14	23	13	6	42	1 651	1 598	136	3 385

Table 1.8. Number of schools for special education and respective enrolmentby ownership, 2008/09 to 2013/14

Note: Some "home education" students are associated with a given school and taken into account in the data above. This is in contrast to the equivalent data presented in Table 1.9.

Source: Ministry of Education and Research (2015b), Haridussilim (The Eye of Education), www.haridussilm.ee, based on the Estonian Education Information System (Eesti Hariduse InfoSüsteem, www.ehis.ee).

Special schools do not provide vocational education. Hence, special education students with an interest in vocational education are integrated in regular vocational schools. In 2013, special education students accounted for 6% of all vocational education students. Generally, they are integrated in regular classes. However, special groups can be established if several students with special needs want to study the same specialty and a special group improves the study conditions of the group (Ministry of Education and Research, 2015a).

General education can also be acquired at home, at the request of a parent or due to the child's health condition. Home education due to a health condition is organised by the school assigned to the child. The school, in co-operation with the parents, prepares an individualised curriculum taking into account the child's abilities and special needs as well as the compulsory subjects in the national curriculum, relying on the recommendations of the attending physician or specialist and the Counselling Committee. Home education at the request of a parent is organised and financed by the parent, who is also responsible for meeting the study goals. In this case, the child also has an individualised curriculum and benefits from free textbooks and other school materials.

Table 1.9 and Figure 1.12 show the number of students with special educational needs by type of provision and type of curriculum between 2007/08 and 2013/14. In this period, the overall number of students identified as having special educational needs has remained stable. However, the provision setting has changed: while the proportion of special needs students educated in special schools has decreased, the proportion of special needs students educated in mainstream schools has increased but this has essentially occurred through the expansion of special classes in mainstream schools. The proportion of special education students educated in regular classes has remained fairly stable during this period. In 2013/14, the proportion of students with special educational needs in the school system was 4.4% while it was 3.9% in 2007/08 (Ministry of Education and Research, 2015a).

Table 1.9. Number of students with special educational needs, by type of provisionand type of curriculum, 2007/08 to 2013/14

Type of study	Type of curriculum	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
School for students with special	National curriculum at all levels	1 562	1 502	1 373	1 390	1 455	1 431	1 419
educational needs (SEN school)	Simplified curriculum for basic school	1 482	1 384	1 334	1 283	1 225	1 170	1 112
	Coping curriculum for basic school	913	941	922	924	644	603	579
	Nursing curriculum for basic school					245	230	214
	Total	3 957	3 827	3 629	3 597	3 569	3 434	3 324
	Proportion (%)	65.0	64.7	65.1	66.2	63.7	59.6	56.1
Special class in mainstream school	National curriculum at all levels	1 233	1 149	1 020	967	1 180	1 408	1 631
	Simplified curriculum for basic school	223	303	319	311	318	348	424
	Coping curriculum for basic school	122	91	93	60	44	44	32
	Nursing curriculum for basic school					14	14	13
	Total	1 578	1 543	1 432	1 338	1 556	1 814	2 100
	Proportion (%)	25.9	26.1	25.7	24.6	27.8	31.5	35.4
Special curriculum in regular class	Simplified curriculum for basic school	360	419	397	403	408	442	428
	Coping curriculum for basic school	8	8	10	9	7	5	6
	Total	368	427	407	412	415	447	434
	Proportion (%)	6.0	7.2	7.3	7.6	7.4	7.8	7.3
Home education (medical reasons)	Simplified curriculum for basic school	139	78	61	49	32	24	18
	Coping curriculum for basic school	38	37	37	29	10	12	15
	Nursing curriculum for basic school					18	26	34
	Total	177	115	98	78	60	62	67
	Proportion (%)	2.9	1.9	1.8	1.4	1.1	1.1	1.1
Home education (parents' wish)	Simplified curriculum for basic school	8	4	6	5	3	4	4
	Coping curriculum for basic school	2			3			
	Nursing curriculum for basic school					1	1	
	Total	10	4	6	8	4	5	4
	Proportion (%)	0.2	0.1	0.1	0.1	0.1	0.1	0.1
All		6 090	5 916	5 572	5 433	5 604	5 762	5 929

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





SEN: Special education needs.

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

#### School governance

Schools benefit from extensive levels of autonomy. As a result, within their schools, school directors are given full responsibility for the quality of education, financial management, appointment and dismissal of teachers, definition of teacher salaries (above a minimum) and relations to the school community and the general public. School directors are appointed and dismissed by the school founder. School directors form their leadership team. An important advisory body in school management within general education is the board of trustees. The board of trustees of a basic school comprises the owner of the school, the teacher council, representatives of parents, graduates and organisations supporting the school make up the majority of the members. If a student council has been formed in a basic school, the board of trustees also includes the representative appointed by the student council (see also Chapter 4).

In vocational educational institutions the Council is the highest collegial decision-making body of the school, organising the activities and planning the development of the school. The Council includes the school director, deputy directors, heads of structural units of the school and employees responsible for broad groups of studies, representative of the student body and a trustee of the employees. The school director manages the work of the Council. In addition, vocational education institutions also have an advisory body, which advises on the connection of the school to the world of

work. The advisory body has at least seven members and is formed by the management of the school for five years. A representative of the advisory body has the right to participate in the sessions of the Council of the school (see also Chapter 4).

#### **Evaluation and assessment**

The evaluation and assessment framework in Estonia comprises the following main components in addition to teacher evaluation and school leadership appraisal which are described in Chapters 5 and 4 respectively.

#### Student assessment

Student performance is assessed by a wide range of instruments, ranging from national external assessments to ongoing daily formative assessment in the classroom. At the national level, sample-based national tests are conducted in Years 3 and 6, the results from which are used for national monitoring. These are low stakes for schools, teachers and students. Summative assessment is based on a mix of teacher-based classroom assessments and national examinations. The latter take place at the end of both basic education and secondary education (Years 9 and 12) and have a certification function (even if, in Year 9, students can continue to Year 10 without passing the examination). In Year 9, students take examinations in mathematics, Estonian language and a third subject which they choose from a given list. Results of these examinations are used by some selective upper secondary schools for admission purposes. In Year 12, students take examinations in mathematics, Estonian language and a foreign language and are required to write a research essay. However, teachers hold most responsibility for summative assessment, e.g. while the Year 9 examination is designed externally, it is marked by teachers at the school. The Ministry of Education and Research defines the framework for summative assessment separately for general education and vocational education while schools and vocational education institutions define summative assessment criteria.

#### School evaluation

The External Evaluation Department of the Ministry of Education and Research takes responsibility for external school evaluation and the licensing process for schools to operate. There is no cyclical external evaluation of schools. The approach is based on thematic evaluations (e.g. professional development for teachers; individualised support for students) which involve a sample of schools. A risk assessment precedes the choice of the schools in the sample. The focus is on the development of schools and supporting their improvement. County governments carry out the regular thematic evaluations through their education departments. At the end of each school year, the county governor submits a summary report to the Ministry of Education and Research. In addition, the External Evaluation Department can also intervene on the basis of specific complaints. Since 2006 educational institutions must produce an internal evaluation report once during a development plan period, which lasts at least three years. The report should list the strengths and weaknesses of individual schools. There is no mandatory format for the report. Hence, school self-evaluation is provided by the preparation of the school development plan. Further information is provided in Chapter 4.

#### Education system evaluation

The Ministry is responsible for evaluating the school system. It uses a range of tools to monitor the performance of the education system. Information on student learning outcomes is collected from sample-based national standardised assessments in Years 3 and 6 and from national examinations in Years 9 and 12. The Innove Foundation undertakes an analysis of these assessments' results, following guidelines prescribed in regulations. In addition, the External Evaluation Department of the Ministry compiles an overview of the findings described in counties' summary reports of their school thematic evaluations. The monitoring system also includes a range of statistics on education based on data collected from schools on a standardised format. These are the basis for annual publications with system-level indicators on education. Also, international benchmarks of student performance provided by international student surveys such as PISA (OECD Programme for International Student Assessment) have been influential in driving policy development at the system level.

#### Main trends and concerns

#### Adults enjoy high levels of educational attainment

Levels of educational attainment in Estonia are among the highest within the OECD area, with 90% of 25-64 year-olds having completed at least an upper secondary education, against an OECD average of 75%, and 38% of adults holding a tertiary qualification, compared with an OECD average of 33%. Upper secondary attainment has been rather stable across generations, while tertiary attainment has increased across cohorts: 86% of 25-34 year-olds hold at least an upper secondary education, compared to 88% of 55-64 year-olds (OECD averages: 83% and 64% respectively); 44% of 25-34 year-olds have completed a tertiary education, compared to 36% of 55-64 year-olds (OECD averages: 41% and 25% respectively) (OECD, 2014b).

While upward educational mobility among 55-64 year-olds is comparatively high, it is lower among younger adults. 58% of 55-64 year-olds have a higher educational attainment than their parents, compared to 23% of 25-34 year-olds (42% and 32% on average across OECD countries with available data). Downward educational mobility is more prevalent among the younger cohort. 27% of 25-34 year-olds have a lower educational attainment than their parents (OECD average: 16%), while this is the case for only 8% of 55-64 year-olds (OECD average: 9%). The likelihood of a student (20-34 years-old) in Estonia to participate in tertiary education if at least one of the parents attained tertiary education is 4.7 times as great compared to the likelihood of someone whose parents have not attained at least upper secondary education, which is around the average for OECD countries with available data (OECD, 2014b).

Gender gaps in Estonia are among the widest among OECD countries. 47% of 25-64 year-old women have attained a tertiary education, while only 29% of men have attained this level of education (OECD averages: 35% and 31% respectively). Among 25-34 year-olds, 55% of women have completed a tertiary degree, compared to 33% of men (OECD averages: 46% and 35% respectively) (OECD, 2014b).

#### Adults have literacy and numeracy skills above the OECD average

The OECD Survey of Adult Skills (PIAAC)<sup>1</sup> shows that Estonian adults (16-65 year-olds) have literacy and numeracy skills significantly above those of participating OECD countries. Estonian adults scored on average 276 points in literacy (ranked 7th out of 23 countries,

against an OECD average of 273 points) and 273 points in numeracy (ranked 11th out of 23 countries, against an OECD average of 269 points). The performance of young adults (16-24 year-olds) was comparatively better with an average of 287 points in literacy (ranked 5th out of 23 countries, against an OECD average of 280 points) and 279 points in numeracy (ranked 7th out of 23 countries, against an OECD average of 271 points). By contrast, the proportion of adults scoring at the two highest levels in problem solving in technology-rich environments (28%) was significantly below the OECD average (34%) (OECD, 2013a).

The proportion of low-skilled adults (Score Level 1 and below) is relatively small at 13.0% in literacy (against an OECD average of 15.5%) and 14.3% in numeracy (against an OECD average of 19.0%) (OECD, 2013a). Estonia is also the OECD participating country with the lowest difference in literacy proficiency between adults with high- and low-educated parents. However, low-skilled adults are about four times less likely to participate in adult education and learning than highly-skilled adults (OECD, 2013a).

### Participation in schooling is almost universal, and rates of year repetition and school transfer are low

School access in Estonia is almost universal. The enrolment rate for 5-14 year-olds is 95% (against an OECD average of 98%), and 86% for 15-19 year-olds (against an OECD average of 83%). Estonia has made progress in reducing early school leaving, as the share of 18-24 year-olds who left the education system with at most a lower secondary qualification declined from 13.5% in 2009 to 11.4% in 2014 (while it remains at 15.3% for males), slightly above the 2014 EU average of 11.1% (Eurostat data).<sup>2</sup> Adults' (25-64 year-olds) participation in formal and non-formal education is around the OECD average (53%, compared to an OECD average of 51%) (OECD, 2014b).

According to school principals' reports, based on PISA 2012 data, about one in two 15 year-olds are in a school that always considers residence in a particular area for admission (OECD average: 41%). More than one in three 15 year-olds are in an academically selective school whose principal reported that at least students' records of academic performance or recommendations of feeder schools is always considered for admission (OECD average: 43%). Year repetition in Estonia is very low. Only 3.5% of 15 year-olds participating in PISA 2012 reported having repeated a Year in primary, lower secondary or upper secondary school (against an average of 12% in OECD countries). 15-year-old students in Estonia are also not likely to be transferred to another school because of low academic achievement, behavioural problems or special learning needs. Only 4% of 15 year-olds were in a school whose principal reported such a practice for PISA 2012 (against an OECD average of 13%) (OECD, 2013b).

## A significant proportion of young adults do not have a professional or vocational qualification and rates of completion in vocational upper secondary education are low

In Estonia, as analysed in OECD (2015), about 30% of young people do not have a professional or vocational qualification which prepares for labour market entry. Relatively many young people obtain upper secondary academic degrees, which do not prepare for immediate labour market entry, and do not pursue studies at the tertiary level. The share of young people whose highest educational attainment is a general upper secondary degree is large compared to other countries (see Figure 1.13). At the same time, enrolment rates in upper secondary vocational education in Estonia are comparatively low (34%, compared to 46% on average across OECD countries) (OECD, 2014b).



Figure 1.13. Highest educational attainment of young adults (25-34 year-olds), 2012

Note: EU21 average is the unweighted mean for the 21 countries that are members of both the European Union and the OECD and for which the data are available or can be estimated. Source: OECD (2014b), Education at a Glance 2014: OECD Indicators, http://dx.doi.org/10.1787/eaq-2014-en, Tables A1.4a and A1.5b.

A related major challenge concerns the low completion rates in vocational upper secondary education. In 2012, in Estonia, only 60% of entrants in a vocational programme at the upper secondary level graduated (from either a general or vocational programme) within the theoretical duration of the programme, against an OECD average of 64%. This proportion increases to 66% for a completion within two years after the theoretical duration of the programme (against an OECD average of 79%). The corresponding figures for graduation (from either a general or vocational programme) for students who entered a general upper secondary programme are 84% and 91% (against OECD averages of 76% and 91%) (OECD, 2014b, Table A2.4).

### Estonian students perform above the OECD average at the secondary level in mathematics, reading and science

In PISA 2012, Estonian students scored on average 521 points in mathematics, 516 points in reading and 541 points in science, compared to OECD averages of 494, 496 and 501 points respectively. Estonia's performance in PISA is not only above the OECD average, but has also improved significantly since it first participated in 2006. The country's performance in reading improved from 501 points in PISA 2006 to 516 points in PISA 2012, and science performance improved from 531 points in PISA 2006 to 541 points in PISA 2012 (OECD, 2014c).

While 15 year-olds in Estonia do very well in international assessments, the percentage of students who feel happy at school, however, is one of the lowest among OECD countries. Only 67% of students reported feeling happy at school, compared to 80% on average across OECD countries. And only 36% of students reported that things are ideal in their school (against an OECD average of 61%) (OECD, 2014c).

#### Estonia has a slightly higher than average share of top performers in mathematics and science, and one of the smallest shares of low performers in mathematics, reading and science

In PISA 2012, 14.6% of students performed at proficiency level 5 or above, in mathematics, meaning that they can develop and work with models for complex situations, and work strategically using broad, well-developed thinking and reasoning skills (against the OECD average of 12.6%). This is a three percentage point increase from PISA 2009. Also, 8.4% of students performed at proficiency level 5 or above in reading (OECD average: 8.4%), and 12.8% in science (OECD average: 8.3%), and Estonia also saw an increase in top performers in these two subjects (by around two percentage points since PISA 2009) (OECD, 2014c).

Only 11% of Estonian 15 year-olds demonstrated low levels of mathematics proficiency, meaning that they can, at best, extract relevant information from a single source and can use basic algorithms, formulae, procedures or conventions to solve problems involving whole numbers. This proportion is notably below the OECD average that performed below proficiency level 2 (23%). In reading and science, similarly only a small percentage of Estonian 15 year-olds performed below this proficiency level (9% in reading and 5% in science) and the share of low performers equally decreased from PISA 2009 to PISA 2012 (a reduction of four percentage points in reading, and of three percentage points in science) (OECD, 2014c).

The dispersion of scores is small with the score difference in mathematics between the top and bottom 10% of students being the second smallest among OECD countries (209 points compared to an OECD average of 239 points). In reading, the score difference between the top and the bottom 10% of students amounts to 206 score points, also among the smallest among OECD countries (average of 241), and in science to 206 points (OECD average: 239 points) (OECD, 2014c).

## Students' socio-economic background has a smaller impact on performance in Estonia than in other OECD countries

In Estonia, only 9% of differences in performance in mathematics among students in PISA 2012 are explained by disparities in students' socio-economic status, compared to an OECD average of 15%. While, on average across OECD countries, 90 score points - the equivalent of more than two years of formal schooling - separate the mathematics performance of advantaged students (the top quarter of socio-economic status) and disadvantaged students (the bottom quarter of socio-economic status), this difference amounts to 63 score points in Estonia. Whereas disadvantaged students are, on average across the OECD area, more than twice as likely as students who are not considered disadvantaged to score in the bottom quarter of the performance distribution, disadvantaged students in Estonia are only about 1.6 times as likely to score in the bottom quarter of the performance distribution. Fewer than 10% of students in Estonia attend disadvantaged, low-performing schools (OECD average: 18%), while fewer than 15% attend advantaged, high-performing schools (OECD average: 20%). In addition, a relatively large share of students in Estonia beat the socio-economic odds against them when compared with similar students in other countries. Estonia, then, combines relatively high performance with a relatively weak relationship between performance and socio-economic status, and has relatively narrow performance differences across socio-economic groups (OECD, 2013c).

## Differences in performance between schools are comparatively small, but the performance of students in Russian language schools is a concern

Between schools variance in Estonia accounts for 13.3% of the average total variation in mathematics performance across OECD countries (OECD average: 36.9%). As Estonia manages to achieve higher-than-average mean performance, parents and students can expect that, no matter what school they attend, they are likely to achieve at high levels (OECD, 2013c).

However, even though there has been a notable improvement over the six years prior to PISA 2012, students in Russian-language schools scored lower than those in Estonianlanguage schools in PISA 2012 in all assessment subjects. In PISA 2012, the difference between the scores of Estonian- and Russian-language students in mathematics amounted to 31 points (PISA 2006: 40 points), and in reading and science to 36 points (PISA 2006: 66 points and 43 points respectively) (Ministry of Education and Research, 2015a).

### Some performance differences in Estonia exist between schools depending on their location

After taking socio-economic status into account, schools in cities score better in the PISA 2012 mathematics assessment than schools in small towns by a difference of 8 score points (OECD average: 4 score points). As in other countries, students in schools located both in cities and in small towns perform better than students in schools located in rural areas, but this performance difference disappears after considering socio-economic status. Interestingly, the mathematics performance of students attending a rural school in Estonia is one of the highest among OECD countries after accounting for socio-economic status (517 score points, compared to an OECD average of 479 score points) (OECD, 2013c).

#### Notes

- 1. The Survey of Adult Skills (PIAAC), which took place from August 2011 to March 2012, assesses the proficiency of adults aged 16-65 in literacy, numeracy and problem solving in technology-rich environments. Around 166 000 adults were surveyed in 24 countries and sub-national regions, including 22 OECD member countries. Further information is available at www.oecd.org/site/piaac.
- 2. See Anspal et al. (2011) for an estimate of the cost of not completing upper secondary education in Estonia.

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