Chapter 2

Governance of schooling and the organisation of the school network in Estonia

This chapter is about the governance of schooling, in particular the supply of school services and the organisation of the school network. The chapter places particular emphasis on areas of priority for Estonia such as the restructuring of the school network in light of demographic developments, better integrating students with special needs, improving the language support to Russian-speaking students and increasing efficiency in vocational education. It also reviews capacity and co-operation at the local level for education provision as well as co-ordination for educational regional planning. The chapter further highlights the importance of increasing the externality of quality assurance processes and the need to review the regulation of the private school sector.

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 is about the governance of schooling, in particular the supply of school services and the organisation of the school network. It analyses how the effectiveness of resource use is influenced by key features of the school system such as the distribution of responsibilities, the structure of schooling, diversity of school offerings, learning opportunities across geographical areas and student groups and the level of parental choice. The chapter places particular emphasis on areas of priority for Estonia such as the restructuring of the school network in light of demographic developments, increasing efficiency in vocational education and training, better integrating students with special needs and improving the language support for Russian-speaking students.

Context and features

The governance of education in Estonia is facing similar challenges than in most other OECD countries. First, the education sector operates under various external pressures, such as the rising importance of education in a global world; the growing imperative of an efficient use of public resources; rising expectations from society; technological advancements; and demographic changes, which are leading to the decrease of the school age population. Second, education has become highly decentralised with the devolution of significant responsibilities to municipalities, often of very small size, and the granting of high levels of autonomy to individual schools. The education system involves the interaction of various actors, each with own specific interests and agendas, which leads to a great level of administrative complexity.

The governance of schooling is affected by a context of funding constraints and demographic decline

In 2011, Estonia spent about 3.8% of its GDP in pre-tertiary education (including pre-primary education), against an OECD average of 4.2%. Overall public expenditure on education as a percentage of GDP decreased from about 6.0% in 2009 to about 5.2% in 2011 (while the OECD average decreased from 5.8% to 5.6%, in the same period) (OECD, 2014a, see also Chapter 3). In addition, teachers in Estonia, in spite of the significant salary increases of recent years, are among the worst paid in the OECD area, particularly pre-primary education teachers (see Chapter 5). The efficient use of resources is a growing concern also as a result of the fiscal constraints imposed by the financial crisis, especially during 2008/09. As a result, it has become a necessity for policy makers to demonstrate that public funds are spent effectively and that the public purposes for financing education are actually fulfilled.

At the same time, as described in Chapter 1, there is a pronounced demographic decline which will be sustained in the long term. By the 2013/14 school year, as compared to 2005/06, the number of students in general education had dropped by 22% and the number of general education schools decreased by 9% (see Tables 1.4 and 1.5 in Chapter 1). Furthermore, the drop in the number of students varies across regions. Since 2005, the biggest reduction in the number of students in general education occurred in Hiiu County

(46.1%) followed by Jõgeva County (39.4%) and Võru County (39.1%), and the smallest reduction occurred in Harju County (9.8%) and Tartu County (14.7%), where the two largest Estonian cities are located (Ministry of Education and Research, 2015a).

The governance of schooling is highly decentralised

The current distribution of decision-making power in the Estonian school system involves the three poles of the national, the municipal and the institutional. Compared to other OECD countries, the governance of schooling is highly decentralised (see Figure 2.1). The institutions (schools) have acquired relatively large autonomy: school directors hire and dismiss staff; manage the school budget; can adapt the national curriculum to their context, and are protected from a too strong local control through the funding system (which limits the redistributing power of municipalities) (see also Chapters 3 and 4). Also, each county government, which represents the national government in the respective county territory, has an education department with some limited powers such as the supervision of education services (through its inspection services), the provision of information on education regulations and, if welcome by the municipalities, a co-ordination role for the provision of education services in the county.

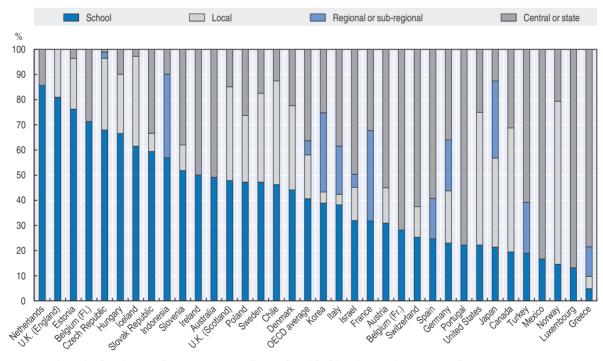


Figure 2.1. Percentage of decisions taken at each level of government in public lower secondary education, 2011

Source: OECD (2012a), Education at a Glance 2012: OECD Indicators, http://dx.doi.org/10.1787/eag-2012-en, Chart D6.1.

The national government, that is, the Ministry of Education and Research has strong regulatory powers as well as powerful instruments to implement and monitor its policies through the funding of primary and secondary education, a thorough information system which generates large amounts of data on local and school level processes (including student outcomes), inspection services that allow the collection of qualitative classroom level information, the definition of student learning objectives, the licensing of education

providers, and through a number of specialised agencies such as the Estonian Qualifications Authority and the Innove Foundation. The state, through the Ministry of Education and Research, is also an education service provider. In 2013/14, it managed 30 general education schools (about 3% of all general education students) and 29 vocational education schools (about 82% of all vocational upper secondary education students) (see Chapter 1).

At the same time, municipalities are influential players as providers of public services, with strong national level representation and interest assertion capacities. In education, they manage all public provision of pre-primary education (with about 96% of the number of students at this level), most general education provision (92% of all students at this level) and 3 vocational education schools (16% of all vocational upper secondary education students) (see Chapter 1). Interestingly, there is a degree of competition between the state and municipalities in the provision of general and vocational education, which is more visible at the upper secondary level. Municipalities take responsibility for the quality of their education services, including planning of services, provision of support to schools (e.g. support staff, specialised staff, career counselling, lunches, extracurricular activities, medical services), quality assurance, maintenance and development of infrastructure, and management of human resources (in particular the organisation of school leadership). Of course, the extent to which municipalities exercise these functions depends on their size and capacity. Large municipalities such as Tallinn or Tartu have education departments with good capacity, including for quality assurance and human resources management. However, smaller municipalities rely heavily on school directors to assume most of these functions. School directors are responsible for all core educational functions and organisational operation of schools. They have strong authority over the use of funding and employment decisions and have discretion to define salary levels above the minimum teacher salary (see Chapters 4 and 5).

Hence, key characteristics of the Estonian governance of schooling are: strong fiscal decentralisation, decentralised provision of education services, local human resource management and relatively light central professional accountability systems combined with a curricular policy that leaves room for the establishment of school-level curricula. The multi-level and multi-actor character of the Estonian school system has created a particularly complex governance context that requires intelligent and sophisticated steering and policy implementation approaches. Unlike in some other countries, the decentralisation process in Estonia has not led to the weakening of national authorities: it has rather changed their role and repertoire of instruments for effective steering.

School choice is a foundation of the school system

There is a great degree of school choice in the Estonian school system. Private schools are publicly funded on the same terms as public schools (while they can also charge tuition fees). A child is originally assigned to a school on the basis of his or her residence while taking into account the school of enrolment of siblings. Schools are required to admit all Year 1 students assigned to them on this basis with no entrance tests. However, parents may choose another school for their children subject to the availability of places. Also, upper secondary schools define their entrance criteria and admission procedures, which need to be published. They typically administer admission tests.

The consolidation of the school network has become a policy priority

The school network is defined in Estonia as the totality of schools formally licensed by the government to provide education and care in the country. Only schools belonging to the network are entitled to receive public funding. In order to be registered as part of the school network, schools need to go through a licensing process regulated by the Ministry of Education and Research. The Estonian school network is regulated by the Basic Schools and Upper Secondary Schools Act, the Vocational Education Institutions Act and the Private Schools Act for general education, vocational education and private education respectively.

The licensing process to open a school is similar across owner types. While the decision to open a school is taken by the respective owner, the license is granted by the Ministry of Education and Research (including for municipal schools). The licensing process involves, for all owner types, the submission of a set of documents which are then analysed by the Ministry and an ad hoc expert committee. Applications must include the statutes of the school; the curriculum proposed; evidence of the qualifications of school management and teachers; information about facilities; the development plan (for private schools only); certification that school owner and individuals on management bodies comply with the Law (for private schools only); for vocational schools, a foundation for the choice of programmes as well as written views of social partners on the programmes proposed; and the opinion of the county Governor (for municipal schools only). The analysis of the ad hoc expert committee, mandated by the Minister, concentrates on the analysis of the curriculum and the conditions for its delivery. The license is initially granted for five years and can be then renewed for an unspecified term in case the delivery of education services is considered to meet the stipulated requirements.

School closure is a decision by the respective owner, i.e. the municipality in case of a municipal school, the Ministry of Education and Research in case of a state school and a private entity in case of a private school. A number of aspects are considered when closing a school such as the quality of the education it provides, the cost of provision, safety and health conditions, school alternatives in the vicinity, quality of roads around school location and the school's role in the local community and cultural life. As described below, given the demographic decline, a growing number of schools, particularly in rural areas, have too few students, small classes and underutilised facilities. When a decision is made to close a school, there is typically support (including financial support) to ensure an adequate transition for its current students. This involves the transfer of students to the nearest school (transport expenses as well as longer time spent on travelling), defining new uses for the school building(s) and support for redundant teachers (Ministry of Education and Research, 2015a).

From 2005 to 2013, 78 general education municipal schools were closed, with primary schools representing by far the largest share of closed schools (Ministry of Education and Research, 2015a). In addition to that, also due to the small number of students, several schools experienced a transformation of their offerings e.g. from full-cycle school to basic school, basic school to primary school, and so on (see Table 1.7); and other schools within the same municipality were merged (31 between 2005 and 2013) (Ministry of Education and Research, 2015a).

Figure 2.2 displays average school size in general education by type of ownership in the last few years. It shows the recent decrease in school size, with the exception of state institutions up to 2012/13. While in 2008/09, the average school size was 275, it stood at 265 in 2013/14 (Ministry of Education and Research, 2015a). It also highlights the fact that privately-owned schools are considerably smaller and witnessed a recent pronounced drop in their size. The bigger size of state-owned schools is explained by the fact that these are mostly upper secondary schools.

State-owned schools Municipally-owned schools Private schools 350 330 310 290 270 250 230 210 190 170 150 2008/09 2009/10 2010/11 2011/12 2012/13 2013/14

Figure 2.2. Average number of students per school, by type of ownership, general education, 2008/09 to 2013/14

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.

In turn, Figure 2.3 provides information on the average use of space (net area per student) in general education by type of school and school setting. The average net area per student in schools considers the areas used for instruction and supporting activities as well as sports facilities, boarding school facilities and ancillary buildings. It shows that there are considerable differences between urban and rural areas (with lower net areas in urban areas) and between basic schools, schools with upper secondary education and full-cycle schools. The overall average net area per student in the country is 15 m² (Ministry of Education and Research, 2015a). A long-term goal for the use of space, excluding sports facilities, boarding school facilities and ancillary buildings, in general education schools is to achieve the figure of 10 m² per student by 2020. Currently, less than a third of general education schools comply with this objective.

Further evidence for the need to rationalise the school network is provided by current average class sizes. In 2012, class size in Estonia stood at 17 for primary education (2nd lowest figure in OECD area, against an OECD average of 21) and at 16 for general lower secondary education (lowest figure among OECD countries, against an OECD average of 24)

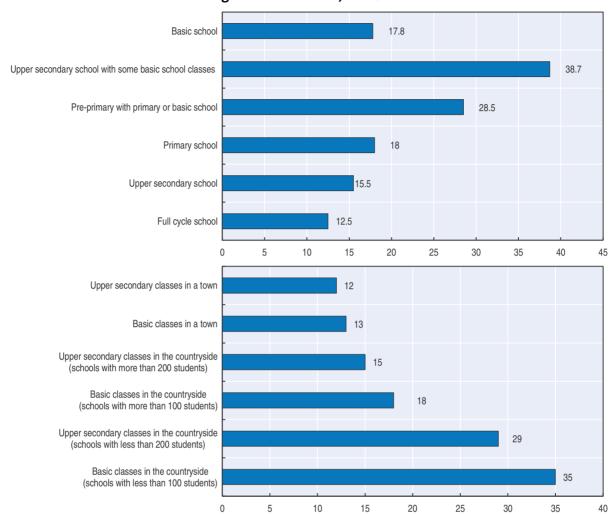


Figure 2.3. Average net area per student (m²), by school type and setting, general education, 2013/14

Notes: A basic school provides primary and lower secondary education (Year 1 to Year 9); a general upper secondary school offers Year 10 to Year 12 (Gymnasium); a full cycle school offers primary, lower secondary and upper secondary education (Year 1 to Year 12); a primary school offers Year 1 to Year 6. Upper secondary classes refer to classes at the upper secondary level either in full cycle schools or gymnasiums. Basic classes refer to classes at the basic education level in any type of school (e.g. primary, full cycle).

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.

(OECD, 2014a). The need for rationalisation is clear and seems to be accepted by all key stakeholder groups. There are too many and too small founder units which lead to a fragmentation of the system (see Table 3.8, in Chapter 3). In the past decade, incentives for school consolidation provided by the funding system led only to partial results at the municipal level (see Chapter 3). This has led to the belief, among the government, analysts and various stakeholders that the central government should be more prescriptive in the process of school network rationalisation. The current school network policy of the government has three interconnected major elements:

• The separation of basic and general upper secondary education, and the rationalisation of the separate general upper secondary school network.

- The "recentralisation" of general upper secondary education, with state operation of general upper secondary schools (involving the establishment of one state general upper secondary education school per county), the reduction of the number of general education schools operated by municipalities which offer upper secondary education and the decrease of the overall number of schools providing upper secondary education to a figure under 100 by 2023 (this process will be referred to as the "recentralisation" of general upper secondary education in this report).
- Incentives for municipalities to rationalise their upper secondary and basic education school networks.

Another issue concerns the growing number of private schools (see Chapter 1). The emerging network of private schools, receiving the same funding as public schools, increases educational capacity mainly in bigger cities but, most often, with smaller classes than in public schools, when the government intends to ensure greater efficiency of school provision. Indeed, in 2012, the average class size in the private sector was 15 and 12 for primary and lower secondary education respectively, while it stood at 17 and 16 for the whole system for the same education levels (OECD, 2014a).

Vocational education is undergoing considerable transformations

The provision of vocational education and training (VET) in Estonia has a number of specific features. It is mostly provided in state-owned and state-managed schools. Funding is based on comprehensive planning by the State Commission for Vocational Education. The commission defines the occupational profiles to be offered in the VET system and annually determines the exact number of students to be publicly financed for each of the occupations (state-commissioned places) at each vocational school. It does so in dialogue with employers and vocational secondary schools. Schools typically plan their occupational profiles in three-year cycles with the involvement of major stakeholders (who are represented in school management structures, see Chapter 1) and are allowed to enrol additional students on a fee-paying basis. The number of students in vocational education has decreased 22% between 2007/08 and 2013/14, in part as the result of the overall demographic decline. However, the share of VET students among upper secondary students remains somewhat low at 30% (average between 2005 and 2011). This is in part due to the low status of vocational education among secondary students.

Vocational education and training in Estonia remains mostly school-based and provides few opportunities for students to directly interact with the business world. In part this is due to the small size of Estonian companies; in part it is due to the relatively weak culture of co-operation between companies and training institutions. Within this context, VET policies in Estonia currently have three major objectives: i) the continuation of the rationalisation of the vocational school network; ii) attracting more students to the vocational stream of upper secondary education; and iii) the improvement of the effectiveness of VET programmes, through the improvement of linkages to the labour market. A major recent development was the establishment of a new standard for vocational education, as of 2013 (see Chapter 1). The new occupational standards are harmonised with the Estonian Qualifications Framework.

Education services for students with special educational needs are receiving new attention

In 2014/15, there were 38 schools for children with special educational needs (SEN schools), 20 of which were run by the state, 13 by municipalities and 5 by a private entity. In 2013/14, about 3 300 students attended SEN schools while another 2 500 students with special needs attended mainstream schools (see Table 1.9 in Chapter 1).

Since 2007, the total number of special needs students has remained stable, but the number attending mainstream schools has increased by about 600 while the number attending SEN schools has decreased by about 600. This shift of enrolment from SEN schools to mainstream schools is nonetheless slower than the Ministry envisaged given the current objective of mainstreaming as many special needs students as possible (Ministry of Education and Research, 2015a). Indeed, less than 20% of the special needs students attending mainstream schools are being taught in regular classes.

Until recently, the decision to send a child to a SEN school was made by the parents after consulting with the school. Recently, this procedure has been changed and while parents will still have the choice, the decision will be made in consultation with specialists at the new regional counselling centres established by the Ministry (see Chapter 1). The new centres (also called "Pathfinder centres") will provide services to students, parents, teachers and schools to support children with special educational needs. This might include the provision of speech therapists, special education teachers, social pedagogues and psychologists (see Chapter 1). This initiative is based on a new SEN inclusion strategy the Ministry of Education and Research is developing. However, it should be noted that special needs education, as such, is not part of the Estonian Lifelong Learning Strategy 2020.

Instruction for Russian-speaking students is a key education policy area

As explained in Chapter 1, until new regulations for general upper secondary education were adopted in 2007 (and implemented mostly in 2011), the ruling pattern of educational provision for Russian-speaking students was the operation of "Russian schools" with full mother tongue instruction and teaching Estonian as a foreign language at all levels of pre-tertiary general education. This has been complemented with schools offering the Estonian Language Immersion Programme, whereby instruction is both in Estonian and Russian (see Chapter 1). Figures 1.10 and 1.11 in Chapter 1 display the distribution of students across the language of instruction in Estonian schools.

In general upper secondary education from the 2011/12 school year, a rather radical shift from Russian language instruction to bilingual education was made. In the new system, the language of instruction gradually became Estonian for 60% of the content while Russian became the language of instruction for the remaining 40%. The transition began in 2007, thus giving schools time to prepare. At upper secondary level full Russian-language programmes remained available only in vocational education and training (Estonia.eu, 2013). Figure 2.4 displays the number of general education schools by language of instruction (including basic schools).

The aim of these policies and programmes is to ensure equal opportunities for Russian-speaking students to access tertiary education (where instruction in Russian is not offered), the labour market and society as a whole. Indeed, majority-language proficiency is a key condition for Russian-speaking students to succeed in school.

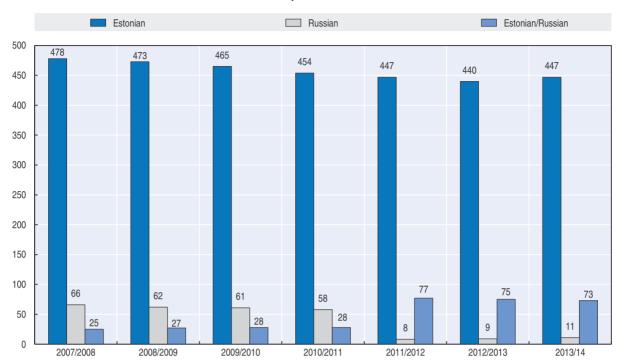


Figure 2.4. Number of general education institutions by Estonian or Russian language of instruction, 2007/08 to 2013/14

Notes: Data based on what schools declare in their charters. The language of instruction is considered Estonian (Russian) if at least 60% of the subjects are taught in Estonian (Russian). A school with the Language Immersion programme and offering general upper secondary with 60% of the subjects in Estonian is considered to have "Estonian" as a language of instruction (if all other years are taught in Estonian). A school is considered to have "Russian" as a language of instruction only if it is a basic school where subjects are taught in Russian. A school is considered to have "Estonian/Russian" as a language of instruction if: i) basic education is offered in Russian and general upper secondary education is offered at least 60% in Estonian; ii) Some basic education years are taught in Russian and some in the context of the Language Immersion programme; and iii) same as ii) and general upper secondary education is offered at least 60% in Estonian.

Source: Estonian Education Information System (Eesti Hariduse InfoSüsteem), www.ehis.ee.

Strengths

The Estonian school system is high-performing and promotes equity

The Estonian school system is among the best performing school systems in Europe, with learning outcomes and participation indicators which are high in international comparison. Coverage rates in pre-primary education are high, participation in schooling is almost universal and rates of repetition are low (see Chapter 1). According to PISA, Estonian students perform well above the OECD average at the secondary level in mathematics, reading and science. Furthermore, Estonia has one of the smallest shares of low performers in these three areas while having a slightly higher than average share of top performers (see Chapter 1).

Estonia has also a good record in promoting equity in schools. The capacity of Estonian schools to compensate for the negative impact of low socio-economic status on learning is high in international comparison. According to PISA, students' socio-economic background has a smaller impact on performance in Estonia than in other OECD countries (see Chapter 1). There has also been improvement in what constitutes one of the major equity concerns: the performance gap between Estonian-speaking and Russian-speaking students. According to PISA results, the performance gap in mathematics between 15-year-old students whose home language is Estonian and those whose home language is Russian was

33 points in 2006. In 2012 this gap decreased to 17 points. Recent policies of strengthening curricular flexibility and the more flexible use of human resources in schools are aiming at creating more space for responding to the diverse individual needs of students. These changes have the potential of further improving the overall capacity of schools to compensate for the disadvantages of various student groups.

Overall, among policy-makers and stakeholders, there is a clear understanding and appreciation of the importance of education and an associated desire to deliver improvement. During the review visit it was clear that, across actors, Estonia recognises the strategic importance of education for the future wellbeing and prosperity of individual citizens and of the nation as a whole.

The governance of the school system benefits from clear strategic objectives and education policy development is well informed

There is a stable institutional framework for the education system with clear strategic objectives which work as a reference for the development of policies. These are open to the contribution of a variety of stakeholders and seek to be informed by the available evidence. The relatively strong local and institutional power and the market mechanisms are counterbalanced by national level steering and the use of a number of steering instruments. Estonia has a highly developed national education information system which allows the monitoring of many local and institutional level processes (such as student performance, funding and human resource management) and creates also good opportunities to assess the impact of national policies and development interventions. The funding system is also used to create incentives to influence the behaviour of local actors (see Chapter 3). The per student funding is, to some extent, encouraging municipalities to use funds in a more efficient way, and to seek solutions of reorganisation or restructuring services when the number of enrolled students is falling (see Chapter 3).

The balance of power between the state, municipalities and schools is complemented by two interrelated mechanisms that strengthen the system of checks and balances: the relative strength of market mechanisms, on the one hand, and the actions leading to increased transparency, on the other. The existence of private institutions and their access to public funding and, even more, the per capita funding system based on the principle of public money following students associated with free school choice have created a quasi-market environment which places the users of services in a powerful position. This is supported by the disclosure of some information about schools for parents and students with the intention of making school choice more informed and encouraging competition among institutions. A public Internet portal named "The Eye of Education" (Haridussilm, www.haridussilm.ee) which was established by the Ministry of Education and Research publishes key data on every school, based on the Estonian Education Information System (Eesti Hariduse InfoSüsteem, www.ehis.ee).

There has been a good investment in infrastructure that facilitates system learning and adjustment

Both the national government and local governments have invested in the sort of hard and soft network infrastructure that facilitates system learning and adjustment. At the local level, this includes investments in electronic accounting systems, hobby schools, the improvement of subject teaching, and the exchange of information between school directors. At the national level, this refers to the development of sophisticated central

databases to track public funding, monitor the performance of public institutions and follow the life chances of citizens. The national government has also used European Union structural and investment funds to support the development of a network of private and university-based research centres whose work does seem to be taken seriously in policy discussions. And it is investing heavily in a network of regional centres for career counselling and guidance, support for special needs education, and psychological counselling.

Municipalities have made effective and prudent use of their borrowing powers to refurbish schools and build new facilities. Jurisdictions that reached their debt limits under Estonian law have also made use of innovative public-private partnerships in which private firms build or renovate schools and then lease them back to municipal governments. Also, municipalities have made effective and creative use of centralised procurement systems to engage the private sector in the provision of support services to schools while preserving school choice with respect to the type of services being provided.

Local governance of education brings benefits and is balanced with good levels of horizontal accountability

Municipalities and individual schools carry a significant degree of autonomy – they can take a range of decisions at local and school level in order to deliver improvement. This is an important strength and can help ensure that schooling contributes to the wider social and economic wellbeing of communities, families and individuals. The analysis of the education policy practice of the most effective education systems suggests that the combination of extended local and school autonomy with strong accountability mechanisms, continuous capacity building and the use of effective system steering instruments offers the highest chances to create a high performant education system (Mourshed et al., 2010).

Estonia has managed to build a system with a relatively good balance between accountability and autonomy. The move towards extended local and school autonomy has been paralleled with a high level of horizontal accountability ensuring the intensive involvement of parents, local communities and various other stakeholders. Horizontal social control over public sector behaviour seems fairly well developed in Estonia at the school level. This is done through participatory boards of trustees in general education schools and advisory bodies in vocational schools. These ensure that quality of education, school development plans, human resource management, budgets and expenditures are continuously reviewed by different stakeholders (see also Chapter 4). Through its meetings with local municipal leaders and with board of trustees' members, the review team formed the impression that a genuine commitment to the goals of assuring quality and effectiveness in Estonia is a realistic expectation at local and institutional level.

The school network provides a wide diversity of offerings but the need for its consolidation is recognised

Estonia operates an extensive school network able to ensure full access to education. Especially, there is a strong emphasis on providing access to early education in rural areas. There are guarantees in place that pre-primary and primary education can be provided locally. The nine years of unified basic school education constitute a comprehensive system for the development of basic and key competencies in an equitable way, while upper secondary education has the potential to provide appropriate space for choice and specialisation.

Given the dramatic demographic decline (see Chapter 1), the need for the consolidation of the school network is accepted by all key stakeholder groups. There are inefficiencies which result from the existence of too many and too small founder units. Under the pressures created by the funding system, the adjustment of the school network has already started (see also Chapter 3). In general education, between 2005 and 2013, while the number of students declined about 22%, the number of schools dropped by about 9%; between 2008 and 2013, while the number of students declined about 8%, the number of teachers dropped about 6% (see Tables 3.6 and 3.7 of Chapter 3). The decrease of the number of schools and teachers is slower than the decrease of the number of school age students but it shows some capacity of the decentralised system to adapt to the demographic changes. The government is strongly committed to the further consolidation of the school network as demonstrated by its direct intervention in general upper secondary education, the creation of incentives for municipalities to consolidate their schools, the steering of a part of EU structural and investment funding towards improvement in educational infrastructure and its readiness to take over the responsibility for a part of educational expenditures so far covered by municipalities (see also Chapter 3).

Supplementary services and educational support are provided

Most schools provide a rich offer of extracurricular activities in the large majority of municipalities. There is no widespread shadow educational service system through which better-off parents are investing in extra tutoring for their children in order to compensate for the weaknesses of the formal system. Also, the emerging network of regional counselling centres in each county is providing a good basis for further development of access to additional special services for children with special learning needs.

Individual schools are key players in quality assurance

The quality assurance system is able to ensure a good balance between formative (developmental) and accountability purposes with a strong emphasis on schools' own quality self-improvement, whilst doing away with too much central government control and intervention. Therefore, school-based self-evaluation is the keystone of the overall quality assurance system in Estonia, ensuring individual schools assume most responsibility for the quality of school education (see also Chapter 4). School leadership, pedagogical staff and representatives of the school community have been developing good capacity to engage in self-evaluation-based school improvement. However, as elaborated below, the level of externality in quality assurance processes is low.

The VET system is strengthening its co-operation frameworks with the actors of the labour market

The Estonian government is adequately placing increasing emphasis on strengthening the mechanisms for the vocational education and training system to adjust to changing labour market needs. To a large extent this adjustment occurs via the close involvement of the representatives of different economic sectors both at the national level and the school level. There is also significant investment in the improvement of the labour market monitoring system that has the potential for making educational and financial planning for vocational education and training more evidence-based. The new qualification standards for vocational education are further improving the flexibility of the vocational

school system, including through a better integration of general and vocational elements. However, as elaborated below, vocational students have few opportunities to directly interact with the business world through apprenticeships and work-based learning.

Funding from the European Union creates opportunities to increase the efficiency of the school system

Estonia, similarly to other Central and Eastern European Countries, is using the EU structural and investment funds to modernise its education system. This is a major historical opportunity to achieve not only reforms improving the quality and relevance of education but also to realise the necessary structural adjustments to make the education system more efficient and financially more sustainable. Initially a significant amount of EU funds was used to improve school infrastructure, particularly in vocational education. The new strategic planning for the use of EU structural and investment funds for the period 2014/20 corresponds to the priorities set out in the Estonian Lifelong Learning Strategy 2020 and will be used as a powerful instrument to promote changes leading to higher efficiency and effectiveness in the Estonian school system. For instance, the new funds are being used to develop the new network of state-run upper secondary general schools and to assist municipalities to improve the quality of the provision at the basic education level as they consolidate their school network (see Table 3.4 in Chapter 3).

Challenges

There is an unclear distribution of responsibilities between the state and municipalities and a lack of co-ordination mechanisms

The distribution of responsibilities between the state and the municipalities for the provision of public education services is complex and leads to an unclear distribution of responsibilities. In fact, the municipal and the state-owned schools engage in competition in general education, in special needs education and – to a lesser extent – in vocational education and training. This results in declining clarity of the responsibilities for setting the funding rules and for leading the school consolidation process. And it happens that, for example, designing and managing the school network can be achieved only through a strong co-operation of all relevant agencies, especially the state and local governments.

However, as part of a larger strategy to clarify responsibilities in the education sector, the plan of the government is that, by 2020, the distribution of responsibilities between the state and municipalities for managing public schools will be as follows:

- The municipalities take responsibility for:
 - pre-primary schools and child-care institutions
 - primary schools (including support for special needs students in mainstream schools)
 - basic schools (primary and lower secondary education) (including support for special needs students in mainstream schools).
- The state takes responsibility for:
 - vocational education and training (VET) schools
 - general upper secondary schools (Gymnasiums)
 - special education schools (SEN schools) for more severe disabilities.

The steps to "recentralise" general upper secondary education are part of this medium-term strategy which, on the whole, may contribute to clarify responsibilities in the school system.

There is also some rigidity in school-level provision across levels of education, such as the frequent separation between pre-primary education and primary education, or the separation between general education and vocational education and training. The education of children below the school compulsory starting age has a low degree of integration with primary education. This is particularly reflected in the difference between the funding models used in the pre-primary education sector and in the primary and secondary education sectors. While schools are funded from the state budget through a formula, the public funding of pre-primary education is provided by municipalities from their own revenues. The difference in the funding models discourages municipalities to organise pre-primary and school education as integrated services where resources can easily be shared (even though there are cases of integration). Furthermore, the review team did not see examples of schools providing both general and vocational upper secondary programmes which could offer possibilities for students to move between the two tracks and also for teachers to use their competences in both fields. The general and the vocational subsystems operate quite isolated from each other and the review team could not sense any intention to get the two subsystems closer to each other.

Also, the multitude of small providers together with distinct responsibilities across education levels and school types raises co-ordination problems in relation to the management of the school network. Indeed, particularly in lower secondary education, education effective provision can be organised only through inter-municipal co-operation which allows the sharing of resources (for example teaching capacities, special children services or extracurricular facilities) between institutions. As concluded by an OECD Public Governance Review of Estonia, which also looked at education as a case study (OECD, 2011), "There appear to be many missed opportunities for greater efficiencies at the regional level, as well as for strengthening effectiveness. Municipalities rarely share administrative services (e.g. joint purchasing), teaching resources (e.g. special courses or distance education), or networks to support teacher professional development." This reflects the fact that incentives for inter-municipality co-operation are weak. This is reinforced by the fact that county level education departments have little power to assume co-ordination responsibilities as they are not perceived by municipalities as a legitimate partner for school governance.

The review team formed the impression that inefficiencies related to the management of the school network originate to some extent in co-ordination weaknesses. The decentralisation process, leading to the emergence of increasingly autonomous and powerful local actors (municipalities, individual schools), raises the question of how to assure co-ordination in this new context of multilevel and multi-actor governance. Normally decentralisation should be accompanied by the creation of new co-ordination mechanisms, adapted to the reality of the new governance context, including those covering the management of the school network. These new co-ordination mechanisms are apparently not yet sufficiently institutionalised, especially in the field of school network design.

The ambiguous distribution of responsibilities is reinforced by the funding system. The per capita funding formula has been so weighted as to create a common misconception that the existent structure of the school network is – and will be – fully state funded and directors are entirely responsible (see Chapter 3). The lack of a clear statement of objectives for the funding system leads to diluted responsibility for resource management, which ends up mostly in school directors' hands. Its implicit norm is that the national government will fully fund the current distribution of teachers across the school system. As a consequence, there is an emerging mismatch between responsibilities for management and responsibilities for funding. For example, there is a mismatch between the municipality responsibility for financing and the growing responsibility of school directors for human resource management.

The consolidation of the school network needs further progress

The major educational policy challenge in Estonia is the efficiency problem caused by the large discrepancy between school capacities and the number of students in a growing number of schools, which results from the dramatic demographic decline. This results in too many small schools and big differences in class size across locations and levels of education.

The organisation of the school network has been the subject of thorough analysis by the Praxis Centre for Policy Analysis (Põder et al., 2014), with a first study in 2005 and a second in 2014. The analysis of 2014 concludes that by the 2013/14 school year, the changes to the school network had fell short of what had been recommended by the 2005 study, with the number of basic and upper secondary schools significantly larger than what would be desirable given the number of students (Põder et al., 2014). Interviews with local government representatives indicated the major reasons limiting the extent of school consolidation were:

Economic factors

Closing schools involves additional costs such as transportation, dormitories, teacher redundancy, reconverting schools, etc. In addition, for small municipalities, the school is often the major local employer and state funds for the school constitute a large share of the municipality's budget.

Political, social and historical factors

The preservation of the local school is often part of commitments with voters, as a result of the social importance of the school. Also, historical differences between neighbouring communities may not facilitate the sharing of facilities among them.

Administrative factors

The fact that schools are not under the same owner for the same education level does not facilitate school consolidation.

School leadership-related factors

The way a school develops depends, to a great extent, on the quality of the school leadership. This often dictates the need to close a school or not.

Infrastructure factors

Existing buildings are not adapted to plans for modernising the school network.

The analysis provided by the Praxis Centre for Policy Analysis recommends a major consolidation of the current school network: by 2020 the number of basic schools should be 352, i.e. 132 schools less than in the 2013/14 school year. The need for consolidation

varies considerably across counties. There are counties where the number of basic schools already corresponds to the recommended estimate (Saare County, Tartu County, Valga County) while there are others where school consolidation is further necessary (Viljandi County, Lääne-Viru County, Lääne County). Assuming that 60% of basic school graduates move to a separate upper secondary school, and considering the upper secondary school network as covering the entire county, the study suggests that in 2020, 44 upper secondary schools would be enough to accommodate all students in that level of education. This figure is larger (58) if towns are considered separately from counties. In the 2013/14 school year, there were 194 schools offering upper secondary education in the country, thus the suggested decrease is significant, affecting all counties and most of all the city of Tallinn (Pōder et al., 2014).

A major reason for the growing efficiency problems is the insufficiency of incentives for municipalities to adjust their educational capacities to the declining number of students and develop the necessary capacities for transportation and dormitories. The funding formula has not provided effective incentives for school consolidation so far (see Chapter 3). The other major reason, as explained earlier, is the little inter-municipal co-operation. There has been no county-level or locality-level medium-term planning of the school network (see also Chapter 3). The school consolidation that has been achieved thus far resulted mostly of ad hoc case-by-case decisions for specific schools within individual municipalities, many of which dictated because the decision could not be postponed any longer. The perception of the majority of municipalities of their role in operating local school networks is rather limited and self-constraining even in cases, when the size of their network would allow for more proactive and strategic policies. Municipalities in Estonia rarely consider the quality of teaching and learning provided by schools in connection to decisions of school consolidation.

The policy of "recentralisation" of general upper secondary education in Estonia emerged from the slow and incomplete adjustment to student numbers by the municipalities that generated the need for stronger central government intervention. However, the policy of establishing state-owned general upper secondary schools in each county may multiply capacities that maintain competition between state and municipality/city-owned schools for the limited and declining number of students (see also Chapter 3).

A final important note arising from the observations of the review team is that discussions about school consolidation were dominated by logistical factors such as number of schools, types of schools, distance to be travelled as well as financial factors (financial sustainability of maintaining schools). A lot less emphasis was given to quality of education as the main factor dictating school network decisions, i.e. the opportunities that school consolidation may offer to improve the educational experience for students.

In sum, the major area where the steering capacity of the national administration is being challenged, and where there might be a need for new, innovative forms of interventions is the governance of the school network. Given the inherited inefficiencies and the ongoing demographic changes, the rationalisation of the school network is unavoidable. But, as the politically autonomous municipalities are owners of schools, and as they take decisions on opening, closing or reorganising them, the processes of rationalisation require co-operation and sophisticated co-decision procedures.

Further efforts are needed to integrate students with special needs in mainstream schooling

Though Estonia has a well-developed network of SEN schools and programmes, relatively little progress has been made in integrating children with special educational needs into regular classes in mainstream schools (see Figure 2.5). While the proportion of students with special needs studying in mainstream schools has increased in the last few years, most of these students still attend SEN schools. Moreover, few of those in mainstream schools who are capable of following the regular curriculum are doing so in integrated classes.

Special Needs school Special class in mainstream school Regular class in mainstream school Home education 2013/2014 2007/2008 0 10 20 30 40 50 60 70 80 90 100

Figure 2.5. Proportion of students with special educational needs according to learning setting, 2007/08 and 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.

It does seem that not enough resources are being devoted to integrating special needs students in mainstream schools, and that parents are choosing to keep children who might do well in mainstream schools in special schools because they are getting more teacher attention. In interviews with the review team, educators and the parents of special needs students suggested that the decision not to send their child to mainstream schools is most often being driven by the feeling that these schools lack the skilled personnel and assistant teachers necessary to make the undertaking a success. In addition, in its interviews, the review team heard criticisms by teachers in mainstream schools who expressed difficulties coping with the presence of SEN children in their classes (see also Chapter 5). Whether this is because the funding that is provided to mainstream schools for special needs students is too low, or whether it is because there is a shortage of such specialists (or some combination of the two) is unclear. Furthermore, because funds for special needs students

are not transferred to local governments in the form of an earmarked grant it is difficult for schools, parents and the national government to monitor whether those funds are being transferred and used by schools for their assigned purposes (see Chapter 3).

A study on education opportunities for children with special needs undertaken by the National Audit Office (2006), which considered students with disabilities and learning difficulties, identified a number of problematic areas: i) an unsatisfactory system to identify special needs; ii) the often late identification of special needs; and iii) insufficiency of materials to assist special needs students (including in special schools) as well as a lack of required specialists. The study also noted that, in spite of the greater effectiveness of special schools in meeting the needs of students with more severe conditions, the treatment and rehabilitation services of special schools were limited. The audit confirmed that, in comparison with special needs schools, mainstream schools had not been able to offer similar conditions for the education of students with more critical and specific special needs. Hence, the recommendation was for mainstream schools to improve their conditions to receive students with special needs, namely through better logistical and material support and specialised support staff. Another audit (National Audit Office, 2004) pointed to the inefficiency of schools to respond to the needs of children with behavioural problems.

As the government further integrates students with special needs in mainstream schools the role of special education schools, both in terms of their profiles and in terms of their involvement in providing support services to SEN students educated in mainstream schools, needs to be reconsidered. The dominant European trend is to move towards more integrated education and this is accompanied by the functional transformation of special needs schools from primary service providers to SEN students to providers of professional support for mainstream schools educating inclusively students with special educational needs.

The integration and inclusion of SEN students is a very complex policy issue involving matters related to classification and diagnosis, placement (i.e. enrolment policies at national, local and institutional levels) and the professional conditions of inclusion. Therefore, determining the obstacles to the integration of SEN students is not an easy task. Overcoming these obstacles requires a great deal of research, analysis and planning. The typical obstacles to inclusion in the European countries are the following (Radó, 2009):

- Ambiguous enrolment policies: since the parents are the ultimate decision-makers in their
 children's education, regulations determining the space within which municipalities
 and schools make enrolment decisions often reluctantly give unambiguous priority to
 integrated placement. However, national governments have the legitimate authority to
 determine the type and severity of disabilities that special schools are eligible to serve.
- Dysfunctional pre-enrolment assessment: systems of pre-enrolment diagnostic assessment
 are often based on an outdated medical classification that provides the underlying bases
 for enrolment decisions. In many cases, these assessment systems do not use multiple
 and sophisticated instruments and methods. The decision-making procedures often do
 not ensure informed parental decisions. In a few countries categorisation determines
 not only the access to additional resources, but also placement decisions that often lead
 to stigmatisation.

- The insufficient preparedness of mainstream schools: since the success of inclusion depends
 on the professional preparedness of mainstream schools, the professional foundations
 of inclusion (i.e. the use of the methods of diagnostic and formative pedagogical
 assessment, differentiated teaching and the necessary conditions for supplementary
 individual development on the basis of Individual Educational Plans, physical and
 communication accessibility, etc.) must be in place in all schools.
- Weak institutional capacities: creating the conditions for mainstream schools to become "inclusive schools" requires the capacity of schools to identify their internal obstacles to inclusion, to implement school development programmes aimed at removing these obstacles and the capacity to institutionalise those internal procedures and co-operation frameworks that allow for successful classroom inclusion.
- Counter-productive vested interests: there might be various elements in the financial
 allocation system that may maintain vested interests in the separate education of SEN
 students. For example higher per capita funding for special schools, the lack of financial
 incentives for integrated education (e.g. not higher than for separated provision),
 social benefits provided through special schools, the lack of stability of available
 supplementary funds for inclusion if they are provided on a temporary and competitive
 basis, etc.
- Resistance of the profession: in countries, where the prevailing professional approach is based on "defectology", that is, on strong "medicalisation" of the problems of SEN students, especially in the case of children with "mild mental disabilities". In these countries the scope of pedagogical development is greatly underestimated, often resulting in responsibility shifts and creating wide competency gaps between mainstream and special education educators. Special school professionals' interest in maintaining segregated enrolment of SEN children is a major obstacle to the realignment of the discourse on the education of SEN students in many countries.
- Lack or shortage of support services: since the inclusion of SEN students is a highly knowledge- and support-intensive type of education, one of the most important prerequisites is a professional support system that reaches out to all schools and offers the required variety of support services. Beyond building a network of external service providers and ensuring the employment of specialists by mainstream schools, special schools provide support services to mainstream schools in many countries.
- Low level of awareness: Successful inclusion is impossible without the sensitivity of
 mainstream society, especially of those who make decisions and who are working with
 special needs students. The low awareness of the challenges of people living with
 disabilities or children with various difficulties reduces the sensitivity towards these
 difficulties in many countries.

Figure 2.6 provides a framework to analyse the integration of children with special educational needs.

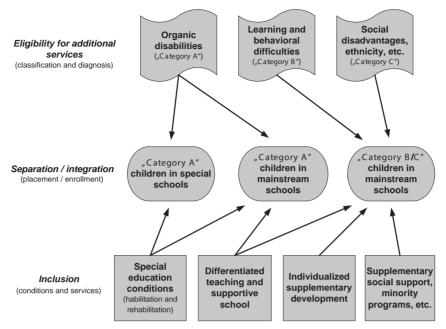


Figure 2.6. Framework for the inclusion of special needs children

Source: Radó, P. (2009), Improving the Inclusive Capacity of Schools in Serbia.

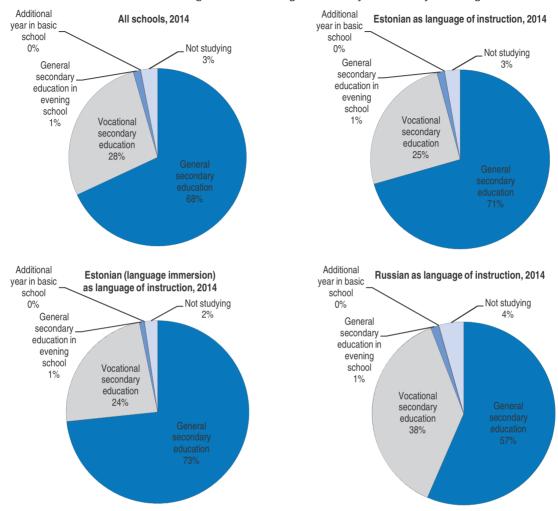
Russian-speaking students do not receive enough support

According to a study commissioned by the Ministry of Education and Research, the Estonian language skills of approximately one-third of Year 9 students in schools with Russian language of instruction do not reach the required B1 level of the Common European Framework of Reference for Languages (Estonian Public Broadcasting, 2015). The introduction of bilingual education in general upper secondary education and the ineffective teaching of Estonian in basic schools with Russian language of instruction may be increasing selection based on ethnicity. At the same time fully Russian language instruction programmes are still available in vocational upper secondary education. This may lead a greater proportion of Russian-speaking students to attend vocational schools at the upper secondary level. As illustrated in Figure 2.7, the proportion of basic education graduates going into a vocational secondary school the year after graduation is considerably higher for graduates from basic schools with Russian as the language of instruction (38% of them) than for graduates from basic schools with Estonian as the language of instruction (25%) and graduates from basic schools with Estonian (language immersion programme) as the language of instruction (23%). While the opportunity to continue studies in Russian might be an important factor in explaining the choice of vocational education, other factors such as family traditions in the Ida-Viru County or socio-economic background might also play a role. No research studies are available on this issue.

Also, as displayed in Figure 2.8, the proportion of graduates from basic schools with Russian as the language of instruction going into a vocational secondary school the year after graduation considerably increased between 2010 and 2013 (and slightly decreased between 2013 and 2014) while it remained mostly stable for graduates from basic schools with Estonian as the language of instruction. This could possibly result, at least in part, from the new 2007 regulations stipulating that Russian would progressively be discontinued as a language of instruction in general upper secondary education.

Figure 2.7. Choices made by basic education graduates according to the language of instruction in basic school, 2014

Distribution of basic education graduates according to their study choices the year after graduation



Source: Estonian Education Information System (Eesti Hariduse InfoSüsteem), www.ehis.ee.

While Estonia has a few programmes designed to provide additional financial support to schools with Russian language of instruction, as well as additional Estonian language training to Russian-speaking students, these programmes are of limited scope.* While the school funding formula provides for extra funding for Russian-speaking students (i.e. a higher coefficient in the salary grant, presented explicitly in the formula as of January 2015, see Chapter 3), potentially for extra teaching hours in Estonian language, the actual use of this extra funding is not audited. In addition, difficulties in mastering Estonian are imposing sometimes significant costs on (primarily) Russian-speaking households for private language instruction.

^{*} To some extent, the language immersion programme that has been developed for Russian speakers is trying to address this problem. But it is available only in selected schools and is funded on a case by case basis, and not as a system wide solution (see Chapter 1).

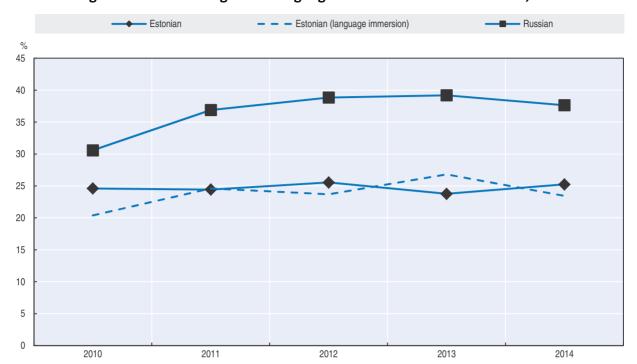


Figure 2.8. Proportion of basic education graduates entering vocational education the year after graduation according to the language of instruction in basic school, 2010-14

Source: Estonian Education Information System (Eesti Hariduse InfoSüsteem), www.ehis.ee.

There are concerns about the resourcing of regional counselling centres

While the new Regional Centres for professional, student and psychological counselling hold great promise for improving the day-to-day functioning of the system, increasing cost effectiveness, and for providing critical information about the system's weak spots and fault lines, these institutions are still a work in progress. They will need sustained support to develop the personnel, procedures and practices necessary for them to fulfil their promise.

In the short term, it is unlikely that they will be able to support themselves on fees paid by schools, households, and teachers. As a result, a large part of their financing will have to be covered by the European Social Fund (ESF). But downstream, it will be important to put additional funds into school budgets so that they can purchase services from these Centres. As with mainstreaming special needs students, ensuring that Russian-speaking students acquire proficiency in Estonian, and improving VET enrolment and retention rates, it is important that financial incentives be aligned with policy priorities (see also Chapter 3).

The vocational education sector has low status, high drop-out rates and little work-based learning

Enrolment in vocational secondary education constitutes about a third of enrolment in secondary education, which is lower than the OECD average (see Chapter 1). The Estonian government is actively seeking to expand VET enrolment through higher quality facilities, a more streamlined supply of programmes (assisted with the establishment of new occupational standards), and greater flexibility of provision. Nonetheless these intentions

are facing important obstacles such as the low status of vocational education among students and parents, the strict separation between general and vocational education schools and possibly the little effectiveness of career guidance in basic education.

Another major challenge is the high rate of drop-outs in VET education (or interruption of studies). Although the organisation of studies in vocational training has been made more flexible with the help of new forms and types of studies, the interruption of studies in vocational training has been rising. Between 2004/05 and 2010/11 approximately one out of every five students enrolled in vocational training interrupted his/her studies, which makes a total of 40 063 students. Later only a tenth of them managed to obtain a vocational or higher education qualification. The early school leavers who later successfully finished school include mainly students who had interrupted their post-secondary vocational training (Espenberg et al., 2012). The study by Espenberg et al. (2012) identified the following major reasons for interrupting vocational studies: i) an incorrect choice of specialty which indicates inadequate career counselling in basic education; ii) the weak preparation of students, including in terms of basic skills, as they enrol in vocational education; iii) placing a low value on education, which leads to student absenteeism; iv) a lack of processes for the early identification of learning difficulties, associated with a lack of mentors/supervisors at VET schools; v) traditional teaching methods used by teachers, which reduce students' motivation; and vi) instances of school bullying.

A further limitation of VET in Estonia relates to the few opportunities students have to engage in work-based learning and apprenticeships. This relates to the fact that businesses remain little involved in the provision of vocational education and training (OECD, 2012b). Most vocational students attend school-based education, where students typically only complete 4-6 months of internships. Only 2% of youth who complete vocational education do an apprenticeship (OECD, 2015). Graduates from work-based VET typically fare better than those from school-based programmes. The probability of being employed is significantly higher for work-based VET graduates and their transition from school to work quicker. There is also an income premium of work-based VET graduates relative to school-based graduates. Evidence across OECD countries also shows that labour market outcomes of vocational graduates improve if substantial work-based training is built into programmes (OECD, 2014b).

The level of externality in quality assurance processes is low

Educational quality assurance at national and municipal levels might require some adjustments. While there is a sound emphasis on school level self-evaluation and school development in Estonia (see Chapter 4), the review team formed the impression that the external support provided to schools for self-evaluation and self-evaluation-based development could be expanded, especially in smaller municipalities. The government does not operate an extended network of various quality-related external services, which can be provided to schools and school management teams, such as advisory support, coaching, in-service training for quality improvement, etc.

Also, while the rather formative character of the external quality evaluation system fits in well with the ruling bottom-up (school-based) system of responsibilities for quality and effectiveness, relatively little comparable quality information is provided to schools for self-evaluation. For example, the self-evaluation indicator data collected by the Ministry of Education and Research do not establish a benchmarking system and schools receive very little external feedback on the performance of their students. This might be the reason why

the success of schools is still widely judged upon by very traditional indicators, such as the achievements of the best performing students in Olympiads, marks given by teachers and the offer for extracurricular activities. An implication of governance based on learning outcomes, as is now the case, is the need for better information on whether learning targets are actually being reached. In general, in Estonia, there is little external challenge to the conclusions of school self-evaluations (see also Chapter 4).

Also, with the exception of the biggest cities in the country, there is very little evidence suggesting that municipalities are operating a serious regular system of the appraisal of the work of school directors (see Chapter 4), or more generally operating a quality education framework. Therefore, management decisions at the level of municipalities in most cases are weakly connected to those at the school level through planning, as well as through an accountability system for school directors. The mismatch between the increasing responsibilities of school directors and the often weak local accountability systems may grow to be an issue of concern in Estonia in the future. While the national system of governance has shifted in the direction of a learning outcomes-based model, the work of most municipalities remains very much input-based.

Finally, the co-ordination among the different elements of the quality assurance system, that is, among external assessment and examinations, the educational information system and external school evaluation is not fully ensured, because inspections performed by county government offices are not supervised by the Ministry of Education and Research. In addition, although the Ministry collects the data for self-evaluation indicators, county governments run thematic evaluations only. Although inspectors use national indicators during thematic inspections, the connection between external assessment and self-evaluation is weak (see also Chapter 4). Therefore, the link between self-evaluation and external evaluation – one of the pillars of the EU recommendations on educational quality assurance – is not fully ensured (European Commission, 2001). These might be the reasons why integrated feedback of quality evaluation information to school owners and schools lags behind the amount and quality of information that is produced on a regular basis.

There is a lack of capacity at the local level

One of the specific challenges Estonia seems to face in governing its school system is that while key decisions such as school reorganisations, closures or mergers have been transferred to local governments as school owners, most of the information and administrative capacities have been retained by the central government. However, the capacities of most municipalities to manage schools are relatively weak. The number of municipal staff working on education in small municipalities is typically very small and they often also take responsibility for social services and cultural programmes (OECD, 2011). Many of the small municipalities delegate most of their competences such as quality assurance or budget management to schools themselves. This challenge flows from the small size of the majority of municipal self-governments. Over 80% of the municipalities have a population under 6 000 inhabitants, the majority of them have fewer than 3 000, while about 70% of the population of Estonia lives in cities (OECD, 2011).

Schools in rural areas are facing specific challenges that municipalities have to address, such as attracting qualified teachers, maintaining the expected instructional quality in spite of more scarce resources, making extracurricular activities available to

students, consolidating schools, ensuring access to professional services for students and teachers, ensuring the transportation of students, etc. These are often difficult challenges to meet with the little capacity that is typical of small municipalities.

The regulation of the private school sector raises some concerns

Apart from offering parents greater school choice, other benefits of the way the schools' market operates in Estonia are elusive. New entry by private schools, encouraged by the funding system, has resulted in smaller schools and class sizes and hence a higher cost school system with no evident increase in student learning outcomes (see Chapters 3 and 5). Similarly to other systems that are based on per capita funding, especially those which allow private institutions to have access to public funding, the Estonian system faces the challenge of undertaking adequate selection of those services and providers that should be eligible to receive public funding. This requires a continuous monitoring of the existing school licensing processes assuming the selection function, and, on the basis of this, revising standards and the application of these standards when necessary. If this does not happen, funding claims by new services and providers may create unexpected burdens on the public purse (see also Chapter 3). There is a need to increase the transparency of licensing decisions, particularly in terms of the assessment of need for the additional educational services. This is particularly valid for the decisions to register private providers into the publicly funded network.

Policy recommendations

Clarify responsibilities in the education sector

There is a need to clarify responsibilities in the education sector. The government's medium-term intention of establishing a division of labour, within public education, whereby municipalities provide pre-primary, primary and lower secondary education and the state takes responsibility for upper secondary education (both general and VET) and special education schools seems a good step in that direction. This will reduce unnecessary duplication; provide the potential for better co-ordination within education levels (or school types); establish closer linkages between funding, school management and accountability; facilitate the alignment between education strategic objectives and school-level management; reduce ambiguities in defining who is responsible for what; and assist with school network planning. For example, having the state take responsibility for both VET and general upper secondary education is likely to facilitate bridges between the two sectors and allow upper secondary education to be managed as a unified subsystem.

The government's goal of "recentralising" general upper secondary education is an important step in simplifying the governance of public schooling in Estonia. As suggested in Chapter 3, however, this needs to be done in recognition of the established experience and capacity for larger municipalities to provide general upper secondary education. The approach, as elaborated in Chapter 3, should be the development of a state-level regulatory framework for general upper secondary education where room exists to delegate the provision of the services to those municipalities with enough capacity and experience. This will lead to a more efficient consolidation of the network of general upper secondary schools. However, "recentralisation" of upper secondary education entails the risk of weakening the links between education and regional development planning. As a result, an important aspect to the "recentralisation" process to keep in mind is the importance of establishing mechanisms that ensure that regional development objectives remain a

relevant dimension in defining the supply of courses at each upper secondary school. It is important that upper secondary schools remain responsive to regional needs and are open to diverse regional and local expectations. Therefore, as recommended below, decisions on educational programmes offered at upper secondary schools as well as decisions on the organisation of the network of upper secondary schools should involve co-ordination at the county or regional level with consultation of the relevant stakeholders.

Further consolidate the school network through co-ordination across school owners Make the best interest of students the quiding principle for school consolidation

It is clear that with the current demographic of Estonia, school consolidation remains a top priority for education policy. There is still considerable room for efficiency gains through school consolidation. However, it is important to keep in mind that school consolidation should be about making optimal choices to ensure quality education for children. The objective should be to ensure that students' access to high quality education is not affected adversely by where they live.

Achieving efficiencies and ensuring public funding invested in education is having optimal impact is mainly about ensuring the highest possible quality of education for students with the available resources. It is therefore important that the focus is not on savings or a prioritisation of accessibility over quality. The key question in considering school consolidation must therefore be what is in the best interest of students. In some cases, closing the school may not be the best solution – the distance to travel may simply not be practicable. However, in others consolidating educational provision on fewer sites will present wider opportunities for both students and teachers and steps should be taken to ensure this happens.

Consider a range of strategies to rationalise the school network

In the consolidation of the school network, in particular in small municipalities, Estonia can consider a number of different options (see Ares Abalde, 2014, for further considerations about these options):

- Closing or consolidating small schools. An option, especially for those small schools where the quality of the learning has been identified as deficient, is the closure of the school. Assessments could be conducted at the regional level, in the context of the regional planning platforms suggested below, to identify such schools. The assessment should consider the (financial, human and political) costs, feasibility and acceptability of different alternatives such as transporting students and housing them at boarding schools. Alternatively, consolidating schools with the reduction of services (e.g. a school providing only primary education instead of Year 1 to Year 9) will avoid their closure. This is in the spirit of the modular approach to school consolidation proposed below.
- Sharing of resources between nearby schools. Sharing of resources among schools, possibly belonging to different municipalities, is a practice followed in a number of countries, in which a group of schools located close to each other retain their individual identity and legal status (thus each will still have its own school leader and its own reporting requirements), but they agree to share specific resources to lower the cost and improve services rendered to students. Shared resources may include teachers (who would conduct lessons and other activities in more than one school), sport facilities (open to

students from all schools participating in the collaboration), computer labs and similar. Box 2.1 provides an example of the sharing of resources among schools in the Flemish Community of Belgium.

• Clustering of schools. The clustering of schools involves the conversion of several nearby small schools into satellites of one educational institution with a single leadership team. This means that the legal status of smaller schools is changed, and only one school leader of the central school will manage the operations of all satellite establishments. Similarly, there is only one budget for the whole school cluster encompassing the central school and the satellite schools. This institutional structure allows not only transportation of satellite school students to the central school, but also travel of central school teachers to satellite establishments to conduct classes there, for example on specific school days. Moreover decisions need to be taken about the location of new education resources, such as teacher working time or equipment: whether they are more efficiently used in the central school or in the satellites. Similarly, it is necessary to decide for each satellite school which years will be taught there. Since this is typically the autonomous decision of the school leader, significant flexibility in the use of resources may be achieved under this arrangement. Box 2.1 provides the example of school consolidation in Portugal which was greatly based on the creation of school clusters.

Introduce effective co-ordination and planning mechanisms to manage the school network

Given the current efficiency problems in managing the school network, the establishment of a strategic reflection on the development of institutional mechanisms for school network co-ordination and planning is to be given high priority. The particular specificities of each county or region imply that the strategic reflection on effective school network co-ordination and planning should have a strong county or inter-municipal dimension with the general goal of "regionalising" school network design and planning. This is in the spirit of the recommendation by the OECD Public Governance Review of Estonia: "In the education sector, the national, county and municipal governments should consider co-operating to create regional 'cluster districts' (also sometimes referred to as 'collaboratives' or 'federations') as a way to encourage more effective and efficient management of education" (OECD, 2011).

The strategic reflection on effective regional (county-level or inter-municipal) school network co-ordination and planning should raise the question of the nature of the planning process, as well as the role of counties and municipalities in the process. The review team considers that regional school network planning should be a process based on social consultation and deliberation, that is, it cannot be purely a technical/administrative process managed fully by the national authorities and their county-level units. It does not have to necessarily be organised by counties' government offices. It can be convened by the national government through a body bringing together the representatives of school owners at the county level (or, alternatively, in a territory bringing together several municipalities).

The creation of regional (county level or inter-municipal level) planning platforms covering all levels of school education, with the involvement of all relevant stakeholders (including municipalities, private providers, the regional representatives of the world of work, county government representatives and also the representatives of national authorities) could be a first step towards improving co-ordination of decisions concerning the school network. It is expected that the Ministry of Education and Research would be a

Box 2.1. "Communities of schools" in Belgium (Flemish Community) and school clusters in Portugal

In the Flemish Community of Belgium, communities of schools for primary and secondary education have been promoted by the government, starting in 1999. The objective was to make schools work in collaboration by sharing resources, rationalise the supply of courses and promote cost savings across schools. The government's aspirations were that this new system would enable the enhancement of student guidance systems, particularly in relation to their educational career trajectories; the lessening of the managerial-administrative burden on school directors so that they become pedagogical leaders; the increased use of information and communication technologies (ICT); and the rationalisation of resource use both in relation to staff recruitment, functioning and evaluation and in relation to co-operation in curriculum. The government incentivises participation of schools in these communities by allocating additional staffing and other resources (e.g. "envelopes" of teaching hours) specifically to be used through collective decision making processes established freely by the communities of schools. Overall, communities of schools have been successful in strengthening co-operation in an environment based on school choice and competition. The evaluation undertaken for secondary school communities shows that communities have strengthened co-operation in developing common personnel policies and policies to allocate human resources across the schools involved and there seems to be informal co-operation with other school levels such as primary schools and special education. Yet there is still scope for co-operation in rationalising education supply and infrastructure across schools and in providing effective guidance for students. The OECD Review of School Leadership provides several country examples of school collaboration (see Pont et al., 2008, Table 2.1: 57).

In Portugal, about 2 500 schools closed between 2005 and 2008 compared with 1 000 in the previous 10 years. Rural areas were dominated by small schools with poor facilities, while urban areas had overcrowded schools with double shift education. Research showed inefficiencies, lower academic performance in smaller schools, higher teacher turnover and variable quality in rural areas. The government determined that small schools with year repetition rates higher than the national average were to be closed during 2005/06 and clusters of schools should be created. The reorganisation and redeployment programme had several instrumental features: i) there was a clear central vision about what type of schools should replace the closing schools, which were larger school centres with a minimum of 150 students at more than one level and full-day school with extracurricular activities; ii) it was recognised that parents needed to be convinced that the outcomes for them and their children would be better and incentives, including free transportation, were provided; iii) municipalities needed incentives to invest in new provision; and iv) the consultation and decision making processes needed to be applied carefully as previous attempts to close schools had failed. In general, the reorganisation process brought about innovations and improved efficiency of the schools, reduced isolation of teachers, improved socialisation of underprivileged or isolated students, and fostered a collaborative approach between the Ministry of Education (centrally and regionally), municipalities, schools and other stakeholders (Ares Abalde, 2014).

Sources: Pont, B., D. Nusche and H. Moorman (2008), Improving School Leadership, Volume 1: Policy and Practice, http://dx.doi.org/10.1787/9789264044715-en; and Ares Abalde, M. (2014), "School Size Policies: A Literature Review", OECD Education Working Papers, No. 106, http://dx.doi.org/10.1787/5jxt472ddkjl-en.

strong player in the field of school network design and planning. As suggested in Chapter 3, while the review team supports the government's goal of "recentralising" general upper secondary education as an important step in clarifying responsibilities within education, the implementation of this strategy should involve both a dialogue with municipalities (to determine which ones could maintain the operation of their gymnasiums under a state-defined regulatory framework) and co-ordination at the county or regional level to define where the operation of state-run gymnasiums is pertinent.

Encourage co-operation among municipalities

The planning processes should also encourage more horizontal co-operation between municipalities, especially in the case of those of smaller size. Such co-operation is not facilitated due to the lack of efficient organisational and financial models, the weak county level co-ordination and the strong role of school directors, making co-operation for jointly provided educational or connected services very rare (OECD, 2011). Given the existing barriers to co-operation, the national government should consider providing incentives, facilitating formal agreements between municipalities, and building capacity for co-operative work (OECD, 2011). Of course, any national efforts to develop mechanisms for sub-national co-operation will need to be developed in partnership with municipalities and counties (OECD, 2011).

Improved territorial co-ordination could also benefit from the strengthening of the role of the educational departments of the county government offices. This territorial co-operation might be a good instrument to encourage inter-municipal collaboration for the provision of school services, such as co-management of basic schools across municipalities, improving transportation services and the common use of various facilities, joint purchasing, school maintenance, improving the access to professional services, etc.

Take a "modular approach" to school consolidation

The discourse is often about "closing schools" although in many cases the reduction of services would not necessarily imply the closing of whole institutions. The review team recommends a more "modular" thinking on school network solutions which allows the use of rationalisation techniques not in terms of whole institutions but in terms of specific services within these institutions. For example, instead of closing schools, decision makers could consider reorganising local provision so that pre-primary classes are provided alongside primary classes (i.e. at the same school), which would facilitate the provision of education services in smaller municipalities possibly in a context where the maintenance of a full basic school is financially not sustainable. Making a clear distinction between the primary and lower secondary education levels would also reflect this "modular" thinking. Similarly, in the case of secondary VET it is suggested that thinking shifts from "institutions" to "programmes within institutions". It should be noted that the steps taken by the Estonian government to separate general upper secondary education from basic education (e.g. by not allowing municipalities to create new schools combining Year 10-12 and basic education) are undertaken using this "modular" approach.

State should clarify what it is funding

Of course, a fundamental component of the strategy to achieve school consolidation consists of the incentives mechanisms built into the school funding formula. These are

explained in Chapter 3. In this respect, the planning of the school network would benefit from a clear message from the central government about what are the objectives of the public funding of education and what it is actually funding through its education grants. For example, in addition to stating that it is funding a given minimum salary for teachers, it could define that public funding is to be used for classes above a given minimum size (see Chapter 3). In this way, municipalities would know that if they wish to maintain classes below such minimum levels, they would need to contribute their own public funds.

Use EU funds to further assist school consolidation

The Operational Programme for Cohesion Policy Funds 2014-2020 (Ministry of Finance, 2014) already provides, under Investment Priority 2, for funds targeted at assisting with school consolidation processes, in particular the development of the new network of state-run upper secondary general schools and support for municipalities to strengthen their basic education schools (see Table 3.4 in Chapter 3). Within this context, the support for local reorganisations of education provision could involve the creation of appropriate conditions for school transportation and support for networks of municipalities to design and implement education development plans that improve the efficiency of resource utilisation. The review team also recommends the creation of a specific action line within the Operational Programme 2014-2020 that would support the creation of a school network planning platform in one or two counties, including a careful monitoring of the process.

Ensure entry into the school network derives from assessed need

Decisions on accrediting schools for entry into the school network – and therefore to benefit from public funding – should increasingly depend on needs analysis and quality assessment. Only services of proved quality should get public funding and only new services whose need has been identified should be allowed to become part of the school network. The review team proposes that in function of the further development of the national evaluation and assessment framework quality requirements are increasingly taken into account when decisions are made about the allocation or withdrawal of public funding for education services.

Make vocational education a more attractive option and improve its efficiency

In Estonia, there is a great need to make vocational education and training (VET) a more attractive option for students. A first priority is to ensure the labour market relevance of vocational programmes. This involves maintaining a close collaboration with labour market actors at the national, regional and school levels. In this respect, it is important to improve the responsiveness of individual schools to the identified needs in the labour market with an improved ability to swiftly adjust their supply of programmes. It is not clear to the review team that the strict planning approach of the State Commission for Vocational Education, defining publicly-funded places per occupation, is a better option to respond to the needs of the labour market than having student demand (properly informed by labour market outcomes) dictate schools' adjustments to their supply.

Furthermore, Estonia needs to provide more work-based learning and apprenticeships within its VET system, which require the development of strategies to ensure businesses are willing to provide such opportunities to VET students. The challenge to promote work-based learning is to find a balance among the productive work in work-based learning, the salary paid to the trainee and the level of subsidies (OECD, 2012b). The proper

balance may change from one sector to another. As recommended in OECD (2012b), Estonia should consider promoting a system where subsidies provided to firms are accompanied by quality control ensuring that part of the time spent in firms is devoted to instruction and not only productive work.

Another priority is improving the status of VET. Possible strategies to achieve this objective include greater partnership between general and vocational schools, the provision of up-to-date and economically relevant information, and advice and guidance not merely at the point at which students begin to make choices but from the earliest stages of compulsory education. Showcasing the successes of vocational education and identifying role models who can enthuse and inspire young people to take an interest in vocational pathways would also be a positive step. Another key aspect to make VET an attractive choice is to maintain partnerships between VET schools and employers, which encourages provision which matches labour market realities, makes VET learning more practical, familiarises employers with VET programmes and qualifications, and help teachers of vocational subjects to keep up-to-date. The main message should be that VET is a valid choice giving good prospects to students in the labour market or allowing students to pursue further studies at the higher education level and not the remaining alternative for students with weaker academic results in lower secondary education.

In addition, there is an imperative need to ensure that completion rates in vocational education improve. Strategies to achieve this objective include improved career guidance at the basic education level; supplementary general education classes to improve the basic skills as students enter vocational education; conveying the value of a vocational education degree to students (through improvement of career guidance within vocational education); establishing mechanisms for the early identification of learning difficulties or the inadequate choice of specialty (through individual mentorship systems within vocational education schools); instituting remedial programmes to address learning difficulties; offering professional development for vocational teachers to use more innovative teaching methods; ensuring practical elements of the training come early in the learning process; and ensuring that vocational options provide pathways to other learning opportunities in the Estonian qualifications framework (see also Chapter 3). Strategies suggested by Espenberg et al. (2012) are relevant in this respect. Also, as elaborated in Chapter 3, funding incentives can also contribute to improve the efficiency of vocational institutions.

Provide external support for evaluation and assessment

In order to ensure that all local players, especially school owners and school actors maximise the potential of school-based self-evaluation, it is recommended to strengthen the externality of school evaluation, to provide greater support and tools for school self-evaluation and to improve the performance information made available to individual schools (see also Chapter 4).

As far as external evaluation of schools is concerned, building upon the existing evaluation procedures operated by county government offices, the risk-based approach to monitoring schools can be strengthened with better student performance assessment data. In addition, support structures can be developed to monitor the quality assurance frameworks operated by school owners, especially municipalities. More fundamentally, it is suggested to develop a system to externally validate school self-evaluation in individual schools (i.e. an external audit to school self-evaluation), which could be performed by inspection services. In a system based on the responsibility of individual schools for

quality assurance, it is important to ensure school self-evaluation procedures are properly implemented. In addition to this, there needs to be mechanisms to externally challenge the conclusions of school self-evaluation. This could be done through formative external evaluations, possibly using a risk-based approach (as suggested in Chapter 4), whereby a group of external experts would establish a dialogue with the school to discuss its self-evaluation conclusions.

In addition, schools and municipalities could be provided with extra resources to strengthen their self-evaluation and quality assurance frameworks. This could include the availability of self-evaluation instruments training to interpret student achievement data, guidelines to develop school development plans, instruments for classroom observation, and resources for developing networks of schools to share practices and experiences. All these activities could continue being supported by the current officially trained quality assurance advisors (see Chapter 4), who could possibly be integrated in the services provided by the regional counselling centres.

Finally, schools could be provided with more informative data to guide their self-evaluation. This includes schools being provided with a data profile prepared on the basis of the data available from the Estonian Education Information System, so they can more easily "position" themselves within the overall Estonian school system. It could also be considered to transform the sample-based national student assessment in Year 6 into a full-cohort assessment so a more reliable assessment of whether or not the new education standards are met can be made at the school level.

Expand inclusive education for students with special educational needs and adjust the functions of special education schools

The movement towards the integration of students with special educational needs (SEN) into regular classes in mainstream schools has been very slow. This runs against Estonia's commitment to inclusive education and does a disservice to this small but important minority. It is also probably unnecessarily costly, though it also quite possible that implementing integration strategies in mainstream schools may initially be more expensive than educating SEN children in SEN schools. The solution lies, in part, in increasing the financial support given to mainstream schools for SEN students. In this way, the national government should review the coefficients used to provide additional revenue to mainstream schools for teaching SEN students in both mainstream and special classes (see also Chapter 3). These coefficients should make it possible for schools to hire well qualified teaching assistants to work in integrated classes. It is also important that funding for SEN students in mainstream schools is earmarked and that there are effective ways to monitor its use to facilitate the integration of SEN students in regular classes.

The expansion of effective inclusive education will also require SEN schools to enlarge their functions to support both students with special needs being educated inclusively in mainstream schools and teachers providing inclusive education in these schools. The example of countries, such as Germany, where the increase of mainstream placements has been important together with the high number of special schools has led to rethink the role of special schools' staff, might be relevant for Estonia. In Germany an increasing number of special schools' teachers are spending part of their working time in mainstream schools not only directly supporting children but also providing consultancy to class teachers (NESSE, 2012).

The other key component of a strategy for inclusive education is enabling mainstream schools to provide effective inclusive education. This can be a slow and gradual process which, however, can be significantly accelerated by massive and effective capacity building. The practice of inclusive education requires major changes both in the professional competences and the attitudes of mainstream teachers. Only teachers capable to use a rich repertoire of innovative teaching methods and capable to create learning environments that support personalised teaching and learning can achieve successful inclusive education. This requires a supportive institutional context characterised by an organisational culture which supports diversity and pedagogical innovations. Successful inclusive education can be realised only if massive capacity building in mainstream schools creates new capacities in these institutions and in their teachers to manage effectively classes where students with and without special needs are educated together. As recommended in Chapter 5, it is important that all teachers receive some preparation to manage classes with SEN students, either through initial teacher education or professional development programmes. In addition, VET school curricula could offer programmes to train teaching assistants to support the learning of SEN students.

Further support Russian-speaking students in Estonian language

The national government should consider developing an earmarked grant designed to provide financial support to local governments and schools for the additional hours of Estonian language instruction necessary to make Russian-speaking students proficient in the country's official language (see also Chapter 3). Language acquisition problems clearly pose barriers to, and raise the costs of Russian-speaking students advancing through Estonia's education system. As such, they run against Estonia's commitment to equal opportunity and fair treatment. The review team also believes that language barriers distort the choice of upper secondary programmes by Russian-speaking students in favour of vocational programmes, and thus ameliorating the basis for this choice would probably improve the efficiency of the system as well.

Sustain the support to regional counselling centres

The new regional counselling centres hold great promise for improving the day-to-day functioning of the school system and for providing critical information for its improvement. But they will need sustained support to develop the staff capacity, procedures and practices necessary for them to be attractive service providers for schools and local governments, and important sources of information for national policy makers about where the system needs to be adjusted to improve educational outcomes and social equity. It also seems logical to embed the discussion of the development of these institutions in the wider regional dialogues the review team is proposing to facilitate the consolidation of school networks. It seems similarly clear that at least some of Estonia's most skilled experienced teachers could be better utilised in developing these centres, than teaching small classes in small schools.

Improve capacity at the local level

Given the key role of municipalities in providing educational services, the capacity building of local actors should be a permanent priority. It is important to keep in mind that the professionalisation of local management does not depend only on the personal preparedness of local actors. In a wider professionalisation framework, the institutional

settings within which local actors operate (e.g. co-ordination and co-operation among municipalities), the professional support provided to local actors, feeding back assessment information on the work of municipalities and their services, as well as the access of local actors to vital information are key aspects to consider in improving capacity at the local level.

Part of the strategy involves capacity building programmes to be made available to municipality staff. These could emphasise quality assurance in education (including interpretation of performance data), managing local school networks, engagement with community members, communication and consultation processes, school development, financial planning and human resources management. This approach should be complemented with a network of advisors to support the education work of municipalities, possibly to be based in regional counselling centres.

In the spirit of collaboration, a valid option to increase capacity is to share education management resources among groups of volunteer municipalities. This could involve employing a number of specialised staff whose services would be available to different municipalities, in areas such as budgeting and financial control, planning of school network, provision of services to schools and use of data relevant for education management. In more general terms, municipalities should be encouraged to collaborate, including with regular opportunities for formal and informal exchange of practices. This could involve the identification and dissemination of effective practices.

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