Chapter 2

Governance of schooling and the school network in the Slovak Republic

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 the Slovak Republic such as the re-structuring of the school network in light of demographic developments, better integrating students with special needs, improving the educational opportunities of the Roma community and expanding the provision of pre-primary education. It also reviews capacity and co-operation at the local level for education provision, synergies across education subsystems, co-ordination for educational regional planning, and the use of EU structural funds in education. The chapter further highlights the importance of implementation aspects of education policy and the need to assess the impact of policy interventions.

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 regions and student groups and the level of parental choice. The chapter places particular emphasis on areas of priority for the Slovak Republic such as the re-structuring of the school network in light of demographic developments, better integrating students with special needs and improving the educational opportunities of the Roma community.

Context and features

The governance of education in the Slovak Republic is facing similar challenges than in most other OECD countries with a number of specificities which are typical to the Central and Eastern European region. First, the education sector operates under various external constraints, such as the scarcity of resources and the parallel need for fiscal consolidation; and demographic changes, especially the decrease of the school-age population with significant regional differences. Second, the broader context of the ongoing public administration reform strongly determines the room of manoeuvre for specific education sector policies. Third, education has become a system characterised by several decision-making levels, each having a certain, sometimes significant, level of autonomy and by the interaction of various actors, each having its own specific interests and agendas, which is leading to an increasing level of administrative complexity (Cerna, 2014).

The governance of schooling is affected by a context of funding constraints and fiscal consolidation

In 2011, about 4.4% of the GDP was spent on educational institutions in the Slovak Republic (including tertiary education), which is the second lowest figure within the OECD area (see also Chapter 3) (OECD, 2014a). The 2012 *OECD Economic Survey* of the country underlined that teachers in the Slovak Republic are among the worst paid in the OECD stressing that, on average, teachers were earning less than half the salary of a tertiary graduate, compared to between 77% and 89% in the average OECD country (OECD, 2012) (see also Chapter 4). The government expressed several times its intention to increase educational spending but this is difficult to realise in the context of current fiscal consolidation efforts. According to the European Commission's 2012 fiscal sustainability report "the country is at medium sustainability risk in the medium run and at high risk in a long-term perspective, mainly due to the budgetary impact of ageing costs" (European Commission, 2012) and the 2013 report of the Commission on public finances in the also stated that the fiscal imbalances in the Slovak Republic require "the credible implementation of ambitious structural reforms" (European Commission, 2013). Nonetheless, the fiscal situation has improved recently. The European Commission noted

that the "successful measures to improve public finances enabled" the Slovak Republic "to leave the EU's Excessive Deficit Procedure" (European Commission, 2014a). Reconciling the goal of increasing public spending in education and the parallel goal of reducing public debt puts the efficiency challenges of the education system in the spotlight (Jurzyca, 2014).

While reducing the high public debt remains a key objective, the country is also aware of the longer term negative consequences of underinvestment in human resources. This has been strongly stressed by the European Commission in the context of the 2015 "European Semester": "Low investments undermine Slovakia's competitiveness and growth prospects. Continuing economic convergence will require significant increases in both physical and human capital" (European Commission, 2015a: 4). As the fiscal situation improves the country is being encouraged by the European Union to increase growth-enhancing investment, especially in human resource development, including education (European Commission, 2015b). An area which is not affected by funding constraints and fiscal consolidation is the funding of development interventions supported by the EU structural funds.

The governance of schooling is highly decentralised

The public administration system has undergone major changes in the last decade in the Slovak Republic, with the emergence of politically autonomous municipal and regional self-governments which have now a major role in shaping the provision of education services, the school network and in assuring appropriate conditions for the daily operation of schools (see Chapter 1). There are 2 890 municipalities in the eight self-governing regions in the Slovak Republic (see Chapter 1). Municipalities are the "founders" of state pre-primary, primary and lower secondary educational institutions, except for those exclusively providing education for children with special needs, which have remained part of a separate network under the direct supervision of de-concentrated state administration units (regional state authorities). The authorities of the self-governing regions are the founders of state upper secondary institutions, also with the exception of those exclusively offering special needs education (also managed by regional state authorities). The number of municipalities running schools is very high and almost one third of them are founders of lower secondary institutions (see also Chapter 1).

The municipal and regional systems of self-governance are relatively new in the Slovak Republic and the way responsibilities are shared between the municipalities or self-governing regions and the national authorities is still in a state of development. As the time elapsed since the emergence of the system of self-governments is still too short to firmly evaluate its effectiveness and sustainability, caution is needed when analysing the current and possible future public administrative context of educational governance. This caution has to be stressed particularly strongly when it comes to the regional level. The emergence of self-governing regions is a very recent development; therefore it is not yet possible to see how their social recognition, political weight, administrative jurisdictions and particularly their problem-solving capacities will develop (Buček, 2011).

The current distribution of decision-making power in the Slovak state education system seems to be balanced between the three poles of the national, the municipal/regional and the institutional. The institutions (schools) have acquired relatively large autonomy: all of them now have an elected school board with relatively strong jurisdictions (including the selection of the school director), and they are protected from too strong a local control through the funding system (which limits the redistributing

power of their founders) and they are also encouraged to adapt the national curriculum to their own specific educational context through school education programmes (see also Chapter 1).

The national government, that is, the Ministry of Education, Science, Research and Sports has strong regulatory powers. It uses a range of instruments to implement and monitor its policies through its de-concentrated regional agencies (the regional state authorities, recently integrated into the general purpose regional administrative units of the government), an information system which generates vast amounts of data on local and school level processes (including student outcomes), the national inspectorate that allows the collection of qualitative classroom level information and a relatively well developed network of other specialised agencies of the Ministry of Education (see Chapter 1) (Shewbridge et al., 2014). At the same time, municipalities are increasingly influential players in the field of public service provisions, with strong national level representation and interest assertion capacities.

The multi-level and multi-actor character of the Slovak education system, as it has emerged from the public administration reform of the early 2000s and the more recent curriculum reform of the late 2000s 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 the Slovak Republic has not led to the weakening of national authorities: it has rather changed their role and their repertoire of instruments for effective steering.

The ongoing public administration reform has implications for education governance

The ongoing reform of general public administration might have a strong impact on the administration and the governance of the education sector. One of the key goals of this reform is to face the challenge of fragmented public administration "organised around strong ministerial silos" and to strengthen integration through promoting "co-ordination and collaboration across ministries" (OECD, 2014b). One of the visible impacts of the public administration reform in the education sector is the integration of the regional education sector administrative services into the regional state authorities subordinated to the Ministry of Interior (Shewbridge et al., 2014). This change certainly will, in the longer run, weaken the possibility for the central administration to use direct administrative tools and might encourage the movement towards a strategic steering model, and it might also strengthen the operative management functions of the self-governing regions.

One of the explicit aims of the public administration reform is to ensure stronger collaboration between the "streamlined" de-concentrated state administration units (the regional state authorities) and municipal and regional self-governments in order to "facilitate regional development and address increasing regional inequalities" (OECD, 2014b). Another aim is to promote the use of evidence-based policymaking, including more systematic and better quality impact assessment through improving the analytical capacity of the administration. It is a logical expectation that all these changes will also pressure administrators in the education sector, for example, to provide stronger support to regional actors to enhance their planning capacities and also to improve the knowledge and information basis of decision-making.

The consolidation of the school network has become a policy priority

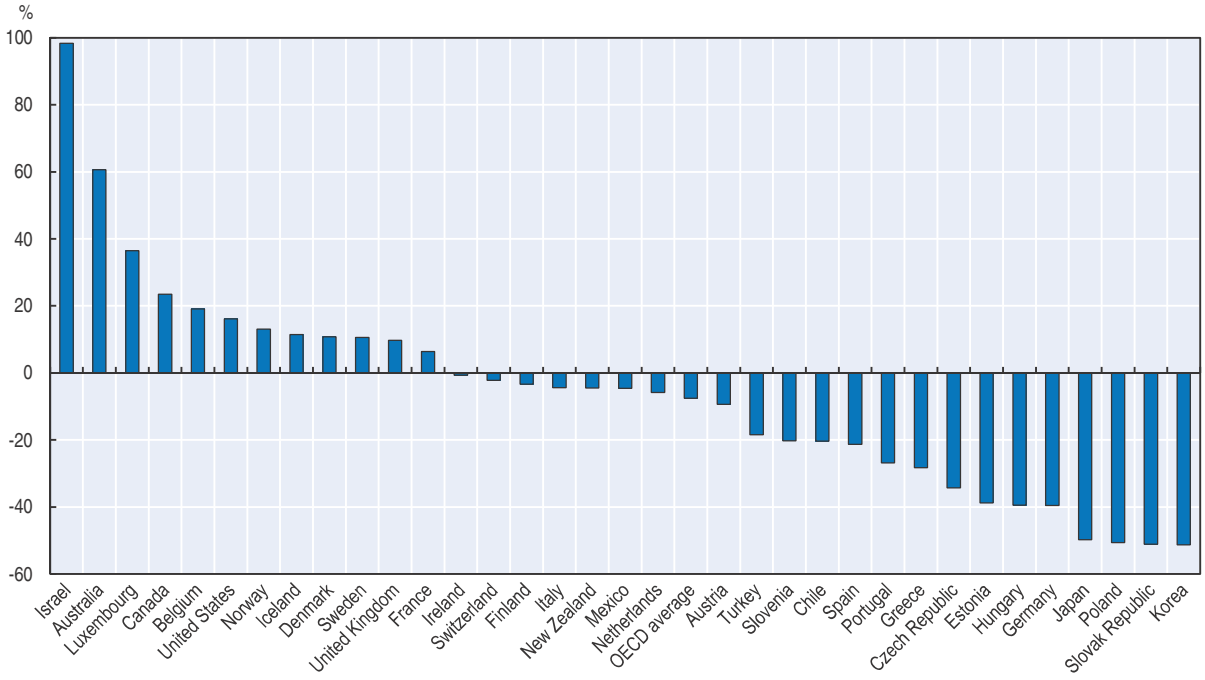
One of the areas where the steering capacity of the state administration is being challenged, and where there might be a need for new, innovative forms of interventions is the governance of the school network. Given the inherited inefficiencies and the ongoing demographic changes, the rationalisation of the school network is unavoidable. But now, as the politically autonomous self-governments have become the "founders" of state schools (i.e. they exercise ownership rights, such as deciding on opening, closing or reorganising schools), the processes of rationalisation require co-operation and sophisticated co-decision procedures.

The school network is defined in the Slovak Republic as the totality of schools formally accredited by the Ministry of Education, Science, Research and Sports to provide education and care in the country. Only schools belonging to the network are entitled to receive public funding. The procedure of school accreditation is regulated so that founders have to submit their application to the Ministry of Education by 31 March each year. Following a positive decision by the Ministry, the founder can establish the school and start its operation on the 1 September of the following year. Private and church founders must also enclose the approval obtained either from the municipality (in the case of pre-primary and basic schools) or the self-governing region (in the case of upper secondary schools) in their application. Without this approval the Ministry does not include the school in the network. A basic school with Years 1-4 can be established if the expected number of students is at least 30, and a basic school with Years 1-9 if the number of students is not lower than 150. In special cases (for example, if the closest basic school is difficult to reach) a lower number of children can be accepted. When the Ministry evaluates the applications it takes into account local and regional needs, the language of instruction, the number of students and the financial and technical conditions of schools. The Ministry can also take the decision to close schools through a similar process but a proposal to close a school can also be made by regional state authorities and the Inspectorate.

The need for rationalisation is clear and seems to be accepted by all key stakeholder groups, including teacher unions and various other organised interest groups. There are a number of inherited inefficiencies which have been reinforced by the public administration and public funding reforms, creating too many and too small founder units and leading to a fragmentation of the system. The current demographic decline makes these inherited inefficiencies even more visible. The number of births dropped from 80 000 in 1990 to 55 000 in 2012 and this has led to a continuous decline of the school-age population (Educational Policy Institute, 2015). The number of students decreased by 21% between 2005 and 2012, with the largest decrease in the secondary vocational sector (27%) but substantial decrease also occurred at the level of basic schools and general secondary schools (nearly 20%). At the same time the number of teachers also dropped, although at a lower rate (14%), as well as the number of classrooms (8%) and schools (7%) (Educational Policy Institute, 2015).

The Slovak Republic is among those OECD countries where the expected future decrease of the school-age population in the coming decades is among the highest (see Figure 2.1), though, in the shorter term, the size of some school-age groups is expected to grow. By 2025 the number of children aged 15-19 is expected to be more than 20% higher in 59 out of 72 districts. There are, however, significant differences in population projections between regions and districts. The districts in the eastern part of the country and the

Figure 2.1. **Projected change in 5-19 year-old populations across OECD countries between 2000 and 2050**



Source: OECD statistical database, *Historical Population Data and Projections (1950-2050)*, *http://dotstat.oecd.org/Index.aspx*.

southern districts of the centre of the country will experience a sharp decrease but in some western districts, especially in Bratislava, the school population is expected to grow, at least in the shorter term.

The clustering of primary and lower secondary education within a single school unit and the approach to vocational education are specific features of the Slovak education system

Compulsory basic education is typically provided in schools comprising both primary and lower secondary level classes, with the consequence that lower secondary education is seen as part of a basic service to be provided as close as possible to the place where people live, that is, even in small villages. This structural feature of the system makes it difficult to create school units of appropriate "size efficiency", although there are many basic schools with only primary education classes (Years 1 to 4). Furthermore the Slovak Republic, similarly to other Central and Eastern European countries inherited a very extensive sector of secondary vocational schools providing specialised training in many, rather narrow vocational areas (in 2013, there were 460 secondary vocational schools). Education in secondary vocational schools is typically more expensive than in schools providing general education and the relative isolation of this sector from the world of work (especially when compared to work-based or company-based skills development forms), the often high drop-out rates and the relatively high proportion of graduates who find jobs in areas that are different from the profile of their original formal VET qualification shows serious efficiency problems in this typical Central and Eastern European model of skills development (World Bank, 2006).

In the light of the notorious efficiency problems of the VET system the 2015 adoption of the new Act on VET (see Chapter 1) deserves particular attention. This new legislation strongly supports work-based learning as schools are now encouraged to establish partnerships with companies for providing practical training in accordance to their needs. According to CEDEFOP (European Centre for the Development of Vocational Training), the new school-company partnerships may gradually change the nature of initial VET, "transforming the traditional school-based supply-driven system to a demand-driven work-based learning system" (CEDEFOP, 2015). A recent amendment to the School Act is also linking the state funding of VET schools to the labour market relevance of their programmes. Since 2012 the Ministry has also been publishing lists of study fields with a lack of/surplus of graduates compared to the needs on the labour market.

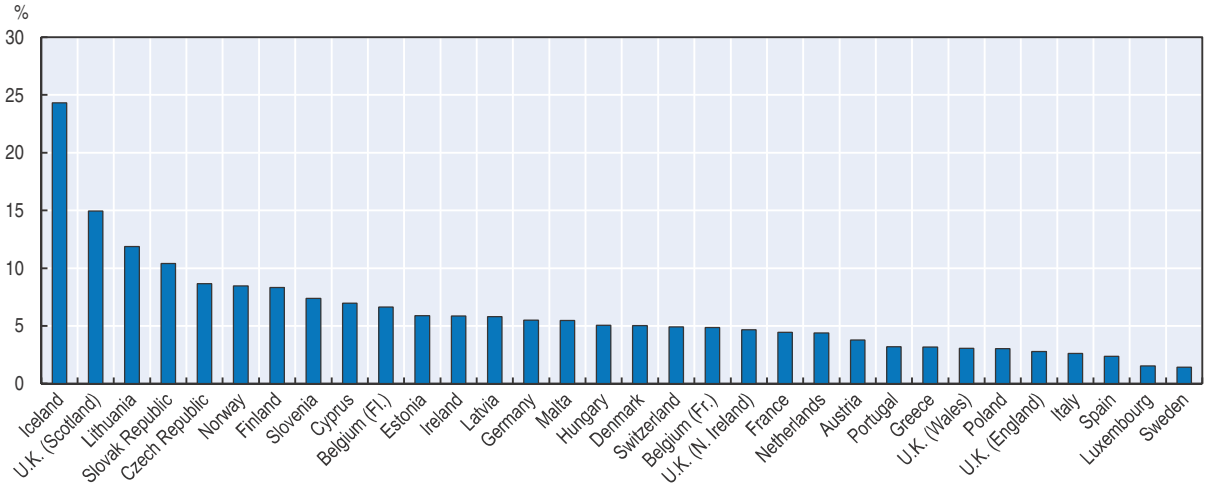
The student population is becoming more heterogeneous

A further contextual factor that has major implications for the efficiency of resource use in the Slovak education system is the growing heterogeneity of the student population and, parallel to this, the relatively low capacity of the system to organise effective teaching in heterogeneous student groups. A key issue in school resource use relates to the ability of school systems to properly address the diversity of student needs, ensuring learning opportunities across student groups through adequate school offerings and adapted school settings.

In 2013 the number of students with special educational needs (SEN) was 66 787, which was 7.9% of the whole student population (this proportion is 1.0%, 10.2% and 5.4% in pre-primary, basic and secondary education respectively) (see Table 1.8 in Chapter 1). Of these SEN students, 31.8%, 44.9% and 52.8% were attending mainstream schools (either in regular or special classes) in pre-primary, basic and secondary education respectively (see Table 1.8 in Chapter 1). The proportion of students categorised as having special educational needs is higher than in most European school systems while the proportion of SEN students attending regular classes in mainstream schools is lower than in most European school systems (see Figures 2.2 and 2.3). Although these data have to be treated cautiously they indicate potential efficiency problems related to the provision of special needs education (see also Chapter 3).

The growing heterogeneity of the student population is also related with the changing ethnic composition of the Slovak society, especially with the growing proportion of students belonging to the Roma minority, many of them living in conditions of deep poverty. According to the most recent census in the Slovak Republic (2011), only 2% of the Slovak population identified as belonging to the Roma minority (Educational Policy Institute, 2015). However, this is likely to be an underestimate. More accurate figures are provided by the Atlas of Roma Communities project, which is based on a survey applied directly in the field (UNDP, 2014). According to this survey, about 7.5% of Slovak population identified as belonging to the Roma Community (403 000 people). Of these, 46.5% live spread among the majority population, 12.9% live in concentrated settlements within municipalities, 23.8% live in concentrated settlements on the border of municipalities and 17.0% live in segregated settlements (UNDP, 2014 and Decade of Roma Inclusion, 2013). According to a study published in 2012 there were eight districts in the Slovak Republic where the proportion of the Roma minority was close to or higher than 20% (Matlovičová et al., 2012). In such districts the proportion of Roma children can be very high. According

Figure 2.2. **Proportion of compulsory school age students with special educational needs (SEN), 2010-11**



Notes: Caution is needed in comparing data across countries. Both the definition of "special educational needs" and the age range for compulsory education differ across countries. See the source of the data for further details. Data for Hungary, Luxembourg, Portugal and Spain refer to 2009-10 while data for the Czech Republic, Estonia, Greece, Latvia, Lithuania, Malta, the Netherlands, the Slovak Republic, Slovenia and the United Kingdom (Northern Ireland, Scotland and Wales) refer to 2011-12. Data for the private sector in the United Kingdom (Scotland) refer to 2009-10.

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

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

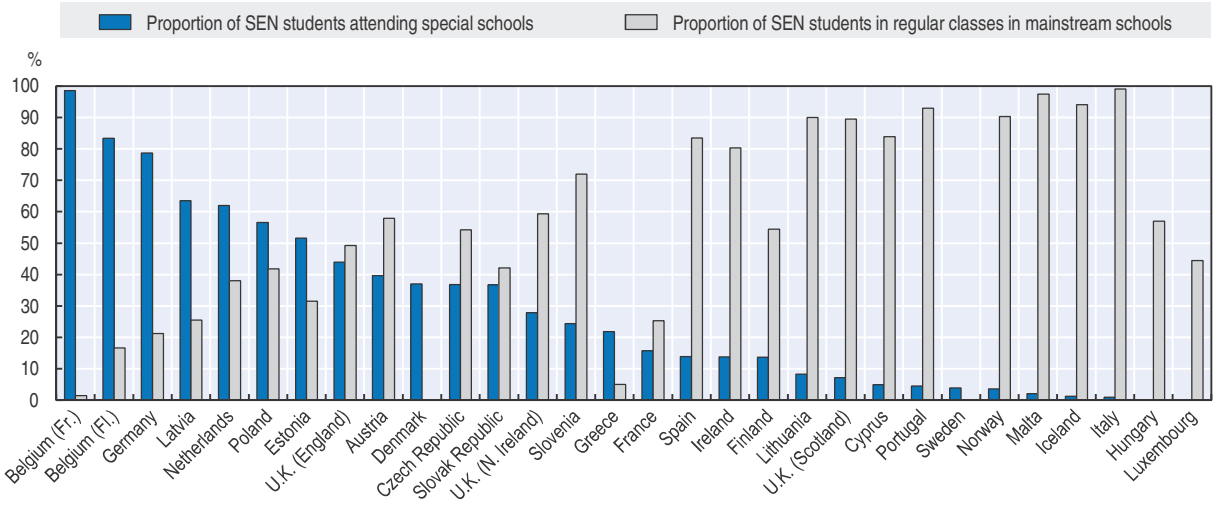
Source: EADSNE (2012), *Special Needs Education: Country Data 2012*, European Agency for Development in Special Needs Education, Odense, Denmark.

to a study on the demographic trends of the Roma population the share of school-age Roma children in the total number of children aged 6 to 15 will increase from 14% in 2005 to 15.7% in 2015 and 17.1% in 2025 (Vaňo, 2005).

Extracurricular activities are given great importance in developing social capital

An additional contextual factor is the richness of extracurricular activities and services in Slovak schools (see Chapter 1). School clubs (offered to students enrolled in the concerned school) and free-time centres (not attached to a specific school and which are open to all children) provide a wide range of educational and free time activities. In 2012, more than 300 000 children were enrolled in 500 free-time centres and more than 125 000 children were attending 2 100 school clubs (Educational Policy Institute, 2015). Many schools provide extracurricular activities related to mathematics and ICT: more than 90% of students are attending schools offering computer clubs, which, according to PISA data is the third highest figure in the OECD. The availability of extracurricular activities and services is seen as a strength of school education in the Slovak Republic as this sector plays an important role in the production of social capital. It also allows increasing the role of local revenues and parental contributions, especially when public support to this sector is targeted to the most disadvantaged student population.

Figure 2.3. **Proportion of compulsory school age students with special educational needs (SEN) by learning setting, 2010-11**



Notes: Caution is needed in comparing data across countries. Both the definition of "special educational needs" and the age-range for compulsory education differ across countries. See the source of the data for further details. Data for Hungary, Luxembourg, Portugal and Spain refer to 2009-10 while data for the Czech Republic, Estonia, Greece, Latvia, Lithuania, Malta, the Netherlands, the Slovak Republic, Slovenia and the United Kingdom (Northern Ireland, Scotland and Wales) refer to 2011-12. Data for the private sector in the United Kingdom (Scotland) refer to 2009-10.
Notes on Cyprus by Turkey and by all the European Union Member States of the OECD and the European Union: see notes for Figure 2.2.
Source: EADSNE (2012), *Special Needs Education: Country Data 2012*, European Agency for Development in Special Needs Education, Odense, Denmark.

EU funds are used to support educational development

The Slovak Republic, similarly to other Central and Eastern European countries, has been using EU structural funds to modernise its education system since its accession to the European Union. The operational programme for the education sector for the period 2007-13 specified five major development goals (Ministry of Education of the Slovak Republic, 2007):

- Creating a modern, flexible school system.
- Establishing conditions for the development of higher cognitive capabilities of students by developing their competences.
- Ensuring a transition from factual learning to the development of key competences, opening the school and linking it to the surrounding environment and the entire society
- Performing a didactic reform aimed at the application of modern teaching strategies, effective forms and methods of education.
- Modifying the objectives of education and the content of upbringing and educational programmes so that they provide the school leaver a set of competencies for further education or for entry in the labour market, as well as skills for life-long learning.

Since these ambitious goals imply the realisation of major changes in the practices of teachers and schools a large part of the EU funds has been used to support capacity development through various training programmes. The time constraints of the EU-funded interventions have made, among others, the establishment of new programmes and institutional mechanisms – such as massive teacher professional development – a particularly urgent task.

Strengths

There is consensus on the need to improve the efficiency of the school system

The policy environment for efforts to improve school resource use seems to be favourable in the Slovak Republic. The participation of the country in this OECD Review of School Resources is only one sign of this. During the visit and the interviews with key stakeholders the OECD review team gained the impression of the existence of a genuine concern for quality and efficiency, shared by all key stakeholders met. The quality and efficiency problems of the education system seem to be widely recognised and the need for action, including measures for network rationalisation seem to be shared even by the representatives of those social and professional groups whose position might be, in the short term, affected by such measures.

Hence the apparent willingness and capability of key stakeholders to co-operate in the efforts to make the Slovak school system more efficient and more effective is an important strength. During the interviews the OECD review team gained the impression that the representatives of the major stakeholder groups are open to negotiate the appropriate solutions. This is a particularly important feature because, given the level of decentralisation and the sharing of responsibilities in the Slovak education system, only common and co-ordinated action can bring results.

Local autonomy is well balanced with adequate accountability

The visit of the OECD review team confirmed the picture provided by the OECD Review of Evaluation and Assessment in Education in the Slovak Republic (Shewbridge et al., 2014) that the country has managed to build a system with a relatively good balance between accountability and autonomy. The analysis of the education policy practice of the most effective education systems suggests that the combination of extended local and institutional 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). The necessity to combine these perspectives seems to be widely recognised in the Slovak Republic among key stakeholders.

The move towards extended local and institutional autonomy which started in the first half of the last decade, first with the local government and fiscal decentralisation reforms and municipal and regional self-governments becoming the owners (founders) of most schools, and later continued, in the second half of the decade, with the new education law extending the autonomy of schools, has been paralleled with the creation and strengthening of accountability frameworks. The emerging national system of standardised student achievement measurement and the State Schools Inspectorate are key elements of the latter. As already stressed in the previous section on contextual factors, the current system of educational governance in the Slovak Republic can be described as a relative balance of power between three poles: i) the state education authorities regulating and supervising the system; ii) the autonomous local/regional governments (founders of schools); and iii) the autonomous schools with their own board of elected representatives (school board). Through its meetings with municipal leaders, school leaders and school board members the OECD review team formed the impression that a genuine commitment to the goals of assuring quality and effectiveness in the

Slovak Republic is a realistic expectation at local and institutional level. The elected leaders and representatives the OECD review team met at these levels seemed to show a good understanding of the current challenges and good problem-solving capacities.

School choice and school-level information strengthen the system of checks and balances

The balance of power of the three poles is complemented by two inter-related mechanisms that are further strengthening 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 hand. The existence of private institutions with access to public funding, the per capita funding system based on the principle of public money following students (see Chapter 3) and the free school choice system have created a quasi-market environment which places the users of services in a powerful position. This is supported by the disclosure of information about schools for parents and students with the intention of making school choice more informed and encouraging competition among institutions. The Ministry of Education supports the operation of a public Internet portal called "School Map"[1] which publishes key data on every school, such as the contact details, the number of students and teachers, the number of students with a socially-disadvantaged background, the budget of the school, details on the specific educational profile of the school, graduate unemployment data (for secondary schools) and the aggregated standardised tests' results of the school. Further data (such as the results of the secondary school leaving examination) are available on another portal operated by an NGO, which allow users to compare schools on the basis of a set of indicators.[2] While some of these data may be problematic (see Chapter 3), school-level information assists school choice by parents.

There is good central steering

The relatively strong local and institutional power and the market mechanisms are counterbalanced by strong national level steering and the use of a relatively wide variety of steering instruments. The Slovak Republic has an information system which allows the monitoring of many local and institutional level processes (such as student performance, funding and human resource management) and creates opportunities to assess the impact of national policies and development interventions. This is a system in development, with new forms of data collection and new indicators being continuously added. One of the most recent developments is the shift from the collection of aggregated institutional statistical data (which faced considerable quality assurance challenges) to individual student and teacher level data collection (as of September 2015, following a pilot exercise during 2014). This naturally raises the question of data protection and also new questions of data reliability. National authorities are also running a high number of specific programmes (mostly with EU co-funding) which make it possible for them to intervene when necessary in the increasingly decentralised public management environment and also develop the capacities of local decision makers.

The funding system is also used to create incentives shaping the behaviour of local actors (see Chapter 3). The per capita normative funding is encouraging municipal and regional self-governments to use funds in a more efficient way, and to seek options for the reorganisation or restructuring of education services when the number of enrolled students is falling (see Chapter 3). A good example of using funding instruments to steer the system towards established policy goals is the encouragement for individual

mainstream schools to integrate students with special educational needs (SEN) through a per capita normative that is higher than for regular students (even if the results are not always as desired, see Chapter 3). There are also several forms of targeted funds for specific purposes such as energy savings or purchase of special equipment. The system seems to be, at least in part, responsive to the financial incentives, which allows the central government to steer the system in the decentralised environment.

There has been some consolidation of the school network

Under the pressures created by the funding system, the adjustment of the school network has already started (see also Chapter 3). As the number of students dropped by 18.7% (20.4% in the state sector) between 2005 and 2013, the number of schools dropped by 5.4% (8.5% in the state sector) and the number of teachers decreased by 7.8% (10.3% in the state sector) (see Table 2.1). This adjustment has been particularly effective in the state

Table 2.1. **Proportion of compulsory school age students with special educational needs (SEN) by learning setting, 2010-11**

	2005	2013	% change
Students	**992 864**	**807 111**	**-18.7**
State schools	**926 419**	**737 566**	**-20.4**
Pre-primary education	141 814	153 059	7.9
State schools	139 516	145 497	4.3
Basic education	534 147	427 377	-20.0
State schools	507 278	399 760	-21.2
General secondary education	99 758	76 711	-23.1
State schools	81 357	60 439	-25.7
Vocational secondary education	217 145	149 964	-30.9
State schools	198 268	131 870	-33.5
Teachers	**77 942**	**71 839**	**-7.8**
State schools	**71 208**	**63 843**	**-10.3**
Pre-primary education	13 201	14 841	12.4
State schools	12 989	14 001	7.8
Basic education	37 690	35 006	-7.1
State schools	35 566	32 344	-9.1
General secondary education	8 404	7 387	-12.1
State schools	6 490	5 344	-17.7
Vocational secondary education	18 647	14 605	-21.7
State schools	16 163	12 154	-24.8
Schools	**6 060**	**5 735**	**-5.4**
State schools	**5 710**	**5 227**	**-8.5**
Pre-primary education	2 945	2 870	-2.5
State schools	2 887	2 716	-5.9
Basic education	2 304	2 159	-6.3
State schools	2 173	2 003	-7.8
General secondary education	238	246	3.4
State schools	160	151	-5.6
Vocational secondary education	573	460	-19.7
State schools	490	357	-27.1

Note: Students attending lower-secondary education in 8-year *gymnasiums* are included under "General secondary education". For "General secondary education" and "Vocational upper secondary education" only full-time students are included. Data for special schools are not included. Data on teachers are based on head counts and include teachers at primary schools of art and language schools.
Source: Data provided to the OECD review team by the Ministry of Education, Science, Research and Sports.

secondary vocational sector where a drop in student numbers of 33.5% between 2005 and 2013 was followed by a decrease of 27.1% in the number of state vocational schools and a reduction of 24.8% in the number of teachers (see Table 2.1). Overall, the decrease in 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. However, it should be noticed that in the general context of the drop in student numbers, the private school sector has been expanding considerably at all levels of education. The same happens in the church school sector but to a lesser extent (see Tables 1.2, 1.3, 1.4, 1.5 in Chapter 1 and Table 4.1 in Chapter 4).

There is a growing awareness of equity issues

The OECD review team noticed a growing awareness of the critical situation faced by social groups particularly hit by social deprivation and poverty, especially the need to make serious efforts to integrate the Roma minority in mainstream education. These efforts have already had some influence also in the area of school network design, for example in the form of installing modular schools to enhance the accessibility to education services for Roma children close to the place where they live (although this approach also raises important equity questions as another potential factor of segregation). There is also a growing recognition of the negative equity implications of the early tracking created by 8-year *gymnasiums*, enrolling very young (10-year-old) children.

The role of extracurricular activities in the integration of disadvantaged student groups seems to be widely recognised in the Slovak Republic and this already receives high level political support. According to the 2014 National Reform Programme of the Slovak Republic submitted to the European Commission a pedagogical model for full day schooling was elaborated in 2012 with the support of EU funds. The model, after being evaluated by domestic and foreign experts, was put to test in 200 basic schools with at least 20% of their students coming from socially-disadvantaged environments. In this framework special curricula have been developed putting the emphasis on "linking students' educational and out-of-class activities" (Ministry of Finance of the Slovak Republic, 2014).

One of the specific equity dimensions characterising the whole region of Central and Eastern Europe is related to the special educational needs of national minorities. Hungarians are the largest national minority in the Slovak Republic (more than 8% of the whole population). In 2013, 8.5% of the 21 552 classes operated by state basic schools were using a language other than Slovak as the language of instruction, which was slightly higher than in 2000 (7.8%). Unsurprisingly, the size of classes where the language of instruction is not Slovak is significantly lower. For example, while the average size of basic school classes using Slovak as the language of instruction was 18.8 in 2013 the same figure for those teaching in Hungarian was only 15.9, and this figure was much lower in the case of other languages (Ukrainian, German or Ruthenian) (between 11 and 12). The provision of instruction in the language of national minorities is a priority in the Slovak Republic, placing equity considerations above efficiency considerations.

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

As already mentioned, the Slovak Republic, similarly to other Central and Eastern European countries, is using the EU structural 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. The fact that this OECD Review of School Resources is conducted at the beginning of the new 2014-20 programming period offers a unique opportunity for the Slovak Republic to include elements related to a more efficient resource use into the design of new development interventions. The strategic planning of the use of EU cohesion and structural funds, as presented in the Partnership Agreement between the European Commission and the Slovak Republic for the programming period 2014-20 shows that educational development is an important part of the national development programmes co-funded by the EU. According to this agreement a total of EUR 737 million are allocated to the thematic objective "Investing in education, training and vocational training for skills and lifelong learning" (about 5% of a total of over EUR 14 billion) with almost two-thirds funded from the European Social Fund and slightly over one-third from the European Regional Development Fund (about 2% is funded from the European Agricultural Fund for Rural Development) (see Table 2.2) (Government of the Slovak Republic, 2014).

Table 2.2. **Thematic objectives and indicative allocation of support by the EU, European Structural and Investment Funds for the Slovak Republic, programming period 2014-20**

Thematic objective	Indicative allocation of support by the EU (EUR)
1. Strengthening research, technological development and innovation	1 849 125 523
2. Enhancing access to, and use and quality of, ICT	825 683 592
3. Enhancing the competitiveness of SMEs, of the agricultural sector (for the EAFRD) and of the fishery and aquaculture sector (for the EMFF)	914 635 480
4. Supporting the shift towards a low-carbon economy in all sectors	1 119 171 222
5. Promoting climate change adaptation, risk prevention and management	995 298 991
6. Preserving and protecting the environment and promoting resource efficiency	1 858 443 897
7. Promoting sustainable transport and removing bottlenecks in key network infrastructures	3 495 128 621
8. Promoting sustainable and quality employment and supporting labour mobility	1 189 558 794
9. Promoting social inclusion, combating poverty and any discrimination	1 407 671 723
10. Investing in education, training and vocational training for skills and lifelong learning	736 744 582
11. Enhancing institutional capacity of public authorities and stakeholders and efficient public administration	267 311 313

Source: Government of the Slovak Republic (2014), *Partnership Agreement of the SR for the Years 2014-2020*, *www.partnerskadohoda.gov.sk*.

Thematic objective "Investing in education, training and vocational training for skills and lifelong learning" is operationalised through the *Operational Programme Human Resources for the Programming Period of 2014-2020*, the Integrated Regional Operational Programme (mostly with investment in educational infrastructure) and the Rural Development Programme (mostly through support for vocational training in the areas of agriculture and forestry). The Operational Programme Human Resources gives a prominent role to education as one of six Priority Axes (1-Education; 2-Youth Employment Initiative; 3-Employment; 4-Social Inclusion; 5-Integration of Marginalised Roma Communities; and 6-Technical Facilities in Municipalities with Presence of Marginalised Roma Communities). Within the "Education" Priority Axis, funded by the European Social Fund (a total of EUR 459 million), there are four specific investment priorities, one of them focussed on school education (Ministry of Labour, Social Affairs and Family of the Slovak Republic, 2014) (see Table 2.3). Priority Axes 5 and 6 to support marginalised Roma communities also

Table 2.3. **Investment priorities and specific objectives for "Education" Priority Axis in the Operational Programme Human Resources for the programming period 2014-20**

Investment priority	Specific objectives
Investment priority 1: Reduction and prevention of early school dropouts and support for access to quality pre-school, elementary and secondary education including formal, informal and common methods of education with a view to re-inclusion in education and training. (Financed by the European Social Fund – ESF)	**Specific objective 1.1:** Increasing inclusivity and equal access to quality education and improving results and competences of children and students.
Investment priority 2: Improving the labour market relevance of education and training systems, facilitating the transition from education to work, and strengthening vocational education and training systems and their quality, including through mechanisms for skills anticipation, adaptation of curricula and the establishment and development of work-based learning systems, including dual learning systems and apprenticeship schemes. (Financed by the European Social Fund – ESF)	**Specific objective 2.1:** Improving the quality of vocational education and training while reflecting labour market needs.
Investment priority 3: Improving the quality and efficiency of, and access to, tertiary and equivalent education with a view to increasing participation and attainment levels, especially for disadvantaged groups. (Financed by the European Social Fund – ESF)	**Specific objective 3.1:** Increase the quality of tertiary education and development of human resources in the area of research and development with a view to establishing a link between tertiary education and the needs of the labour market.
Investment priority 4: Enhancing equal access to lifelong learning for all age groups in formal, non-formal and informal settings, upgrading the knowledge, skills and competences of the workforce, and promoting flexible learning pathways including through career guidance and validation of acquired competences. (Financed by the European Social Fund – ESF)	**Specific objective 4.1:** Improving the quality and effectiveness of lifelong learning with an emphasis on the development of core competences and enhancing and upgrading skills.

Source: Ministry of Labour, Social Affairs and Family of the Slovak Republic (2014), *Operational Programme Human Resources for the Programming Period of 2014-2020*, *www.minedu.sk/data/att/7342.pdf*.

provide for investment in education services, including access to pre-primary education. In turn, investments to support school education through the Integrated Regional Operational Programme, which are funded by the European Regional Development Fund, are aimed at the improvement of school infrastructure; the provision of material and technical equipment in classrooms, laboratories, and resources for language teaching; and the creation of centres for dual vocational education and training. There is a special emphasis on the infrastructure needed to expand pre-primary education provision, especially in those municipalities with marginalised Roma communities (Ministry of Labour, Social Affairs and Family of the Slovak Republic, 2014).

In the coming years this might be the most powerful instrument to promote changes leading to higher efficiency and effectiveness in the Slovak school system. However, the longer term sustainability of reforms carried out with the support of EU funds will also depend on the availability of national funding sources. The EU investment described above typically requires co-funding from the national government.

Challenges

Lack of capacity and little co-operation at the local level are challenges in school resource use

Designing and managing the school network can be achieved only through a strong co-operation of all relevant agencies, especially state institutions and municipal/regional self-governments. One of the specific challenges the Slovak Republic seems to face in governing its school system is that while the key decisions (reorganisations, mergers) have been transferred to municipal/regional self-governments as founders, most of the information and administrative capacities have been retained by the central and

de-concentrated institutions of the state administration. The administrative capacities of most self-governments are relatively weak; many of them require active support from the relevant state institutions to take and implement decisions. Furthermore, particularly in lower secondary education, effective education provision can be organised only through inter-municipal co-operation which allows the sharing of resources (for example teaching capacities, special education services or extracurricular facilities) between institutions across several municipalities. But the incentives for inter-municipality co-operation are weak. As noted by the 2014 *OECD Economic Survey* (OECD, 2014c) "many municipalities are too small to efficiently provide public services".

There are rigid boundaries across education subsystems

Efficiency challenges are also linked to the relative isolation of subsystems (pre-primary schools; basic schools; upper secondary schools; special needs schools) and the rather rigid boundaries between them. This makes it difficult for subsystems to share resources and also hinders the smooth shift of resources from one subsystem to the other when needed in function of demographic changes, emerging new needs, existing inefficiencies and changing policy priorities. Pre-primary education is not sufficiently integrated into the formal education system, basic education institutions are disconnected from upper secondary institutions, and special needs schools are almost completely isolated from the mainstream school system. This relative isolation of subsystems seems to be accompanied by the low intensity of communication between the administrative authorities responsible for these subsystems. The de-concentrated regional offices of the Ministry of Education (now integrated into the general purpose regional state authorities), the self-governing regions, and municipalities as founders of the various types of institutions that belong to different subsystems are not sufficiently connected to each other to easily share human, infrastructural and knowledge resources. As a consequence, rationalisation efforts in one subsystem cannot rely on similar efforts in another subsystem.

The provision of lower secondary education is faced with major efficiency challenges

In 2013, about 427 000 students attended around 2 200 basic schools in the Slovak Republic (see Table 1.3 in Chapter 1). This means that the average size of basic schools was around 200. Although basic schools typically provide both primary and lower secondary education, the operation for these two levels can be carried out separately: in fact, in 2013 only 60% of basic schools were operating with at least nine classes (one-third of them operated with less than seven classes and one-quarter of them with only one or two classes).[3] This opens opportunities to organise teaching in a more efficient way, but when children have to move to higher year classes in another school that operates in a different municipality there is a need for enhanced co-operation between municipalities. The average school size in terms of the number of classes is rather low: out of 2 185 basic schools only 538 (24.6%) had at least 16 classes in 2013, that is, less than one-quarter of basic schools functioned with two parallel classes in each year. When schools providing lower secondary education have only one class in each year – as it is the case in most basic schools in the Slovak Republic – the possibilities of using subject teachers' work-time efficiently might be more limited. In this case a logical solution would be to use the work-time of some teachers in more than one school but this again requires strong inter-municipality co-operation.

As already mentioned in the context section, the number of municipalities offering lower secondary education is very high. There are 500 municipalities with less than 2 000 inhabitants with schools offering lower secondary education. This corresponds to 7.7% of municipalities with less than 1 000 inhabitants and 61.3% of municipalities with between 1 000 and 2 000 inhabitants offering lower secondary education (see Table 2.4). Ensuring a sound financial basis and adequate administrative capacities to provide good quality lower secondary education in such small municipalities is likely to be a challenging task. As a comparison, the number of municipalities in Denmark and Finland, which are countries with a similar population size as the Slovak Republic, is only 98 and 336 respectively. The high number of small municipalities providing lower secondary education makes the establishment of size-efficiency at this educational level particularly challenging. In the light of the projected demographic decrease it is expected that the pressure to consolidate the school network will increase, as well as the pressure on small municipalities to establish co-operation for effective provision of lower secondary education.

Table 2.4. **Municipalities providing lower secondary education, 2014**

Size of municipalities (inhabitants)	Number of municipalities	Number of municipalities managing basic schools with lower secondary education	Proportion of municipalities managing basic schools with lower secondary education (%)
<= 1 000	1 907	146	7.7
> 1 000 and <= 2 000	578	354	61.3
> 2 000 and <= 3 000	183	171	93.4
> 3 000 and <= 4 000	63	63	100
> 4 000 and <= 5 000	41	40	97.6
> 5 000	155	155	100
Total	**2 927**	**929**	**31.7**

Source: Data provided to the OECD review team by the Ministry of Education, Science, Research and Sports.

Also, with some general education secondary schools enrolling students younger than the typical school-leaving age of basic schools (8-year *gymnasiums*) the secondary and basic education sectors are competing for lower secondary students. The best performing students often leave basic schools providing lower secondary education to enrol in 8-year *gymnasiums* making it more challenging for municipalities to provide effective lower secondary education services in basic schools.

Upper secondary education faces a range of efficiency challenges

There are also specific efficiency challenges related to the provision of upper secondary education. In the year 2013 there were 246 general secondary schools (*gymnasiums*, including 8-year *gymnasiums*) attended by 76 711 students and 460 vocational secondary schools attended by 149 964 students, that is, the average size of general secondary schools in terms of student numbers was around 314, and that of vocational secondary schools around 346 (see Tables 1.4 and 1.5 of Chapter 1). More than 86% of upper secondary students were attending programmes leading to the school leaving examination (the *Maturita*), either in general or vocational education, which gives access to higher education. Upper secondary state education is provided by schools founded by the self-governing regions, although approximately 40% of general secondary schools and 20% of vocational secondary schools are run either by churches or private entities.

Programme-level planning is missing in vocational secondary education and little tracking of graduates is undertaken

Secondary vocational education is one of the few fields where the isolation of subsystems has been diminished with the integration of the earlier upper secondary specialised schools (SOŠ, *stredné odborné školy*) with practical secondary vocational schools (SOU, *stredné odborné učiliština*) which are now all named secondary vocational schools. The differences between these two previous subsystems are now disappearing and an increasing number of schools which previously provided only upper secondary practical programmes are now also providing more general programmes (ReferNet Slovakia, 2011). This has opened an opportunity for increased efficiency through resource sharing, but it has also created new challenges, partly for those students used to make choices between institutions (rather than between programmes) and for those users who try to better connect vocational secondary education with labour market needs. The OECD review team noticed during the visit that the labour market relevance of secondary vocational education is typically considered at the level of institutions or types of institutions and not at the level of specific programmes which is unsuitable when schools are offering various parallel programmes. There seems to be a need for a shift both in user orientation and in provision planning from the level of institutions (schools) to the level of specific programmes.

Aligning secondary VET outputs with the skills needs of the world of work is particularly difficult in the absence of programme level planning and co-ordination. This is possibly one of the causes of the too rapid decrease of enrolment in practical programmes (ISCED 3C) which has often been criticised by employers (ReferNet Slovakia, 2011). If employers only see the institution (school) level and do not see the programme level, the possibility of the former influencing the content of the programmes and, in general, the output of secondary VET remains too limited. Most decision-makers in secondary VET still seem to think in terms of a network of schools instead of a network of programmes. This can be, however, counterbalanced by the increased autonomy of secondary VET institutions in determining the content of their programmes but only if they actively involve the social partners, especially employers, into the design and development of curricula which has already become a normal practice in many VET schools (ReferNet Slovakia, 2011). There are, however, some promising developments in this area. According to the 2013 ReferNet report on VET in Slovakia "indication of VET programmes offering an insufficient number of graduates and programmes featuring a surplus of graduates on the labour market is being developed as a proxy for reducing a mismatch between supply and demand on the labour market." The report also mentions that "a list of respective study and training programmes has been already developed in partnership with social partners (…) to assist in regulation of numbers of classes and study programmes in 2015/16" (ReferNet Slovakia, 2013).

A major source of inefficiency at the level of secondary VET is the lack of systematic programme tracking of graduates. Many secondary VET schools have very little knowledge about what happens with their students after they leave the school and enter the labour market. Apparently the recognition of the key role of this type of information in programme or network planning is still missing among decision-makers. As analysed by Fazekas and Kurekova (2016), these data gaps also prevent informed policy decisions and undermine informed student choice.

There is little synergy between vocational and general secondary programmes

While the isolation of subsystems has diminished at the level of vocational secondary education it still exists between the general and the vocational secondary subsystems. The OECD 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. Although the self-governing regions have a general responsibility for running upper secondary schools the general and the vocational subsystems operate quite isolated from each other and the OECD review team could not sense any intention to get the two subsystems closer to each other. Also, as concluded by Fazekas and Kurekova (2016), vocational programmes in the Slovak Republic are not adequately geared towards supporting general skills development.

Regional co-operation between VET providers is weak

The relatively weak planning and co-ordinating capacity of self-governing regions seems to be one of the factors that may hinder efforts to make the vocational training system more efficient and more responsive to regional labour market needs. Similarly to other Central and Eastern European countries (see Box 2.1) the Slovak Republic also started the process of establishing larger regional vocational training centres with the aim of improving the internal (financial) and external (labour market) efficiency of the training system. This process has, however, been slower than in some other countries, partly because of certain regional actors being "cautious taking into account risks of conflicts between VET schools selected for upgrading into centres and those not selected in terms of financing and attracting students" (ReferNet Slovakia, 2010), partly because this process seems not to have a real "owner". However, the new 2015 Act on vocational education and training, as it strengthens the role of self-governing regions in determining the supply of VET programmes, is expected to bring improvements to regional co-ordination in VET provision.

Box 2.1. **The establishment of regional vocational training centres in Lithuania**

Lithuania, as one of the Eastern and Central European countries which inherited a large network of technical and vocational schools, many of them very small, started a restructuring programme at the beginning of the 2000s. The aim was to establish "multifunctional regional vocational training centres". The creation of the regional centres was started with merging training institutions in a given region. Originally the goal of transforming some of these new centres into post-secondary training institutions was also pursued but this was later rejected (Methodological Centre for VET, 2003). Following the access of the country to the European Union (EU) the process of regionalising VET provision was supported by development interventions in the framework of EU funded structural operations. The mergers led to a significant reduction of the number of VET schools. By 2008 13 vocational schools operating as regional centres had been granted self-governing status with increased budgetary autonomy. This allowed them to attract "a variety of stakeholders in the management (enterprises, regional and municipal government representatives, etc.)" which also helped "to improve the relationship with employers and has strengthened the standing of VET" (Methodological Centre for VET, 2008). During the last one-and-a-half decade similar programmes were launched also in other Eastern and Central European EU member countries.

The creation of regional training centres seems to depend strongly on the willingness of a number of partners to co-operate, such as sectoral employer organisations, regional self-governments, regional state authorities and the schools themselves. According to a ReferNet report there were 13 pilot centres in 2010 operating in the fields of motors trades and repairs, engineering, construction, forestry and electrical engineering (ReferNet Slovakia, 2010). Regional VET councils, "affiliated with the self-governing regions" (ReferNet Slovakia, 2011) might play a key role in accelerating this process but this can happen only if the planning and co-ordinating capacity of regional self-governments becomes stronger.

The provision of special needs education is inefficient

A further case of isolation of a subsystem concerns the field of special needs education. In the context section above the OECD review team stressed the relatively high number of SEN students in the Slovak Republic and also the relatively high proportion of those who are educated in a separate setting. Since the education of SEN students, by nature, is expensive, the way SEN categories are defined, the way actual decisions to place individual students into these categories are taken and also the forms special education provision can take are among the greatest efficiency challenges in all school systems, including that of the Slovak Republic.

The fact that, while the administration of mainstream schools has been transferred to municipalities and regional self-governments, the system of special education schools has remained under direct state supervision is understandable, given the much lower sensitivity of local providers for this specific area, their limited capacity to assure the highly professional services that are typically needed in this sector, and the high level of specialisation which requires a national scale of operation. This has created, however, a major challenge through disconnecting almost entirely the subsystem of special needs schools from the mainstream systems. This disconnection makes it particularly difficult to develop strategies for inclusive or integrated education which can be realised only through intensive daily interactions between the institutions and the practitioners of special needs schools and mainstream schools. 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 inclusively educating students with special educational needs. The administrative separation of special needs schools from the mainstream sectors seems to be a major obstacle to the development of inclusive education not only in quantitative but also in qualitative terms.

The OECD review team formed the impression that, on the one hand, SEN practitioners and schools are less interested in giving direct support to mainstream practitioners and schools in the Slovak Republic than in other countries and, on the other hand, mainstream practitioners and schools are less prepared to provide quality education in inclusive settings than in those countries where this is actively supported by SEN practitioners and schools. Although the number of SEN students educated in mainstream schools is increasing, thanks to the existing financial incentives and to the interventions of those who protect human rights and fight against discrimination, this has often created formal and authentic integration. In its interviews, the OECD review team heard criticisms by teachers in mainstream schools who expressed difficulties coping with the presence of SEN children in their classes. The experiences of other countries show that the capacity of

mainstream schools to provide high quality inclusive education can be created only if SEN and mainstream schools and teachers are in a daily intensive interaction and this can be created only if these sectors are not administratively isolated.

The relative isolation of the system of special needs schools from mainstream institutions has to be assessed in light of what is said above, in the section on contextual factors, about the increasing number of Roma children and their disproportionate placement in SEN schools. This practice is based on the judgments of expert committees which decide on individual cases on the basis of established criteria and principles, which are deeply rooted in the professional knowledge (and, inevitably, also beliefs) of the national SEN profession and which are strongly determined by the perceived pedagogical reality of mainstream schools. The relative isolation of special education schools, enrolling a large proportion of Roma children, from mainstream schools leads to poor communication between the professionals of the two sectors. As a consequence, the use of the expertise of professionals based in special education schools to enhance integration is probably much more limited than in those countries where the two sectors are better connected and where special schools' professionals work together, on a daily basis, with their colleagues in mainstream schools. The limited role of special schools' professionals in improving the capacities of mainstream education to become more inclusive might be a major bottleneck for the promotion of effective inclusion in the Slovak Republic.

Also, as analysed in Chapter 3, the significant recent increase of students categorised as having special educational needs which followed the introduction of a funding formula with a funding premium for special needs students raises concerns about the potential limited transparency of the decision processes to determine whether or not a student has special educational needs. This issue has certainly negative implications in terms of costs per student in Slovak schools.

A positive development has been an amendment to the School Act approved on 30 June 2015 whereby the basis for attendance of a special school or a special class in a mainstream school is more clearly defined. More specifically, the amendment stipulates that socio-economic disadvantage cannot be the basis for attending a special school or a special class in a mainstream school. Such attendance is to be limited to students with a diagnosed medical disability. The amendment also stipulates that the Slovak State Schools Inspectorate is required to monitor Pedagogical and Psychological Consulting and Prevention Centres which are in charge of identifying student special educational needs. In its supervisory role the Inspectorate may mandate the improvement of practices of the Centres and can also impose sanctions on them. This amendment seeks to support the integration of socially disadvantaged student groups (such as Roma children) in mainstream schools and classes.

Equity remains a major concern

Socio-economic background has a strong impact on student performance

Disparities in the field of education are not only regional but also social. According to the 2012 PISA survey, the Slovak education system is among those where the impact of the socio-economic status of parents on student performance is among the highest and the proportion of resilient students[4] is among the lowest (see also Chapter 1). While the OECD average of the percentage of variance explained by socio-economic status in mathematics performance was 14.8%, in the case of the Slovak Republic it was 24.6%, which was the

highest in the whole OECD area. And while the proportion of resilient students was 6.4% for the whole OECD area this percentage was only 3.9% in the Slovak Republic, which was the fourth lowest value (OECD, 2013).

There is little capacity to provide inclusive education

The low equity performance of the Slovak education system has many causes, some of them being certainly related to the low level of education spending mentioned earlier. But there are also structural causes related with the high level of structural differentiation and the isolation of the subsystems, as well as the low level capacity of the system to provide inclusive or integrated education. These latter two causes are strongly interrelated and they tend to reinforce each other, generating a vicious circle that leads to lower equity performance. The limited capacities of schools and teachers to provide integrated education, based on innovative pedagogies supporting teaching in heterogeneous classes, create constraints that push the system towards more structural differentiation (including both early tracking of students to basically different programmes, including with the option to join 8-year *gymnasiums*, and within-school tracking) and limited inclusion. But more structural differentiation and limited inclusion prevent the system learning those pedagogical approaches that allow effective teaching and learning in heterogeneous classes. In this context, especially when the system moves towards extended local and institutional autonomy, local actors tend to take decisions that lead to even higher levels of structural differentiation and exclusion which appear to them as effective solutions. Examples of this are the construction of modular schools close to segregated Roma communities and placing those children not deemed "ready" to enter Year 1 in the so-called Year 0. While it intends to provide some children with stronger foundations to start primary education, the latter practice tends to introduce inequality from an early age. It also raises concerns that Roma children might be particularly targeted.

The integration of the Roma community in mainstream education is limited

Similarly to other Central and Eastern European countries there is a tendency in the Slovak Republic to place Roma children in disproportionally high numbers into SEN classes and schools. Although these placements are done on the basis of the decision of an expert panel the outcome of the process is a practice of exclusion that is often criticised by Roma and other civil rights activists. This alleged discrimination has been subject to infringement proceedings launched by the European Commission in April 2015 against the Slovak Republic for non-compliance with the Racial Equality Directive (European Union Agency for Fundamental Rights, 2011) in its treatment of Roma school children. This has also been recognised by national authorities as a fundamental equity and rights issue which needs to be addressed (Office of the Ombudsman, 2013). The 30 June 2015 amendment to the School Act which stipulates that attendance of a special school or class is only for children with a diagnosed medical disability seeks to address this issue.

According to data from a 2010 household survey almost 20% of Roma students attended special classes in the Slovak Republic (UNDP, 2012a). This means that the proportion of SEN children was approximately twice as high among Roma students as in the total student population. Data from the same survey have also shown that almost two thirds of Roma children attending SEN schools were enrolled in institutions where there were only (or nearly only) Roma children and more than 90% of those attending SEN classes in mainstream schools were in classes with only Roma students (see Table 2.5). The lack of

Table 2.5. **Proportion of Roma children studying in various school types and the ethnic composition of their classes/schools, survey data, 2010**

	Mainstream basic school (%)	Special basic school (%)	Special class in a basic school (%)	Secondary vocational school (%)	Total (%)
Only (or nearly) Roma children	31.1	65.2	90.9	14.3	36.2
More Roma children than non-Roma	16.3	15.2	0.0	16.7	15.4
Approximately half Roma and half non-Roma children	15.6	14.4	9.1	21.4	16.4
More non-Roma children	32.2	3.0	0.0	33.3	26.0
Only (or nearly) non-Roma children	4.7	2.3	0.0	14.3	6.0
Individuals total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: UNDP (2012a), *Report on the Living Conditions of Roma Households in Slovakia 2010*, *www.undp.org/content/dam/rbec/docs/Report-on-the-living-conditions-of-Roma-households-in-Slovakia-2010.pdf*.

integration of Roma children also occurs within mainstream schools. The proportion of Roma children attending mainstream schools where the majority of classmates are Roma is the highest among all Central and Eastern European countries: according to data from a 2011 survey of the UNDP, the World Bank and the European Commission this was higher than 40% among the 7-15 year-old student population (UNDP, 2012b).

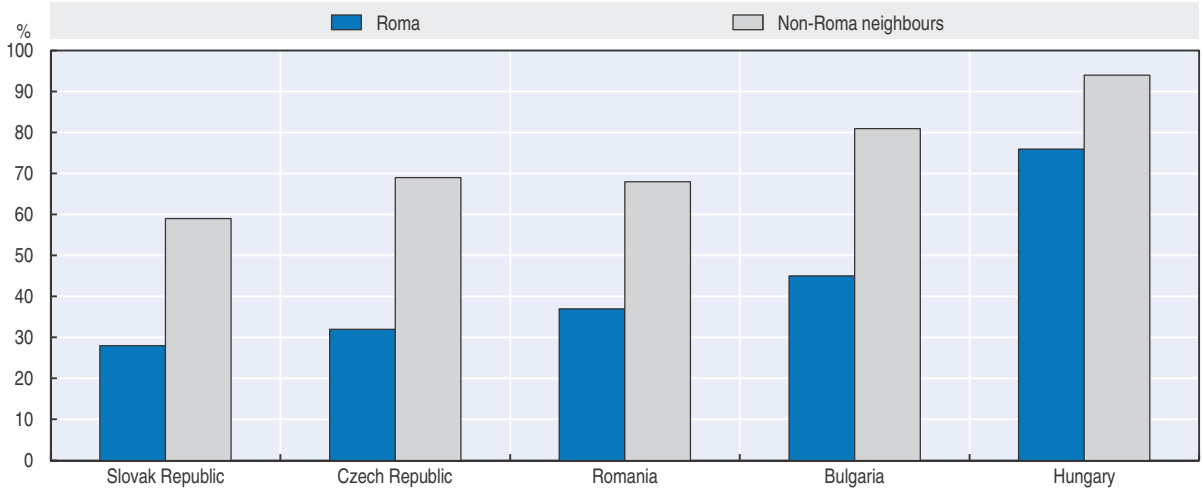
Socio-economic disadvantage and learning difficulties might still lead to attendance of special schools

The tendency to treat children with learning difficulties as "mentally disabled", that is, "medicalising" the socio-economic disadvantages is often seen by local actors as a solution to equity challenges but, on the longer term, these are further amplifying equity challenges. Unlike most other countries, the practice of "medicalising" the education of children with special education still exists in the Slovak Republic. The OECD review team saw strong indications of this when visiting a special needs education school: teachers were wearing white lab smocks and walls were decorated with medical pictures. All SEN children the OECD review team met at the school were Roma. Several of the children the OECD review team met at the school would probably receive education in regular classes in mainstream schools in most other education systems. Although the children met seemed to receive careful attention and teachers showed strong emotional commitment to take care of them, the almost complete isolation of these children from their mainstream colleagues certainly becomes a major obstacle to their future social integration. It is expected that the 30 June 2015 amendment to the School Act which limits the attendance of special schools and special classes in mainstream schools to children with a diagnosed medical disability will progressively eliminate the practice of "medicalising" socio-economic disadvantage.

Enrolment in pre-primary education is low

Pre-primary education enrolment is significantly lower in the Slovak Republic than in other countries of the Central and Eastern European region (see Chapter 1). This is related to insufficient supply in many municipalities, especially those inhabited by the Roma population and other disadvantaged social groups. According to the survey by the UNDP, the World Bank and the European Commission referred to above only 28% of the 3- to 6-year-old Roma children were attending pre-primary education in the Slovak Republic in 2011 (see Figure 2.4). Pre-primary education is financed by municipalities from their own budgets, and many of them do not have sufficient resources to expand this service. Since municipalities are not formally obliged to provide pre-primary education to all children

Figure 2.4. **Participation of 3-6 year-old Roma and non-Roma children in pre-primary education, 2011**



Source: Educational Policy Institute (2015), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools: Country Background Report for the Slovak Republic*, *www.oecd.org/edu/school/schoolresourcesreview.htm*.

even if they could afford it they do not always do it. The Ministry of Education has the intention of increasing investment in this area by allocating investment funds to individual municipalities based on a new subsidy mechanism. In 2015, EUR 14.5 million are being allocated from the state budget to the municipalities with the highest demand for pre-primary education provision. In the first round of this initiative, the Ministry is covering the extension of capacity in 113 municipalities with the creation of an additional 3 600 pre-primary places for children. Given a higher than expected number of applications by municipalities, the government intends to allocate additional resources to satisfy the remaining demand. EU funds are planned to substantially contribute to the increase in capacities for pre-primary education including in areas with significant Roma communities.

The provision of pre-primary education is not sufficiently integrated with the provision of primary education

The relative isolation of subsystems also characterises the provision of pre-primary education. 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 basic 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, although they receive an allocation from the state budget within non-normative funding for children one year before the start of compulsory schooling (see Chapter 3). The difference in the funding models might discourage municipalities from organising pre-primary and school education as integrated services where resources can easily be shared. The fact that pre-primary services cannot benefit from resources allocated to basic schools (even if the same resources are shared between pre-primary and basic school services) and vice versa creates barriers to the provision of integrated services. The relative isolation of the pre-primary education sector from the school sector might be

one of the causes of the lack of appropriate provision of pre-primary education in the Slovak Republic. At the level of pre-primary education there is an increasing level of unsatisfied demand (the number of rejected applications grew from 1 760 in 2007 to 9 600 to 2013) and in light of demographic changes this trend is projected to continue in the short term (up to 2017) (Educational Policy Institute, 2015).

Co-ordination for educational regional planning is needed

The challenge of disconnected subsystems is strongly connected with the challenge of co-ordination. The OECD review team formed the impression that inefficiencies related to the management of the school network are rooted in a great part in co-ordination weaknesses. Co-ordination becomes a challenge in every system where subsystems operate under different political and administrative jurisdictions, which is the case in the Slovak Republic. The decentralisation process, leading to the emergence of increasingly autonomous and powerful local actors (self-governing regions, municipalities, school boards), raises the question of how to assure co-ordination in this new context of multilevel and multi-actor governance. Ideally 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.

When thinking about the possible new co-ordination mechanisms the challenge of regional differences in demographic and ethnic patterns has to be taken into account. The Slovak Republic is one of those countries where regional differences strongly determine the applicability of specific public policies and public management solutions, including in the education sector. The dispersion of regional GDP, an indicator of regional differences used by Ecostat, was 35.2%, in 2011, with only five other EU countries (Bulgaria, Estonia, Hungary, Latvia and Romania) having higher values, and the value of this indicator was 1.3 times higher than one decade ago, with no other EU country showing a similar increase (Ecostat data).[5] This is accompanied by large regional differences in the level of labour market activity, unemployment and the balance between the demand for and the supply of skills. According to a regional analysis published by the OECD in 2014, the lowest level of unemployment, in some western regions, was 10% while in some eastern regions it was 18%. The same analysis identified significant differences also in skills supply and demand, with regions representing each of the existing patterns, that is "low skills equilibrium", "skills deficit", "skills surplus" and "high skills equilibrium" (OECD, 2014d). As stressed in the Country Background Report for this review "problems with capacities in basic schools are of regional nature" (Educational Policy Institute, 2015: 45) and this seems to be valid also for other subsystems and education levels, and not only for capacity but also for efficiency problems.

The regionalisation of planning of school provision is necessary in all countries but given the major regional differences this is particularly so in the Slovak Republic. The related political and administrative challenge is the allocation of responsibilities for regional planning. Regional planning can be done, theoretically, both by national and regional authorities, and both through technical/administrative and social/political processes, the two extremities being: i) technical/administrative regional planning by national authorities; and ii) social/political planning by regional authorities. The possible solutions in the education sector will be strongly determined by the current process of

public administration reform, as well as the institutional context of regional development, especially the use of EU regional development funds. During the visit, the OECD review team saw no serious reflection on how the regional planning of the school network should be institutionalised, how much this planning should be conceived as an administrative or as a social/political process, what role the autonomous local authority should play in this process and how planning in the education sector should be connected to the overall institutional framework of territorial development.

Processes to determine public funding eligibility need improvement

Similarly to other systems that are based on normative funding, especially those which allow private institutions to have access to public funding, the Slovak system faces the challenge of undertaking an adequate selection of those services and providers that should be eligible to receive public funding. This requires a continuous monitoring of the existing school registration and accreditation processes which assume 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). Recent new entry by church and 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 1 and 3). As shown in Figurex 1.A1.5 and 1.A1.6 in Annex 1.A1 of Chapter 1, school size and class size are smaller in church and private schools than in state schools (and much smaller in private schools) in a context in which a growing number of church and private schools are entering the school network (see Tables 1.2, 1.3, 1.4 and 1.5 of Chapter 1). On the basis of the evidence gained through the interviews, the OECD review team formed the view that the current process of accrediting providers and granting their registration in the network of publicly funded services does not provide enough guarantees public money is spent on services of high quality.

Revising standards and the application of these standards is a particularly difficult task because a balance has to be created between the need to adapt these in function of their observed impact, on the one hand, and the need for longer term stability and predictability, on the other hand. There is also a need to increase the transparency of accreditation and registration decisions. This is particularly valid regarding the decisions to register private providers into the publicly funded network as these decisions are, in all countries where public funding is allocated to private education providers, one possible source of corruption. Establishing high levels of transparency is generally seen as the most powerful instrument to avoid corruption in this area.

There is not enough attention to implementation aspects of education policy

A further challenge is that, similarly to other Central and Eastern European countries, there is a strong legalistic administrative tradition in the Slovak Republic shaped historically by the German legal tradition and reinforced, paradoxically, by the accession to the European Union (Liebert et al., 2013). This tradition is characterised by an overemphasis on the role of legal instruments in policymaking and a relative neglect of implementation aspects. This was illustrated during the interviews of the OECD review team. When talking about specific education problems and possible solutions to these problems the interlocutors of the OECD review team typically referred to legislative

documents under preparation and very rarely mentioned other "soft" policy instruments. References to instruments such as incentives, development interventions, and the use of feedback mechanisms or capacity building were seldom made.

A legalistic approach might be inadequate when the nature of the policy problem requires solutions applied gradually in function of the development of capacities or other contextual features. For example inclusive education of SEN children in mainstream schools can be successful only when a critical mass of teachers possesses the adequate competences which can be acquired only through professional learning. These are complex professional competences, learning them requires time, they spread across schools and among teachers only gradually and they cannot be mandated. An implication of this is that the spreading of inclusive education can be made only gradually, and this happens only if there is a sustained strong policy support for this process. A legalistic approach, which often forces teachers and schools to provide inclusive education from one day to another following the adoption of relevant legal rules and which does not provide strong and sustained professional support in the implementation phase cannot be successful in this and similar policy areas.

A specific challenge, strongly related with the legalistic administrative tradition, is the lack of or the limitations of impact analysis of policy interventions. As a document submitted a few years ago by the Slovak government to the European Commission in the framework of a social impact assessment peer review process stated: "the Slovak Republic has so far had little practical experience in the area of social impact assessment within the preparation of regulation proposals" (Alfoldiova, 2008). In fact, this statement could be made in all Central and Eastern European EU member countries. During the review visit, the OECD review team saw very few signs of legislative changes or other policy interventions being preceded or followed by careful impact evaluation. This impression has been particularly strengthened by the interaction of the OECD review team with the representatives of the education policy research community.

There are considerable challenges in making an effective use of EU structural funds

The use of EU structural funds for large scale development interventions requires specific management and implementation capacities which, similarly to other Central and Eastern European countries, are often missing in the Slovak Republic. A major challenge has been the ability to absorb and consume the EU structural and development funds made available to the country. According to a recent evaluation report, while the Slovak Republic was particularly successful in contracting out European Social Fund support for the 2007-13 programming period, the payment ratio[6] was among the lowest in the Central and Eastern European region (KPMG, 2014). The same evaluation report mentions that the Slovak authorities took important measures to improve the management of the EU-funded operations but this might influence less the capacity to achieve long-term outcomes than a more effective achievement of shorter term outputs. Another evaluation mentioned the Slovak Republic as one of those countries where the "high bureaucratic burden associated with the projects" was causing implementation failures (Jedlička and Rzentarzewska, 2014). According to the calculations of a private think-tank, while the contracting ratio[7] for all operational programmes (OPs) of the 2007-13 programming period was 66% by 2012, this was only 53% in the Education OP, and while the utilisation ratio was 31% for all OPs this was only 21% in the Education OP (Kuhn et al., 2012). By mid-April 2015, for the 2007-13 programming period, the Slovak Republic managed to spend only 66% of the total amount

of available European funds for the Education OP which already resulted in the loss of some significant financial resources (it should be noted, however, that the deadline for the allocation of the funds has been extended to 31 December 2015).

A further challenge is the alignment of EU-funded development interventions with the overall sectoral strategies and a better diffusion of the results of the most successful programmes. As the 2014 EU Education and Training Monitor report on the Slovak Republic stresses "EU funds could be used more effectively to support educational reforms" and, in order to achieve this, "good practices piloted through EU-supported projects could be better mainstreamed and supported by national funding" (European Commission, 2014b).

Also, since the planning and the implementation of EU-funded programmes are regulated by the relevant legal documents of the European Union and they are increasingly used to support the implementation of common European strategies in the Member states, there is a challenge in linking these to specific national policy priorities and policy measures. Since education development programmes are part of broader human resource development programmes, this requires the effective collaboration of various ministries and national agencies and also that of national and regional actors. The evaluation of the longer-term impact of EU-funded development interventions is a major challenge given the general weakness of policy impact assessment capacity referred to above. These challenges are aggravated by the weak operational and project management capacity, especially when the focus of managing projects should be shifted from achieving short-term output results to realising longer-term real impact.

Policy recommendations

Further consolidate the school network through co-ordination across levels of school administration

Given the present considerable inefficiencies in the provision of education services (small schools and classes) and the ongoing demographic changes, the rationalisation of the school network is a clear policy priority. Developing planning capacity, co-ordination mechanisms and inter-municipal collaboration is cornerstone to creating a more efficient and equitable school network. This is elaborated below. The other major policy strategy is the establishment of stronger financial incentives for school rationalisation and class consolidation. This is elaborated in Chapter 3.

Make the best interest of students the guiding principle for school consolidation

It is clear that with the current demographic outlook of the Slovak Republic, 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, the Slovak Republic 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 basic 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 2.2 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 2.2 provides the example of school consolidation in Portugal which was greatly based on the creation of school clusters.

Box 2.2. **"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 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*.

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

Given the current efficiency challenges in managing the school network, the establishment of a systematic strategic reflection on the development of institutional mechanisms for school network co-ordination and planning is suggested. The regional differences stressed in the previous section and the specificities of each region imply that the strategic reflection on effective school network co-ordination and planning should have a strong regional dimension with the general goal of "regionalising" school network design and planning.

The strategic reflection on effective regional school network co-ordination and planning should raise the question of the nature of the planning process, as well as the role of self-governing regions and municipalities in the process. The OECD review team considers that regional school network planning, given the key role of self-governing regions and municipalities as founders of schools, should increasingly 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 regional units (regional state authorities). It is assumed that a systematic strategic reflection on regional school network co-ordination and planning will lead to the recognition of the need to create a regional planning platform.

The creation of regional planning platforms covering all levels of school education, with the involvement of all relevant stakeholders (including municipalities, self-governing regions, the regional representatives of the world of work, regional state authorities and also the representatives of national authorities) could be a first step towards improving co-ordination of decisions concerning the school network. The OECD review team recommends the creation of such a planning platform initially in one or two self-governing regions, on the basis of voluntary participation. These pilots could test one or two models of regional planning of school education and, on the basis of a few years of experience, a national framework of regional educational planning could be established, supported by relevant legislation. It is important to stress that this process should not be an isolated education sector exercise but should be strongly connected to the overall system of regional development. It is also important that the development of regional planning of education is followed, in its pilot period, by continuous monitoring and supported by research, both feeding a national debate on the role of regional co-ordination in school education. This should be supported by the development of relevant analytical capacities in order to make planning an intelligent process supporting innovative solutions and evidence based policymaking.

Improved regional educational planning could benefit from the strengthening of the role of the education offices of the regional state authorities. An obstacle to this, however, is the recent integration of the regional education sector administrative services into the regional state authorities which are subordinated to the Ministry of Interior (and not the Ministry of Education). This is likely to hinder the potential of education offices of the regional state authorities for playing a key co-ordination role in regional planning. Given the importance of educational planning at the regional level in the Slovak Republic, bringing back regional education offices representing the state to the subordination of the Ministry of Education could be reconsidered.

The OECD review team sees two possible scenarios for the future development of regional co-ordination and planning. In one scenario of the regionalisation of school network design, planning remains the remit of the national Ministry and its regional units (regional state authorities) and the self-governing regions and municipalities play only a consultative role. This could be called the "nationalised regional planning scenario". In the second scenario self-governing regions become the key players, with significant co-ordination responsibilities and gaining control over the planning process. This could be called the "nationally-supported regional planning scenario". The term "nationally-supported" is important to underline that even if the second scenario is realised, the national authorities (the Ministry of Education and the regional state authorities) must have a strong role of co-ordination, support and capacity building. In the second scenario the co-ordination and planning potential of self-governing regions can be realised and effective policy outcomes can be expected only if the Ministry of Education provides strong support to the regional planners through appropriate guidelines, data, monitoring and, where appropriate, direct interventions.

The OECD review team expects that in both scenarios the Ministry of Education remains the strongest player in the field of school network design and planning even if the actual processes of regionalisation are different in these scenarios. The role and the responsibility of local municipalities are also expected to become stronger in both scenarios. The planning process should also encourage more horizontal co-operation between municipalities, especially in the case of those of smaller size, in both scenarios (see below).

The planning at the regional level could involve, among other things:

- A prospective analysis of needs for education services within the region: the demand (i.e. potential enrolment, preferences of students); the supply (i.e. capacity constraints, quality); and the current and future trends and needs of the region's economy and society. This should involve an assessment of the long-term infrastructure needs in light of the prospective demand and regional development objectives.
- An analysis of inefficiencies in education provision within the region, including through the identification of instances of high unit costs and low quality of education provision.
- Mandatory agreements between school founders (self-governing regions, municipalities, regional state authorities) establishing principles for the provision of school services (e.g. quality standards, minimum school size, minimum class size, maximum distance for a student to travel to school, sharing of resources, basis for establishing school clusters).
- The creation of incentives for voluntary collaboration between school founders (e.g. between municipalities, between regions and regional state authorities for the provision of education special needs services).
- The facilitation of bilateral or multilateral agreements between school founders to establish school mergers, school clusters and the sharing of resources.

Build synergies across education subsystems

The OECD review team considers that the efficiency of the Slovak education system could be significantly increased though diminishing the relative isolation of its subsystems and through encouraging more resource sharing (including human, financial and also knowledge resources) between them. More resource sharing could be realised between: i) pre-primary education and basic education; ii) special needs schools and mainstream

schools; iii) lower secondary and upper secondary education; and iv) general secondary and vocational secondary education. This requires institutional frameworks, including administrative frameworks that enhance connections and interactions between the subsystems. This could be realised, among other things, through:

- Bringing together the funding models for pre-primary education and basic education.
- Transferring the responsibility of SEN schools to larger urban municipalities and self-governing regions, possibly with the exception of some more specialised schools which need a national scale.
- Establishing regional planning mechanisms covering both lower and upper secondary education.
- Encouraging the emergence of upper secondary institutions providing both general and VET programmes.

Encourage co-operation among municipalities

The regional planning processes should also encourage more horizontal co-operation between municipalities, especially in the case of those of smaller size. Much of the potential efficiency gains of a better planned school network will occur at the lower secondary education level, which is offered by municipalities. At present, inter-municipal co-operation is not facilitated due to weak regional co-ordination and the strong role of municipalities and school directors, making co-operation for jointly provided educational or connected services very rare. Regional co-operation through the regional planning platforms suggested above might be a good arrangement 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. Box 2.3 below provides an

Box 2.3. **Municipal networks for efficiency and improvement in Norway**

Policymaking in Norway is characterised by a high level of respect for local ownership. School owners and schools have a high degree of autonomy regarding school policies, curriculum development and evaluation and assessment. In such a decentralised system, it is essential that different actors co-operate to share and spread good practice and thereby facilitate system learning and improvement. Networking is a common form of organisation among municipalities in Norway and there are a range of good examples where networks and partnerships have been established between different actors as a means to take collective responsibility for quality evaluation and improvement. In Norway, there are many examples of localised collaboration initiatives launched and developed by small clusters of municipalities. As an example, in 2002, in Norway, the Association of Local and Regional Authorities (KS), the Ministry of Labour and Government Administration, and the Ministry of Local Government and Regional Development set up "municipal networks for efficiency and improvement" that offer quality monitoring tools for municipal use and provide a platform for municipalities to share experience, compare data and evaluate different ways of service delivery in different sectors. For the education sector, an agreement was established between KS and the Directorate for Education and Training to allow the networks to use results from the user surveys that are part of the national quality assessment system.

Source: Nusche, D. et al. (2011), *OECD Reviews of Evaluation and Assessment in Education: Norway 2011*, *http://dx.doi.org/10.1787/9789264117006-en*.

example of arrangements for municipal co-operation in Norway (see also Wilkoszewski and Sundby, 2014, for a description of consultation approaches between the central government and municipalities in Norway). This could be undertaken in the context of the joint provision by small municipalities of broader public services as recommended by the 2014 *OECD Economic Survey* of the Slovak Republic (OECD, 2014c).

Use a modular approach to the co-ordination and planning of the school network

One of the conditions for more effective co-ordination and management of the school network is a sound definition of "school network". The OECD review team proposes a broad definition of this term, so that it includes all publicly funded educational services and supports what might be called "modular thinking". The school network consists not only of single entire schools that can be opened or closed but also of the wide range of education services that can be not only opened and closed, but also reduced and extended, combined and restructured or moved from one provider to another.

The OECD review team has often heard discourses about "closing schools" although in many cases the reduction of services would not necessarily imply the closing of whole institutions. The OECD review team recommends a more "modular" thinking on education policy 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 can 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 nine-year 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".

In the Slovak Republic, the flexible "modular" thinking on the school network is already supported by the possibility of operating basic schools with less than nine school years and providing pre-primary education alongside primary classes. The repertoire of these flexible solutions should be enriched, including solutions at higher educational levels, such as integrated vocational and general upper secondary schools. As the modularity of the system increases the possibility and the feasibility of effective reorganisations and structural adaptations will also increase.

Expand inclusive education for students with special needs by adjusting the functions of special needs schools

The OECD review team believes that the expansion of effective inclusive education will require a well elaborated strategy with several interrelated components. There are at least two key components of this strategy that are worth stressing here. One is encouraging SEN service providers (in SEN schools) to develop a new function of supporting 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 number of special schools is high, and the growing demand for mainstream placements has led to rethink the role of special schools' staff, might be relevant for the Slovak Republic. 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). Hungary, where EU funds have been massively used to transform special schools into regional support centres, is also an interesting case to study.

Turning special schools into methodological centres providing support to mainstream schools is a highly complex process of institutional change, which requires serious adaptive capacities from SEN professionals and schools and it can be implemented only slowly and gradually through pilot development projects based on voluntary participation and through the spreading of successful practices. The experiences of countries where SEN schools have been successfully transformed into methodological support centres for mainstream schools should be made available for decision makers and institutional level practitioners in the Slovak Republic. This process could use as a major asset the participation of the Slovak Republic in the work of the European Agency for Special Needs and Inclusive Education which collected a significant amount of experience and examples of good practice in the field of turning schools into institutions that are capable of providing genuine inclusive education.

The second key component of a strategy for inclusive education is enabling mainstream schools to provide effective inclusive education. This is also 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 of using a rich repertoire of innovative teaching methods and capable of creating 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. Institutions responsible for initial and continuous teacher education, including those providing specialised forms of training linked with specific development interventions should be strongly involved in this process.

Extracurricular activities should remain an important component of school network planning

Using the broader definition of "school network" provided earlier, the publicly funded extracurricular activities (school clubs and free time centres) are seen as part of the school network, that is, designing and planning the network should cover also these activities. In general, the OECD review team considers that the richness of extracurricular activities is a positive feature of the Slovak school system, contributing significantly to the production of social capital. A more elaborated and more effective design and planning of the school network should not lead to the weakening of these services although public funding in this area should be better targeted to those social groups that need it the most and further private contributions could be expected from more advantaged households.

Improve the processes determining public funding eligibility

In the decentralised context where the allocation of public funding to private providers and where the contribution of private partners (e.g. parents, employers) to pay for some components of public services is a normal practice, there is an increasing need to

establish a high level of transparency. This can be supported by the establishment of quality standards and through various quality evaluation development procedures. Decentralisation should also go together with continuously strengthening integrity and fighting corruption. The system of governance based on local and institutional autonomy (combined with strong national strategic steering) will be sustainable only if it is capable of achieving integrity. One possible way to achieve this goal could be to conduct an integrity assessment of the education system covering all operations and functions that allow room for corruption practices.

The current rules for accrediting schools into the school network or excluding them should gradually be made more flexible so that the nature of these decisions (allocating public funding for services provided by various providers) becomes clearer. Decisions on allocating public funding to education services 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. In addition, some specific requirements for operation should be re-defined for schools to enter the publicly-subsidised school network. For instance, as suggested in Chapter 3, sufficiently high minimum school size and minimum class size should be maintained for schools to enter the school network so that new schools do not increase the public unit cost of education as has been the case in recent years with the high number of private schools entering the school network with much lower class sizes than state schools.

The OECD review team proposes that, in function of the further development of the national evaluation and assessment framework – in line with the analysis and the recommendations of the associated recent OECD review (Shewbridge et al., 2014) – quality requirements are increasingly taken into account when decisions are made about the allocation or withdrawal of public funding for education services. This requires the development of relevant quality standards and effective tools to analyse current and future needs. Decisions on school mergers and reorganisations should be preceded by careful school evaluation revealing the strengths and weaknesses of particular institutions in order to avoid the loss of organisational values. The political nature of resource allocation decisions makes the involvement of relevant social partners particularly important.

Give careful attention to equity objectives as efficiency policies are implemented

In light of the low equity performance of the Slovak school system it is essential that the equity dimension remains a key feature of school network design and planning. There is a need for a continuous monitoring of the equity implications of all restructuring or rationalisation decisions. The specific needs of the socially-disadvantaged groups have to be considered and the implications of rationalisation measures especially for the integration of the Roma minority and the inclusion of students with special education needs have to be carefully analysed. It is proposed that this dimension receives the greatest attention when creating the new institutional frameworks for effective network design and planning with guarantees such as the participation of the representatives of the most vulnerable groups or the obligation of adding an equity clause to each restructuring or rationalising measure. Some service components, such as the employment of Roma teaching assistants should benefit from special protection when restructuring or rationalising measures are implemented.

More generally, there is a need for further effective equity-oriented initiatives. For example, procedures to assess the special needs of students and categorise them should be reviewed. The objective is to improve the identification of those students who should attend special needs services and ensure socio-economic disadvantage is not "medicalised". This is the natural corollary to the 30 June 2015 amendment to the School Act that stipulates that only students with an identified disability should attend a special school or a special class in a mainstream school. A clear protocol to identify the special needs of students should be established and become the basis for the supervision of the State Schools Inspectorate to the services provided by Pedagogical and Psychological Consulting and Prevention Centres.

This should be accompanied with intensive capacity development programmes for mainstream teachers in order to improve their skills to use advanced pedagogical methods enhancing work in heterogeneous student groups and more personalised teaching (see also below, in relation to the use of EU funds). In this spirit, the government should reconsider the permission given to schools to create a Year 0 for those students who are deemed not ready to attend Year 1. Bringing children up to the level required in Year 1 can be accomplished with extra individual support in Year 1, for instance through extra instruction by regular teachers or extra help by teaching assistants within the classroom. This would avoid the potential stigmatisation associated with Year 0, prevent children from falling behind at an early age and grant more equal opportunities for disadvantaged children as they start school (by providing extra resources to children with extra needs). Also, as recommended previously by the OECD, the government should make steps to delay the age at which first selection into education tracks is made (OECD, 2007; OECD, 2012). The intention to limit access to 8-year *gymnasiums* to at most 5% of the students who complete primary education (now planned to be introduced in 2016-17) is narrow in its scope and risks strengthening the elitist character of 8-year *gymnasiums*.

The OECD review team also recommends that all initiatives aimed at improving the efficiency of resource use should give specific attention to the Slovak Republic's strategy for the integration of the Roma community (Government of the Slovak Republic, 2011). One of the key components of this strategy is the establishment of relevant indicators and the regular monitoring based on these indicators. In general the principles of the early school leaving strategy of the European Union[8] can be applied in this area, including the combination of measures of prevention, intervention and compensation and the use of macro- and micro-level data to support the evidence-based policy approach. The careful impact analysis of development interventions in this area is particularly important.

Also, as recommended by an OECD review on the Slovak VET system, the government should use VET in general, and work-based learning and recognition of informal learning in particular, to integrate groups at risk, including the Roma, into the labour market. This should be accompanied by the expansion of second-chance education opportunities based on provision of formal certification and on-the-job learning (Fazekas and Kurekova, 2016).

Strengthen capacity at all governance levels

Evaluating system efficiency and designing policy interventions to improve efficiency are extremely complex endeavours that require both advanced analytical capacities and the availability of relevant data. Strengthening analytical capacities is a key element of the public administration reform in the Slovak Republic, also strongly supported by the relevant OECD documents (OECD, 2014b). In several specific cases the OECD review team

had the impression that the simple development of cognitive models that describe policy challenges and support policy interventions or the use of more sophisticated technical solutions could lead to significant improvement.

In the Slovak Republic, there are considerable efforts to develop databases that can support policy decisions. The quality of the data on education will be improving with the transition to a data collection system based on student- and teacher-level data (planned for September 2015). There are, however, some areas where enriching the database could lead to significant efficiency improvements. The OECD review team recommends, for example, the gradual development of a programme level graduate tracking survey system for secondary VET and the use of such data to support local and regional decisions on specific VET programme capacities (as also strongly recommended in Fazekas and Kurekova, 2016). The strengthening of regional planning and the increasing role of regional stakeholders in this process will create new demands for new and better regional data which will have to be made available also for the regional and local stakeholders involved in planning processes. Analytical capacities should be strengthened not only at the national level but also at the level of self-governing regions and larger cities responsible for larger local school systems. The development of the analytical and planning capacities of self-governing regions and larger cities could be supported by special development interventions either in the framework of EU-funded development programmes of the education sector or in the framework of the programmes targeted at supporting administrative and public management capacities. An interesting model is the *Local Learning* initiative in Germany (see Box 2.4). In general, capacity building should become a key policy instrument in a policy environment where, as in the Slovak Republic, the decisions of local players have an increasing impact on policy outcomes. This should reach not only self-governing regions and local municipalities but also institutional level "lay" actors, such as the members of schools boards.

Place more emphasis on the implementation aspects of education policy

There is a clear need in the Slovak Republic to widen the repertoire of policy instruments and to go beyond legal regulations and mandatory solutions whenever possible. There are many policy goals that require the use of more sophisticated, often "soft" policy instruments. For example the change of regulations which are now making schools responsible for the development of their own pedagogical profile and curriculum in accordance with their local context will not automatically make these schools capable of assuming this new task nor will it automatically make teachers ready to teach according to the revised curricula. This not only requires strong support mechanisms and capacity building but also the acceptance that some schools will become capable of developing effective school-based curriculum quicker than other schools. This requires greater flexibility in regulations allowing some schools to develop faster than others while targeting support to those that are still lacking the appropriate capacities. In general there is a need to shift the focus of education policymaking from the adoption of legal texts to the implementation processes and to strengthen the "implementation intelligence" of the education policy system. Strengthening the role of *ex ante* and *ex post* impact assessment is one possible way to do this (see below).

Box 2.4. **The Local Learning initiative in Germany**

The "*Local Learning*" initiative (*Lernen vor Ort – LvO*) programme was initiated in 2009 by the German Federal Ministry for Education and Research. The aim of the programme is to enable local policy makers in municipalities and cities to develop a coherent education management approach. The focus is on local capacity building. It is expected that the participating local municipalities and cities will have increased managerial and problem solving capacities, including the use of data for enhanced evidence-based policymaking.

The programme addresses not only the questions of classical education, but also issues related to lifelong learning and employability. According to the Federal Ministry for Education and Research the specific goals are:

- Increase the participation in education.
- Improve employability.
- Improve quality and quantity of education and training options at the local level.
- Make the education system and its offers more transparent to its users.
- Improve the transition across various education phases.
- Increase the access to education.
- Strengthen the democratic culture.
- Tackle the challenges of demographic change.

The programme is co-funded by the European Social Fund (more than EUR 100 million for 6 years). The programme attracted substantial interest among the municipalities: about half of all 407 German districts and independent cities applied for participation. About 40 of these were selected through a nationwide competition and are participating in the framework. After the end of the main phase of the programme in 2014, the municipalities are expected to continue the activities through their own funds.

Sources: Busemeyer, M. and J. Vossiek (2015), "Reforming Education Governance Through Local Capacity-building: A Case Study of the 'Learning Locally' Programme in Germany", *http://dx.doi.org/10.1787/5js6bhl2mxjg-en*; and Wilkoszewski, H. and E. Sundby (2014), "Steering from the Centre: New Modes of Governance in Multi-level Education Systems", *http://dx.doi.org/10.1787/5jxswcfs4s5g-en*.

Strengthen the impact assessment of policy interventions

There seems to be a strong need to strengthen the impact assessment of policy interventions in the education sector in the Slovak Republic. The development interventions co-funded by the European Union could provide a favourable context for such efforts, not only given the fact that impact assessment is a formal requirement in the case of EU development support but also that the European Commission can provide a theoretical and practical basis for this. It is important to stress in this context that given the complexity of policy interventions in the social areas, including education, preliminary considerations, even if they are based on rich evidence and hard data, cannot provide sufficiently reliable answers to policy questions. Beyond *ex ante* evaluations typically based on intervention theories, and beyond *ex post* evaluations based on data gained from the monitoring of actual interventions, there is a strong need to also use pilots and experimentations to check the feasibility and assess the impact of policies and interventions.

"Experimental verification" is already recognised in the Slovak Republic as a way to introduce changes, including new organisational forms of providing education and it is conceived as a process regulated by the Ministry of Education (Educational Policy Institute, 2015). The OECD review team recommends the further strengthening of this approach and the continuous consideration, whenever feasible, of the use of pilots in the case of the adoption of policies that require major behavioural changes of individuals or institutions. For

example the shift towards more inclusive education and the related changes in the functions and operation of special education schools could be made through pilots that allow first a limited number of these institutions to develop a new profile.

Consider the use of EU funds to support strategies to improve the efficiency of the school system

In the past few years the use of the structural and investment funds of the European Union has become a key strategic policy tool in the Slovak Republic, similarly to other Central and Eastern European EU member countries. This trend will continue in the coming decade. The EU funds can be used not only to support specific target groups, as in the case of the European Social Fund supporting vulnerable social groups, but also to enhance systemic and structural reforms, including those that improve system efficiency. The OECD review team recommends a systematic review of the possible uses of the EU structural and investment funds, within the framework of the Partnership Agreement between the European Commission and the Slovak Republic for the programming period 2014-20, to support strategies to improve the efficiency of the school system.

For example, these funds can be used effectively to create the necessary institutional and human conditions for inclusive education. They can be used to support the adjustment of SEN schools' functions with the development of new methodological service centres providing individual services to mainstream schools which are integrating students with special needs (including the support to teachers) and personalised services to students with special needs. The OECD review team recommends the creation of a specific action line in the 2014-20 programming period of the European Social Fund that would support the implementation of a comprehensive strategy for inclusive education.

The use of EU structural and investment funds for supporting the implementation of the strategy of the Slovak Republic for the integration of the Roma community should remain a priority. In accordance with the 2014 National Reform Programme of the Slovak Republic (Ministry of Finance of the Slovak Republic, 2014) the optimisation of the school network should be accompanied by targeted development interventions aimed at improving the integration of marginalised Roma communities. This includes, among others, the expansion of pre-primary education so that by 2020 all children from disadvantaged communities have access to high quality pre-primary education, preferably from the age of three, and the expansion of full day's schooling especially for children from these communities.

The European structural and investment funds can also be used to support local reorganisations of provision aiming at improving efficiency and at reconciling efficiency and quality goals. In those municipalities where the school population is expected to decrease the EU funds can be used, for example, to create appropriate conditions for school transportation. The OECD review team also recommends the use of EU funds to support networks of municipalities and self-governing regions to design and to implement education development plans that improve the efficiency of resource utilisation, including moves towards a more rational design of provision. The OECD review team recommends the creation of a specific action line in the 2014-20 programming period of the European Social Fund that would support the creation of a school network planning platform in one or two regions, including a careful monitoring of the process. The OECD review team also recommends a better alignment between infrastructure developments and programmes aimed at capacity and human resource development.

Notes

1. See the website entitled "Mapa regionálneho školstva" (*http://mapaskol.iedu.sk*).
2. See the school portal of the Institute for Economic and Social Reforms (INEKO) (*http://skoly.ineko.sk*).
3. Data provided to the OECD review team by the Ministry of Education, Science, Research and Sports.
4. Resilient students are those who are achieving significantly higher than expected given their socio-economic background.
5. The dispersion of regional GDP is zero when the GDP per capita in all regions of a country is identical, and it rises if there is an increase in the distance between a region's GDP per capita and the country mean (see Ecostat: *http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/dataset?p_product_code=TSDEC220*).
6. The payment ratio equals the amount of payment for costs actually incurred for grants or contracts in 2007-13 divided by the budget available for 2007-13.
7. The contracting ratio equals the amount of actual contracted grants in 2007-13 divided by the budget available for 2007-13.
8. See the recommendation of the Council of the European Union on policies to reduce early school leaving (Official Journal of the European Union. 1.7.2011).

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