## Chapter 1

## School education in the Slovak Republic

School governance in the Slovak Republic is fairly decentralised and involves three levels of administration: the central government, regions and municipalities. While the central government retains the key regulatory role the provision of public education services is mostly the responsibility of regions (upper secondary education) and municipalities (pre-primary and basic education). The large majority of children attend state schools, although Church and other private providers receive public funding on a similar basis to state schools. The content of instruction in the Slovak Republic is established at two levels. At the national level, the Ministry issues National Education Programmes (NEPs). Schools further develop School Education Programmes, which consist of the operationalisation of NEPs to fit the context of individual schools. The Slovak Republic has a mixed set of outcomes. Performance in international assessments indicates some improvement in reading at the primary level but some significant and growing challenges at the secondary level. There are also concerns about strong social selectivity and inequities in the education system, including misplacement of some students in special schools.

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

#### Context

Located in Central Europe, the Slovak Republic has a territory of 49 000 km<sup>2</sup> and, as of 2013, a population of more than 5.4 million (Statistical Office of the Slovak Republic, 2014). The Slovak Republic is bordered by the Czech Republic and Austria to the west, Poland to the north, Ukraine to the east and Hungary to the south. The largest city is the capital, Bratislava, and the second largest is Košice.

The Slovak Republic was established on 1 January 1993 as a democratic parliamentary republic. The Constitution is the supreme law of the country and the official language is Slovak. The constitutional system is comprised of the legislative power (National Council of the Slovak Republic, the Parliament of the country), the executive power (President of the Slovak Republic and the Government of the Slovak Republic) and the judicial power (Constitutional Court and other courts) (Educational Policy Institute, 2015). Central administration of the Slovak Republic consists of the central Government Office, ministries and central administration bodies.

#### Administrative units

Decentralisation in the Slovak Republic is based on a dual system of: i) self-government by local authorities (regions and municipalities); and ii) "deconcentrated" state administration that refers to the transfer of responsibilities to local units of the central government.

Self-government is organised at two main levels with no hierarchical relationship between them but which function on the basis of mutual co-operation: 8 self-governing regions (see Table 1.1) and 2 890 self-governing municipalities (138 towns and 2 752 villages) (Statistical Office of the Slovak Republic, 2014). Both self-governing regions and municipalities finance their "original competences" from own funds. Additionally, they perform some tasks delegated by the state as part of the so-called "transferred competences". To perform their tasks within the transferred competences, self-governing regions and municipalities have a legitimate claim to use funds from the state budget (Educational Policy Institute, 2015).

There are two types of "deconcentrated" state administration: i) the general state administration, decentralised from the central level to the district level (district offices of general administration), which applies, for instance, to administration procedures linked to entrepreneurship, general domestic affairs, civil security or citizenship; and ii) the specialised state administration, decentralised from the central level through the regional level (regional offices of specialised state administration) and the district level (district

Table 1.1. Regions of the Slovak Republic

Region	Capital	Area (km²)	Population (2013)	Population density (people per km <sup>2</sup> , 2013)
Banská Bystrica	Banská Bystrica	9 454	656 813	70
Bratislava	Bratislava	2 053	618 380	301
Košice	Košice	6 754	794 756	118
Nitra	Nitra	6 344	686 662	108
Prešov	Prešov	8 973	818 916	91
Trenčín	Trenčín	4 502	592 394	132
Trnava	Trnava	4 146	557 608	135
Žilina	Žilina	6 808	690 420	101
Slovak Republic	Bratislava	49 035	5 415 949	110

Source: Statistical Office of the Slovak Republic (2014), Regional Statistical Yearbook of Slovakia 2014, https://slovak.statistics.sk.

offices of specialised state administration), which applies, for instance, to school offices, environmental protection offices and health care administration offices. The regional offices of specialised state administration, which have some administrative responsibilities over education, will be referred to as regional state authorities in this report. The Slovak Republic has currently 79 districts, Bratislava being divided into 5 districts.

#### Demographic characteristics

#### **Population**

The Slovak Republic is seeing a long-term trend of population ageing (see Figure 1.1). From 1992 to 2012, the Slovaks' median age rose by 6.1 years (up to 35.7 years), compared to the EU27's 5.8-year increase (up to 41.5 years). This is mainly due to low fertility rates (lower than the EU27 average) and increasing life expectancy at birth (catching up with EU27). Similarly to other European countries, the Slovak Republic has experienced a negative demographic development in the last decades. Between 1990 and 2012, the annual number of births dropped from 80 000 to 55 000, which resulted in an important decline of the school population (Educational Policy Institute, 2015).

The Slovak population is projected to decrease in 50 years' time by 300 000 people as a result of the expected dynamics of fertility, life expectancy and migration rates and the age structure is expected to become much older than it is at present. The share of young people (aged 0-14) is projected to fall from 15% to 12% by 2060. This will lead to a sharp decline in the proportion of those considered economically active (aged 15-64), from 72% to 54%. In addition, the proportion of people aged above 65 will grow from 12% to 34% and the share of those aged above 80 from 3% to 12%, which will have important implications on the socio-economic system, including public pension programmes and health care (Educational Policy Institute, 2015).

However, from 2002 to 2011, the number of births increased. This trend has had an impact on the population of children aged 3-5, which rose from 154 000 (in 2006) to 168 000 (in 2012). As a result, unsatisfied demand for pre-primary education has been growing. In the coming years, the population of all age cohorts (except for 15-18) is expected to rise. By 2020, the number of children aged 6-9 should exceed the level of 2013 by 10%. The size of the 10-14 age cohort shall reach its peak in 2025 and outgrow the level of 2013 by 13%. The population aged 15-18 is expected to be below the level of 2013 until 2026 (Educational Policy Institute, 2015).

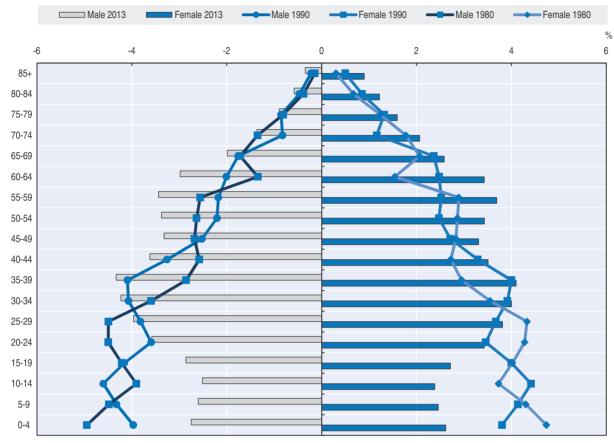


Figure 1.1. Slovak population pyramid in 1980, 1990 and 2013

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

Population projections for 2025 differ across districts. The majority of districts can expect a change (generally negative) of up to 20% in the student population across most of the age cohorts. However, there are districts where the population of individual age student cohorts is expected to rise by more than 20%, which could have a significant impact on the necessary school capacities. Four out of the five districts with the highest expected average increase of the student population are located in Bratislava (the other one is Senec, a neighbouring district to Bratislava). The growth is mostly concentrated on the 5-9 and 10-14 age ranges and varies from 42% and 144%. By contrast, districts in the eastern part of the country and southern districts of central Slovak Republic will experience a decrease across all student age cohorts by 2025 (Educational Policy Institute, 2015).

#### Cultural and language diversity

According to the most recent census in the Slovak Republic (2011), more than 80% of the total population stated Slovak nationality. Large but decreasing in number are also national minorities. In 2011, more than 670 000 people (12.3% of the total population) stated a nationality other than Slovak. The Hungarian minority is the largest (8.5%), while it has seen the largest decrease since the previous census. The Roma minority, which follows (2.0%), experienced the largest increase. Approximately three-quarters of the Slovak population are registered members of church. In 2011, 62% of the total population

professed Roman Catholic religion, followed by the Evangelic Church (5.9%) and Greek Catholic Church (3.8%). About 13% of the population did not declare any religious affiliation (Educational Policy Institute, 2015).

A citizen of the Slovak Republic who belongs to a national minority also has the right to use (besides the official language) the language of the national minority. Citizens belonging to a national minority, who make up at least 15% of the total number of citizens in a given municipality in two subsequent censuses, have the right to use the language of the minority in official dealings. The use of the languages of national minorities in official dealings and in other fields is regulated by relevant legislation.

The country applies strict immigration policy and serves mainly as a transition country for migrants. Thus, the Slovak Republic shows negligible numbers of permanent immigration. Since 2005, the number of immigrants with permanent residence fluctuates between 5 000 and 8 000 a year.

#### Economic growth and inequality

#### Economic growth

The Slovak Republic is a very open and export-oriented economy, relying heavily on the automotive industry. The country produces the largest number of passenger cars per capita globally. The second most important industry is consumer electronics. These two sectors have brought most of the country's foreign direct investments in the last 20 years. The Slovak economy takes advantage of its well-educated, productive and relatively cheap labour force, high-quality connections to markets in Western Europe as well as its favourable geographical position for export to the markets in Eastern Europe (Educational Policy Institute, 2015).

Integration and globalisation contributed to a relatively high real GDP growth in the Slovak Republic. As a result, the Slovak economy caught up with those of its neighbouring countries as well as with the economies of OECD countries, with an average GDP growth of 5.6% between 2000 and 2008 (see Figure 1.2). However, the Slovak Republic was hit hard by the global economic crisis because of its relatively higher dependence on foreign demand and its small domestic market, and the GDP experienced a 5% drop between 2008 and 2009, compared to an average OECD drop of 3%. Economic growth turned again positive in 2010, and the GDP grew by 4.8% in 2010, 2.7% in 2011, 1.6% in 2012, 1.4% in 2013 and 2.6% in 2014 compared to OECD GDP growth averages of 3.0%, 1.9%, 1.3%, 1.4% and 1.8% respectively (OECD, 2014a). The Slovak Republic recovered relatively quickly from the 2009 global crisis. By 2013, the GDP had surpassed the pre-crisis peak by more than any other European country that experienced a recession in the wake of the global financial crisis (OECD, 2014b).

#### Unemployment

The Slovak Republic faces high unemployment rates, mainly affecting young and people with lower levels of education. In 2012, the unemployment rate reached 14% and ranked fifth highest among OECD countries. In addition, the Slovak Republic reports a high share of long-term unemployed (more than one year), which has dramatic consequences in terms of working habits and skills loss. In 2012, 64% of unemployed people had not been working for more than a year, compared to an average of 34% and 40% in OECD and V3 countries (Czech Republic, Hungary and Poland) respectively. Moreover, 45% of all

Slovak Republic - - - OFCD · - V3 GDP growth (%) 15 10 5 0 -5 -10 -15 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Figure 1.2. Evolution of GDP growth in the Slovak Republic, the OECD and the V3 countries, 1994-2014

Note: V3 countries are the Czech Republic, Hungary and Poland.

Source: OECD (2014a), OECD Economic Outlook, http://dx.doi.org/10.1787/eco\_outlook-v2014-2-en.

unemployed people were unemployed for longer than two years. From 2008 to 2013 the unemployment of the young aged 15-24 years rose by 14 percentage points up to 33%. During the same period, the total unemployment rate increased by 4.6%. In 2013, the unemployment rate of low educated people (primary and lower secondary education) in the Slovak Republic reached 42.6%, which is twice as much as the EU28 average and threefold the total unemployment rate in the country. People with tertiary education are the least vulnerable group, with an unemployment rate of 7.3% in 2013. In addition, 5.3% of 15-19 year-olds were neither employed nor in education or training in 2011 (3.9% unemployed and 1.4% inactive), which is less than the OECD average of 8% (2.7% unemployed and 5.8% inactive) (OECD, 2013a). In 2014, the labour market showed signs of recovery, however, with long-term unemployment remaining high.

As explained in Shewbridge et al. (2014), there is evidence that Slovak children in homes with an unemployed parent are at far greater educational risk than on average in the OECD. Just over 14% of the Slovak students participating in PISA 2012 reported that their fathers were not in full- or part-time paid employment and their average performance disadvantage in mathematics was 62 points (this compares to a performance disadvantage of 24 points on average in the OECD for students whose fathers are not in paid employment) (OECD, 2013b, Table II.3.2).

#### Regional disparities

Regional inequality is one of the highest among OECD countries and is increasing (OECD, 2014b). GDP per capita in Bratislava is the 6th highest among 272 regions in the European Union while the country as a whole ranks only 20th out of 28 EU countries (OECD, 2014b). Regions can be divided into two broad groups: more developed western regions (Bratislava, Trnava, Trenčín, Nitra), and lagging central and eastern regions (Žilina, Banská Bystrica, Prešov, Košice). Regional differences in household income and unemployment are also high. Poverty risks and benefit dependency are over-represented in the east and centre of the country (OECD, 2014b).

#### The lack of integration of the Roma community

A major challenge is the integration of the Roma community in the education system and the labour market and, more generally, in society. A large proportion of the Roma population lives in segregated areas with little opportunity of finding employment. By 2009, about 68% of Roma men and 77% of Roma women had completed at most lower secondary education, compared to an average of 4% and 7% for the overall population respectively (Educational Policy Institute, 2015).

#### The governance of the school system

#### School governance is fairly decentralised

School governance is fairly decentralised and involves three levels of administration: the central government, regions and municipalities. While the central government retains the key regulatory role the provision of public education services is mostly the responsibility of regions and municipalities.

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

The government and the Ministry of Education, Science, Research and Sports are responsible for national education policy and the overall strategy for the education system. The responsibilities of the Ministry include the supervision and development of the education system, establishing the framework for student learning objectives (through National Education Programmes, see below), defining the levels and terms of funding, setting the requirements for the professional and pedagogical competence of educational staff, determining salaries of teachers and managing the register of schools and school facilities which are part of the school network.

The Ministry of Interior is also formally part of the administration of the funding to schools. In 2013, the management of education departments of regional state authorities (which mainly administer special schools, see below), shifted from the Ministry of Education to the Ministry of Interior. Since then, all schools except those established by self-governing regions are financed from the budget chapter of the Ministry of Interior. However, the Ministry of Education is in charge of education budget negotiations and determines the terms for the funding of individual schools. The Ministry of Interior acts as an intermediary regarding the cash flow from the state budget to schools and provides mainly back office services for the Ministry of Education.

Another significant player, at the national level, is the Slovak State Schools Inspectorate (ŠŠI). It is responsible for monitoring schools and school facilities and checking the conditions and results of the education they provide, the quality of their management, the efficiency of their use of resources and their compliance with binding regulations. The Inspectorate can also recommend the closure of schools or school facilities.

The Ministry is assisted in its work by a range of national-level agencies which are supervised by the Ministry and partially funded from its budget. These include: i) the Slovak Centre of Scientific and Technical Information (CVTI) (which was merged with the Institute of Information and Prognoses of Education, UIPŠ), which is the national information centre for science, technology, innovation and education (collecting and processing information on education); ii) the National Institute for Certified Educational Measurements (NÚCEM), which takes responsibility for the common (or state) part of the school-leaving examination (Maturita), organises national student assessments (in Years 5 and 9, see below), and manages international student assessments; iii) the National Institute of

Vocational Education (ŠIOV), which is responsible for work which informs policy development in secondary vocational education, including the development of educational programmes and methodological advice to vocational schools; iv) the National Institute of Education (ŠPÚ), which develops work to inform policy development in basic and general upper secondary education including the content of educational programmes and methodological advice to schools; and v) the Methodology and Pedagogy Centre (MPC), which organises and implements professional development for teaching and non-teaching staff – it has one head office and three regional centres which co-ordinate and organise in-service training courses for teachers and school management.

#### A decentralised provision of education services

As part of their transferred competences in school education, self-governing regions establish and close upper secondary schools and apprenticeship training centres. As part of their original competences, self-governing regions establish and close primary schools of art, language schools (other than language schools associated with basic schools), school facilities (e.g. free time centres, school farms and apprenticeship training centres, school dormitories) and school special-purpose facilities (e.g. school catering facilities, school service centres).

As part of their transferred competences in school education, municipalities establish and close basic schools, covering both primary and lower secondary education. As part of their original competences, municipalities establish and close pre-primary schools, primary schools of art, language schools associated with basic schools, school facilities (e.g. school clubs for children, free time centres, school dormitories) and school special-purpose facilities (e.g. school catering facilities, school service centres).

Education departments of regional state authorities are the founders of special schools (at all levels) as well as of some school facilities (e.g. dormitories, catering facilities). They also co-operate with school self-governing authorities and private school founders by providing guidance regarding the funding and organisation of schools and offering methodological guidance (e.g. training). In addition, they also manage professional advisory services which are provided to all schools in the respective region.

The remaining providers are the church and other private providers. They receive public funding on a similar basis to state schools and benefit from considerable autonomy in managing their schools (see below). In terms of funding, in basic and upper secondary education, founders serve as the link between the central level and schools. Founders distribute funds they receive from the Ministry to individual schools and are allowed to reallocate a certain amount among their schools (see Chapter 3).

#### A range of policy consultation processes

The development of educational policies led by the Ministry involves a range of consultations, including with advisory bodies headed by the Minister of Education. Advisory bodies, involving a range of stakeholders and education experts, include the Curriculum Board (whose members are mostly pedagogical experts and representatives of basic and secondary schools) and the Board for Education of National Minorities (with representatives of national-minority schools). The Ministry also co-operates with the representatives of school founders (e.g. Association of Self-governing Regions, Association of Municipalities, Association of Private Schools and School Facilities, Association of Catholic Schools of Slovakia); several professional organisations such as the Chamber of

Teachers, the Trade Union of Employees of Education and Science, the Association of Hungarian Teachers in Slovakia, the Association of Special Teachers of Schools and Advisory Centres and the Association of State Gymnasium School Leaders; and employers' representatives. Also, ad hoc working groups and advisory groups involving relevant stakeholders are typically established in case of specific legislative arrangements (Educational Policy Institute, 2015).

In addition, the Slovak government, with the purpose of developing a relevant vocational education system, established the National Council for Vocational Education and Training together with regional and sectoral VET councils. The Council is the advisory and co-ordinating body for vocational education policies. The Council consists of 15 working groups which focus on individual vocational fields of study to support the links to the labour market. The Council discusses state education programmes for vocational education and recommends the Ministry of Education to introduce new vocational fields of study or exclude current ones. Members of the Council are representatives of self-governing regions, ministries, and employers.

#### **Educational** goals

#### General goals, policy objectives and targets

Goals for student learning are expressed at different levels. The 2008 School Act defines the objectives of the education system as:

- Gaining a range of competencies (e.g. communication skills, mathematical literacy, social and civic competencies).
- Gaining English language proficiency and in at least another foreign language.
- Learning how to identify, analyse and solve problems.
- Preparing for a responsible life in a free society in the spirit of mutual understanding and tolerance; learning how to develop personally, engaging in lifelong learning, working in a team and taking responsibility.

In addition, strategic objectives and priorities of the Slovak government for education are defined in the National Reform Programme (NRP), which is the national strategic document for the country's economic development and structural policies in the framework of the Europe 2020 Strategy. In line with European benchmarks defined in the Europe 2020 Strategy and the strategic framework Education and Training 2020, the Slovak Republic established quantitative targets for its education system. By 2020, the share of early school leavers aged 18-24 should be less than 6%, 15-year-old students should reach an average of 505 points in PISA (OECD Programme for International Student Assessment) and at least 95% of children aged 4-5 should attend pre-primary education.

#### Student learning objectives

More specific learning objectives for students are developed in references established at the national level through National Education Programmes (NEPs). These binding documents stipulate the content in each learning area; the expected outcomes in each subject at the end of each year and at the end of an education level (education standards); and a general learning plan. An education standard comprises a content standard (minimum knowledge areas to be covered) and a performance standard (proficiency levels in the prescribed minimum content). The general learning plan contains learning areas with a defined list of mandatory and optional subjects. It also defines: the minimum

number of lessons students have to take during their studies in each subject; the maximum weekly number of lessons for students in each year; and the number of lessons schools can use in their School Education Programme in order to specialise. The Ministry of Education issues distinct NEPs for:

- Pre-primary education.
- Basic education, with a distinction between the 1st stage (primary) and the 2nd stage (lower secondary).
- General upper secondary education (gymnasiums).
- Vocational upper secondary education (83 of them) and conservatoires.
- Children with special educational needs (gifted children and children with disabilities).
- Primary schools of art and language schools.

On the basis of the binding NEPs, schools prepare more specific School Education Programmes (SEPs). These determine, within the constraints imposed by the general learning plan of NEPs, how the content proposed by NEPs is distributed into individual years (or other units such as modules) and establish the subject syllabi (a detailed description of the educational content). One learning area can be divided to form one, two or more subjects or, conversely, the content of several learning areas may be integrated into a so-called "integrated subject". Schools shape their profiles by means of their SEPs.

The new framework setting student learning objectives intends to promote a competency-based learning approach. The national education programmes specify competencies and "cognitive competencies" in different content areas. For example, "Language and communication" within the subject "Slovak language and literature" includes the competency "Distinguishing sentences and texts". The associated cognitive competencies are "Reproduction", "Application", "Analysis", "Synthesis", "Generalisation", "Evaluation" and "Self-assessment" (Shewbridge et al., 2014). Accordingly, the final examinations at upper secondary level (Maturita) and the national assessments in Years 5 and 9 (Testovanie 5 and Testovanie 9, see below) are adapted to assess competencies listed in the national education programmes.

#### The organisation of the school system

#### Overview

The school system in the Slovak Republic is organised in three sequential levels: pre-primary education (ISCED 0 (International Standard Classification of Education), ages 3 to 6), basic education (ISCED 1 and 2, typical ages 6 to 15) and upper secondary education (ISCED 3, typical ages 15 to 16/19). Basic education is organised according to two stages: primary education (ISCED 1, Years 1-4); and lower secondary education (ISCED 2, Years 5-9) (see Figure 1.3). Students typically attend a single-structure school during their basic education but can also enrol in a *Gymnasium* (a secondary school providing general education) following Year 5 (8-year *Gymnasium*). School attendance is compulsory for ten years, from 6 to 16 years old.

There are three types of upper secondary education:

• General upper secondary education with a school-leaving examination (Maturita) (ISCED 3A programmes, Years 10-13). It is provided in a four-year Gymnasium and in the last four years of an eight-year Gymnasium. These programmes are geared to the continuation of studies at higher education level.

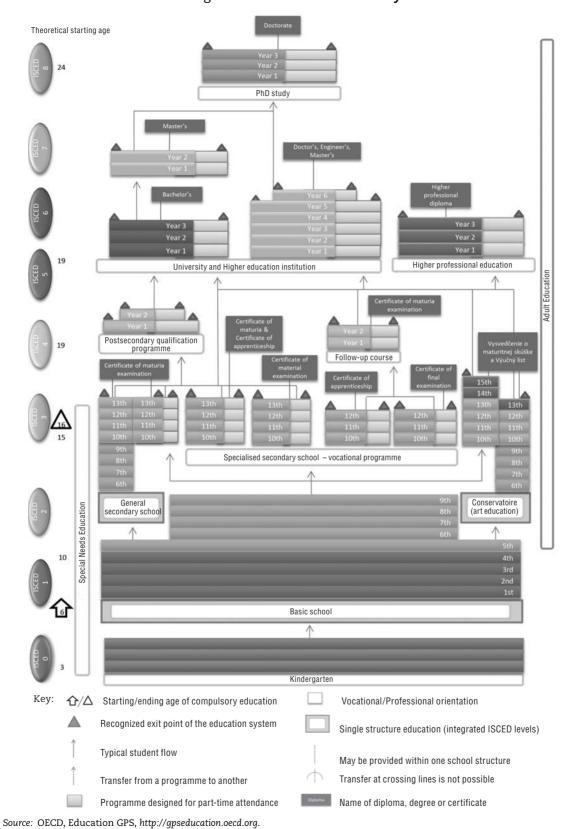


Figure 1.3. **The Slovak school system** 

- Vocational upper secondary education with a school-leaving examination (Maturita)
  (ISCED 3A programmes, also known as specialised secondary school programmes with a
  school-leaving examination, Years 10-13/14). It is provided in secondary vocational
  schools and in conservatoires. These programmes are either geared to working life or the
  continuation of studies at higher education level.
- Vocational upper secondary education with an apprenticeship certificate (ISCED 3C programmes, also known as specialised secondary school programmes with an apprenticeship certificate, Years 10-11/12), lasting two to three years. It is provided in secondary vocational schools. These are geared towards an initial qualification for students, giving priority to their entering the job market while, at the same time, allowing them to study further (but with no direct transition to higher education).

There are also some vocational programmes offered at the lower secondary level (ISCED 2C), targeted at students who did not complete basic education and will then continue their studies in a secondary vocational school.

#### Pre-primary education

Responsibility for providing public pre-primary education lies with the municipalities, including its financing, as part of their original competences. This provision is complemented by privately-run pre-primary education, either by the church (only 2.3% of enrolled students in 2013-14) or other private providers (2.6% of students) (see Table 1.2 and Figure 1.A1.7 in Annex 1.A1).

Table 1.2. Pre-primary education: Number of schools and students, school size and class size, 2003, 2008 and 2013

		•		
	2003	2008	2013	Change between 2003 and 2013 (%)
Number of schools				
State	3 180	2 773	2 716	-14.6
Private	11	56	89	709.1
Church	19	42	65	242.1
Total	3 210	2 871	2 870	-10.6
Number of students				
State	149 728	133 749	145 497	-2.8
Private	318	2 364	3 970	1 148.4
Church	672	2 073	3 592	434.5
Total	150 718	138 186	153 059	1.6
School size				
State	47.1	48.2	53.6	13.8
Private	28.9	42.2	44.6	54.3
Church	35.4	49.4	55.3	56.2
Total	47.0	48.1	53.3	13.6
Class size				
State	20.1	20.0	20.4	1.5
Private	16.7	17.3	17.0	1.8
Church	21.7	21.8	21.1	-2.5
Total	20.1	20.0	20.3	1.0

Note: Data for special pre-primary schools are not included. School size refers to the average number of students per school.

Pre-primary education is free of charge for all children one year before compulsory school attendance. For socially-disadvantaged children, pre-primary education is also free irrespective of age. However, in all other cases, pre-primary schools (including state ones) can charge tuition fees. There is no ceiling for tuition fees in pre-primary schools except in those run by regional state authorities (special schools).

Enrolment in pre-primary education remains below the OECD average and has actually decreased in recent years. In 2012, the enrolment rates were 73% and 81% at ages 4 and 5 against OECD averages of 84% and 94% respectively. In 2005, the respective enrolment rates were 74% and 85% (OECD, 2014c). The total number of students in pre-primary education has increased only slightly (1.6%) between 2003 and 2013, with a reduction of the number of students in the state sector (decrease of 2.8%) (see Table 1.2 and Figure 1.A1.7 in Annex 1.A1). This trend reflects some difficulties for the municipalities to respond to the increasing demand and the growing number of private and church providers. From 2007 to 2013 the number of rejected applications in pre-primary education increased more than fivefold, from 1 760 to 9 600 (Educational Policy Institute, 2015). Not surprisingly, between 2003 and 2013, both school size and class size in pre-primary education have increased (see Table 1.2 and Figures 1.A1.3, 1.A1.4, 1.A1.5 and 1.A1.6 of Annex 1.A1).

#### **Basic education**

Responsibility for providing public basic education lies with the municipalities, as part of their transferred competences. This provision is complemented by privately-run basic education, either by the church (5.3% of enrolled students in 2013) or other private providers (1.1% of students) (see Table 1.3 and Figure 1.A1.7 in Annex 1.A1). Basic education brings together primary education (Years 1-4) and lower secondary education (Years 5-9), typically offered within the same school. In primary education, all subjects are usually taught by a generalist teacher, while in lower secondary education, subjects are taught by teachers specialising in one or two subjects.

Basic education has been considerably affected by demographic trends with a loss of 26.4% of students between 2003 and 2013 (see Table 1.3 and Figure 1.A1.1 in Annex 1.A1), with a small increase of the proportion of students in church and private schools (from 3.9% to 6.4%). This has been accompanied by the closure of about 12% of municipal schools (while the number of church and private schools increased), and the decrease of both average school size and class size (see Table 1.3 and Figures 1.A1.2, 1.A1.3, 1.A1.4, 1.A1.5 and 1.A1.6 of Annex 1.A1).

Basic education provided in state schools is free of charge. Private and church schools, however, are allowed to charge tuition fees.

#### Year Zero

Basic schools can create a Year Zero for socio-economic disadvantaged children aged six who are deemed not to have the capability of attending Year 1. It is considered a transition year to bring children up to the level deemed necessary to attend Year 1. Parental consent is needed to place a child in Year Zero. Another requirement is a recommendation from the consulting and prevention centre which evaluates the child's school capability.

Table 1.3. Basic education: Number of schools and students, school size and class size, 2003, 2008 and 2013

	2003	2008	2013	Change between 2003 and 2013 (%)
Number of schools				
State	2 272	2 090	2 003	-11.8
Private	11	34	42	281.8
Church	104	113	114	9.6
Total	2 387	2 237	2 159	-9.6
Number of students				
State	554 986	436 077	399 760	-28.0
Private	503	3 066	4 874	869.0
Church	25 302	22 572	22 743	-10.1
Total	580 791	461 715	427 377	-26.4
School size				
State	244.3	208.6	199.6	-18.3
Private	45.7	90.2	116.0	153.8
Church	243.3	199.8	199.5	-18.0
Total	243.3	206.4	198.0	-18.6
Class size				
State	21.3	19.7	18.5	-13.0
Private	12.0	14.6	14.2	18.3
Church	21.1	19.3	18.2	-13.9
Total	21.3	19.6	18.5	-13.3

Note: Data provided refer to attendance of basic schools. As a result, students attending lower-secondary education in 8-year *gymnasiums* are not taken into account. Data for special basic schools are not included. School size refers to the average number of students per school.

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

#### Eight-year gymnasium

During their basic education students can enrol in a *Gymnasium* (a secondary school providing general education) following Year 5 (8-year *Gymnasium*). This option is considered a prestigious pathway in the school system and is typically chosen by those students with the best academic achievement. In recent years, the government has shown the intention to limit access to 8-year gymnasiums to the 5% of students who complete primary education at most. This limitation has been postponed several times and is now planned to be introduced in 2016-17.

#### Upper secondary education

As explained earlier, there are three types of upper secondary education: general upper secondary education (with school-leaving examination) (ISCED 3A); Vocational upper secondary education with school-leaving examination (ISCED 3A); and Vocational upper secondary education with an apprenticeship certificate (ISCED 3C). While most students graduate from vocational upper secondary education (70% in 2012), the proportion of students graduating from general upper secondary education has been growing in the last few years from 24% in 2005 to 29% in 2012 (Educational Policy Institute, 2015). At the same time, the proportion of students graduating with a school leaving examination (Maturita), has grown from 63% in 2003 to 83% in 2013 (Educational Policy Institute, 2015). In 2011, around 80% of students pursuing vocational upper secondary education were enrolled in vocational upper secondary education with

school-leaving examination. In 2012, more than 75% of general upper secondary graduates enrolled in tertiary education while only 35% of vocational upper secondary graduates did so (Educational Policy Institute, 2015).

Upper secondary education (both general and vocational) provided in state schools is free of charge. Private and church schools, however, are allowed to charge tuition fees.

#### General secondary education

Responsibility for providing public general upper secondary education lies with the self-governing regions, as part of their transferred competences. Privately-run general secondary education, either by the church (16.2% of enrolled students in 2013-14) or other private providers (5.0% of students) complements this provision (see Table 1.4 and Figure 1.A1.7 in Annex 1.A1). General secondary education is provided in either 4-year or 8-year *gymnasiums*.

Table 1.4. General secondary education: Number of schools and students, school size and class size, 2003, 2008 and 2013

		* * * * * * * * * * * * * * * * * * * *		
	2003	2008	2013	Change between 2003 and 2013 (%)
Number of schools				
State	158	156	151	-4.4
Private	19	40	38	100.0
Church	46	55	57	23.9
Total	223	251	246	10.3
Number of students				
State	83 072	79 902	60 439	-27.2
Private	3 240	4 196	3 837	18.4
Church	13 745	15 723	12 435	-9.5
Total	100 057	99 821	76 711	-23.3
Class size				
State	30.6	29.0	25.2	-17.6
Private	23.1	17.1	15.0	-35.2
Church	30.3	27.2	23.2	-23.7
Total	30.2	27.9	24.0	-20.5
School size				
State	526.4	512.2	401.0	-23.8
Private	256.1	138.1	111.7	-56.4
Church	298.8	285.9	218.2	-27.0
Total	456.5	403.0	314.0	-31.2

Note: Data provided refer to attendance of *gymnasiums*. As a result, students attending lower-secondary education in 8-year *gymnasiums* are taken into account. Data for special secondary schools are not included. School size refers to the average number of students per school and considers part-time students while the number of students and class size do not.

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

General secondary education lost 23.3% of students between 2003 and 2013 (see Table 1.4 and Figure 1.A1.1 in Annex 1.A1), with an increase of the proportion of students in church and private schools (from 16.2% to 21.2%). Interestingly, this has been accompanied by an increase of about 10% in the total number of schools (despite a decrease of 4.4% in the number of state *gymnasiums*), and a substantial decrease of both average school size and class size (see Table 1.4 and Figures 1.A1.2, 1.A1.3, 1.A1.4, 1.A1.5

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and 1.A1.6 of Annex 1.A1). It should also be highlighted that the proportion of general secondary students in 8-year *gymnasiums* has been decreasing steadily, from 41.7% in 2003 to 31.5% in 2013.

*Gymnasiums* are selective institutions. Admission is conditional on requirements set by them, which typically include an entrance examination and an aptitude test.

The number of students in general secondary education (including students in the first four years of 8-year *gymnasiums*) as a proportion of students in secondary education reached about 34% in 2013, an increase from 31% in 2003.

#### Vocational upper secondary education

Responsibility for providing public vocational upper secondary education also lies with the self-governing regions, as part of their transferred competences. Privately-run vocational secondary education, either by the church (2.5% of enrolled students in 2013-14) or other private providers (9.6% of students) complements this provision (see Table 1.5 and Figure 1.A1.7 in Annex 1.A1). Vocational programmes are provided in vocational secondary schools and conservatoires.

Table 1.5. Vocational upper secondary education: Number of schools and students, school size and class size, 2003, 2008 and 2013

	2003	2008	2013	Change between 2003 and 2013 (%)
Number of schools				
State	567	396	357	-37.0
Private	46	86	83	80.4
Church	15	20	20	33.3
Total	628	502	460	-26.8
Number of students				
State	213 967	176 602	131 870	-38.4
Private	8 168	14 576	14 359	75.8
Church	3 307	4 166	3 735	12.9
Total	225 442	195 344	149 964	-33.5
Class size				
State	26.3	25.6	22.7	-13.9
Private	22.1	20.4	18.0	-18.7
Church	26.9	23.3	20.8	-22.8
Total	26.2	25.1	22.1	-15.6
School size				
State	393.0	460.1	386.1	-1.7
Private	234.4	206.7	201.6	-14.0
Church	275.3	252.7	239.4	-13.1
Total	378.5	408.4	346.4	-8.5

Note: This table does not include data for conservatoires. Data for special secondary schools are not included. School size refers to the average number of students per school and considers part-time students while the number of students and class size do not.

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

Vocational secondary education lost 33.5% of students between 2003 and 2013 (see Table 1.5 and Figure 1.A1.1 in Annex 1.A1), with an increase of the proportion of students in church and private schools (from 3.7% to 12.1%). This has been accompanied by a

significant decrease of about 27% of the total number of schools (37% for state schools), and a decrease of both average school size and class size (see Table 1.5 and Figures 1.A1.2, 1.A1.3, 1.A1.4, 1.A1.5 and 1.A1.6 of Annex 1.A1).

In vocational upper secondary education with school-leaving examination (ISCED 3A programmes), the programmes the most in demand are social sciences and services (including waiter/waitress, tourism industry, hairdresser, cook, with about 44% of 2013 graduates), type-I technical sciences (including electronics, metallurgy, food industry, engineering, technical and applied chemistry, with about 21% of 2013 graduates) and type-II technical sciences (including transport, telecommunications, postal services, printing, building industry, cartography, wood processing, and information technologies, with about 18% of 2013 graduates) (data provided to the OECD review team by the Ministry of Education, Science, Research and Sports).

Conservatoires provide a comprehensive artistic education in 6- to 8-year programmes. They prepare students for a professional artistic career and for teaching artistic subjects in educational art programmes.

The 2009 Act on Vocational Education and Training sought to improve the relevance of VET for the labour market. The Act set the conditions for the involvement of individual employers and their associations and private investment capital in the VET system. The Act encouraged co-ordination between the business sector and education through the establishment of VET councils at the governmental, regional and industrial level. In 2015, a new Act on Vocational Education and Training came into force. It introduces features of a dual system of vocational education and training, namely with the employers' contribution to the practical component of students' training and the state's provision of tax incentives to employers for their participation in the dual system (see below). Another OECD Review on the Slovak VET system provides further information about recent developments in vocational education in the country (Fazekas and Kurekova, 2016).

#### Extracurricular activities

In the Slovak Republic, there is a tradition of extracurricular activities for students. These are provided either by schools themselves (especially for students in lower years) or by various types of school facilities, both state and private. Among the most popular are primary art schools, which provide primary and secondary art education, and language schools. These are usually attended by students as a complement to the curriculum in formal schooling. School facilities also comprise "school clubs" and "free time centres". Other school facilities provide a variety of specialised support services and care. In 2013, around 150 000 students took courses in 317 primary art schools and 22 500 students attended language courses in 41 language schools. Also, for the same year, about 181 000 children attended 495 free time centres and more than 118 000 children attended 1 942 school clubs for children at (special) basic schools (Educational Policy Institute, 2015).

Extracurricular activities provided by school facilities are mostly run by municipalities and private and church providers (some, at the upper secondary level, are run by self-governing regions). In the case of state school facilities, these services are financed by municipalities' and regions' own budgets in the context of their original competences. Regulations also require municipalities and the self-governing regions to provide non-state founders of school facilities at least 88% of the per-student funding which they spend on salaries and operations in their own institutions. In 2013, the public funding allocated to

free time centres was changed. While previously municipalities were centrally allocated funds for free time centres on the basis of enrolment at the centres (funds which were nonetheless not earmarked), the new approach consists of allocating funds on the basis of the number of all children aged 5-15 with permanent residence in the municipality (regardless of whether or not free time centres exist in the municipality).

#### School providers and school types

Schools and school facilities can have the state, church, or a private entity as a founder. Founders of state schools are municipalities, self-governing regions or regional state authorities. Provision is distributed as depicted in Table 1.6.

Table 1.6. Types of schools by their founders

State			Church	Private	
Founder	State administration (8 regional state authorities)	Self-governing region	Municipality	Registered churches and religious communities	Natural persons or legal entities
Types of schools	Special schools (pre-primary, basic, secondary)	Secondary schools	Pre-primary schools, basic schools	Pre-primary schools, basic schools, secondary schools, special schools (pre-primary, basic, secondary)	Pre-primary schools, basic schools, secondary schools, special schools (pre-primary, basic, secondary)

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.

Non-state provision is particularly significant in education provided by conservatoires (about 37% of enrolments in 2013) and general secondary education (about 21% in 2013), and less so in vocational upper secondary education (about 12% in 2013). As shown in Figure 1.A1.7 in Annex 1.A1, the proportion of education services offered by church and private providers has been increasing steadily in the last decade. Private entities and churches are also important providers of extracurricular activities. They run about 35% of free time centres.

Table 1.7 displays the number of schools in 2013 by type. Basic schools may offer all nine years ("fully organised basic school") or fewer than nine years ("not fully organised basic school").

Table 1.7. Number of schools by type, 2013

Type of school	Number
Pre-primary school	2 870
Special pre-primary school	51
Basic school	2 159
Special basic school	233
General secondary school	
4-year gymnasium and 8-year gymnasium	246
Vocational secondary school	460
Special secondary school	133
Conservatoires	15

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.

All state, private and church schools comply with the same regulations (e.g. National Education Programmes, education standards, teacher qualifications). There are, however, differences regarding the autonomy in appointing school leaders (non-state founders do not have to follow the nomination of school boards), admitting students to Year 1 of basic schools (non-state schools are not obliged to admit all children to Year 1 of basic school) and funding (e.g. non-state schools can charge tuition fees).

#### Language of instruction

In the Slovak Republic, it is possible to teach and learn in a language other than Slovak either in a dedicated school or in given classes within a school. In 2013, 29 715 students were taught in Hungarian in basic school (7% of the total number of students in basic education), while a much smaller number of students received classes in languages such as German, English and Ukrainian (fewer than 500). This possibility is offered by both state and non-state schools.

The Concept of Upbringing and Education of National Minorities develops a framework for equal education of all citizens of the Slovak Republic, focusing on the education of all national minorities in their native language according to the European Charter for Regional or Minority Languages.

#### Students with special educational needs

In the Slovak Republic, children with special educational needs (SEN) are children with disabilities and gifted children.<sup>3</sup> The Concept of Upbringing and Education of Children with Disabilities, approved in 2000 by the Ministry of Education, defined the key objectives and their draft implementation for the following 15-20 years. This concept has encouraged the integration of students with special needs in mainstream schools but this only occurs when deemed feasible. Also, the Concept of Development of Gifted Children and Youth in the Slovak Republic defines the conditions for the development of gifted students in the education process and defines the methods for their identification.

Students with special needs learn in three possible settings: i) regular classes of mainstream schools; ii) special classes formed in mainstream schools; and iii) special education schools. Students are considered "integrated" if they attend a regular class of a mainstream school. If integrated in a regular class, a student with special needs typically has an individual learning plan. Special schools exist for pre-primary, basic and secondary education. Attendance of a special school requires a recommendation from an appropriate authority and parental consent.

The proportion of SEN students in the Slovak Republic is high by international standards. In 2013, 1.0%, 10.2% and 5.4% of students were considered SEN students in pre-primary, basic and secondary education respectively (see Table 1.8). This reflects a considerable increase compared to 2003, except for pre-primary education. In line with policy objectives, the proportion of SEN children attending mainstream schools has been increasing, reaching 31.8%, 44.9% and 52.8% in 2013 for pre-primary, basic and secondary education respectively (see Table 1.8).

Except for secondary education, the number of special schools decreased between 2003 and 2013, while the proportion of private and church providers increased. During this period, the size of basic special schools increased considerably while that of secondary special schools decreased (see Table 1.9).

Table 1.8. Number and distribution of students with special educational needs (SEN), by type of provision, 2003 and 2013

	2003		2013			
	Number	Proportion of students with SEN	Proportion of SEN students attending mainstream schools	Number	Proportion of students with SEN	Proportion of SEN students attending mainstream schools
Pre-primary education						
All students	152 127			154 164		
SEN students attending mainstream schools	796	1.4	36.1	516	1.0	31.8
SEN students in special schools	1 409			1 105		
Basic education						
All students	606 167			456 002		
SEN students attending mainstream schools	8 414	5.3	24.9	23 280	10.2	44.9
SEN students in special schools	25 376			28 625		
Secondary education						
All students	330 753			232 930		
SEN students attending mainstream schools	299	1.7	5.4	7 006	5.4	52.8
SEN students in special schools	5 254			6 255		

Note: SEN students attending mainstream schools consider students with disabilities and gifted students. Source: Data provided to the OECD review team by the Ministry of Education, Science, Research and Sports.

Table 1.9. Number and average size of special schools, 2003 and 2013

Number of schools	20	003	2013	
Number of schools	Total	Total State		State
Pre-primary education	66	63	51	41
Basic education	290	282	233	208
Secondary education	86	85	133	124
School size	All schools	State schools	All schools	State schools
Pre-primary education	21.3	21.8	21.7	22.5
Basic education	87.5	88.3	122.9	131.0
Secondary education	61.1	61.7	47.0	48.5

Note: School size refers to the average number of students per school.

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

As explained in Chapter 3, the school funding formula establishes a considerable premium for a student with special educational needs. In addition, to support the integration of SEN students, schools have the possibility of hiring dedicated teaching assistants. For example, more than 890 new teaching assistants for SEN children were hired as of September 2014.

Pedagogical and Psychological Consulting and Prevention Centres are in charge of identifying student special educational needs. They guide and advise parents on the appropriate education environment for their children with special educational needs. For instance, attendance of a special school and placement in Year 0 require the recommendation of these Centres. These centres also provide general counselling regarding students with special educational needs, including for mainstream schools and their teachers.

#### School governance

Schools benefit from extensive levels of autonomy. Within their schools, school leaders are given full responsibility for the quality of the education, the financial management, the appointment and dismissal of teachers, and the relations with the school community and the general public. School leaders are appointed and dismissed by the founder and serve a five-year fixed term. School leaders form their leadership team and can establish advisory boards (e.g. pedagogical board, methodology association, subject committee).

An important body in school management is the school board. While it is mostly an advisory body, it takes part in key decisions at the school level. School boards were introduced in order to ensure the promotion of public interest in schools. The school board is established by the school's founder and is made up of the following members: four founder representatives (3 in secondary vocational schools, where one extra member represents employers), four parent representatives (3 in upper secondary schools, where one extra member is the representative of the student school board), two teacher representatives and one non-teaching staff representative. In state schools, the school board selects the school leader through an open recruitment process and the founder is required to follow the school board's nomination. By contrast, in non-state schools. founders are not required to follow the nomination suggested by the school board. The founder is also required to hear the school board's views before the potential dismissal of the school leader, while the board can also initiate a process to remove the school leader. The school leader is also required to consult the school board on a range of issues, including the draft school budget, the school development plan, the number of students to be admitted, the establishment of new educational programmes, the school activity report and specific human resources issues.

An increasing trend is the creation of student school boards at upper secondary level. From 2004 to 2011, the share of upper secondary schools with such boards increased from 32% to 58% (Educational Policy Institute, 2015). Parent teacher associations are also common in Slovak schools, but their role is informal. They organise elections to appoint parents' representatives to the school board.

#### Evaluation and assessment

As described in Shewbridge et al. (2014), the evaluation and assessment framework in the Slovak Republic comprises the main components listed below (teacher evaluation and school leadership appraisal are described in Chapters 4 and 5 respectively).

#### Student assessment

While school leaders determine school assessment policies, with the advisory support of the School Pedagogical Board, the national education programmes contain both content and minimum performance standards to guide student assessment. Summative assessment plays a strong role in Slovak basic and secondary schools. Students receive formal assessment reports at the end of the first and second semesters of the school year, with grades for both academic achievement and behaviour. They also receive certificates upon successful completion of primary and lower secondary education. Students sit national tests at the end of lower secondary education (*Testovanie* 9) which help to inform the choice of secondary school they will attend. These are developed by the NÚCEM and were introduced in 2009. The NÚCEM also developed a new national test at the end of the

1st stage of basic education (*Testovanie* 5), introduced in November 2015. At the end of upper secondary schooling, most students sit examinations (*Maturita*) in Slovak language and literature and a foreign language, as well as in two elective subjects. The compulsory subjects include an external component (a written test) developed and administered by the NÚCEM. The *Maturita* is designed to determine students' entrance to higher education (Shewbridge et al., 2014).

#### School evaluation

The Slovak State Schools Inspectorate (ŠŠI) conducts external evaluation of all Slovak schools using a published quality indicators framework. It also monitors the competency of school leaders and teachers. The official cycle is for each school to have a comprehensive inspection once every five years, which involves a visit from a team of inspectors over three to seven days and results in a specific evaluation report with recommendations for the school (this is not published). The ŠŠI also conducts information inspections, typically in a single day, e.g. to check whether the school education programme complies with the national education programme. The ŠŠI may also conduct a "thematic inspection" in a selection of schools on a particular topic. There is a system to follow up schools in which inspectors have identified concerns. Upon re-inspection, if adequate improvement has not been made there may be sanctions for the school leader, for funding or even closure, although these are very rare. Since 2003, basic and secondary school leaders are obliged to submit an annual report on the school's educational activities, results and conditions to the school founder for approval and to the school board for comment. Legal requirements on the content of these reports were introduced in 2006 and include a school development plan for the following two-year period. School founders are responsible for school leader appointment, appraisal and dismissal (with the participation of school boards) and also monitor the management of school funds and other compliance issues not inspected by the ŠŠI. Student results in tests administered by the NÚCEM are aggregated to the school level and published on line, without any information on the school's socio-economic context or intake (Shewbridge et al., 2014).

#### Education system evaluation

The Ministry is responsible for evaluating the school system and draws on the evaluation work of the ŠŠI and results of national and international assessments. There is no specialised research institute and central agencies have limited analytical capacity. There is a central mechanism to compile annual information on the system, mostly based on a collection of data from schools, which is moving to student- and teacher-level data (a pilot of individual level collection was run in 2014). The ŠŠI publishes an annual report including a summary evaluation for the education system as a whole based on inspection analysis and other evidence. The NÚCEM publishes reports on different aspects of student performance in national and international assessments. The eight regional state authorities have a limited evaluation role, but check school administrative and financial requirements. Since 2009-10, the ŠŠI reports major inspection findings for each self-governing region (Shewbridge et al., 2014).

#### Main trends and concerns

#### Some challenges with educational attainment remain

Secondary-school attainment has traditionally been high, and continues to be so. In 2012, the proportion of adults aged 25-64 who had attained at least upper secondary

education was 92%, the highest figure in the OECD area (compared to an OECD average of 75%). The equivalent proportion for adults aged 25-34 reached 94% (compared to an OECD average of 82%). Upper secondary graduation rates for young people aged 25 or less reached 84% in 2012, the 5th highest figure among the 20 OECD countries for which data are available (OECD, 2014c).

By contrast, tertiary educational attainment is very low by international comparison, although increasing enrolment rates imply the situation is gradually improving. In 2012, the proportion of adults aged 25-64 who had attained tertiary education was 19%, the 5th lowest figure in the OECD area (against an OECD average of 32%). This proportion was 27% for adults aged 25-34 (the 5th lowest figure against an OECD average of 39%) (OECD, 2014c).

# Adults have literacy and numeracy skills around the OECD average but the relative performance of young adults is poorer

The OECD Survey of Adult Skills (PIAAC)<sup>4</sup> shows that Slovak adults (16-65 year-olds) have literacy skills not significantly different from the average of participating OECD countries while they have numeracy skills significantly above the average of participating OECD countries. Slovak adults scored on average 274 points in literacy (ranked 10th out of 23 countries, compared to an OECD average of 273 points) and 276 points in numeracy (ranked 8th out of 23 countries, compared to an OECD average of 269 points). The performance of young adults (16-24 year-olds) was comparatively worse (in their relative position within the OECD area) with an average of 276 points in literacy (ranked 13th out of 23 countries, compared to an OECD average of 280 points) and 278 points in numeracy (ranked 10th out of 23 countries, compared to an OECD average of 271 points). By contrast, the proportion of adults scoring at the two highest levels in problem solving in technology-rich environments (26%) was significantly below the OECD average (34%) (OECD, 2013a).

The proportion of low-skilled adults Score Level 1 and below is relatively small at 11.6% in literacy (against an OECD average of 15.5%) and 13.8% in numeracy (compared to an OECD average of 19.0%) (OECD, 2013a). However, in the Slovak Republic, the difference in literacy proficiency between adults with high- and low-educated parents is above the average of participating OECD countries. Also, low-skilled adults are about five times less likely to participate in adult education and learning than highly-skilled adults (OECD, 2013a).

## Student learning outcomes are improving in primary education but worsening in secondary education

As analysed in Shewbridge et al. (2014), in international comparison, the Slovak Republic has a mixed set of outcomes. Performance in international assessments indicates some improvement in reading at the primary level, but some significant and growing challenges at the secondary level. The main conclusions, as analysed by Shewbridge et al. (2014) are as follows:

Slovak students perform above the international average at the primary level in reading and science
At the primary level, international evidence from the International Association for the
Evaluation of Education Achievement's (IEA) Progress in International Reading Literacy
Study (PIRLS) and Trends in International Mathematics and Science Study (TIMSS)
indicates that Slovak students (average age 10.4 years) perform above the international
average in reading and science assessments, but only around the international average

Figure I.2.14).

level in mathematics (Mullis et al., 2012a; Martin et al., 2012; Mullis et al., 2012b). The relatively poorer average performance in mathematics appears to be related in part to the fact that topics included in the international assessment were not included in the Slovak curriculum through Year 4 (Mullis et al., 2012b). Positive messages from these international results include: evidence of improvement in Slovak students' reading performance between 2001 and 2009, in particular in assessing "reading for literary purposes" and "interpreting, integrating and evaluating" (Mullis et al., 2012a); and 11% of Slovak students performing at the advanced international benchmark in science (performing the most demanding tasks on the test) in comparison to 7% internationally (this was also a strength in the TIMSS 2007 science test) (Martin et al., 2012).

• Slovak students perform below the international average at the secondary level in reading, mathematics and science
At the secondary level, international evidence on student performance from the OECD Programme for International Student Assessment (PISA) 2012 results indicates that Slovak students perform below the international average in mathematics, reading and science (OECD, 2014d). In mathematics, this represents a decrease in performance compared to PISA 2009, when Slovak students performed around the OECD average. In fact, since PISA 2003, Slovak student performance in mathematics has deteriorated both in absolute

terms and relative to other countries. This meant that the Slovak Republic ranked from 23rd to 29th of the 33 OECD countries in PISA 2012 mathematics (OECD, 2014d,

• A significant proportion of students underperform in secondary education
A significant challenge in the Slovak Republic is the high proportion of low-performing students. In PISA 2009, 22.3% of students demonstrated low levels of reading proficiency compared to 18.8% on average in the OECD. In PISA 2012, 27.5% of Slovak students demonstrated low levels of mathematics proficiency compared to 23.1% on average in the OECD. In fact, a significant increase in the proportion of low-performing students in mathematics has driven the deterioration in mathematics performance since 2003 (7.5 percentage points increase of students performing below mathematics proficiency Level 2, as defined by PISA) (OECD, 2014d, Figure I.2.23). It is the same case for science performance (OECD, 2014d, Figure I.5.11). Also, the Slovak Republic is among the ten PISA participants with the widest spread in mathematics scores (score point difference between the top and bottom 10% of students) (OECD, 2014d, Figure I.2.24). However, the observed gender difference in mathematics performance has reduced between 2003 and 2012 and is now around the OECD average (OECD, 2014d, Figure I.2.27).

#### There are significant equity concerns in the Slovak school system

As analysed by Shewbridge et al. (2014), international evidence indicates significant concerns for equity in the Slovak school system. The range of different socio-economic backgrounds among Slovak students is similar to the OECD average (OECD, 2013b, Figure II.2.6). However, compared to the OECD average, Slovak students' socio-economic background is more strongly related to their mathematics performance in PISA 2012 (socio-economic background explains 14.6% of variance in mathematics performance in the OECD and 24.6% in the Slovak Republic), and the performance differences across socio-economic groups are greater (OECD, 2013b, Table II.A).

Also, educational differences between rural areas and cities are significant. As explained in Shewbridge et al. (2014), in the PISA 2012 mathematics assessment, Slovak students in rural areas were significantly outperformed by their peers in towns and cities, although some of this was explained by socio-economic differences (OECD, 2013b, Table II.3.3a). Even when taking into account these socio-economic differences, the performance disadvantage for students in rural areas is significantly more pronounced than on average in the OECD.

Another concern relates to the basis for attending a special school. It is well known that in the Slovak school system a good proportion of students who attend special schools do so as a result of learning difficulties and/or a social disadvantage and not following the identification of a learning disability. This is particularly the case of Roma children whose attendance of special schools is still very high in spite of the decision to progressively integrate disadvantaged students into mainstream schools (World Bank, 2012).

As analysed in Shewbridge et al. (2014), educational outcomes of the Roma minority are particularly poor: more than 70% of the Roma population has not reached upper secondary education and Roma do not attain tertiary education (OECD, 2012). Also, in spite of the several measures to encourage parents with less advantaged socio-economic status to enrol their children in early childhood education, the participation of Roma children remains low (Šiškovič, 2012 in OECD, 2012). In 2010, while only 28% of Roma children aged 3-6 attended pre-primary education, 59% of non-Roma children living in the same localities attended pre-primary education (see Figure 2.4 in Chapter 2) (UNDP, 2012). There are also few schools offering teaching in Roma language which, in part, results from a shortage of qualified teachers who could teach in Roma language and a lack of the necessary textbooks.

The Strategy of the Slovak Republic for Roma Integration by 2020 approved in 2012 is the underlying document for policies aimed to address the adverse position of vulnerable Roma communities for the period until 2020 and for the use of financial resources from the European structural and investment funds in the programming period 2014-20. The strategy defines better access for Roma children to all levels of education including pre-primary education as the global educational objective. Special emphasis is placed on the elimination of segregation at schools, the prevention of early school leaving and ensuring a successful transition to the labour market (Educational Policy Institute, 2015).

#### A high degree of academic selection within the school system

As described earlier, children may transfer to an academically selective school while attending basic school (8-year *gymnasium*), which in reality translates into moving the students with the highest academic achievement into elite institutions. Also, access to upper secondary education is highly selective. As reported in Shewbridge et al. (2014), data from the OECD PISA 2012 assessment indicate that 50% of 15 year-olds were in schools where the school leader reported that student academic performance records were always considered in decisions to admit students, as compared to 39% on average in the OECD (OECD, 2013c, Table IV.2.7). This is the dominant practice at the upper secondary level (83% of students, compared to 52% on average in the OECD), but less common than on average in the OECD at the lower secondary level (8% of students studying at ISCED 2 level, compared to 27% on average in the OECD) (OECD, 2013c, Table IV.2.8). Furthermore, at the upper secondary level there appears to be an established culture in many schools to transfer students to a different school due to either their low academic performance,

behavioural problems or special learning needs: 37% of Slovak students at the upper secondary level were in schools where the director reported this would be very likely, in comparison to 16% on average in the OECD (OECD, 2013c, Table IV.2.10).

#### Year repetition is low but on the increase

Although year repetition is not common practice in the Slovak Republic, there are indications that this may be becoming more frequent. As explained in Shewbridge et al. (2014), between PISA 2003 and 2012, there was a notable increase in the rate of year repetition reported by students in the Slovak Republic, from 2.5% to 7.6% (compared to averages for the OECD area of 13.8% and 13.3% in 2003 and 2012 respectively) (OECD, 2013c, Figure IV.2.10).

#### Labour market outcomes of vocational education graduates are of concern

Unemployment affects mainly graduates of secondary vocational schools. Unemployment rates (two years after graduation, as of May 2015) are highest for graduates of non-Maturita fields of study (17%) followed by Maturita fields of study with extended practical training (14%) and Maturita fields of study (11%). Substantially lower unemployment rates affect graduates from general secondary education (5%), as most of them continue their studies in tertiary education (CVTI, 2015).

#### Main policy developments

#### A major reform of public administration with large implications for education

In 2002 the reform of public administration significantly affected the governance of the education system, in that a traditional model of sector-based central governance was abolished and the influence of self-government was strengthened. Eight newly established regions gained significant autonomy, including in the governance and management of upper secondary schools. Similarly, municipalities gained self-governance powers to take responsibility for pre-primary and basic schools.

More recently, in 2012, the government of the Slovak Republic initiated a restructuring of public administration, the so-called ESO Reform (Efficient, Reliable and. Open Public Administration). The objective is to make public administration simple, accessible, sustainable, transparent and cost-effective. For example, more transparent structures of the de-concentrated central administration shall be established through single Citizen's Contact Administrative Points. The objective is also to establish a new quality management system to monitor and assess performance efficiency and the quality of state administration. In this context, as mentioned earlier, the management of education departments of regional state authorities shifted from the Ministry of Education to the Ministry of Interior.

#### Establishment of per-student school funding

In 2003, decentralisation in education was established alongside the launch of the school funding reform. Act No. 596/2003 set roles and responsibilities for the state, regions and municipalities, and introduced a system of mainly normative funding to schools. The normative budget for each school became dependent on the number of students at the school, the school type and other parameters defined by the law (see Chapter 3). Normative funding covers expenditures for teachers' salaries and operational costs. As of 2014, the

Ministry has been preparing adjustments to the per-student funding model, with the objective of strengthening incentives for school consolidation, possibly through the introduction of a factor based on the number of classes (see Chapter 3).

# The development of National Education Programmes and School Education Programmes

The 2008 School Act, the main legislative document governing schooling, establishes two levels for determining the content of instruction in the Slovak Republic. At the central level, the Ministry determines National Education Programmes (NEPs) for each educational area within pre-primary, basic and secondary education. These define the compulsory content, scope and conditions of education and provide a national framework for student learning. In agreement with such framework, schools further develop School Education Programmes (SEPs), which consist of the operationalisation of NEPs to fit the context of individual schools. Schools have considerable room to design their own learning strategies as NEPs are not markedly detailed. However, SEPs as well as approaches to student assessment and the content of textbooks need to comply with the requirements defined in NEPs. Recently, the Ministry of Education, Science, Research and Sports approved new NEPs for pre-primary, basic and general secondary education which are implemented as of September 2015. The new NEPs stipulate more time to be devoted to the teaching of mathematics and natural science subjects (physics, biology, chemistry).

#### The introduction of standardised national assessments

School autonomy in the development of programmes and in choosing instruction methods has generated the need to monitor student outcomes across schools. Not surprisingly, the introduction of external instruments for the assessment of students such as national assessments at key stages of schooling has been among the main policy issues in the education agenda. Full-cohort national assessments in Year 9 (Testovanie 9) have been conducted since 2009. Students are assessed in Slovak language and literature, as well as, where applicable, in the main language of instruction (Hungarian or Ukrainian) and in mathematics. The National Institute for Certified Educational Measurements (NÚCEM) is also conducting national assessments for Year 5 as of November 2015.

#### Creation of a career system for teachers

The Act on Pedagogical Employees and Specialist Employees (2009) specified qualification requirements for school staff and their rights to professional development. The Act created a salary system based on teachers' level of qualification (their academic qualification, career level and responsibilities), as well as a system of bonuses (based on performance or credits gained from attending professional development training) (see Chapter 4). The Act also guarantees teachers the freedom to choose pedagogical methods and teaching approaches.

#### Reform of vocational secondary education introduces features of a dual system

A new act on vocational education and training was adopted by parliament in March 2015 in co-operation with employers whereby features of a dual system of vocational education and training are introduced. The new system stipulates that employers participating in the dual system provide and finance the practical part of the education based on a contract with a given vocational school and a contract with the

student. The state gives employers tax incentives to participate in the dual system based on the number of students and the extent of practical training (Educational Policy Institute, 2015). The law strengthens the role of self-governing regions in determining the size of study programmes that should be guided by labour market forecasts and school performance indicators (Fazekas and Kurekova, 2016). As of September 2015, 117 employers are engaging in the dual system and offered 1 450 VET placements at their workplace (these were matched by the interest of approximately 420 students, who will take part in the dual system during school year 2015/16). These employers are evenly distributed across regions and most have between 20 and 100 employees.

#### Notes

- 1. However, this is likely to be an underestimation. Compared to the two previous censuses, the number of people who did not report their nationality increased significantly. At the same time, the number of people declaring Slovak nationality decreased significantly, while no significant changes occurred for other nationalities.
- 2. The size of the Roma population is likely to be underestimated. A large share of Roma is not recorded in any statistics. The Atlas of Roma Communities project provides the most accurate estimate derived from a field survey. In 2013, 7.5% (403 000) of the population were part of the Roma community. Compared to the previous 2004 survey, there was an increase of 70 000 people.
- 3. Some children identified as having special educational needs can also be assigned to the "socially-disadvantaged" category. These children attend mainstream schools and are either integrated in a regular class or attend a special class.
- 4. The Survey of Adult Skills (PIAAC), which took place from August 2011 to March 2012, assesses the proficiency of adults aged 16-65 in literacy, numeracy and problem solving in technology-rich environments. Around 166 000 adults were surveyed in 24 countries and sub-national regions, including 22 OECD member countries. Further information is available at <a href="https://www.oecd.org/site/piaac">www.oecd.org/site/piaac</a>.

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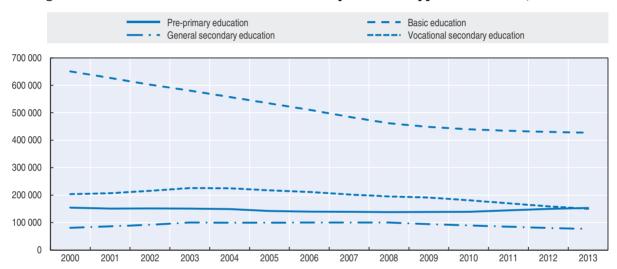
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#### ANNEX 1.A1

### Data on school education

Figure 1.A1.1. Enrolment in school education by level and type of education, 2000-13



Note: Students attending lower-secondary education at 8-year *gymnasiums* are taken into account under "General secondary education". Data for "Vocational secondary education" do not include students in conservatoires. Data for special schools are not included. For general and vocational secondary education, part-time students are not included.

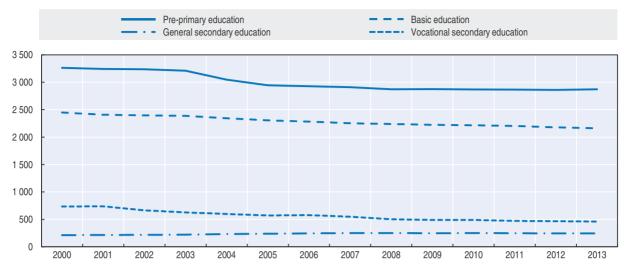


Figure 1.A1.2. Number of schools by level and type of education, 2000-13

Note: Data for "Vocational secondary education" do not include conservatoires. Data for special schools are not included. Source: Data provided to the OECD review team by the Ministry of Education, Science, Research and Sports.

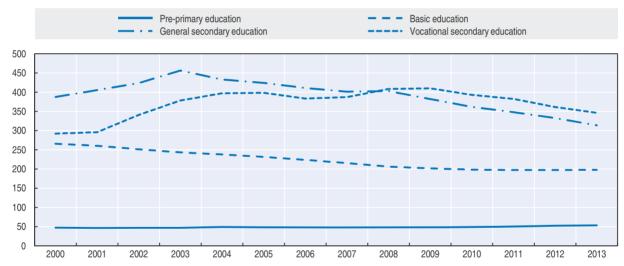


Figure 1.A1.3. School size by level and type of education, 2000-13

Note: School size refers to the average number of students per school. Students attending lower-secondary education at 8-year gymnasiums are taken into account under "General secondary education". Data for "Vocational secondary education" do not include students in conservatoires. Data for special schools are not included. For general and vocational secondary education, part-time students are included.

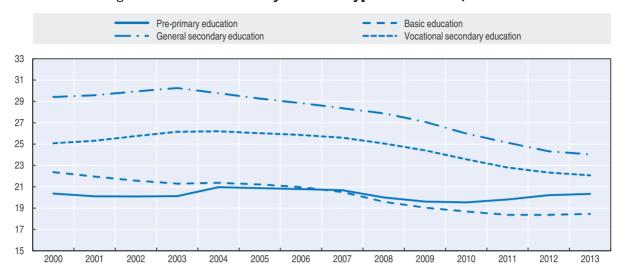


Figure 1.A1.4. Class size by level and type of education, 2000-13

Note: Class size refers to the average number of students per class. Students attending lower-secondary education at 8-year *gymnasiums* are taken into account under "General secondary education". Data for "Vocational secondary education" do not include students in conservatoires. Data for special schools are not included. For general and vocational secondary education, part-time students are not included.

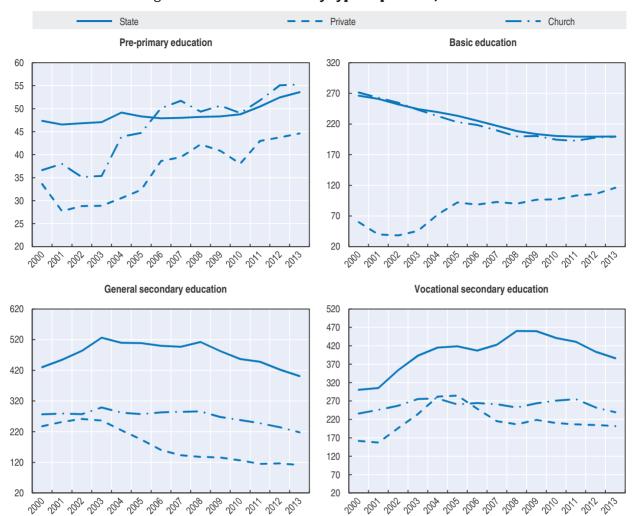


Figure 1.A1.5. School size by type of provider, 2000-13

Note: School size refers to the average number of students per school. Students attending lower-secondary education at 8-year gymnasiums are taken into account under "General secondary education". Data for "Vocational secondary education" do not include students in conservatoires. Data for special schools are not included. For general and vocational secondary education, part-time students are included.

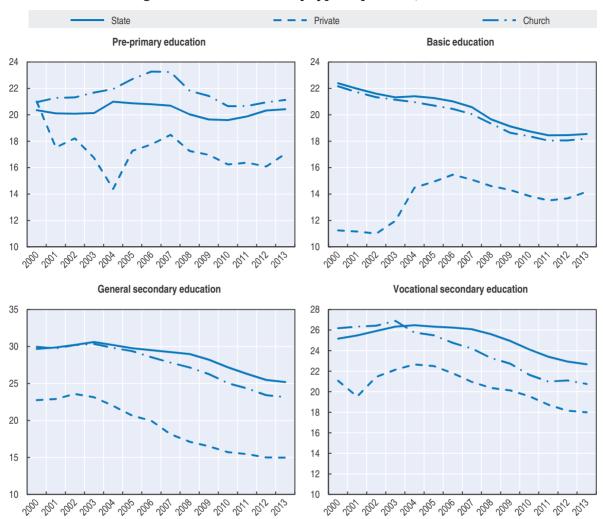


Figure 1.A1.6. Class size by type of provider, 2000-13

Note: Class size refers to the average number of students per class. Students attending lower-secondary education at 8-year *gymnasiums* are taken into account under "General secondary education". Data for "Vocational secondary education" do not include students in conservatoires. Data for special schools are not included. For general and vocational secondary education, part-time students are not included.

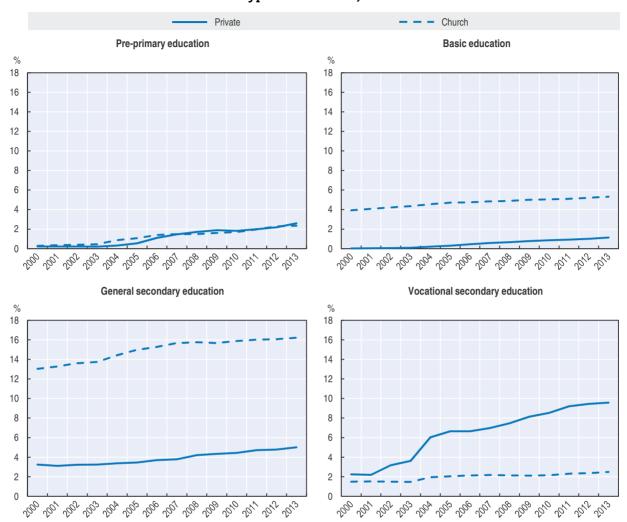


Figure 1.A1.7. Proportion of students in church and private institutions by level and type of education, 2000-13

Note: Students attending lower-secondary education at 8-year gymnasiums are taken into account under "General secondary education". Data for "Vocational secondary education" do not include students in conservatoires. Data for special schools are not included. For general and vocational secondary education, part-time students are not included.



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