



Slovakia

Education for All 2015 National Review

report was prepared by the relevant national authorities in view of the World Education Forum (Incheon, Republic of Korea, 19-22 May 2015). It was submitted in response to UNESCO's invitation to its Member States to assess progress made since 2000 towards achieving Education for All (EFA).

The views and opinions expressed in this document are those of the authors and do not commit UNESCO. The designations employed and the presentation of material do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The paper can be cited with the following reference: "Education for All 2015 National Review Report: Slovakia". For further information, please contact: efa2015reviews@unesco.org

EFA National Report

The Ministry of Education, Science, Research and Sport presents the following materials to the secretariat of UNESCO in accordance with the requirements for preparation of the EFA (Education for All) report. All related information, strategies, projects and statistical overviews for the Slovak Republic can be found in the following report and the attached tables.

A. SIX FUNDAMENTAL GOALS OF EFA

Goal 1: Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children;

Education and care for preschool age children has a long history in the Slovak Republic. Until 1993 childcare was provided either in crèches, institutions that provided only care for children aged six months to three years and were professionally and methodologically managed and directed by the Ministry of Health, or in combined crèches and nursery schools, in which the nursery school section was intended for children from three years of age until the start of obligatory schooling, usually at six years of age. Nursery schools were professionally and methodologically managed and directed by the Ministry of Education.

From 1993 to the present childcare from six months to three years is provided in crèches, child centres and maternity centres that are not managed and directed by any ministry. Their establishment and operation, as well as the content of activities there, is fully in the competence of the founders and the persons who work there. Maternity leave in the Slovak Republic is six months and a parent can care for his/her child until the child's third birthday; if they do so the state provides a child-care allowance. For this reason, there is not very large demand for children to be accepted in institutions providing care for children under the age of two years.

Pre-primary education is provided in **nursery schools**, in which care is combined with education. Upbringing and education in nursery schools in the Slovak Republic is regulated by the Schools Act and **Decree** of the Ministry of Education of the Slovak Republic No 306/2008 **on nursery schools**¹ as amended by Decree No 308/2009 (hereinafter the "Decree on Nursery Schools"). None of the provisions of the Schools Act result in the exclusion of a particular group of children, i.e. not even children with certain disadvantages in the standard school system. Education respects the following rights of children:

- a) equal access to education,
- b) education in the state language and their mother tongue,
- c) an individual approach respecting their capabilities and possibilities, talents and health condition,
- d) respect for their beliefs, world view, nationality and ethnicity,
- e) provision of advice and services connected with upbringing and education,
- f) upbringing and education in safe and hygienic conditions,
- g) organisation of upbringing and education appropriate to their age, abilities, interests, health conditions and in accordance with the principles of mental health,
- h) respect for their person and protection against physical, mental and sexual violence.

Pre-primary education in the Slovak Republic is provided by **nursery schools** (in which special classes can be established for children with certain health disadvantages) and **special nursery schools** (i.e. nursery schools for children with special educational needs),

¹ Available from: <http://www.minedu.sk/data/att/671.pdf>

which provide **full-day**² or **half-day**³ upbringing and education. Attendance of nursery school **is not obligatory; it is voluntary** but it is recommended that every child attend nursery school for at least one year before obligatory schooling.

The mission of nursery schools in the Slovak Republic is to support children's personal growth in the social and emotional, intellectual, physical, moral and aesthetic dimensions; to develop abilities and skills and to lay the foundations for subsequent education. It prepares children for life in society in accordance with their individual characteristics and their age; on completing it, children acquire pre-primary education, for which the nursery school issues a document – a certificate of completion of pre-primary education.

Nursery schools are intended, **as a rule, for children from three to six years of age**; where sufficient capacity exists, **children aged two years** can also be accepted in nursery schools. Children are **obliged to attend school from six years of age**.

If a child of six years of age is not yet ready to start school, the head teacher can decide to defer the start of the child's obligatory school attendance by one school year, or to place the child in the zero year of basic school according to the parents' wishes. The zero year of basic school is intended for children who have reached the physical age of six years by 1 September but are not yet ready to start schooling, who come from a socially disadvantaged background and in view of their social situation cannot be expected to cope with the education programme in the first year of basic school.

Children who complete at least the last year of pre-primary education in a nursery school before commencing obligatory schooling acquire **pre-primary education**. Proof of acquisition of this level of education is the **certificate of completion of pre-primary education**.

A contribution must be paid for a part of the cost of education in nursery schools, except for nursery schools in health care facilities (e.g. children's hospitals, medical institutions). A contribution to a nursery school **is not paid for a child**

- who has one year before the start of obligatory schooling
- if the child's legal guardian presents to the head teacher of the nursery school proof that he/she is a recipient of assistance in material need and allowances to assistance in material need,
- who is placed in an institution by court judgement.

Based on a decision of the nursery school's founder, a contribution to a nursery school is not paid for a child

- who has not attended nursery school for more than 30 consecutive calendar days for demonstrable reason of illness or family reasons,
- who has not attended nursery school during school holidays or if operation of the nursery school was suspended by the founder or for other serious reasons; in such cases the legal guardian shall pay a proportionate part of the set contribution.

The state pays for children who attend nursery school in the year before the start of obligatory schooling through **a contribution for upbringing and education**.

The **founders of nursery schools** are usually municipalities (**public (municipal) nursery schools**) but can also be natural persons and legal entities (**private nursery schools**) or churches or religious communities registered by the state (**church nursery schools**). Nursery schools for children with special educational needs, i.e. **special nursery schools** are

² The provision of **full-day upbringing and education** does not exclude the possibility to provide half-day upbringing and education or upbringing and education on only certain days of the weeks – the legitimate wishes of children's legal guardians are respected.

³ **Half-day upbringing and education** means that pre-primary education is provided generally for five hours per day in the morning or afternoon (this time may also be shorter).

founded by the district office in the regional capital; special nursery schools are state nursery schools.

Nursery schools can be established **independently** or as **a part of a basic school with a nursery school** or as **an organisational unit of a combined school**. Independent nursery schools are most common.

Nursery schools are **part of the school system**; until 2008 they were classified as school establishments. Whatever their founder, nursery schools that are authorised to provide upbringing and education in the Slovak Republic are incorporated into the network of schools and school establishments managed by the Ministry of Education, Science, Research and Sport of the Slovak Republic.

In school year 2013/2014 the network of schools and school establishments⁴ included **2,870** nursery schools with **7,525.5** classes (of which **7,201** offered full-day upbringing and education and **324.5** offered half-day upbringing and education) attended by **153,059** children aged 2 to 6–7 years). Nursery schools had **18** special classes for children with special education needs attended by **168** children. Upbringing and education is provided by **14,841** teachers, of whom **96.67%** satisfy the qualification requirements laid down by the relevant legislation. The majority of teachers have completed secondary education and they are followed by groups of teachers with the second stage of higher education and the third stage of higher education. The number of teachers with the first stage of higher education is gradually increasing. Only **29** men work as teachers in nursery schools. There are **174** assistant teachers in nursery schools, which is far from sufficient to cover the schools' real needs.

The network of schools and school establishments include **812 nursery schools for children with special educational needs** (special nursery schools) attended by **1,465 children**.

Upbringing and education in nursery schools is provided **in the state language** (Slovak) and **in the language of a national minority, if relevant**.

In school year 2012/2013 the following teaching languages were in use:

- ✓ **Slovak** (the state language in 2,515 nursery schools,
- ✓ **Hungarian** in 266 nursery schools,
- ✓ **Slovak/Hungarian** in 75 nursery schools,
- ✓ **Ukrainian** in 6 nursery schools,
- ✓ **Slovak/Ukrainian** in 1 nursery school,
- ✓ **Ruthenian** in 2 nursery schools
- ✓ **Bulgarian** in 1 nursery school
- ✓ **French** in 1 nursery school
- ✓ **Slovak/English** in 1 nursery school,
- ✓ **Slovak/German** in 1 nursery school,
- ✓ **English** in 1 nursery school,

The gross enrolment ratio for the year before obligatory schooling in nursery school is approximately **91.78%**⁵. This situation is not good, but to a large extent it is influenced by **lack of capacity** (e.g. as at 15 September 2013 there were **9,682 pending applications** (the number increases every year in line with demographic development; according to forecasts the **growth phase of the demographic curve** for preschool age children will **reach its peak in 2017**), though this number is not entirely accurate because not

⁴ The network of schools and school establishments is the list of schools and school establishments that are authorised to provide upbringing and education.

⁵ The data was acquired after the registration of children starting obligatory schooling in school year 2014/2015. The data is calculated for the number of children who came to enrol for primary education in basic school in the school year 2014/2015 by the set deadline.

all parents requested that their children be admitted to nursery school. The shortage of capacity in nursery schools is also affected by the fact that every year there are many children who **defer the start of obligatory schooling** – the number of children deferring the start of obligatory schooling per year is around **4,500** (as at 15.09 there were 4,751 children registered with deferred start of obligatory schooling).

Where financing allows, the founders open new classes to **enlarge** the existing **capacity** of nursery schools. New classes are established either in the existing buildings of nursery schools – by adapting premises to the needs of classes, or by building extensions to nursery schools. In some cases capacity has been increased by adapting classrooms in basic schools or other premises that the founder owns to serve the needs of nursery schools. This is still not enough to satisfy all the eligible demand on the side of parents.

Upbringing and education is provided by **14,841** teachers, of whom **96.67%** satisfy the qualification requirements laid down by the relevant legislation. The majority of teachers have completed secondary education and they are followed by groups of teachers with the second stage of higher education and the third stage of higher education. The number of teachers with the first stage of higher education is gradually increasing. Only **29** men work as teachers in nursery schools. There are **174** assistant teachers in nursery schools, which is far from sufficient to cover the schools' real needs.

The admission of children to pre-primary education in nursery schools and special nursery schools is **regulated by the Schools Act**. Children's admission to nursery school is **regulated in more detail** by the **Decree on Nursery Schools**. Nursery school is intended for all children, not only the children of working parents.

Parents have the option to choose a nursery school, a **child's admission** to nursery school is **not dependent on the permanent residence of the parent or the child**. In the case of nursery schools **no school districts are established** (as they are in the case of basic schools), which makes them more accessible for parents. The majority of parents choose a nursery school in their place of residence but parents are increasingly choosing nursery schools for their orientation, profile, the quality of the school education programme they provide and so on. If a nursery school is situated at some distance from their place of residence, they are willing to transport the child to the more distant location.

As a rule children are admitted to pre-primary education in nursery schools **between three and six years of age**; children can be admitted from two years of age **in exceptional cases**. Children over the age of two years can be admitted if there are appropriate material, staff and other necessary conditions. Children are also admitted to pre-primary education if **the start of their obligatory schooling is deferred** or is **subject to additional deferral**; such children have priority in admissions. Besides the conditions for the admission of children to nursery school laid down by the Schools Act, the head teacher of a nursery school draws up **other conditions for children's admission** in accordance with the Decree on Nursery Schools and, after consulting them with the school's teachers' council, displays them in a visible public location. **Other conditions** for children's admission to nursery school **must not contravene** applicable legislation and **must not be discriminatory** or limit the rights of children or their parents. Nursery schools must not require, for example, that both parents must be employed, or have permanent residence in a given municipality as a condition for a child's admission. It can however stipulate that if, for example, there are many applications for children's enrolment in the nursery school, priority will be given to children from a given municipality or locality or the children of employed parents etc.

Children are admitted to nursery school based on a written application from the child's legal guardian submitted to the head teacher together with a statement on the child's health condition from a paediatric GP. In the case of a child with special educational needs, the legal

guardian shall submit in addition to the application and the statement on the child's health condition, a statement of the competent educational counselling and prevention establishment. **The decision on a child's admission to pre-primary education is made by the head teacher** in accordance with Act No 596/2003 on state administration in education and school self-government, and amending certain acts, as amended⁶. If there is free capacity in a nursery school, children may be admitted also during the course of the school year.

To facilitate children's adaptation, an adaptation programme can be used in which the legal guardian brings a child to nursery school initially for one hour, two hours and up to four hours in cooperation with the pedagogical staff. If the child adapts, he/she can begin to attend nursery school for the agreed time after the agreement of the child's legal guardian and the head teacher. If the child's ability to adapt is impaired, the head teacher may agree with the legal guardian on suspension of the child's attendance of nursery school for an agreed period.

In one class there can be at most two children with special educational needs, who can be children with mental, sensory or physical impairments, children with impaired communication abilities, children with behaviour disorders or with autism (hereinafter "children with disabilities"), and the maximum number of children in the class can be reduced by two children for every child with a disability. As a rule, a child is placed in a special class of nursery school with children with the same type of disability. A child can be placed in such a class **only with the informed consent of the child's legal guardian** after a diagnostic examination to determine his/her special educational needs carried out by a competent school establishment for educational counselling and prevention.

Nursery schools are divided into classes. The maximum number of children per class in a nursery school with full-day upbringing and education, as set by the Schools Act, is:

- ✓ 20 per class for children aged three to four years,
- ✓ 21 per class for children aged four to five years,
- ✓ 22 per class for children aged five to six years,
- ✓ 21 per class for children aged three to six years,

In view of the increased interest of parents in enrolling children in nursery school, the head teacher may, if space permits⁷, enrol *up to three additional children* in each class above the maximum number permitted by the Schools Act, but only in the following cases:

- a) the change of permanent residence of a child,
- b) the placement of a child in the nursery school as part of an adaptation programme or for diagnostic purposes,
- c) deferral or additional deferral of the start of obligatory schooling,
- d) increased interest of children's legal guardians in upbringing and education in the nursery school.

When determining the number of children in a nursery school class the head teacher of the nursery school **may but need not take into account children in the class younger than three years of age.**

Children who should begin obligatory schooling the following year are usually placed in a separate class. Children with special education needs are placed in classes together with intact children or in separate classes for children with special educational needs. It is not permitted to place children in classes for children with special educational needs solely for the reason that they come from a socially disadvantaged background.

⁶ Available from: <http://www.minedu.sk/data/att/4605.pdf>

⁷ Pursuant to the relevant Decree of the Ministry of Health of the Slovak Republic, there must be at least 4 m² of floor space per child in the day room used for playing and sleeping and if there is a separate sleeping room there must be at least 3 m² of room for playing; for bed for sleeping there must be at least 1.7m²; the space for storage of beds and bedding must permit proper airing; one chair in the dining room must have at least 1.4m² of floor space.

If the founder agrees, a nursery school can create **classes for developing children's talents** in aesthetic, intellectual or sports areas. A class for talented children can include **a maximum of 12 children**. A child's admission to such a class requires the informed consent of the child's legal guardian and a statement from a school establishment for educational counselling and prevention. Two teachers and one trainer alternate in working with a class of children with talent for sport in full-day upbringing and education.

A **separate class of up to 12 children** can be established for children learning a **foreign language**. The teachers who work with this class must meet set qualification requirements.

The head teacher of a nursery school is responsible for **creating safe and hygienic conditions** for pre-primary education and the teachers are responsible for the **health and safety of children** from the time when they are received until they are handed over to their legal guardians or a person authorised by them. In classes with **half-day** upbringing and education, **one teacher** provides pre-primary education. In classes with **full-day** upbringing and education, **two teachers** provide pre-primary education in shifts. In classes **providing full-day upbringing and education for more than ten children under three years of age**, **three teachers work in shifts** and a **non-pedagogical staff member** assists children with dressing and self-care activities.

The average number of children per teacher is currently **something over ten**, but this is a **purely statistical average**. At present, in view of the fact that approximately 90% of the working time of teachers does not overlap, the average per teacher is **20.6 children**, which is significantly above the average not only for the European Union but also for the OECD. The average number of children per teacher, as one of the major indicators of the quality of upbringing and education, cannot be looked at in purely statistical terms but must be looked at from a variety of viewpoints taking into consideration all the perspectives that affect it and determine it.

Children can attend nursery school for 1, 2, 3 or even 4 consecutive years; nursery schools do not have a series of years through which children proceed, which means that, as a rule, children always remain in one class during their time at nursery school in order to reinforce the social ties between children. Nursery schools **do not operate a system of lessons or subjects for educational activities**; educational activities are provided in the form of a **continuous series of activities in the morning and afternoon with varied content, organisation and focus**.

The school year in the Slovak Republic starts on 1 September and ends on 31 August the following calendar year. **School teaching** lasts from 1 September to 30 June and is followed by the school summer holidays. There are **school holidays** also during the period of school teaching: autumn, Christmas, half-year, spring and Easter holidays. In nursery schools at times other than during the summer holidays, operations are adapted to the requirements and needs of children's legal guardians. During the summer holidays the **operation** of every nursery school is **suspended for at least three weeks in view of the need for the thorough cleaning of the premises of the nursery school, disinfection of the environment and toys and to allow certain employees to take holidays**. During the summer educational activities in nursery schools are planned and implemented as games and play and not organised as in the period of school teaching.

The operations of nursery schools are set by **head teachers after prior consultation with parents and after approval by the founder**. Nursery schools operate as a rule from 06:00 to 18:00 but different nursery schools operate differently depending on local conditions and in particular the requirements of parents.

The organisation of daily activities that are repeated regularly in a particular nursery school is set out in the form of a **daily schedule**. The daily schedule shall ensure that children have space for peaceful, safe and meaningful activity in nursery school.

The organisation of daily activities shall:

- ✓ provide a balanced variety of activities (respect for biological cycles, stress-free environment),
- ✓ conform to the principles of healthy lifestyle,
- ✓ create times for children to play and to learn,
- ✓ follow fixed times for routine activities of daily life.

The daily schedule shall include:

- ✓ games and play,
- ✓ movement and relaxation activities,
- ✓ time out of doors,
- ✓ rest,
- ✓ routine activities of daily life (personal hygiene, eating and drinking, table manners).

Games and play are spontaneous or teacher-led activities in which the children participate in games and play. Games and play can include educational activities that are planned in advance. In planning the daily schedule games and play can be included 2 – 3 times in the morning and afternoon hours.

Movement and relaxation activities include exercises for health, relaxation and breathing. These take place every day at a set time, in line with mental health guidelines (before meals / as a rule never immediately after meals, in a well-ventilated room or outside etc.). They are activities that are planned in advance.

Time out of doors includes movement activities for children, walks, educational activities etc. In order to ensure children's healthy psychosomatic development, there is some time out of doors every day. An exception is made in the event of unfavourable climatic conditions: strong gusting winds, severe frosts and rain (not drizzle). In the spring and summer time out of doors is scheduled twice a day, in the early morning or late afternoon having regard for the strength of the sun.

Rest is provided taking into account the children's needs and lasts at least 30 minutes. It respects their individual need for sleep, especially in the case of the youngest children.

Routine activities of daily life take place at fixed times respecting three-hour intervals between meals. Meal times are set according to operating conditions in each nursery school.

All the **organisational forms of the daily schedule** are equal from a **pedagogical and psychological point of view**.

Pre-primary education is implemented using the organisational form – **educational activity**, and is **led by the teacher**. Educational activities include **situational learning** and also **goal-directed intentional learning** based on appropriate and effective motivation. The duration of an educational activity is set by the teacher and must also respect the child's needs and ability to concentrate, with reference to his/her development and general principles of mental health; an educational activity **must not overburden a child** and can be provided as part of **games and play** and during **time out of doors** as well as **in a separate organisational form** during the day.

Education activities can be carried out:

- ✓ by children in a group (the number of children in the group is set by the teacher according to the rules for planning an educational game or at the teacher's discretion),
- ✓ in plenary, with all the children together,
- ✓ individually.

Upbringing and education in nursery schools is carried out according to **programmes for upbringing and education**, the official forms of which in the Slovak Republic are:

- ✓ the state education programme,
- ✓ the school education programme,

Children in nursery schools have been educated according to school education programmes since 01 September 2009. Under to the Schools Act, school education programmes must be prepared in conformity with the State Education Programme ISCED 0 – pre-primary education and the goals and principles of upbringing and education laid down in the Schools Act.

This conformity is checked by the State School Inspection, as the state administration authority carrying out state inspection of pedagogical management, upbringing and education and material and technical conditions including the practice of teaching in schools and school establishments.

The current State Education Programme ISCED 0 – pre-primary education:

- ✓ is framed by the obligatory content of education intended to develop the key competencies of children required for the pre-primary level of education and the type of education guaranteed by the state,
- ✓ contains standards for education (content and performance) i.e. requirements for knowledge, skills, competencies and attitudes that are formed only from content delimited as essential (the core content), which includes only the fundamental elements that are relevant to the education of all children in pre-primary education,
- ✓ creates space for adapting content in line with regional and local conditions and requirements while building on goals that society expects for citizens' level of education and cultural literacy.
- ✓ is prepared based on a continuous approach in which the individual educational programmes for each school level (pre-primary, primary, lower secondary, upper secondary) are interconnected.
- ✓ supports a holistic and integrated approach to education by defining thematic circles and areas of education making use of activating methods of education and effective methods of teaching and learning.
- ✓ includes cross-curricular themes (environment, transport education – road safety, health and safety, healthy lifestyle, creativity, media education, work with information etc.), which overlap with all thematic circles and areas of education, reflect current global and national problems, issues in the contemporary life of the person, country, the European Union and the world, which support the formation of children's values and attitudes, which provide them with opportunities to develop their individual potential, to apply their interests and also to cooperate with each other and express themselves in various organisational forms and learning through play,
- ✓ enables content to be modified for the education of children with special educational needs,
- ✓ emphasises, in the development of content for upbringing and education, a stimulating and creative environment and a good social and emotional atmosphere in the nursery school and its overall culture,

- ✓ provides a model for planning the content of education which enables nursery schools to focus on the individual development of children's personal potential,
- ✓ highlights the quality of the nursery school, its self-evaluation and evaluation.

The main guiding idea is:

- ✓ to support the overall personal development of the child,
- ✓ to activate and motivate the development of psycho-motor skills, knowledge, emotional intelligence and social skills,
- ✓ to develop creativity and imagination in everyday activities,
- ✓ to help children to form their own individuality and life competencies

The programme is integrated into four thematic circles **I am, People, Nature and Culture**.

The content of the thematic circles is oriented as follows:

- ✓ **I am** – the development of personal competencies, the senses, children's relationships with their family and surroundings, self-knowledge, self-expression, social, emotional, motor and cognitive awareness of the child's life (physical, intellectual, spiritual, social and emotional life).
- ✓ **People** – the development of social experience and relationship to the company of people, contact with other groups of people, familiarisation with people's work and other activities, the development of ideas about places where people live and work, the environments in which they can be found, about different cultures, ethnicities and races (other people, humanity).
- ✓ **Nature** – the development of knowledge of the elementary laws of life on earth, natural phenomena, living and non-living things, the formation of the beginnings of ecological culture, the formation of a view of the natural world and a relationship to nature, to formation of a basic world view and the acquisition of basic knowledge of the world and space (the Earth, space).
- ✓ **Culture** – the development of contacts between the child and the world of people's intellectual activity, the development of the recognition and application of musical, literary and creative culture (subjective experience, the world of play and the world of art).

The thematic circles intersect with each other and complement each other. Every thematic circle covers three educational areas:

- ✓ **perceptual-motor**
- ✓ **cognitive**
- ✓ **socio-emotional**

The classification of educational areas is **highly theoretical**; on the practical level they develop in an integrated fashion, interconnect with each other and relate to each other. The educational areas include a range of sub-areas – movement, health, natural science, mathematics and logic, languages, communication, ethics, patriotism, information, artistic expression (music, visual art, literature), work and other cross-curricular themes – personal and social development, protection of life and health, traffic education – road safety, the environment, media, multicultural education, creativity, development pre-reading literacy and literacy in general, information and communication technology.

The content of upbringing and education in the state education programme is adapted for conditions in the nursery school in the school education programme, which is then used in combination with knowledge of the current development potential of the children to create more detailed and specific plans for educational activities.

Content standards include content that respects the development potential of preschool age children and draws on children's experience and knowledge.

Performance standards are conceived as goals that the child should achieve by the end of the preschool period in order to acquire pre-primary education.

School education programme

The school education programme is governed by the requirements of the Schools Act, the state education programme and is based on the goals and profile of the specific nursery school. **It is the basic curricular document governing the daily provision of upbringing and education in the nursery school.**

The school education programme is issued as a rule for a period of one education cycle – i.e. as a rule for three years. Depending on the conditions exist in in specific nursery schools, the school education programme may be issued for a shorter period after which it is revised or amended, or a completely new programme is issued. The **minimum period** for which a school education programme can be issued is **one school year**. It forms the basis for teachers' daily performance of upbringing and education.

School education programmes are **issued by the head teachers** of nursery schools after discussion in the teachers' council and the school council.

The school education programme allows nursery schools to tailor upbringing and education in line with the real needs and interests of children, the requirements of parents/legal guardians, the specific conditions and the traditions of the nursery school.

Syllabuses, an obligatory and also the most important component of the school education programme are prepared at least in the scope laid down by the educational standards of the state education programme. With reference to the specific content of upbringing and education, the character of educational activities and other special aspects of teaching children and children's learning, the nursery school prepares syllabuses in the form of content units / projects. The organisation, methods and forms of upbringing and education activities are in the competence of nursery school teachers.

Nursery schools have planned their upbringing and education activities using syllabuses since the school year 2009/2010. **The planning of upbringing and education activities is entirely in the competence of teachers.** Each nursery school sets and approves the method, form, scope and duration of plans for upbringing and education activities at the first session of the teachers' council. The standard practice in many nursery schools is that multiple forms of planning are used in one nursery school at the same time.

Documents have been published to help nursery school teachers to prepare school education programmes including the *Manual for the Preparation of School Education Programmes*⁸ and the *Methodology for the Preparation of School Education Programmes*⁹. Every teacher had the opportunity to take part in training on the preparation of school education programmes.

Another work in the field, which analyses all the major issues in the field relating to pre-primary education in nursery schools and the management of nursery schools and which was written to help nursery schools is the *Methodology of Pre-primary Education*¹⁰. A document has been drawn up to assist the teaching of the state language in nursery schools where the teaching language is the language of a national minority – the *Methodological Note on the acquisition of the state language in nursery schools where the teaching language is the language of a national minority*.¹¹

The profession of nursery school teacher in the Slovak Republic is **open only to persons who satisfy the qualification requirements** laid down by **Decree of the Ministry of Education of the Slovak Republic No 437/2009** establishing qualification requirements and special qualification requirements for individual categories of pedagogical staff and school-related professionals.

⁸ Available from: http://www.minedu.sk/data/files/145_75_prirucka_na_tvorbu_svp_pre_ms.pdf

⁹ Available from: <http://www.minedu.sk/statny-vzdelavaci-program-skolsky-vzdelavaci-program/>

¹⁰ Available from: <http://www.statpedu.sk/sk/Ucebnice-metodiky-publikacie-odborne-informacie/Publikacie.alej>

¹¹ Available from: <http://www.statpedu.sk/files/documents/publikacna/metodiky/metodicky-list.pdf>

Government Regulation No 422/2009 establishing the scope of direct teaching and upbringing activity of pedagogical staff,¹² as amended, stipulates that a nursery school teacher who works full time shall have a timetable of **28 hours of direct teaching activity**. The teaching hours of nursery school **head teachers** depend on the number of classes for which they are responsible and range from **23 to 12 hours per week**.

An important tool for promoting the development of education in nursery schools and improvements in the equipment of nursery schools is the **implementation of the national project *Training for the Pedagogical Staff of Nursery Schools as a Component of Education Reform***, which has received support from European Union funds amounting to nearly **EUR 19.5 million**. This project also increased international cooperation between nursery schools in the Slovak Republic and institutions for early childhood education and care in other European Union countries.

Another national project that is aimed at nursery schools is the national project “***An Inclusive Model of Education for the Pre-Primary Level of the School System***.” The main aim of this project was to achieve integration of the largest possible number of children from marginalised Roma communities in nursery schools and to improve their readiness for entering primary education through active communication with parents. Activities under the project included training for pedagogical and school-related professional staff in pre-primary education to improve the prospects for social inclusion of children from marginalised Roma communities through an increase in the quality of the staff’s professional competencies. Duration of the project: 2/2013 -11/2015. Further information at: <http://www.npmrk2.sk/>.

Nursery schools pay considerable attention to **developing children’s pre-reading literacy and developing their movement skills and abilities**. To increase quality in the implementation of educational activities in this area, the Ministry of Education, Science, Research and Sport of the Slovak Republic provided grants to **53 nursery schools** in 2012 for a total value of **EUR 152,000**.

A number of successful projects and training activities have been carried out in preschool education in cooperation with the Association for Preschool Education and the Slovak committee of the World Organization for Early Childhood Education (OMEP), professional associations of preschool teachers. Every year regular **professional conferences** are organised to discuss current issues in teaching. For several years these conferences have also attracted regular participation from experts in neighbouring countries, namely the Czech Republic, Austria, Poland, Hungary and Serbia. Both of these professional organisations regularly organise **international internships** in neighbouring countries, which aim at drawing inspiration from examples of best practice.

Professional cooperation with a number of manufacturers and distributors of information and communication technology and teaching aids has made it possible for us to introduce in Slovakia the **latest trends in the use of electronic teaching aids** and other modern interactive teaching aids.

The Slovak Republic is an active participant in **international cooperation** on pre-primary education both in the **European Union** and in the **OECD**. This cooperation is gradually producing benefits in the form of an opening up of pre-primary education, the establishment of contacts with specialists and the presentation of examples of best practice. The main **challenge** facing nursery schools at present is expanding their capacity.

Support for early childhood education and care in the context of teacher training is the priority focus of the **national project of the Methodological and Pedagogical Centre (MPC) “*Training for the pedagogical staff of nursery schools as part of lifelong learning*” (hereinafter the “NP MAT”)**. The aim of the project is: to implement reform of education in

¹² Available from: <http://www.minedu.sk/data/att/639.pdf>

nursery schools and increase the effectiveness of the continuing education system for NS teachers. Duration of the project: 5/2009 – 9/2014. Further information at: <http://www.mat.iedu.sk/DTLN.MPC001> Internet. The NP MAT is developing an effective system of lifelong learning aimed at developing the key competencies of nursery school teaching staff in line with the current and potential future needs of knowledge society. Since their implementation, the NP MAT SR and the NP MAT BA have provided training for around 11,400 pedagogical staff and school-related professionals (9,940 in Slovakia outside Bratislava and 1,460 in Bratislava) through 18 newly created/revised education and study programmes as follows: Drawing in the graphics program RNA, Working with the digital boy Bee-bot in nursery schools, Drawing on the computer, Digital technologies in nursery schools, Development of pre-reading literacy in nursery school, Orientation in space and spatial imagination in pre-primary education, Innovation in didactics for teachers in pre-primary education, Reform of content in nursery schools, Preparatory attestation training for the first attestation test for teachers in pre-primary education, Graphomotor skills, Skiing in nursery school, Programming in nursery school, LandArt, School management, Innovation in the management of schools and school establishments, Innovation in didactics for senior teachers, Digital technologies for senior teachers, Content reform.

- Another method for improving teachers' competencies was through lectures on media literacy and Internet safety in cooperation with e-Slovensko. The MPC organised activities in cooperation with eSlovensko o.z. in 2012 and 2014 for over 800 nursery school teachers in towns in every part of Slovakia (Nitra, Košice, Štúrovo, Banská Bystrica and Žilina).
- **Conferences and seminars were organised on preschool upbringing and education with international participation.**

International cooperation in the area of pre-primary education

- The MPC received a visit from experts in pre-primary education from the Herzen State Pedagogical University of Russia in Saint Petersburg (05/12/2013) to exchange information on pre-primary education.
- In 2014, at the request of the association "Together for a better future for Belarus", the research and analysis department of the MPC received a visit by a delegation from Belarus, the objective of which was to organise a working meeting for the presentation on the pre-primary education system in Slovakia, the professional development of pedagogical staff and school-related professionals in nursery schools and the pre-primary education system in Belarus. The MPC received 44 specialists in pre-school education from Belarus and prepared a two-day seminar with visits to selected pre-school establishments.

The MPC implements the **NP MPC An Inclusive Model of Education for the Pre-Primary Level of the School System (hereinafter the "NP MPK II")**.

Integrated within the MPC is the Roma Education and Documentation Centre in Prešov – ROCEPO, which addresses the specific needs and conditions of the Roma national minority with an emphasis on effective education, information, documentation and advice services, especially for pedagogical staff and school-related professionals working in schools and school establishments where a high proportion of children and pupils come from socially disadvantaged backgrounds.

Activities of ROCEPO:

- provision of information and advice services for pedagogical staff and school-related professionals working with pupils from socially disadvantaged backgrounds via the website www.rocepo.sk, email and telephone.
- training for pedagogical staff and school-related professionals through accredited programmes in the Professional and Career Development (PKR) project.

- it is carrying out a survey of the status of children and pupils from socially disadvantaged backgrounds in the Slovak education system with the aim of obtaining up-to-date information on progress, behaviour, attendance, diet, school clubs for children, interest groups and the transition to secondary school of pupils from socially disadvantaged backgrounds with an emphasis on researching the effect of teaching assistants on individual areas of the education process in comparison with previous surveys. Interim results of the survey are published on the centre's website www.rocepo.sk.
- it carries out analysis of the educational process of teachers of Slovak language and literature and mathematics in certain basic schools participating in the Testing 5 programme organised by the National Institute for Certified Educational Measurements. This analysis is then used to prepare recommendations, methodological material and training programmes for teachers working with pupils from socially disadvantaged backgrounds and marginalised Roma communities.
- it carries out methodological work with the whole teaching staff (training programmes based on the specific characteristics of a given school, optional subjects within the school education programme).

The NP MPC with ESF funding – PRINED – the project for inclusive education (covering the areas of pre-primary, primary and further education)

The objective of the project is to implement an inclusive model of education in order to create better opportunities for pupils from marginalised Roma communities to complete basic education and continue their education at higher levels, which will also enable them to acquire skills that are needed for the labour market. Duration of the project: 4/2014 – 11/2015, Further information: <http://www.mpc-edu.sk/projekty/prined>.

Specific objectives of the project include support for inclusion through education content and staffing in nursery schools with improvements in the quality of the diagnostic process and incentives, and by introducing teaching assistants in nursery schools, the creation of an inclusive educational environment in basic schools through the involvement of an inclusive team of pedagogical staff and school-related professionals, implementation of a full-day upbringing and education system in nursery schools and support for closer cooperation with the families and communities of Roma children and pupils

The specific objectives of NP PRINED also include early childhood preparation for school through the provision of teaching assistants in nursery schools for children with special educational needs and the coordination of the full range of early childhood care services (screening of children at risk, development programmes, special education and psychological services, obligatory speech therapy under state supervision)

The MPC has also produced, in cooperation with the department of school education in the Faculty of Education of Trnava University in Trnava, an official translation of the third edition of the assessment programme for early childhood education and care published by the *Association for Childhood Education International* under the title “Global Guidelines Assessment” (GGA). The assessment is based on the Global Guidelines for Early Childhood Education and Care in the 21st Century. The publication is intended to provide specialists in the field of preschool education with systematic methods for observing the quality of early childhood education and care programmes whose results can be used to improve the quality of education programmes in the aforementioned area and to permit comparison with quality indicators from other countries. The issues assessed in this publication build upon the EFA goals. Further information can be found at the website www.acei.org. The publication will also be available from the website of the MPC.

Goal 2: Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality;

In the Slovak Republic free education is enshrined in the Constitution of the Slovak Republic, school attendance is obligatory and the law does not permit any exceptions. In accordance with the principles and objectives laid down by the Schools Act, basic schools support the development of pupils' personality in line with the principles of humanism, equal treatment, tolerance, democracy and patriotism, in the areas of intellect, morality, ethics, aesthetics, work and physical condition. It provides pupils with basic knowledge, skills and abilities in language, the natural sciences, the social sciences, art, sports, health, traffic and other areas necessary for their orientation in life and society and their further upbringing and education.

The achievement of the aforementioned aims has been supported by a legislative amendment, Act No 234/2012 amending section 42 Act No 245/2008 to allow natural persons who did not acquire lower secondary education in basic school can acquire it in a secondary vocational school by completing education for the acquisition of this level of education. Until this amendment was approved, education for the acquisition of lower secondary education pursuant to section 30(5) could be organised only by basic schools. This measure – education in secondary vocational schools provided better opportunities for completing primary education and acquiring this level of education.

The MPC addresses this issue as regards **inclusion as part of three national projects:** *Training for Pedagogical Staff on the Inclusion of marginalised Roma communities (MRK)* and the projects *NP MPK II* and *NP PRINED*, which are presented in the section on pre-primary education.

In the NP MPK, the MRC focuses on improving the quality of education standards for marginalised Roma communities through training for pedagogical staff and school-related professionals. Improving their abilities for their further education and successful inclusion in the labour market. Duration of the project: 10/2011 -8/2015. Further information at: <http://web.eduk.sk/>

The NP MPK established **eight accredited training programmes** (multicultural education in inclusive education 1010/2012-KV; cooperation between families from marginalised Roma communities and schools in the education process 1009/2012-KV; development of communication skills for the inclusion of pupils from marginalised Roma communities 990/2012-KV; teaching assistants in inclusive schools and their work with pupils from marginalised Roma communities 1008/2013-KV; current approaches and innovations in teaching pupils from marginalised Roma communities 1044/2013-KV; cooperation between professionals and the families of pupils from marginalised Roma communities 1095/2013-KV; the teacher as a creator of learning resources for pupils from marginalised Roma communities 1067/2013-KV; information and communication technologies in the full-day education system).

As at 28/07/2014 a total of **1,676** persons had taken part in the **accredited training programmes developed in NP MPK since 2011**. As part of the NP MPK, the following publication was issued: “A model full-day education system” in approximately 150 copies for public consultation. All the project outputs are available from www.eduk.sk (including study materials for pupils).

Social inclusion is also a topic in the NP Professional and Career Development for Pedagogical Staff (hereinafter “PKR”), the aim of which is to create and develop an effective

system of continuing education for pedagogical staff and school-related professionals in accordance with Act No 317/2009 on pedagogical staff and school-related professionals. Duration of the project: 10/2009 -12/2014. Further information from <http://www.mpc-edu.sk/projekty/profesijny-a-karierovy-rast-pedagogicky-zamestnancov>.

Social inclusion has been addressed since the start of NP PKR by the following seven accredited training programmes. Data is for the period to 01/01/2014 and was collected from the NP PKR. The **total number of participants** was **660** and the total number who **completed** programmes was **556**.

Name of programme	Accreditation number	Number of participants	Number of graduates
Upbringing and education of Roma during religious education lessons	90/2010 – KV	4	4
Who lives with us - education on understanding difference in German language lessons	107/2010 – KV	84	70
Effective integration in primary and secondary education	110/2010 – KV	166	148
Multicultural education in the first stage of basic school	124/2010 – KV	267	257
Specific methods and forms for working with pupils from specially disadvantaged backgrounds	843/2012-KV	103	45
Work with maltreated, abused and neglected children	1034/2013-KV	36	32
Work with pupils from socially disadvantaged backgrounds for trainers in vocational training	1303/2013-KV	0	0

The MPC address the topic of inclusion **in the area of primary education** through the following activities:

- training for pedagogical staff and school-related professionals enabling them to acquire the professional competencies necessary to meet the specific education needs of pupils from marginalised Roma communities;
- participation in the development of a pedagogical model for a school with a full-day education system as an instrument for the inclusion of pupils from marginalised Roma communities and also the modernisation of the teaching process through ICT as a means for the effective implementation of the pedagogical model for a school with a full-day education system;
- participation in overcoming barriers that prevent children with special educational needs from having access to and successfully completing primary education through the introduction of teaching assistants (the number of teaching assistants needs increase significantly in future),
- implementing measures for pupils in material need (school meals, educational packages).

Goal 3: Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes;

Government Resolution No 20 of 18 January 2012 approved the **National Strategy for Global Education 2012-2016** and also the Action plan for the performance of tasks resulting from the National Strategy for Global Education 2012. In accordance with the tasks laid down by the resolution, each year until 2015 the Ministry of Foreign and European Affairs shall submit for deliberation by the government, as part of the National Programme of Official Development Aid for the given year, an evaluation of the Action plan for the implementation of the National Strategy for Global Education for the previous year, and the Action plan for the implementation of the National Strategy for Global Education for the following year until 2016 with tasks for affected institutions. At present tasks are being performed under the third action plan, the Action plan for the implementation of the National Strategy for Global Education 2014, which was approved by the government in December 2013 and in which tasks relating to education, science, research and sport are mainly performed by the National Institute for Education, the Methodological and Pedagogical Centre and Juventa. Tasks carried out under the Action plan for the implementation of the National Strategy for Global Education 2014 will be evaluated at the end of the year.

The basic pedagogical document governing upbringing and education in a basic or secondary school is the **school education programme**, which is prepared in accordance with the state education programme pursuant to Act No 245/2008 on upbringing and education (the Schools Act) and amending certain acts, as amended, and which is focused on the competencies of the basic or secondary school's pupils in different areas of life. The obligatory components of education include cross-curricular topics such as environmental education, personal and social development, multicultural education and media education, which schools incorporate into their school education programme in a natural fashion, generally as part of the syllabus of selected relevant subjects and areas of education.

With an emphasis on pupils' competencies in different areas of life, the aim in **global education** is to lead pupils to understanding and the development and formation of their behaviour and their own social responsibility not only in relation to the environment and conscious consumption but also in relation to increasing awareness of global issues and the global connections between events, development and problems in social, environmental, economic and political processes on the local, regional, national and international levels.

The Methodological and Pedagogical Centre played a key role in the implementation of global development education (GDE) in nursery, basic and secondary schools, which is summarised below:

GLOBAL DEVELOPMENT EDUCATION 2006

Global development education (GDE) was the topic of a national seminar entitled "The Conception of Global Development Education". The purpose of the seminar was to provide information on GDE, the principles and practice of GDE and their application in target groups using the methodology of the methodological and pedagogical centres to implement regional seminars and cross-curricular education in 2007. It was organised by MPC Prešov (then one of five autonomous MPCs in Slovakia).

Subsequently **five regional seminars** were held. The target groups were senior pedagogical staff in schools and school establishments and teachers of subjects where GDE and the aim was to present information on GDE and to promote and highlight its use in the education process.

Publication activity in 2006

In this year 24 publications were published in this area.

GLOBAL DEVELOPMENT EDUCATION 2007

The priority for GDE in 2007 was implementation of a nationwide project of continuing education for pedagogical staff through continuing education based on prepared criteria and conditions. The MPC Prešov in cooperation with the nongovernmental development organisation People in Peril maintained a website and updated it with information, events, publications and other activities related to GDE at the address www.rozvojevzdelavanie.sk, which gradually became a discussion portal for Slovak teachers and non-teachers.

The MPC Prešov prepared a framework project in the form of a contest for basic and secondary schools "Development School". In 2007 the MPC Prešov organised three meetings of the GDE working group made up of representatives of all five MPCs in Slovakia (with effect from 01/01/2008 the previous MPCs were combined into one MPC), the Ministry of Education, the Ministry of Foreign Affairs and nongovernmental development organisations to summarise activities and the further strategy for implementation of GDE (budget, publications, the preparation and progress of continuing education on GDE, coordination of tutors, internships for methodology specialists, visits, information about the website...). During implementation of the project for continuing education on GDE in 2007, a total of 51 seminars were organised in the Slovak Republic, which were attended by 804 participants, and 40 publications were translated.

Other activities to strengthen GDE in school practice for teachers in primary, secondary and higher education:

- *The Global Dimension in Schools* – 2 seminars in cooperation with the NGO People in Peril - (35 participants, 30 hours).
- *use of a documentary film and interactive methods in GDE* – 1 seminar in cooperation with the NGO People in Peril - (14 participants, 15 hours).
- *Trip to Vienna for methodology staff of the MPC SR* in cooperation with Slovak AID, the Austrian Ministry of Education, Sudwind Agentur, Baobab - (19 participants, 10 hours) intended to broaden horizons with new knowledge and experience for tutors, not only from specialised literature but also from stays abroad.

Publication activity in 2007

In this year 15 publications were published in this area.

GLOBAL DEVELOPMENT EDUCATION 2008–2009

1. The priority for GDE in 2008 was the implementation of one-off events as part of the nationwide project for continuing education for pedagogical staff Global Development Education through the incorporation of innovative topics into the content of continuing education for senior pedagogical staff – training of senior pedagogical staff as one of the modules of functional training.
2. During 2008 and 2009 **a group of teachers was gradually formed** in the Košice region with a special interest in GDE (gradually during 2008 and 2009). In 2008 the MPC continued the production and **distribution of a range of basic teaching material** on GDE based on the interests of teachers taking part in one-off GDE events as part of training for senior pedagogical staff.
3. **Presentation of the incorporation of global development education in teaching on religious education**
4. A **Week of Global Development Education** in nursery, basic and secondary schools in the Košice and Prešov districts was organised in cooperation with the Slovakia–South

Africa Association (SJAS) in Košice. The Week of Global Education took place in the third week of November 2008 and 2009. The main topic of the Week of GDE was published on www.rozvojevzdelavanie.sk.

5. The Slovak Agency for International Development Cooperation organised an informal meeting on development education which took place in 2008 in the premises of the Facilities Administration Service of the Ministry of Foreign Affairs in Bratislava. The purpose of the meeting was the exchange of experience in the area of development education between Slovakia and Austria.
6. The GDE coordinator at the MPC made **initial preparations for a planned project** to strengthen development education in the Prešov and Košice regions in cooperation with the Slovakia–South Africa Association (SJAS).
7. In October 2009 the GDE coordinator in MPC Prešov prepared for publication a methodological manual **Use of GDE Worksheets in basic schools**.

GLOBAL DEVELOPMENT EDUCATION 2010–2011

(From 2010 activities were harmonised with the requirements for continuing education of pedagogical staff and school-related professionals laid down by Act No 317/2009 on pedagogical staff and school-related professionals and amending certain acts, as amended, and amending certain acts)

To support the incorporation of development topics, humanitarian assistance and global issues into the upbringing and education process in the Slovak school system, the MPC developed a continuing education programme (refresher training) Global Development Education. In March 2011 a request was submitted on behalf of the MPC regional branch in Prešov for accreditation of an educational programme with revised content for refresher training entitled Global education in the education process with a larger time allocation, which satisfied requirements for the use of distance learning and defined precise, clear conditions for the completion of education and verification of competence while also being in line with the planned national strategy for global education.

In connection with the National Strategy for Global Education 2012–2016 and with the aim of integrating global education into the pre-primary, primary, secondary and tertiary levels of formal education, a working group was established and held regular meetings to prepare and review relevant documents, the content and the form of the strategy.

For the purposes of the national strategy in Slovakia, the term **global education (GE)** is used, and this is seen as an overarching principle. It includes development education (education on the problems of developing countries, and poverty in the world), environmental education, multicultural education, peace education and education on human rights in a global context.

The main objective of the National Strategy for Global Education is to provide citizens of the Slovak Republic with access to information on global problems and the problems of developing countries and to motivate them to take action to solve them – to provide target groups with information that makes it easier for them to understand the social, environmental, economic and political processes in the world, to develop critical thinking and promote attitudes of global citizenship.

The main topics of global education

In defining the content of global education, the national strategy responds to current challenges in the world.

1. **Globalisation and interdependence** – is a fundamental topic and principle of global education. It concerns awareness of the interdependence of developed and developing countries and their influence on each other.
Topics: Aspects of globalisation, Economic globalisation – World trade – Ethical business, Sustainable development, Migration
2. **Global problems** – fundamental topics relating to development education as an important component of global education. The topics reflect the main problems in the contemporary world.
Topics: poverty and inequality, health (HIV/AIDS, Malnutrition, Obesity), Conflicts in the world
3. **Multiculturalism** – a set of issues that is the basis for multicultural/intercultural education as a component of global education.
Topics: Stereotypes and prejudices, xenophobia, racism, intolerance, Cultural identity, cultural differences, religious differences
4. **Development cooperation**
Topics: Development – the meaning of development, principles, the Millennium Development Goals, Development and humanitarian assistance supplied by the Slovak Republic and the EU.
5. **Environment with reference to global issues** – this set of issues is a component of environmental education, which is one of the components of global education.
Topics: Climate change, Waste, Environmental migration, Air, water, soil, Use of natural resources, Alternative sources of energy
6. **Human rights**
Topics: Human rights and civil rights, Rights of the child, Gender equality, Democracy and good governance

Sub-goals

1. **To integrate the objectives, principles and topics of global education into the state education programmes.**

Global education will be integrated into the education process through the global dimension of subjects. Use of the global dimension of subjects rather than the creation of new courses with global content makes it possible to find global context in the existing syllabuses of individual subjects.

2. **To provide continuing education for teachers reflecting the principles, objectives and topics of global education and developing the knowledge, skills and approaches necessary for teachers to integrate global education into their teaching.**

The most important goal is to provide opportunities for continuing education through innovative accredited continuing education programmes provided by the Methodological and Pedagogical Centre.

3. **To integrate GDE topics into extracurricular activities organised by school establishments.**

The structure of school establishments and their activities with children and young people offer space in which global education can be implemented as an obligatory topic through various activities and projects on global education.

An integral component of the national strategy is the Action Plan, which is subject to regular monitoring for which interim monitoring reports are prepared. The website www.rozvojevzdelavanie.sk was renamed as www.globalnevzdelavanie.sk and continued

to provide teachers with information and updated teaching materials on issues related to global education suitable for classroom use.

GLOBAL EDUCATION 2012

List of tasks carried out under the 2012 Action plan for the National strategy for global education 2012 – 2016

Objective 2 To provide continuing education for teachers reflecting the principles, objectives and topics of global education and developing the knowledge, skills and approaches necessary for teachers to integrate global education into their teaching.

Task 1

a) An accredited training programme was developed in the Prešov branch of under the title ***Global***

Development Education (GDE)

Type: refresher training, number of graduates: 36

b) Under the supervision of the Prešov branch of the MPC, a continuing education programme was submitted for accreditation reflecting the change of name of this type of education from Global Development Education to Global Education, entitled

Global Education in Educational Practice

Type: refresher, the educational programme is not yet accredited.

Task 2

a) Teaching material to assist teachers was prepared under the title ***Use of work sheets in global development education.***

GLOBAL EDUCATION 2013

List of tasks carried out under the 2013 Action plan for the National strategy for global education 2012 – 2016

Objective 2 To provide continuing education for teachers reflecting the principles, objectives and topics of global education and developing the knowledge, skills and approaches necessary for teachers to integrate global education into their teaching

Task 1

a) In 2013 training for pedagogical staff was provided under the supervision of the MPC regional office in Prešov in the accredited education programme entitled ***Global Development Education (GDE)***.

Type: refresher training, number of graduates: 35

b) a) Under the supervision of the Prešov branch of the MPC, continuing education was provided for pedagogical staff in an educational programme reflecting the change of name of this type of education from Global Development Education to Global Education, entitled

Global education and its application in educational practice.

Type: refresher training

Task 2

a) teaching material was prepared aimed at the target group pedagogical staff for use with participants in education under the title ***Global education – education for the 21st century*** and posted in pdf format in the publications section of the MPC website.

GLOBAL EDUCATION 2014

List of tasks carried out under the 2014 Action plan for the National strategy for global education 2012 – 2016

Objective 2 To provide continuing education for teachers reflecting the principles, objectives and topics of global education and developing the knowledge, skills and approaches necessary for teachers to integrate global education into their teaching

Task 1

- a) Under the supervision of the Prešov branch of the MPC, a continuing education programme was submitted for accreditation reflecting the change of name of this type of education from Global Development Education to Global Education, entitled ***Global education and its application in educational practice.***
Type: refresher training, number of graduates: 24

Lifelong learning

The Slovak Republic is amongst the countries undertaking significant activity to develop lifelong learning. A Strategy of Lifelong Learning and Lifelong Guidance was adopted in 2007 and revised in 2011 based on a review of implementation to that time and an appraisal of new social requirements. It is focused on the most problematic aspects of lifelong learning in the Slovak Republic which affect its development. One of the key areas was identified to be the level of individuals' competencies for professional and personal development: financial literacy, business skills, communication in world languages and active citizenship. In 2009 a financial literacy standard was prepared for basic and secondary schools. The implementation of the National Standard for Financial Literacy began a process for raising consciousness in this area. It is now necessary to focus on the second stage of financial education which will extend education for pupils, students and teachers and will focus in particular on the adult population.

The objective of the lifelong learning strategy in 2011 was to further develop the strategic document approved by the government in April 2007, which was the first to express several key priorities for support for lifelong learning in the Slovak Republic. The 2011 revised strategy is oriented towards developing key individual skills and competencies that facilitate improvements in qualifications and personal growth, in order to increase employment and social integration.

In order to develop the legislative framework for lifelong learning, the government approved Act No 568/2009 on lifelong learning and amending certain acts in 2009 as one of the outputs of the 2007 Strategy. The main objective of the act was to create conditions for the functioning of continuing education as a part of lifelong learning that increase the quality of provision of continuing education and facilitate recognition of the results of education leading to a partial or full qualification.

Based on an amendment of the aforementioned act (effective from 01/11/2012) the Ministry of Education, Science, Research and Sport launched a system for authorising the performance of tests of occupational proficiency. Schools play an important part in verifying the results of continuing education. Schools and higher education institutions can contribute to the verification of occupational proficiency and issue certificates of full or partial qualification, which can then be used to apply for a trade licence. The amendment also increases the range of subjects that are entitled to apply for authorisation to carry out tests of occupational proficiency. These institutions are professional organisations with rich experience in testing and verifying occupational proficiency. A citizen who passes a test receives a qualification certificate. Certification of full qualification does not provide a higher level of education but

can be used as proof of qualification when a person applies for a trade licence in a relevant field. The amendment also extends continuing education to include individual self-study and activities of employers such as training for employees in which employees acquire occupational proficiency for their work activities. The rules on professional supervisors and tutors and the process for their selection were amended in order to ensure higher professional standards.

The Ministry of Education, Science, Research and Sport actively promotes changes in education through national projects. It is currently implementing two key development projects in adult education.

Implementation of the national project “Continuing education and guidance for adults as an instrument for improving prospects in the labour market” aims to increase adults’ participation in continuing education by developing a system of continuing education and guidance for adults. The project seeks to implement quality assurance for educational programmes in continuing education and educational institutions; a network of guidance institutions will be established; particular attention is given to the involvement of employers in continuing education and guidance for adults. The step should help to increase employers’ confidence in the continuing education system and the confidence of persons participating in continuing education activities.

The objective of the national project “Creation of the National Qualifications System” is to establish and develop an effective life-long learning and life-long guidance system aimed at the development of key competencies and improving and deepening of qualifications in accordance with the existing and prospective needs of a knowledge-based society accessible to all Slovakia’s citizens all their lives long. The descriptions for the National Qualifications System are still at a very early stage but the aim is to create a system by the end of 2015 that supports the recognition of the results of informal education, permits statistical research and analysis of the need for qualifications and their acquisition, qualification diagnostics and a critical assessment of their adequacy for current needs, potential and the real situation in the labour market, their operative modification and fundamental changes in qualifications.

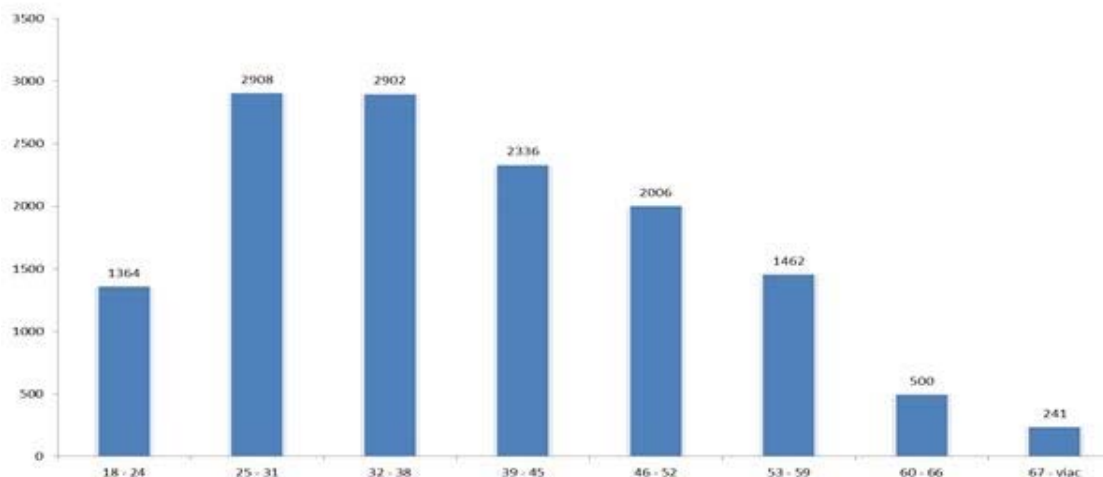
The Slovak Republic does not yet have a stabilised *system for financing lifelong learning* or a system of state support for continuing education. The Slovak Republic recognises that the financial aspect is a key issue in individuals’ motivation to pursue better qualifications and personal growth through continuing education. Financial support from the state and local government in the Slovak Republic provides only just over 60% of the funds that individuals themselves incur for continuing education. For the state and local government in this case there is room to make changes that would support continuing education for their citizens with increased financial resources provided through appropriate support schemes. The overall state of financing for continuing education in Slovakia is significantly undersized compared to financing for school education. In this context it is notable that the state and local government significantly lag behind in financing for continuing education where the participants are self-funded or funded by their employers. One of the activities in the national project “Continuing education and guidance for adults as an instrument for improving prospects in the labour market” will be to create a financial mechanism to support continuing education and guidance for adults. The objective of this stage of the project will be to identify opportunities and to create conditions for systematic financial support of continuing education which makes it possible to support persons in continuing education who are seeking to add to or broaden their knowledge, skills and competencies or to acquire new knowledge, skills and competencies for the purpose of acquiring new occupational proficiency.

Adult participation in lifelong learning in Slovakia in 2011 was only 3.9% whereas the EU average was 8.9%. Statistics indicate that a major obstacle to participation in continuing education is the creation of suitable conditions. These include not just the availability of time and the accessibility of the place of education but also the form in which education is provided.

A significant factor in this area is the population of adults with basic and secondary education.

Some indicators on continuing education are monitored by the Institute of Information and Prognoses of Education, which also publishes an annual statistical report <http://www.uips.sk/dalsie-vzdelavanie/>. It is responsible for collecting and processing data on institutions providing continuing education in the Slovak Republic. The data includes subjects that implement education programmes for adults (persons over 15 years of age). For the purposes of these statistics, continuing education is defined as programmes and activities that permit the increasing, broadening or reinforcement of acquired education and the acquisition of a qualification in accordance with the needs of the labour market, to satisfy one's interests or to prepare for the acquisition of a level of education. Education is carried out in schools and non-school institutions (mainly for a charge) and can be provided through short or long form study (in accordance with Act No 568/2009 on lifelong learning and the amendment of certain acts, as amended).

The age structure of graduates of accredited education programmes in the years 2010 to 2014



67 – viac = 67 and over

Source: Ministry of Education, Science, Research and Sport (Information system on continuing education; 2014) Total number of graduates from 2010 to the end of July 2014: 13,719

Participants in training and graduates by age (registered number)

Age structure	Training participants				Graduates			
	total		of whom, women		total		of whom, women	
	number	% of total	number	%	number	% of total	number	%
15 to 19 years	14,492	8.36	8,193	56.53	7,536	6.63	4,071	54.02
20 to 24 years	14,835	8.56	8,525	57.47	9,249	8.13	5,056	54.67
25 to 29 years	24,358	15.05	13,946	57.24	15,779	13.88	8,436	53.46
30 to 39 years	44,476	25.66	26,206	58.92	28,897	25.42	15,656	54.18
40 to 49 years	41,737	24.08	24,744	59.29	29,067	25.57	15,675	53.93
50 to 59 years	25,553	14.75	13,492	52.80	18,838	16.57	8,961	47.57
60 to 64 years	5,189	3.00	2,866	55.23	3,149	2.77	1,357	43.09
65 years and over	2,675	1.54	1,643	61.42	1,177	1.03	437	37.13
	173,315	100.00	99,612	57.47	113,692	100.00	59,649	52.47

Source: Institute of Information and Prognoses of Education, 2011

Participants in training by level of education completed (registered number)

Education structure	Training participants				Graduates			
	total		of whom, women		total		of whom, women	
	number	% of total	number	%	number	% of total	number	%
Basic	10,102	6.31	5,746	56.88	4,348	4.03	2,482	57.08
Apprenticeship	6,997	4.37	2,376	33.96	5,923	5.50	1,897	32.03
Secondary without <i>Maturita</i> exam	5,769	3.61	2,615	45.33	4,572	4.24	2,036	44.53
Apprenticeship with <i>Maturita</i> exam	6,639	4.15	2,559	38.54	5,255	4.88	1,950	37.11
Completed secondary with <i>Maturita</i> exam	28,752	17.97	16,733	58.20	20,198	18.75	10,543	52.20
Completed secondary vocational with <i>Maturita</i> exam	28,521	17.83	14,962	52.46	21,199	19.68	9,921	46.80
Higher vocational	2,367	1.48	1,378	58.22	1,419	1.32	685	48.27
Higher education level 1 (Bc)	11,329	7.08	6,482	57.22	8,155	7.57	3,919	48.06
Higher education level 2 (Mgr., Dr. Ing.)	56,920	35.58	37,040	65.07	34,817	32.31	21,599	62.04
Higher education level 3 (PhD., CSc.)	2,585	1.62	1,264	48.90	1,854	1.72	891	48.06
	159,981	100.00	91,155	56.98	107,740	100.00	55,923	51.91

Source: Institute of Information and Prognoses of Education, 2011

Training activities, participants in training and graduates by form of training

Form of training activity	Number of training activities	% of total	Training participants				Graduates			
			total		of whom, women		total		of whom, women	
			number	% of total	number	%	number	% of total	number	%
intensive proximate training	353	27.11	5,526	24.07	2,435	44.06	4,580	34.42	1907	41.64
of which, combined with distance learning	7	0.54	123	0.54	72	58.54	57	0.43	26	45.61
with e-learning	1	0.08	15	0.07	12	80.00	15	0.11	12	80.00
proximate evening, weekend and other regular training	640	49.16	11,614	50.59	8574	73.82	5603	42.11	3751	66.95
of which, combined with distance learning	6	0.46	401	1.75	288	71.82	195	1.47	1408	75.90
with e-learning	3	0.23	72	0.31	8	11.11	41	0.31	0.00	0.00
distance learning	50	3.84	749	3.26	649	86.65	344	2.59	293	85.17
e-learning	10	0.77	67	0.29	54	80.60	26	0.20	20	76.92
short one-time activities	109	8.37	3495	15.22	1291	36.94	2155	16.20	1081	50.16
other form of education	140	10.75	1507	6.56	644	42.73	597	4.49	181	30.32
Total	1,302	100.00	22,958	100.00	13,647	100.00	13305	100.00	7233	54.36

Source: Institute of Information and Prognoses of Education, 2011

Two important documents in this area were adopted in 2013: the **Declaration recognising the benefit of informal education in work with young people**, which was signed by more than 40 employers and representatives of educational institutions (including the minister of education), and the **Memorandum on cooperation in the development of continuing education**.

The Slovak Youth Institute (IUVENTA) is implementing the national projects KomPrax and Praktik, which use informal education in work with young people as an opportunity for continuing education aimed at acquiring the competencies necessary for success in work and social life. The educational modules permit young people and youth workers to increase the competencies that employers require alongside occupational proficiency and knowledge. the KomPrax project included a series of regional round table meetings with employers and representatives of formal education to discuss prospects for their application in their activities.

As part of the NP KomPrax in 2013 an educational module was developed to capture the newly emerging needs of children and young people which tests the self-assessment system of local government and its approach to the young generation. The module was developed in cooperation with the Children of Slovakia Foundation based on the experience of partners in Holland and Sweden. Its purpose is to assist self-governing authorities in developing strategic documents relating to young people and to identify challenges affecting young people on the local level. It should also provide young people with assistance in the form of opportunities for consultation and expert assistance.

There has long been a deficiency in support for pedagogical innovation, which is another reason why a system is needed that links formal and informal education and can offer graduates more flexible and comprehensive education for their career growth and prospects in the labour market.

In future it will also be important to establish a new legislative framework and create a functional lifelong learning system. Both require an up-to-date analysis of legislative conditions underlying the patency and effectiveness of the formal and informal education of young people in the Slovak Republic.

Nongovernmental organisations have introduced a number of topics in schools such as the problem of poverty, fair trade, climate change, sustainable development and children's rights.

They have focused on training teachers, preparing methodological guidelines, didactic material, videos and interactive exhibitions and workshops with pupils. Teachers have incorporated topics from the area of global education into subjects such as civics, ethics, social science, geography and even art. Some schools have implemented project-based learning and extracurricular activities. Some schools also made global education a subject in its own right in the school education programme.

An important factor in coordinating support for youth enterprise is combining activities supporting enterprise, in particular activities financed from public funds whose coordination can lead to synergies. A clear super-ministerial coordinator needs to be identified who will partner with non-governmental organisations. A successful example of such cooperation is the cooperation of the civil society organisations Junior Achievement Slovakia – leader in business education in schools and the Young Entrepreneurs Association of Slovakia, which helps young people to start their own businesses.

Support for young entrepreneurs needs to focus on mentoring, in which successful entrepreneurs pass on their experience in developing and managing a business or the creation of spaces in which entrepreneurs can share their experience with each other. There is an emphasis on long-term guidance and mentoring from people who have already achieved business success for young people with strong potential for innovation.

According to the EU youth strategy the global context is an important component in education for young people. This helps to increase awareness of global issues that affect everyone, to develop critical thinking and to advance understanding of areas and topics that affect the world as a whole. Global education creates space for individuals to exchange their views and increase their awareness of their own role in the world. It also motivates people to be responsible to and guides them towards adopting the values of an active global citizen. Global education includes development education (poverty, the Millennium Development Goals etc.), environmental education, multicultural education, peace education and education on human rights.

Global education is closely related to the topic of young people's mobility. Mobility covers all forms of stay abroad that are intended for the acquisition of new knowledge, abilities, skills, work experience and experience of other cultures.

Educational mobility plays an important part in making systems and institutions for education and vocational training more open, more European, more international, more accessible and more effective.

Opportunities for young people are also affected by EU youth policies. Young people's participation in short and long term projects in other countries has been increased by EU education programmes such as the Lifelong Learning Programme or the Youth in Action programme. These programmes have created opportunities to take part in a study visit while at secondary school or in higher education, or to take part in a youth project in cooperation with a foreign partner. The target group of the Youth in Action programme was young people and in particular young people with fewer opportunities. The implementation of activities in the Youth in Action programme supported young people's active citizenship, the development of solidarity and tolerance, mutual understanding and the development of key competencies. Young people who participate in such activities have better prospects in the labour market. The success of the Youth in Action programme can be seen from the increasing number of young people participating in the programme. Between 2007 and 2013 nearly 17,000 people took part in international youth mobility programmes (youth exchanges, youth initiatives,

youth democracy projects, European voluntary service, seminars and training), of whom 6,000 were young people with fewer opportunities (members of minorities, in particular the Roma minority, young people with disabilities and young people from socially disadvantaged backgrounds). The National Agency in the Slovak Republic has provided over EUR 14 million for the implementation of projects. This sum financed over 1,000 projects, which is just 50% of the total number of submitted applications.

The target group of youth work in the Slovak Republic is made up nearly 2 million young people under the age of 30 (38% of the total population) of whom the majority have on average 4 hours of free time during a working day. This time can be used for various activities that could contribute to a better quality of life for young people and the acquisition of a variety of new competencies that are important not only for active citizenship but also for finding work in the labour market. While in countries like Holland, Sweden and Germany youth work is recognised and linked to formal education, in our country the process for recognising youth work and informal education is still in its infancy.

Goal 4: Achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults;

Literacy rate of young people (15-24 years) by sex

The Slovak Republic is amongst the countries posting the highest possible level of youth literacy (over 97%).

The number and percentage distribution of young people (aged 15-24 years) and adults (aged 15 years and over) by level of education achieved (highest level of education completed or reached e.g. primary, lower secondary, upper secondary, tertiary education) and by sex

secondary vocational education – 8,641 school leavers	number of girls 3,110	girls as percentage 35.99%
complete secondary vocational education – 38,117 school leavers	number of girls 17,445	girls as percentage 48.39%
higher vocational education – 792 school leavers	number of girls 557	girls as percentage 70.32%

The relevant data were taken from statistics kept by the Slovak Centre of Scientific and Technical Information published on the website: <http://www.uips.sk/statistiky/statisticka-rocenka>. The relevant data were collected as at 15 September 2013.

Gross enrolment ratio of pupils in secondary education by type of programme (general; technical and vocational education and training; informal education and skills training) and by sex

training programmes in secondary vocational schools – 9,636 registered pupils	number of girls 3,822	girls as percentage 39.66%
study programmes in secondary vocational schools – 9,636 registered pupils	number of girls 16,195	girls as percentage 47.47%
conservatory – 537 registered pupils	number of girls 295	girls as percentage 54.93%

Data were taken from statistics kept by the Slovak Centre of Scientific and Technical Information published on the website: <http://www.uips.sk/statistiky/statisticka-rocenka>. The relevant data were collected as at 15 September 2013.

The number and percentage distribution of centres and the percentage distribution of centres and/or programmes of Technical and Vocational Education and Training (TVET) for young people and adults by type (formal and/or informal)

462 secondary vocational schools
38 secondary vocational schools function as vocational education and training centres (VETC)
16 conservatories

The number and percentage distribution of young people and adults registered in various types of centres and/or programmes for Technical and Vocational Education and Training (TVET) by sex

Newly admitted pupils broken down by field of education.

<http://www.uips.sk/prehlady-skol/statisticka-rocenka---stredne-odborne-skoly>

The number and percentage distribution of young people and adults graduating from various types of centres and/or programmes for Technical and Vocational Education and Training (TVET) by sex

GRADUATES – FULL-TIME STUDY

	total	girls
21 Mining, geology and geotechnics	0	0
22 Metallurgy	63	2
23 Mechanical engineering and other metalworking production I	669	7
24 Mechanical engineering and other metalworking production II	3807	48
26 Electrical engineering	4753	43
27 Technical chemistry of silicates	4	
28 Technical and applied chemistry	236	156
29 Food processing industry	766	534
31 Textiles and clothing	371	355
32 Leather, plastic and rubber processing, manufacture of footwear	20	10
33 Woodworking and manufacture of musical instruments	815	27
34 Printing and media	509	119
36 Construction, geodesy and cartography	2904	237
37 Transport, post office and telecommunications	2037	386
39 Special technical fields	1507	455
42 Agriculture, forestry and rural development I	700	280
43 Veterinary science	201	149
45 Agriculture, forestry and rural development II	598	174
53 Health fields of education in secondary health care schools	1687	1395
Economic sciences	26	15
63 Economics and organisation, commerce and services I	10243	7580

64 Economics and organisation, commerce and services II	8702	5460
68 Legal sciences	123	82
72 Journalism, library and academic information science	170	52
76 Teaching	1196	1112
82 Art and handicraft manufacture I	1889	1234
85 Art and handicraft manufacture II	72	3
92 Security services	11	2
Total	44079	19917

Graduates - part-time study	total	girls
11 Physical and mathematical sciences	18	3
21 Mining, geology and geotechnics	0	0
23 Mechanical engineering and other metalworking production I	22	11
24 Mechanical engineering and other metalworking production II	183	4
26 Electrical engineering	187	7
27 Technical chemistry of silicates	0	0
28 Technical and applied chemistry	3	1
29 Food processing industry	13	11
31 Textiles and clothing	9	9
33 Woodworking and manufacture of musical instruments	73	18
34 Printing and media	2	1
36 Construction, geodesy and cartography	89	2
37 Transport, post office and telecommunications	96	40
39 Special technical fields	2	1
42 Agriculture, forestry and rural development I	83	59
45 Agriculture, forestry and rural development II	67	29
53 Health fields of education in secondary health care schools	1645	1245
63 Economics and organisation, commerce and services I	506	327
64 Economics and organisation, commerce and services II	503	389
68 Legal sciences	20	18
75 Pedagogical sciences	13	13
76 Teaching	496	479
79 Complete secondary education at <i>gymnazium</i> (grammar sch.)	331	162
82 Art and handicraft manufacture I	1	1
85 Art and handicraft manufacture II	3	2
Total	4365	2832

<http://www.uips.sk/prehlady-skol/statisticka-rocenka---stredne-odborne-skoly>.

Number and percentage distribution of TVET teachers/assistants by type of centre and/or TVET programme and by sex

Teachers in secondary vocational school – 14,464	number of women 10,243	women as percentage 70.81%
Teachers in conservatory – 14,464	number of women 620	women as percentage 57.94%
Vocational training supervisors – 3,043	number of women 1,311	women as percentage 43.08%

The relevant data were taken from statistics kept by the Slovak Centre of Scientific and Technical Information published on the website: <http://www.uips.sk/prehlady-skol/statisticka-rocenka---suhrne-tabulky>. The relevant data were collected as at 15 September 2013. The number of teachers includes teachers with reduced working time.

The effective transfer ratio from lower to higher secondary education (at least for general programmes) by sex

The only limitation on vertical transfer in the upbringing and education system is when a basic school pupil cannot be accepted for any form of study or training in secondary school. These are pupils of basic school who have not completed the final year of the basic school or who have not completed the final year successfully. (Section 62(4) of Act No 245/2008 on upbringing and education (the Schools Act) and amending certain acts, as amended). In this case the pupil can be admitted to study in courses leading to the acquisition of lower secondary education.

As at 15 September 2013 a total of 2,536 pupils were registered in programmes leading to lower secondary education (of whom 920 or 36.28% were girls).

This number includes pupils registered in part-time study.

Financial indicators for any education for this purpose, at least for secondary education (by level)

Government Regulation No 630/2008 laying down detailed arrangements for the allocation of state budgetary funds for schools and school establishments divides areas of education in 15 categories with a unified pay scale (within the category) pursuant to section 2(1)(e) to (s) of the Government Regulation.

Results of the PISA 2012 international study with regard to Slovakia

Tables 1 to 8 show the results achieved by 15 year old pupils in the PISA 2012 international study. They indicate pupils' level of performance in reading, mathematics, science and financial literacy and problem solving compared to pupils from 31 OECD countries and 34 partner countries.

Table 1

Scores achieved by the Slovak Republic for each type of performance in PISA 2012 in paper and electronic form, overall and by sex

PISA 2012	scores		
	Slovakia	Girls	Boys
Paper tests			
Reading literacy	i 463 (4.2)	483 (5.1)	444 (4.6)
Mathematical literacy	i 482 (3.4)	477 (4.1)	486 (4.1)
Scientific literacy	i 471 (3.6)	467 (4.2)	475 (4.3)
Financial literacy	i 470 (4.9)	472 (6.2)	469 (5.8)
Electronic tests			
Reading literacy	i 474 (3.5)	484 (4.5)	465 (3.8)
Mathematical literacy	j 497 (3.5)	491 (4.0)	503 (4.0)
Problem solving	i 483 (3.6)	472 (4.1)	494 (4.2)

- i the number in brackets is the standard error
- i Slovak performance is significantly below the OECD average
- i Slovak performance is comparable to the

Table 2

The percentage distribution of pupils by knowledge level in mathematical literacy according to PISA 2012, for Slovakia as a whole and by sex (paper test)
Pupils below level 2 are considered an **at-risk group** in the PISA study.

Mathematical literacy	Slovakia	Girls	Boys
level 6 (more than 669)	3.1	1.9	4.3
level 5 (607-669)	7.8	6.2	9.3
level 4 (545-606)	16.4	17.4	15.4
level 3 (483-544)	22.1	23.2	21.1
level 2 (421-482)	23.1	24.0	22.3
level 1 (358-420)	16.4	15.9	16.8
below level 1 (less than 358)	11.1	11.4	10.8

Table 3

The percentage distribution of pupils by knowledge level in reading literacy according to PISA 2012, for Slovakia as a whole and by sex (paper test)
Pupils below level 2 are considered an **at-risk group** in the PISA study.

Reading literacy	Slovakia	Girls	Boys
level 6 (more than 698)	0.3	0.4	0.2
level 5 (626 - 698)	4.1	5.3	3.0
level 4 (553 - 626)	15.7	19.5	12.2
level 3 (480 - 553)	26.8	30.8	23.1
level 2 (407 - 480)	25	23.6	26.2
level 1a (335 - 407)	16.2	11.8	20.2
level 1b (262 - 335)	7.9	5.4	10.2
below level 1b (less than 262)	4.1	3.1	4.9

Table 4

The percentage distribution of pupils by knowledge level in scientific literacy according to PISA 2012, for Slovakia as a whole and by sex (paper test)
Pupils below level 2 are considered an **at-risk group** in the PISA study.

Scientific literacy	Slovakia	Girls	Boys
level 6 (more than 708)	0.6	0.3	0.8
level 5 (633-708)	4.3	3.0	5.5
level 4 (559-633)	15	14.8	15.3
level 3 (484-559)	26.2	27.9	24.7

level 2	(410-484)	27	27.2	26.9
level 1	(335-410)	17.6	16.9	18.3
below level 1	(less than 335)	9.2	10.0	8.5

Table 5

The percentage distribution of pupils by knowledge level in financial literacy according to PISA 2012, for Slovakia as a whole and by sex (paper test)
Pupils below level 2 are considered an **at-risk group** in the PISA study.

Financial literacy		Slovakia	Girls	Boys
level 5	(more than 625)	5.7	4.7	6.5
level 4	(550-625)	16.9	17.0	16.8
level 3	(475-550)	28.1	30.8	25.5
level 2	(400-475)	26.5	27.1	25.9
level 1	(326-400)	13.3	20.3	25.3
below level 1	(less than 326)	9.5		

Table 6

The percentage distribution of pupils by knowledge level in mathematical literacy according to PISA 2012, for Slovakia as a whole and by sex (electronic test)
Pupils below level 2 are considered an **at-risk group** in the PISA study.

Mathematical literacy (electronic testing)		Slovakia	Girls	Boys
level 6	(more than 669)	1.5	0.7	2.2
level 5	(607-669)	7.6	5.3	9.6
level 4	(545-607)	20.9	21	20.8
level 3	(482-545)	29.1	30.9	27.5
level 2	(420-482)	23	23.4	22.7
level 1	(358-420)	11.8	11.9	11.7
below level 1	(less than 358)	6.1	6.8	5.5

Table 7

The percentage distribution of pupils by knowledge level in reading literacy according to PISA 2012, for Slovakia as a whole and by sex (electronic test)
Pupils below level 2 are considered an **at-risk group** in the PISA study.

Reading literacy (electronic testing)		Slovakia	Girls	Boys
level 6	(more than 698)	0.2	0.2	0.2
level 5	(626 - 698)	3.3	3.3	3.2
level 4	(553 - 626)	16.9	19.3	14.8
level 3	(480 - 553)	31.1	34.4	28.2

level 2	(407 - 480)	25.9	24.6	27.2
level 1a	(335 - 407)	13.7	10.4	16.6
level 1b	(262 - 335)	6.6	5.6	7.4
below level 1b	(less than 262)	2.3	2.2	2.4

Table 8

The percentage distribution of pupils by knowledge level in problem solving according to PISA 2012, for Slovakia as a whole and by sex (electronic test)

Pupils below level 2 are considered an **at-risk group** in the PISA study.

Problem solving (electronic test)		Slovakia	Girls	Boys
level 6	(more than 683)	1.6	0.6	2.4
level 5	(618-683)	6.3	4.1	8.3
level 4	(553-618)	16.2	14.1	18.1
level 3	(488-553)	25.6	27.7	23.7
level 2	(423-488)	24.3	25.5	23.2
level 1	(358-423)	15.4	15.9	14.9
below level 1	(less than 358)	10.7	12.2	9.4

Summary of the results of PISA 2012 – most important findings

The results for Slovak pupils' performance in the fifth round of the PISA study are not satisfactory.

In every area studied, whether mathematics, science or reading, there was a significant decline in Slovak pupils' performance. **For the first time Slovak pupils' results in all three of the aforementioned areas were significantly below the OECD average.**

The most serious findings, which should be taken into account in developing the education policy for the school system in the Slovak Republic are as follows:

- **The statistically significant decrease in the performance of 15-year-old pupils** in all areas of testing in PISA 2012 compared to the results for PISA 2009.
 - Mathematical literacy – a decrease in the average performance score by 15 points.
 - Reading literacy – a decrease in the average performance score by 14 points.
 - Scientific literacy – a decrease in the average performance score by 19 points.
- **An increase in the percentage of pupils in the at-risk group** in all three areas studied.
 - Mathematical literacy – **21.0%** in 2009 and **27.5%** in 2012.
 - Reading literacy – **22.3 %** in 2009 and **28.2 %** in 2012.
 - Scientific literacy – **19.2 %** in 2009 and **26.8 %** in 2012.
- **A significant decrease in the percentage of pupils with the highest knowledge levels (5 and 6)** in all three areas studied. The decline in the percentage of pupils in the top group can be seen in nearly all kinds of schools.
- **The influence of socio-economic background on our pupils' performance is above average.** The Slovak Republic is one of the countries where the influence of children's background on their education results is much higher than the average for OECD countries. The Slovak school system is not able to mitigate differences between pupils that

result from their social and economic background. This effect is one of the largest in the OECD. In 2012 the effect of socio-economic background on pupils' education had strengthened since the previous round of tests, PISA 2009.

- **The difference in boys and girls performance varies between the areas covered by the PISA study.**
 - Mathematical literacy – significant increase in boys' lead over girls in performance.
 - Reading literacy – girls have a significant lead over boys in performance
 - Scientific literacy – boys' performance is approximately level with girls'.

In 2013 the evaluation of lifelong learning policy using reliable, objective and comparable and coherent material information was taken to a new level: in autumn 2013 the results of the OECD's Programme for the International Assessment of Adult Competencies (PIAAC) were published with the aim of documenting the work experience of the adult population of the Slovak Republic and the skills and competencies that are necessary for successful participation in work and social life. It is an important and positive tool for monitoring adult performance. The PIAAC provided an answer to important questions concerning the functional competence of various groups in the adult population because functional literacy is important for success in life, and to what extent it determines jobs and incomes and how it relates to age and continuing education.

Some facts concerning the survey of adult skills (PIAAC) in Slovakia:

- The sample of respondents aged 16–65 was selected from the population register of the Slovak Republic using the rules laid down in the OECD document “Technical standards and guidelines for the PIAAC survey” The size of the chosen sample was 9,280 persons.
- *Pilot tests* were carried out in January and February 2011 to test all the processes, technical and personnel arrangements and the logistics for data collection and the methodology of testing and the justification of test tasks for the main survey. After this was implemented successfully the OECD recommended that the country should be included in the main survey.
- *The main survey* began in October 2011. Data were collected by the company TNS Slovakia, s. r. o., with which a service contract and a licence agreement were concluded on 13/12/2010 based on a public tender. Training was provided to 107 interviewers for the main testing.
- Data collection (interviews with respondents) were carried out from 27/10/2011 to 13/04/2012. The Slovak Republic succeeded in collecting more than the set minimum number of successful interviews (according to the original plan with a total of 5,568 respondents), achieving a total of 5,680 successful interviews (submitted questionnaires and tests). The average for one interviewer was 56 interviews.
- The main survey was carried out in two language variants, one in Slovak and one in Hungarian. The results showed that nearly half the respondents of Hungarian nationality chose to take the test in Slovak, which indicates that they considered the language they use in work or the language of education to be more important than their mother tongue.

- Testing was carried out preferentially using a computer based on a CAPI (computer assisted personal interviewing) method, but depending on respondents' computer skills, there was an option to complete exercises using a pen and paper. The ratio of paper-based tests to computer-based activities was 40:60.
- The survey managed to achieve a return rate (the percentage of the original sample of 9,280 people chosen to take part in the survey) of 67.5%, which placed the Slovak Republic in the top ten countries for this parameter.

The findings show that compared to the other OECD countries that took part in the test, Slovakia has average reading literacy, above-average mathematical literacy and a below-average ability to solve problems in technology-rich environments.

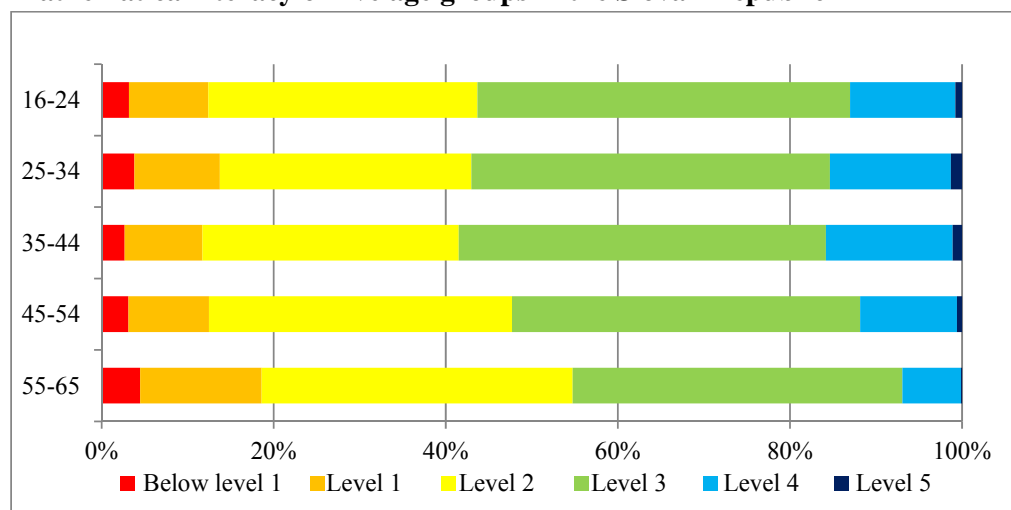
Like most other countries, Slovakia was found to have a negligible percentage of the adult population with low reading literacy

Reading literacy	Slovakia	OECD
Level 5	0.2%	Less than 1%
Level 4	7.3%	11.3%
Level 3	44.4%	38.4%
Level 2	36.2%	33.2%
Level 1	9.7%	12.2%
Below level 1	1.9%	3.3%
did not answer		

Source: database of the Survey of Adult Skills (PIAAC) (2012)

- In the Slovak Republic the difference between the average level of reading literacy of people aged 16-24 years and people aged 55-65 years was just 10 points and was the lowest difference for any country after the UK (England and Northern Ireland) and the USA. This difference and the general differences in performance between younger and older people indicate the acceleration of reading literacy in the population and the effectiveness of the education system.
- In Slovakia the mathematical literacy of 35-44 year-olds is higher than the mathematical literacy of 25-34 year-olds and this again is higher than the mathematical literacy of 16-24 year-olds. The mathematical literacy of older people is higher than the mathematical literacy of the younger, which means that we must conclude that there has been an intergenerational decline in mathematical literacy in Slovakia. The theory that mathematical literacy, unlike reading literacy, can be improved by courses and training at a later age is not confirmed by more detailed analysis.

Mathematical literacy of five age groups in the Slovak Republic



Source: database of the Survey of Adult Skills (PIAAC) (2012)

- In many countries a large part of the population do not have experience with information and communication technologies (ICT) or do not have the computer literacy necessary to use ICT in daily life. In Slovakia 22% of respondents had no previous experience with a computer, 2.2% of respondents failed a test of basic computer literacy and 12.2% of people decided for personal reasons to take the paper version of the test. The test of ability to solve problems in technology-rich environments was taken by just 63.6% of computer literate respondents in Slovakia.

Ability to solve problems in technology-rich environments in the Slovak Republic (the numbers highlighted in green indicate the number who declined to take the test on a computer)

Education – only selected categories	Number of persons (N)	Average point score	Percentage placed in level 3
People with basic education	418	281.2	3.0%
Secondary school graduates with <i>Maturita</i> certificate	1491	280.8	3.7%
Graduates with a bachelor's degree	207	293.1	9.8%
Graduates of with a master's degree	626/93	294.8	8.6%
Graduates with a doctoral degree	34/6	301.5	11.0%

Source: database of the Survey of Adult Skills (PIAAC) (2012)

The results of the analysis in the OECD international report confirm a very strong relationship between adults' participation in further education and the level of performance that they achieve. An individual's success in the labour market can be increased by building up competencies after completing formal education because the great majority of learning also takes place outside the school environment.

The Ministry of Education, Science, Research and Sport of the Slovak Republic must therefore prepare an in-depth and precisely targeted communication strategy that will help to improve the Slovak Republic's prospects and chances in a world with a global economy, prospects which relate directly to the results of the PIAAC survey.

Implementation of the lifelong learning and guidance strategy is obliging the responsible institutions to confront other complex challenges on the road to truly effective support for lifelong learning such as the completion of the National Qualification System, legislation on recognition of the results of education, the development of a lifelong guidance system and questions of financing for continuing education and the balance between commercial and public interests.

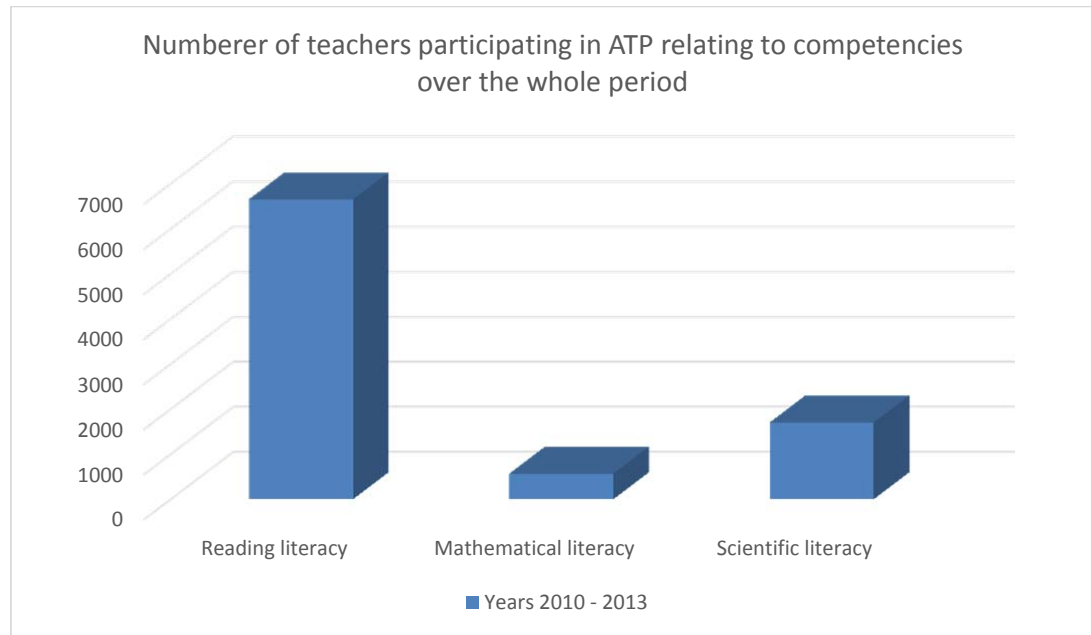
The MPC has carried out the following activities to support and advance pupils' competencies as part of teacher training:

Number of training programmes accredited from 2010 to December 2013 – **464**. Of these, **36 accredited training programmes (ATP) supported reading literacy, plus a further 9 ATP supported mother-tongue communication and 51 ATP supported communication in a foreign language for a total of 96 ATP; mathematical literacy was the topic of 13 ATP and 33 ATP were dedicated to scientific literacy; in total 142 ATP accredited between 2010 and 2013 addressed competencies relevant for PISA**. Out of a total of **55,674** training participants (to 30/09/2013), training programmes in issues relating to competencies in reading literacy, mathematical literacy and science had a total of **8,924 participants**, of whom **568** were teachers in the area of mathematics, **1,702** were teachers in the area of science and **6,654** teachers received training in ATP related to reading literacy (including communication in the mother tongue and foreign languages) (statistics collected at the end of 2013).

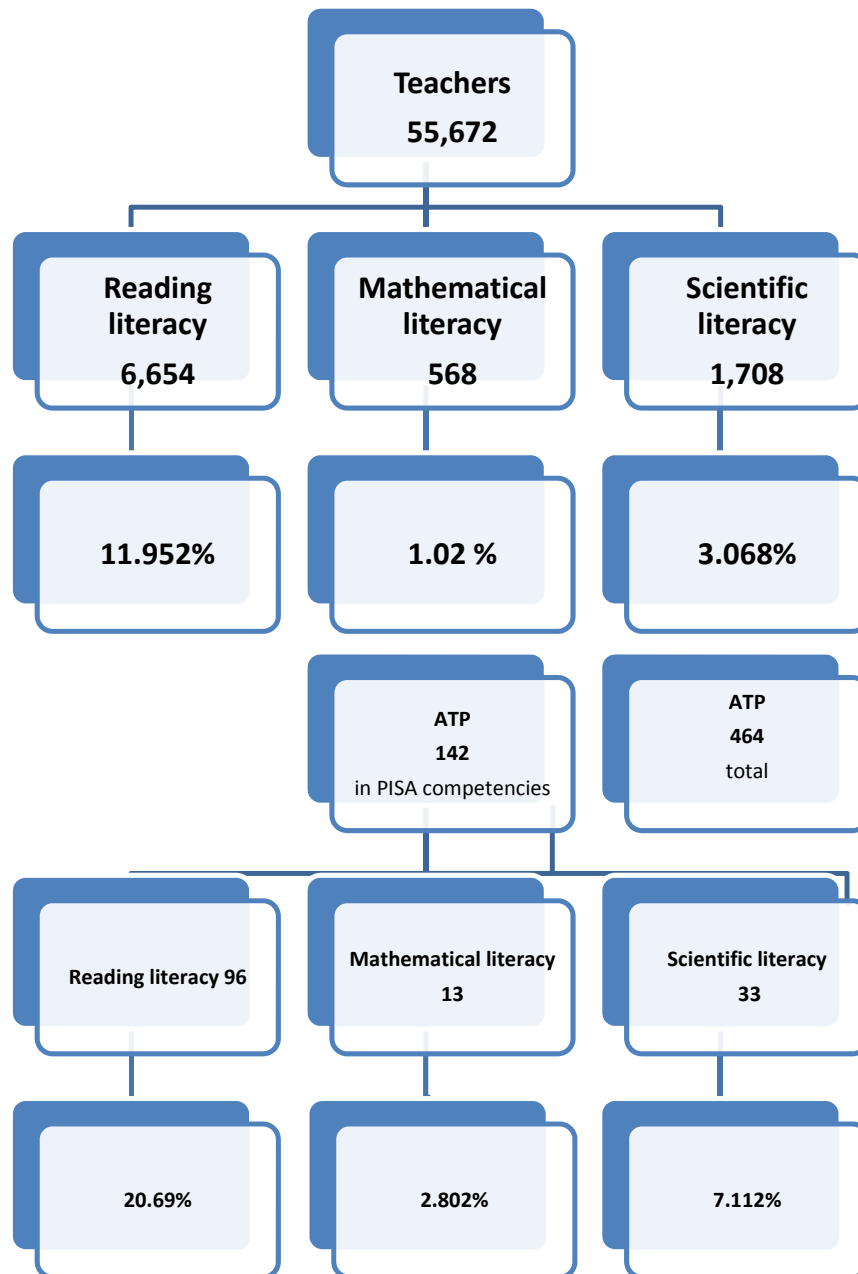
Table 1: Numbers of pedagogical staff who received training related to each competency in the years 2010-213

Years	2010	2011	2012	2013	total
Reading literacy	306	813	898	1048	3065
Communication in mother tongue	145	360	422	843	1770
Communication in a foreign language	89	736	506	488	1819
Mathematical literacy	20	180	137	231	568
Scientific literacy	20	387	498	797	1702

Graph 1: Number of teachers trained in competencies in the years 2010 – 2013



Number of teachers trained in PISA competencies (2010-2013)



Data are taken from an analysis carried out by the MPC in February 2014. Statistics were evaluated to the end of 2013. Other activities carried out by the MPC or under its auspices for the development of the relevant competencies include publication activity, surveys and conferences. Further information is given in the Analysis of accredited training programmes (2014) and the document Evaluation of activities to improve reading skills and proposals for action in the following period (2013).

Accredited training programmes of the MPC aimed at increasing the competencies of pedagogical staff and school-related professionals in the area of media education.

Since 2010 accreditation has been granted for 4 training programmes (TP) developed under the NP PKR for the development of media literacy, an essential component of which is the development of critical thinking regarding media content and sources. Numbers of graduates and participants in individual TP are given for the whole duration of the project from the accreditation of each programme. The data cover the period from **01/01/2010 to 31/03/2014**. A total of **331** teachers and school-related professionals participated in accredited training programmes on topics related to increasing media literacy provided by the Methodological and Pedagogical Centre in the period 2010 – 2014. (Source: Collection on numbers of applicants, participants and graduates of training activity under NP PKR to 31/03/2014).

Content focus and target groups of accredited training programmes

1. TP *Media education in the school education programme* (innovation course), 0080/2010 – KV, the programme is intended to prepare pedagogical staff to implement the cross-curricular topic Media Education in education effectively from topical, methodological and practical perspectives using various forms of organisation in line with the binding educational document, the State Educational Programme ISCED 2. **Number of participants 79, number of graduates 70.**
2. TP *Media education in school practice* (innovation course), 0181/2010 – KV, by completing this education programme teachers develop the professional competencies necessary for the standard performance of pedagogical activities, including the teaching of media education. **Number of graduates 249.**
3. TP *Media education in upbringing outside school hours* (refresher course), 0748/2012 – KV, by completing this education programme educators develop the professional competencies necessary for the standard performance of pedagogical activities, including the teaching of media education in upbringing outside lessons. **Number of graduates 12.**
4. TP *Media education as a cross-curricular theme in nursery schools* (innovation course), 1033/2013 – The TP is aimed at strengthening, developing and broadening the pedagogical knowledge and skills necessary for the implementation of media education in educational activities at the pre-primary level. **Number of participants in the TP 53**, the programme is not yet complete.

A measure that has potential for increasing the media literacy of teachers and school-related professionals in future is the implementation of the NP entitled *Methods of activation in education*. The expected results of the project (in 2014) are analyses and interactive didactic aids for the development of media education and critical thinking in relation to traditional and new media. A translation from the English of the UNESCO Media and information literacy curriculum for teachers, (2011) published on the website www.unesco.org.

Goal 5: Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality

In the area of regional schooling in the Slovak Republic there are no differences between the sexes in the provision of full and equal access to and achievement of basic education of good quality.

Annex No 2 includes a statistical overview – Indicators of the state and development of regional schooling prepared by the Slovak Centre of Scientific and Technical Information.

Goal 6: Improving every aspect of the quality of education, and ensuring their excellence so that recognized and measurable learning outcomes are achieved by all, especially in literacy, mathematical literacy and essential life skills.

1. Do you consider quality to be a component of the right to education enshrined in national legislation on education? How is quality formulated and defined in national education legislation, policies and programmes?

The fundamental principle of the education process is to provide high-quality, attractive and equal education for all and in the case of vocational education and training also to link education to the labour market and to prepare pupils for future occupations having regard for the possibility to find work throughout the European Union. These principles are also reflected in section 3(k) of the Schools Act, which makes control and evaluation of the quality of upbringing and education and the quality of the educational system one of the fundamental principles of upbringing and education in Slovakia.

2. How is the term “quality of education” understood in your country? What aspects and what indicators and criteria are used in your country to measure the quality of education?

More useful than a precise definition of the term “quality” is the establishment of a system of indicators and descriptors for its measurement, which leads to an improvement in the educational process. As an EU Member State the Slovak Republic supports all European policies on vocational education and training that lead to improvements in national systems of vocational education and training. Improvements in the quality of vocational education and training must be made by implementing recommendations of the European Parliament and the Council on the European Qualification Framework and the European Quality Assurance Reference Framework for Vocational Education and Training (EQAVET)

At the same time work is being carried out on the national level to prepare a new act on vocational education and training and pilot projects aimed at increasing the quality of vocational education and training. The creation of the National Qualification System, the National Qualification Framework, the introduction of polytechnic education in basic schools and the introduction of elements of dual education are the main points that will guide the process for the quality of vocational education and training in the next period.

3. What specific policies and measures have been implemented for further improvement in the quality of education? How effective have they been according to your most recent experience? What other policies and measures are needed?

The planned new act on vocational education and training will introduce elements of dual education into the system of vocational education and training in the Slovak Republic. These elements will include a contract on training between an employer and a pupil who trains with the employer for a future occupation, a contract between an employer and secondary vocational school on the organisation of vocational education and training, a method for the organisation of education directly in the employer’s workplace with relevant verification of quality and takeover of responsibility for practical training from the side of employers.

The strategic objective of the national project “Development of secondary vocational education” is to increase the quality of vocational education and training in secondary vocational schools in selected areas of education.

The implementation of the project addresses the issues of the connection between vocational education and training in secondary vocational schools and employers’ needs, increasing the quality and the readiness of future graduates of secondary vocational schools as regards their ability to find work on completion of study, cooperation between secondary vocational schools and professional organisations, the establishment of a model of multi-source

financing and standards for the financing of secondary vocational schools and counselling and guidance for pupils on careers.

“Young Star” is a project implemented in cooperation with the Austrian Economic Chambers, the Ministry of Education, Science, Research and Sport and the State Institute of Vocational Education. The companies MIBA, ZKW, Scheuch, Pankl, HTP and Matador are providing know-how and experience in the practical training of pupils in the company’s workplace.

The project is aimed at bridging the gap between theory and practice. A consortium of Austrian firms in cooperation with a secondary vocational school in Zlaté Moravce will cooperate closely to link education to the needs of the labour market. From 01 September 2014, three programmes should begin from the first year: metal machinist, mechanic – adjuster and mechanic – mechatronics technician, with a ratio of practice to theory of 60%:40%.

This phase of the project is just the first stage in a long process to reform vocational education and training. After the adoption of legislation in the form of the new act on vocational education and training and preparation, which should enter into effect from 01 September 2015, there will be the second phase of the pilot project, in which pupils will be accepted in secondary vocational school based on a contract on training signed by the pupil or his/her legal guardian and a firm.

A project is being developed in cooperation with the Slovak German Chamber of Commerce and Industry in which a consortium of German firms will combine theory and practice in cooperation with a secondary vocational school in Nové mesto nad Váhom or Trenčín.

The Danube Institute of Dual Education is a pilot project for the implementation of dual education in Slovakia. The Danube Institute will be a centre of excellence for the implementation of dual education of workers with vocational qualifications for work in the automotive industry at all levels of qualification and also for the continuing education of teachers and trainers in vocational education. The aim of the project is to strengthen the Slovak educational system and implement innovations and technological competencies, to strengthen the competitiveness of Slovak industry, to raise the profile of vocational education and training in the Slovak Republic and to reduce youth unemployment. The project will be implemented in cooperation with German and Austrian partners who have many years of experience in implementing dual education.

Activities for linking education and the labour market are also being undertaken by large firms such as Volkswagen Slovakia, which considers support for technical education and its combination with practical experience to be one of the largest challenges for young people’s prospects in the labour market. Volkswagen Slovakia has opened a course for mechatronic technicians intended for graduates of secondary schools. It began in September this year in the Dual Education Centre at the Bratislava Automobile Works. Several hundred applications were received, from which 24 were selected to commence education according to the German dual system. The benefit for graduates of this course will be acquisition of the qualification of mechatronic technician and an employment contract with Volkswagen.

Another project involving cooperation with a German firm is a project implemented by the Electrical Engineering Secondary Industrial School, Komenského 44, Košice in partnership with the company T-Systems Slovakia. Since 01 September 2013 it has organised education in the form of three-year post-secondary higher vocation study in the study programme 2695 Q computer systems, which is based on close cooperation between the school and the firm.

In the Operational Programme Education two organisations directly subordinate to the Ministry of Education, Science, Research and Sport carried out projects related to the quality of education whose results have been published on their respective websites: the National Institute for Certified Educational Measurements carried out the project “Evaluation of the quality of education in basic and secondary schools in the Slovak Republic in the context of the ongoing reform of the content of education”, which was completed in November 2013 and the State School Inspection carried out a project “External evaluation of school quality supporting self-evaluation processes and school development”, which has also been completed.

The MPC’s project NP MRK, begun in 2011, promotes the quality of education in the implementation of a full-day education system and training for pedagogical staff. The project also includes community programmes focussing on cooperation with parents. Its purpose is not inclusion for all but the balancing of conditions and the overcoming of obstacles, in particular for pupils from marginalised Roma communities. A follow-up project, MRK2, includes training for nursery school teachers and teaching assistants. Both projects include the employment of teaching assistants in participating schools. The MPC trains teaching assistants in to qualification training programmes: Qualification training for educators and teaching assistants in schools and school establishments and special pedagogy for educators and teaching assistants in special schools and special educational establishments.

Inspection and evaluation of education quality in the Slovak Republic

The quality of upbringing and education in the Slovak Republic is monitored and evaluated by:

- the school or school establishment,
- the State Schools Inspection,
- the Ministry of health, for specialised unit for the preparation of education for health care programmes in secondary health care schools
- the National Institute for Certified Educational Measurements on the level of state education programmes

Internal evaluation

All kinds and types of schools and school establishments carrying out upbringing or upbringing and education activities are obliged, as part of their internal evaluation, to carry out an annual evaluation covering the following areas:

- the conceptual development plan for the school or school establishment covering at least two years;
- upbringing and education activity, its results and conditions;
- the economic performance of the school or school establishment.

The State School Inspection completed a national project supported by the ESF in September 2013 under the tile “External evaluation of school quality supporting self-evaluation processes and school development”. The aim of the project contributes to improvements in the quality and level of education provided in accordance with trends applying to the whole of Europe. The project is intended to provide relevant and practical guidance for schools performing self-evaluation in how to master the self-evaluation process

with subsequent added quality of improvement. The most important activity in the project was the creation of a “Model of Self-Evaluation Work in the School”, which was presented at various levels of education and was provided to schools as an aid for carrying out self-evaluation. The project was a component of the Operational Programme Education - “Modern Education for a Knowledge Society” and was co-financed from EU funds. A school or school establishment can also carry out voluntary self-evaluation using the available procedures and instruments for self-evaluation and thereby increase the quality of its educational processes.

External evaluation

External evaluation is based mainly on:

- national external testing of pupils in basic and secondary schools
- inspection and evaluation of schools and school establishments by the State School Inspection,
- external evaluation of *Maturita* exams and final exams, state exams and certification in continuing education, participation in international projects (e.g. PIRLS, PISA, TIMSS, IALS etc.).

The main objective of external evaluation of schools is to give schools feedback, to use an external viewpoint to highlight strengths and detect weaknesses and deficiencies, to identify areas where there is room for improvement.

Evaluation of the quality of education is carried out by the State School Inspection (SSI), which carries out external evaluation of schools in accordance with Act No 596/2003 on state administration of schools and school self-government and amending certain acts, as amended. The SSI carries out state inspection of the level of pedagogical management, the level of upbringing and education and material and technical conditions, in which area the SSI handles complaints and petitions. It monitors the quality and development of the school as a whole and based on a set of evaluation criteria that support the comparison and assessment of the school’s development.

External evaluation by the SSI comprises:

- ***legislative inspection***, based on identification of the level of conformity of the inspected situation with legislation and decisions applicable to upbringing and education
- ***criteria inspection***, based on identification of the level of conformity or deviation between the inspected situation and set criteria. A set of evaluation criteria is defined for the purpose of evaluating the school as a whole in terms of the quality of management, conditions and the education process. This permits a global evaluation of the functioning of individual elements of the school system.

In schools and school establishments the school inspection inspects:

- compliance with acts of general application and internal regulations and decisions that are applicable to upbringing and education,
- the upbringing and education process and its results,
- professional standards in teaching,
- the spatial and material and technical conditions for the upbringing and education process and their efficient and effective use,
- provision for teachers’ continuing education,
- compliance with the qualification requirements for head teachers of schools and school establishments.

As a result of the new Schools Act in 2008 additional tasks were laid down for the State Schools Inspection:

- checking that the school education programme is consistent with the state education programme and the objectives and principles of upbringing and education,
- checking the upbringing programme is consistent with the objectives and principles of upbringing and education
- checking the quality level of upbringing and education as regards individual education,
- monitoring and evaluating the quality of upbringing and education.

Inspections are carried out according to a standardised methodology approved by the chief school inspector and are required to maintain a standard procedure, inspection and evaluation for the same indicators. The main subject-matter of inspection activity is assessment of the quality of the school and for this reason it must be oriented towards the complex of factors associated with the activity of the school as a whole.

Methodologies take account of changes in schooling and incorporate many elements from the inspectorates and states in the Standing International Conference of Inspectorates (SICI), of which the SSI is a member. The purpose of methodology, which is updated in response to changes in legislation, is to increase objectivity and professional standards in the performance of school inspection and to support the process of self-evaluation in schools.

School inspections can be informational (aimed at acquiring information), thematic (aimed inspecting and evaluating specific themes), comprehensive (giving a full overview of the quality of the management, conditions and level of upbringing and education in a given school) or follow-up (aimed at checking the resolution of deficiencies identified in a previous inspection).

The indicators that the State School Inspection monitors in comprehensive inspections are evaluated in combination with each other. To increase the objectivity of evaluation, indicators are checked, where possible, by a multiple means. The initial source is the school education programme and pedagogical and other documentation. The data and information given in the documentation is verified directly in the process through interviews, questionnaires, an inspection tour of the premises and observation of lessons.

Subject matter of school inspections:

Areas of evaluation	Evaluation criteria
1. School management	1.1 School education programme 1.2 Management of teaching 1.3 Internal inspection and assessment system 1.4 Climate and culture of the school 1.5 School services
2. Conditions for upbringing and education	2.1 Personnel conditions 2.2 Spatial conditions 2.3 Material and technical conditions 2.4 Conditions for ensuring safety and health
3. Procedure for upbringing and education	3.1 Instruction by the teacher 3.2 Pupil's learning

1. Area - School management (5 criteria for evaluation):

Criterion:

1.1 School education programme

indicators

- elaboration of the school education programme
- definition of own objectives for upbringing and education in line with the real needs of the school
- teaching plans (conformity with the framework teaching plans laid down in the state education programmes)
- syllabuses including cross-curricular themes (incorporated into taught subjects)
- educational opportunities offered for pupils with special educational needs (SEN) including conditions provided for upbringing and education, the elaboration of individual programmes, specialised services)
- awareness of the school education programme

1.2 Pedagogical management

indicators

- management of pedagogical documentation and elaboration of internal regulations (conceptualisation and implementation of management)
- professional development of pedagogical staff (annual plan of continuing education)
- performance of the first instance of state administration and decisions (level of decision)
- use of the specialised assistance of advisory bodies (definition and delegation of competences and powers, participation in decision-making, responsibility for results)

1.3 Internal inspection and evaluation system

indicators

- orientation of the internal inspection system towards the evaluation of the results of pupils' education (objectivity of means)
- orientation of the internal inspection system towards the evaluation of workers (objectivity of means)
- functionality of the inspection system (level of the inspection system, analysis of the results of inspection, adoption of measures, inspection of the resolution of deficiencies, use of deficiencies to improve the quality of upbringing and education activities)

1.4 Climate and culture of the school

indicators

- involvement of pupils in school and out-of-school activities
- climate and culture of the school (culture and aesthetics of the premises, mutual relations, cooperation and empathy)

1.5 School services

indicators

- provision of educational guidance

2. Area - Conditions of upbringing and education (4 criteria for evaluation):

Criterion

2.1 Staff conditions

indicators

- qualifications of the school head teacher and other senior pedagogical staff for the performance of management
- ensuring proficiency in teaching (stabilisation of teachers)

2.2 Space conditions

indicators

- adequate space for the number of pupils and the orientation of the school (number of pupils, classes, structure, capacity and quality of spaces)

- effectiveness of use of space in the school in the upbringing and education process
- provision of access for all (in particular pupils with disabilities)

2.3 material and technical conditions

indicators

- provision of textbooks and teaching materials
- material and technical equipment in the school (quantity, quality, creation of a suitable environment for incorporating ICT into the upbringing and education process, provision of compensatory aids for integrated pupils with special educational needs).

2.4 Conditions for ensuring safety and health in school

indicators

- school rules (definition of the rights and duties of pupils and legal guardians, elaboration of measures to prevent the distribution of legal and illegal drugs, protection against discrimination, violence and bullying)
- implementation of active protection against socio-pathological phenomena (the work of school prevention coordinators, provision of monitoring to prevent and detect negative phenomena in pupils' behaviour and signs of bullying, evaluation of monitoring, adoption of measures, elaboration of preventative-educational programmes in line with conditions in the school)
- establishment and work of a school student council (upholding of the rights of the child, establishment of a school student council, acceptance of pupils' opinions)
- respect for pupils' basic physiological, psychological and hygienic needs in the organisation of teaching (organisation of breaks, start and end of teaching, provision for regular drinks)
- measures to ensure pupils' safety and health during upbringing and education activities (organisation of visits, trips, courses, records of accidents)

3. Area - Educational procedure and outcomes

This area is inspected by means of observation. During lessons inspectors monitor indicators focussing on the development of key competencies in the **teacher – pupil** interaction:

- teaching objectives (clear and comprehensible formulation of objectives, conformity of the lesson content with the syllabus, feedback)
- respect for pupils' educational needs (differentiation of tasks and activities)
- use of material resources in the teaching process (work with textbooks, teaching aids, didactic techniques, ICT, compensatory aids)
- development of pupils' cognitive skills (comprehensible presentation of knowledge, tasks for comprehension, application, creativity, critical thinking)
- development of pupils' competencies for lifelong learning (encouraging students to evaluate their own actions and those of their fellow pupils, application of evaluation through classification, verbal and motivational evaluation)
- development of pupils' communication skills (active expression, reading and listening with comprehension, development of reading skills, presentation of information and the output of activities)
- development of pupils' (practical) work habits and skills (correct working procedures, safety compliance, rules for work)
- development of pupils' civic and social competencies (presentation of values, work in groups and teams, cooperation)
- development of pupils' ICT skills (work with educational programs, work with information and searching, sorting and processing information)

The findings and evaluations from inspection are recorded in inspection output materials in the form of a report on the results of the school inspection, which the school inspector discusses with the school head teacher.

Depending on the seriousness of the SSI's findings the following measures can be taken in response:

- **recommendation** that the head teacher resolve deficiencies that **did not result** from a violation of the law;
- **impose an obligation** for the inspected subject **to adopt measures** if there is reason to expect the resolution of identified deficiencies;
- **impose measures** in there are no grounds to expect the head teacher to adopt adequate measures for eliminating deficiencies;
- order a commission test of a pupil in the presence of a school inspector if deficiencies are found in the pupil's classification;
- impose penalties.

The head teacher of the inspected subject has a set period for resolving deficiencies and at the end of this period the SSI will carry out a follow-up inspection to check the resolution of deficiencies and their causes identified by the previous inspection. If the identified deficiencies are not resolved within this period, the SSI usually issues a binding order for their immediate resolution and carries out another follow-up inspection. If the head teacher has not resolved deficiencies by the time of the repeated follow-up inspection, the chief school inspector may submit a proposal to the founder of the school for the recall of the head teacher and this proposal is binding for the founder. If serious deficiencies are found in upbringing and education activities, or if the school / school establishment or the founder does not resolve an inconsistency between pedagogical documentation and its implementation in the school / school establishment, or if serious violations of legislation or serious deficiencies in the area of material and technical provisions, the chief school inspector shall submit a proposal to the ministry for exclusion of the school or department from the education system.

A national report is prepared based on all the inspection tasks carried out by the SSI in the year concerned and this annual report is submitted to the minister of education. Its title is ["Report on the situation and level of upbringing and education in schools and school establishments in the Slovak Republic in the school year concerned based on the findings of inspections and other findings"](#). The report includes the findings of individual inspections summarised for the Slovak Republic and broken down by the kind and type of school. The Report also includes recommendations and proposals directed both to the head teachers of schools and school establishments, founders, the Methodological and Pedagogical Centre, pedagogical faculties, the Slovak National Institute for Education, the State Institute of Vocational Education and the Ministry of Education, Science, Research and Sport. The recommendations and proposals are based on the results of inspections and should help to improve the preparation and amendment of legislation, the planning of changes and reforms in the education system, the integrated planning of education by the head teachers of schools / school establishments and teacher training.

Results of international measurements PISA 2012, PIRLS & TIMSS 2011 and the nationwide measurement Testing 9-2014 (T9-2014)

In the PIRLS and TIMSS international studies of pupils in the fourth year of basic school, the **at-risk group** is made up of pupils who do not achieve the average knowledge level, i.e. pupils who achieve only a low level of performance and pupils who do not achieve even a low level of performance. In the PIRLS 2011 study 17.9% of Slovak pupils fell into this group; in the TIMSS 2011 study 31.2% and 21.1% of pupils fell into the group for mathematics and science respectively. In the PISA international study (15-year-old pupils) the at-risk group was pupils below knowledge level 2. These pupils do not achieve even a basic level of knowledge and skill in the respective category of performance, which could be an obstacle for their further studies. In the international study PISA 2012 27.5% of Slovak 15-year-old pupils were at risk in mathematical literacy, 28.2% in reading literacy and 26.8% in scientific literacy.

Since national measurements use NR (norm-referenced) tests, pupils are ranked by performance and it is not possible to use such tests to make a more precise identification of groups of pupils who are at risk (groups of pupils who have not acquired at least basic educational competencies defined on the national level before the end of compulsory schooling). Nevertheless it is possible **in gross** terms to consider the group that is most at risk (weakest) to be those pupils who **ranked below the 25th percentile (the bottom quartile)** in national measurement for a subject. Table 9 shows the boundary of achievement of pupils with the 25th percentile in tests of Slovak Language and Literature (**48%**), Hungarian Language and Literature (**40%**) and mathematics (**30%**). This is a level of achievement that we consider to correspond to acquisition of the basic educational competencies for pupils on the national level (teaching languages and mathematics).

Table 9

Achievement at the 25th percentile in tested subjects in T9-2014

	Achievement of the bottom quartile (25th percentile)
SLL	48%
HLL	40%
MAT	30%

Table 10

Sex ratio of pupils in the bottom quartile in tested subjects in T9-2014

		SLL		HLL		MAT	
		Number	Percentage	Number	Percentage	Number	Percentage
Bottom quartile	boys	6640	60.2	486	58.1	5413	51.5
	girls	4386	39.8	351	41.9	5107	48.5

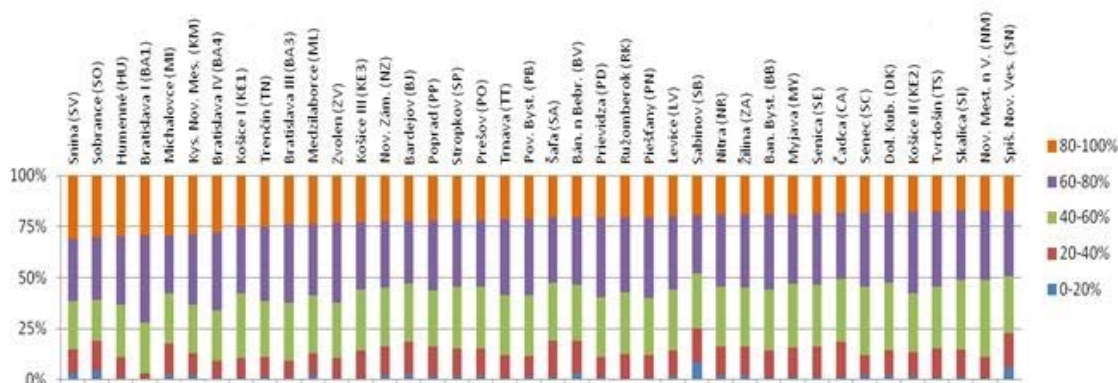
Boys make up a **clear majority** of the bottom quartile in two of the subjects tested in the national measurement T9-2014 – Slovak language and literature, Hungarian language and literature (teaching languages). **Boys were also in the majority** in the bottom quartile for mathematics but the difference was not significant.

National measurements also point to a strong effect of socio-economic background (where unemployment is used as an indicator) on pupils' performance. This is shown by the following **graphs 1 to 8**.

Graphs 1 and 2 compare the achievement of pupils from different districts in the **T9-2014 test for Slovak language and literature**. Pupils were divided into quintiles based on their achievement in the test: achievement from 0% to 20%, 20% to 40%, 40% to 60%, 60% to 80%, 80% to 100%. The coloured bands show the proportion of pupils in the district whose achievement was in the given quintile. Districts are ranked from the district with the highest proportion in the quintile with the highest level of achievement (80% to 100%) to the district with the lowest proportion in this quintile.

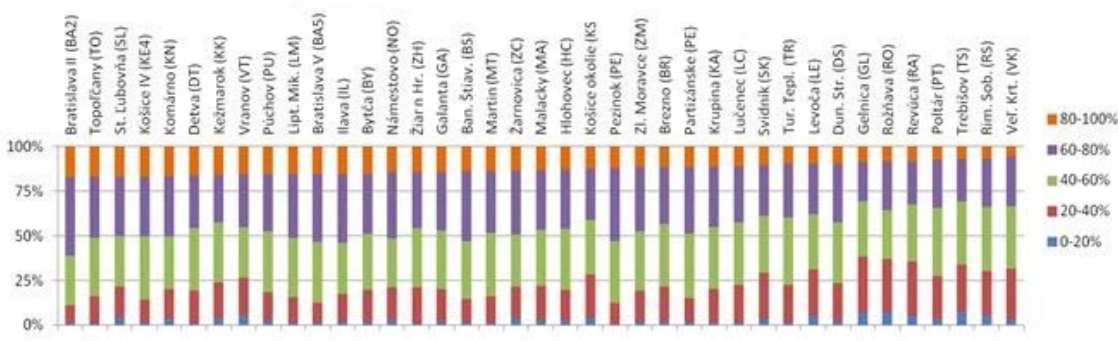
Graph 1 Proportions of pupils in the five performance quintiles based on achievement in the T9-2014 test of Slovak language and literature – **districts with higher performance**

Percentages of pupils in performance quintiles according to achievement in the test



Graph 2 Proportions of pupils in the five performance quintiles based on achievement in the T9-2014 test of Slovak language and literature – **districts with lower performance**

Percentages of pupils in performance quintiles according to achievement in the test



Graph 3 shows the relationship between pupils' achievement in the T9-2014 test of Slovak language and literature in the district and unemployment in the district. **Graph 4** shows the relationship between the proportion of pupils in the lowest performance quintile in the district

(the pupils most at risk) and unemployment in the district. We used the unemployment rate published for the districts by the Statistical Office in 2013. The curve in **graphs 3, 4, 7 and 8** is the local regression.

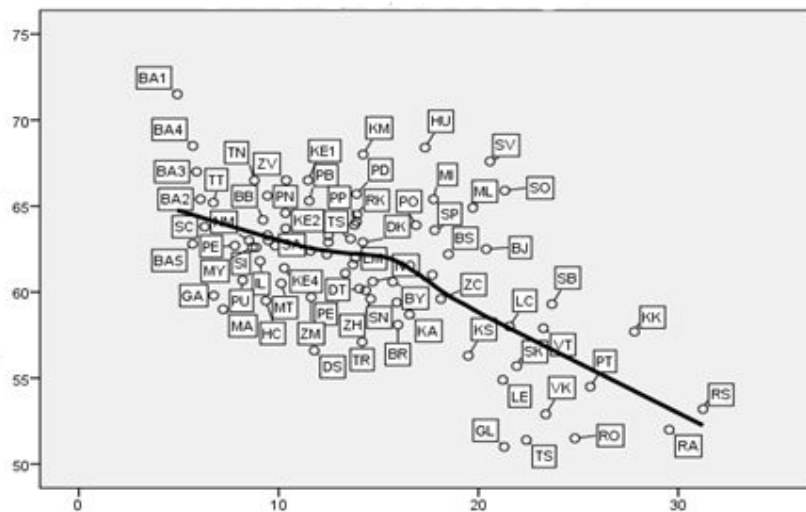
Graph 3 Achievement of pupils in the district in relation to the unemployment rate in the district

T9 SLL 2014

Average success in the SLL test

Vertical – Average achievement in %

Horizontal – Unemployment in the district in %



There is strong correlation between achievement and unemployment: $r = -0.604$. As the unemployment rate in a district rises, pupils' achievement declines. We consider this high value to have strong material significance.

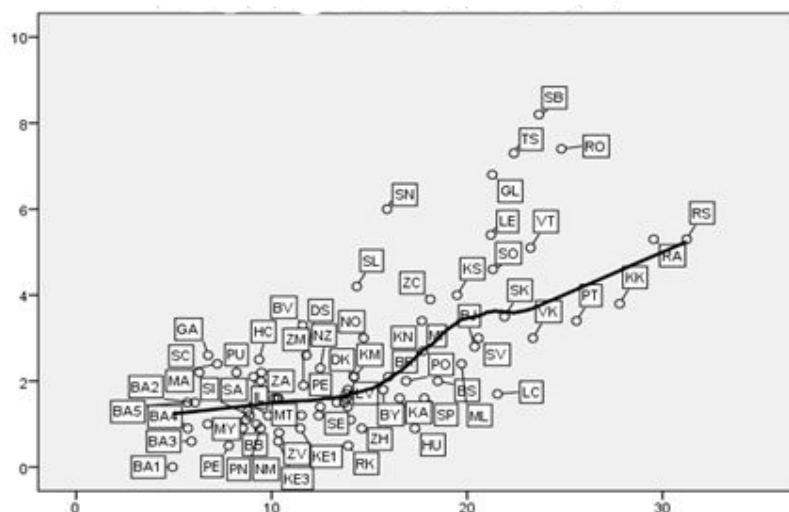
Graph 4 Proportion of pupils in the district in the lowest performance quintile in relation to the unemployment rate in the district

T9 SLL 2014

Percentage of pupils in the lowest performance quintile

Vertical – Percentage

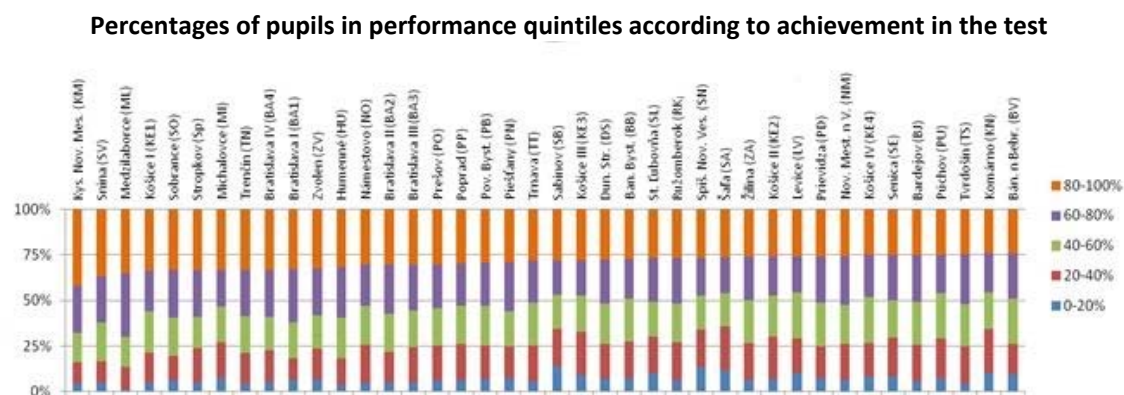
Horizontal – Unemployment in the district in %



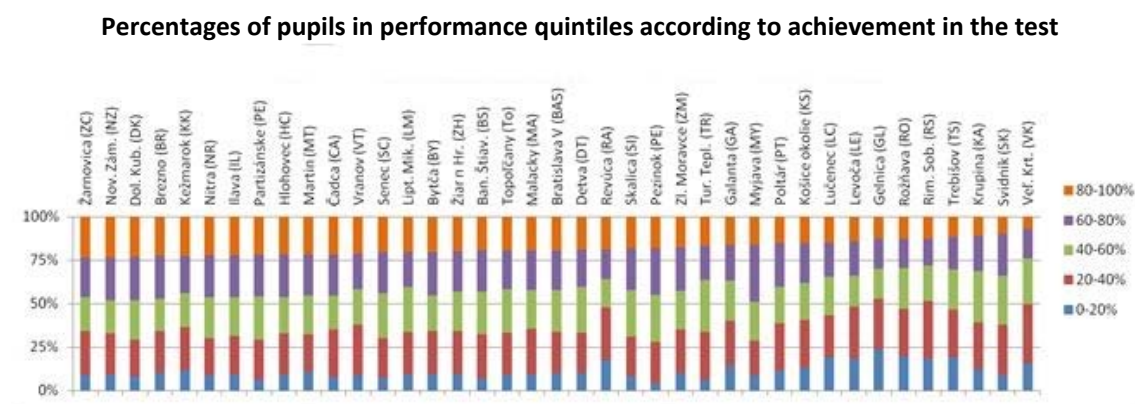
The correlation between the proportion of pupils in the lowest performance quintile and unemployment is also strong in the opposite direction: $r = 0.698$. As the unemployment rate in the district increases, the proportion of pupils in the district in the lowest performance quintile, i.e. the pupils who are most at risk, also increases.

There are similar findings in the results of the **T9-2014 mathematics** test, which also indicate a strong influence of socio-economic background on pupils' performance.

Graph 5 Proportions of pupils in the five performance quintiles based on achievement in the T9-2014 test of mathematics – **districts with higher performance**



Graph 6 Proportions of pupils in the five performance quintiles based on achievement in the T9-2014 test of mathematics – **districts with lower performance**



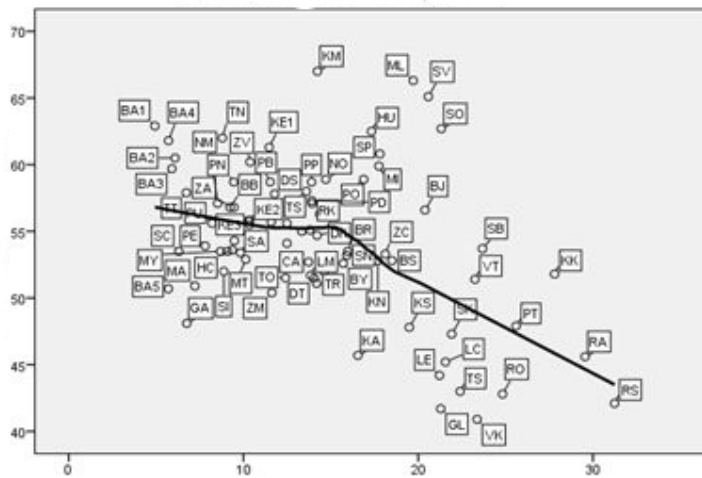
Graph 7 Achievement of pupils in the district in relation to the unemployment rate in the district

T9 MAT 2014

Average success in the MAT test

Vertical – Average achievement in %

Horizontal – Unemployment in the district in %



There is strong correlation between achievement and unemployment: $r = -0.419$. We can see that the average achievement of pupils in the district decreases as unemployment rises.

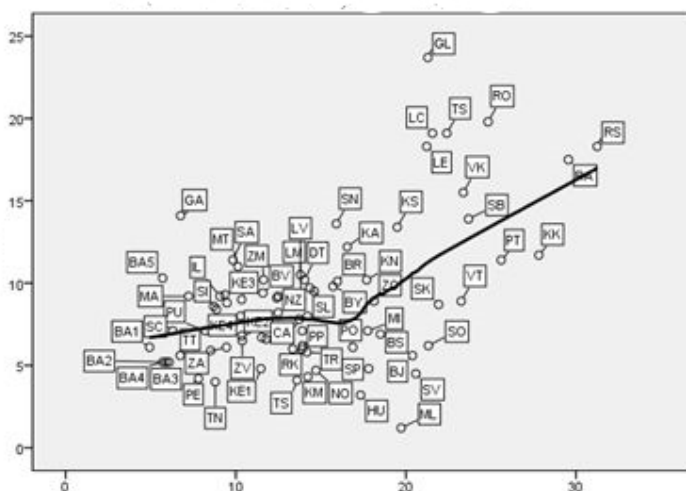
Graph 8 Proportion of pupils in the district in the lowest performance quintile in relation to the unemployment rate in the district

T9 MAT 2014

Percentage of pupils in the lowest performance quintile

Vertical – Percentage of pupils in the district in the lowest performance quintile

Horizontal – Unemployment in the district in %



The correlation between the proportion of pupils in the lowest performance quintile and unemployment is also strong in the opposite direction: $r = 0.448$. As the unemployment rate in the district increases, the proportion of pupils in the district in the lowest performance quintile, i.e. the pupils who are most at risk, also increases.

Information on aspects and indicators that are used in the country to measure the quality of education.

The results of national and international measurements are regularly reported in the form of press releases, presentations intended mainly for the general public and also more detailed reports for the professional community containing:

1. Results obtained using classical test theory (CTT)
 - The characteristics of tests – achievement, standard deviation, the standard error of the mean achievement score, Chronbach’s alpha, the standard error of measurement,
 - Analysis of items – the difficulty of the item, the correlation between items, sensitivity, distribution of achievement, non-completed items
 - Secondary evaluation – achievement and percentile of the pupil,
 - Comparison by
 - school type,
 - region, district,
 - founder,

- settlement type,
 - school size,
 - sex,
 - marks.
2. Results obtained by Item Response Theory
- Difficulty of items,
 - Resolution of items,
 - Relationship between pupils' level of ability and difficulty,
 - Information function and error measurement by pupils' level of ability,
 - Percentile of pupils based on pupils' level of ability,
 - Relationship between a pupil's number of points and pupils' level of ability

The aggregate results for national school testing in individual tested subjects can be accessed on the results portal **Test Results** with options to filter by:

- region, district,
- school founder,
- school type,
- school teaching language,
- subject tested.

The results portal increases public awareness of schools' results in national testing.

Proposals for improving the indicator of education quality – results of national measurement:

- a) Increasing the objectivity of national testing (external supervision in all tested groups, central marking of short response tasks, enforcement of personal responsibility for failure to ensure objective testing),
- b) Expansion of Testing 9 to cover also foreign languages and general knowledge and skills in the sciences and humanities.
- c) Spreading Testing 9 over 2 or more days and dividing the tests of Slovak language and literature and mathematics from the tests of reading literacy and mathematical literacy.
- d) Increased weighting for the external part of the Maturita exam (EPME) by higher education institutions. It is proposed that pupils should take, in addition to the compulsory EPME in the teaching languages and foreign languages and the option EPME in mathematics, an EPME in one of the optional subjects in the natural sciences (including mathematics) or the social sciences. We also see space for an EPME on the theoretical part of training for pupils of secondary vocational schools and conservatories. Individual higher education institutions could define a portfolio of EPME results that they will take into consideration in admissions procedures.
- e) Gradual introduction of “criterion referenced tests” in national testing. Besides the currently used norm-referenced (NR) tests, NUCEM is starting to create criterion referenced (CR) tests as part of the national project “*Increasing the quality of education in basic and secondary schools through the use of electronic testing*”. Such tests verify the extent to which pupils satisfy the criteria laid down by content and performance standards. It is also necessary to determine and define the minimum and maximum standards for each subject.
- f) Implementation of the national measurement Testing 5 for pupils in the fifth year of basic school in the teaching languages and mathematics and its gradual broadening to include testing of foreign languages and general knowledge and skills (the natural sciences and the humanities).
- g) Implementation of added value in the education system as an additional indicator of the quality of education in the school, in the class and in the work of the teacher.

- h) Besides summative tests, greater use should be made of formative tests as a means of obtaining feedback on the education process in schools. In the national project *“Increasing the quality of education in basic and secondary schools through the use of electronic testing”* the National Institute for Certified Educational Measurements is developing a bank of tasks in general subjects and also preparing a testing environment for implementing formative tests in a sample of schools.

4. How would it be possible to extend successful measures in the area of increasing quality for disadvantaged schools and students?

1. Implementation of obligatory pre-school education lasting at least one year in particular for children from socially disadvantaged backgrounds. (The results of international studies (TIMSS, PIRLS, PISA) show that pre-school education lasting at least one year has a positive effect on education performance for all pupils and therefore also on pupils from socially disadvantaged backgrounds.)
2. The implementation of added value in education would make it possible to capture the progress that individual schools are making in working with socially disadvantaged pupils.
3. The combination of the results of summative and formative testing would make it possible to identify problematic areas in the education of socially disadvantaged pupils and provide teachers with feedback that would increase the effectiveness of their work with such pupils.

Outlook for the education programme after 2015

In our view, the main problems facing education in the country which have been identified by national and international measurement are as follows:

1. **Excessively strong influence of pupils’ socio-economic background** on their educational performance. (PISA, TIMSS, PIRLS and national measurement)
2. **The statistically significant decrease in the performance of 15-year-old pupils** in all areas of testing in PISA 2012 compared to the results for PISA 2009. (PISA)
3. **An increase in the percentage of pupils in the at-risk group** in all three areas studied. (PISA)
4. **A significant decrease in the percentage of pupils with the highest knowledge levels (5 and 6)** in all three areas studied. (PISA)
5. **An unfavourable age structure amongst teachers** (aging teachers) and **low numbers of men** in teaching professions. (TALIS)

B. MATERIAL ON THE 12 EFA IMPLEMENTATION STRATEGIES IN THE DAKAR FRAMEWORK FOR ACTION

On strategy 7:

In 2010 the Ministry of Education, Science, Research and Sport approved the syllabus **“Upbringing on marriage and parenthood for basic and secondary schools”**, based on the Conception of Upbringing on Marriage and Parenthood of 1994.

Some of the relevant topics:

Risk of transmission of AIDS

Responsible decision-making in critical areas of mental and sexual development based on moral and generally applicable values and standards

Potential risks of premature and high-risk sexual activities including unwanted pregnancy, sexually-transmitted diseases and HIV/AIDS infection

Risks for reproductive health and the risk of HIV/AIDS infection from drug abuse
Connection between drug use and potential HIV/AIDS infection.

As part of the development project “Health and safety in schools” the Ministry of Education, Science, Research and Sport supports the project “**Red Ribbons**” organised a national school campaign for all basic, secondary and special schools in the Slovak Republic.

The campaign is primarily focussed on providing information and increasing young people’s knowledge through information and awareness-raising activities on the risks and means of protection against HIV and AIDS. The campaign is also developing a new topic on the risks of and the means for preventing trafficking in human beings.

Activities in the campaign include lectures and seminars on the topic of HIV/AIDS, lectures and seminars on the topic of mental health and addictions, lectures and seminars on the topic of trafficking in human beings, activity for red ribbons – a competition, a methodological manual for the campaign, the production and wearing of red ribbons in the period leading up to 01/12 (World AIDS Day), placement of the campaign poster in a visible location, a “Red Ribbons” nationwide creative competition for basic schools, a “Red Ribbons” nationwide creative competition for secondary schools, a “Red Ribbons” nationwide creative competition for secondary health care schools, “Become a Writer” a nationwide creative competition for secondary schools and presentations of the films Anjeli, HIV/AIDS, In your face.

Every year the website www.cervenestuzky.sk continuously presents all the necessary information for potential participants, a timetable of planned events and information on participating schools.

The Red Ribbon Campaign is specifically a campaign implemented for young people and with young people, who can take part not only in artistic and literary competitions but also in a range of other creative activities during the campaign.

In 2013 the development project “Health and Safety in Schools 2013” supported the “**Red Ribbons**” nationwide project in its 7th annual nationwide campaign in schools. A total of 520 schools and school establishments in Slovakia took part in the seventh annual campaign (74 gymnazia (grammar schools), 195 secondary schools, 9 school dormitories, 196 basic schools, 43 secondary health care schools and 3 centres for pedagogical-psychological counselling and prevention

On strategy 8:

The Ministry of Education, Science, Research and Sport has supported the creation and updating of the website www.bezpre.sk, which publishes a range of materials and methods to help schools to create a safe and healthy social environment and to prevent undesirable phenomena – e.g. “Skills for Health”, a translation of WHO publication - “Creating an environment for emotional and social well-being”, prevention of trafficking in human beings etc.

The Pedagogical and organisational instructions **for school year 2013/2014** include the following recommendation in the section on **Safety and Prevention**: In accordance with Article 19 of the Convention on the Rights of the Child it is recommended to implement measures to protect children and pupils against physical or mental violence, injury or abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse. Children’s behaviour and any changes to it should be continuously monitored. If there is reason to suspect a violation of their healthy personal development, immediate measures shall

be taken for their protection and to resolve the problem in cooperation with the school management. It is recommended to consider cooperation with a school psychologist or professionals working for the competent centre for pedagogical-psychological counselling and prevention as necessary also with a competent paediatrician, social worker or police officer.

In the section of the Pedagogical and organisational instructions on upbringing guidance and prevention in school establishments:

- It is recommended to implement programmes for the prevention of sexual violence against children and the prevention of trafficking in human beings, the prevention of drug addiction and the prevention of crime with an emphasis on selective prevention and professional assistance for children at risk.
- It is recommended to cooperate with head teachers and teachers – prevention coordinators in the implementation of school prevention projects and to provide methodological assistance and supervision to teachers – prevention coordinators in their place of work.
- It is recommended to implement preventative programmes and activities (seminars, experiential sessions) for adolescents to help prevent unsafe and suicidal behaviour

The Slovak National Institute for Education has established a working group for the area of prevention of unsafe behaviour in schools – forums for exchanging experience, opinions and the latest knowledge in order to identify schools’ needs, to exchange practical experience, to propose specific potential solutions for basic and secondary school teachers and specialists in the area of education – holding of meetings, outputs –examples of good practice – publication on the web.

- Topics – the risks of virtual communication, tobacco and alcohol amongst young people – what is offered and taken, healthy lifestyle – reflection and solutions in school,
- Creation of information materials and a methodology for the prevention of smoking and illegal drugs.
- Creation of information and methodology material relating to the prevention of extremism
- Establishment of a working group on support for health education – health education – the subject as a cross-curricular theme – name, content, level conditions, holding of meetings
- Printing and translation of specialist publications

On strategy 9:

Development and improvement of human resources

Raising the standing of teachers in society is one of the most important functions in the area of education – political, professional and public support for the teaching profession is critical. In its manifesto the government laid down a priority to develop and improve the quality of human resources in particular by increasing the professional and personal competencies of workers in education. In general all the training programmes provided by the MPC contribute to support for school workers’ lifelong learning and help to increase participation in lifelong learning. **The MPC has accredited the following 19 ATP relating to the given priority and teachers’ professional development.**

The statistics cover the period from the start of the NP to 01/01/2014, source NP PKR and NP MAT. The **total number of participants** was **14,713** and the total number who **completed** programmes was **11,287**.

Name of programme	Accreditation number	Number of participants	Number of graduates
Preparatory attestation training for an educator’s first attestation test	569/2011-KV	0	0
Management of a school or school	1/2010 – KV	4060	2112

establishment			
Innovation in the management of a school or school establishment	2/2010 – KV	4175	3444
Preparation of an education programme for continuous education	4/2010 – KV	1127	1031
School management in nursery schools (NP MAT)	31/2010 – KV	2770	2761
Innovation in didactics for senior pedagogical staff in nursery schools (NP MAT)	32/2010 – KV	890	887
Qualification training for educators and pedagogical assistants in schools and school establishments	180/2010 – KV	414	232
Preparation of selected school projects	268/2010 – KV	0	0
Competency profile of the head of a methodology team	273/2010 – KV	159	133
Design and creation of websites	274/2010 – KV	340	268
Professionalism in the work of a class teacher	330/2010-KV	14	14
Qualification study for trainers in vocational training for the acquisition of pedagogical competence	180/2010 – KV	414	232
Quality indicators in the evaluation of pedagogical staff	1102/2013-KV	0	0
Presentation and communication skills for pedagogical staff	1122/2013-KV	37	37
Preparatory attestation training for an educator's first attestation test	1124/2013-KV	313	136
Use of comparison in school self-evaluation (benchmarking)	846/2013-KV	0	0
Professional competencies of teachers of French language in basic and secondary schools	1245/2013-KV	0	0
Development of competencies for the heads of subject committees in basic art schools	1291/2013-KV	0	0

On strategy 10:

Support for the digital competencies of teachers and **support for information and communication technologies** (ICTs) is dealt with in **77 ATPs** as a cross-curricular theme. In 3 ATPs the issue of ICT is only a marginal topic. From 2010 to 2014 the MPC had a total of **24,680** training participants in the given area of whom a total of **20,604** completed programmes in the 2010–2014 period. The numbers of participants and graduates from individual programmes is for the period from 01/01/2010 to 31/03/2014. Source: Collection

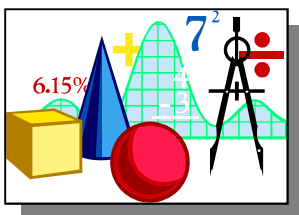
on numbers of applicants, participants and graduates of training activity under NP PKR to 31/03/2014.

Work with digital technologies is a cross-curricular theme integrated into a number of school subjects in general education.

Publication activity of the MPC in the period 2009 – 2014

The MPC published **13 publications** on issues relating to inclusion, vulnerability and social exclusion, **8 publications** on literacy, mathematical literacy and related competencies, **13 publications** on ICTs, **10 publications** on the professional development of pedagogical staff and school-related professionals and **6 publications** on issues affecting marginalised Roma communities.

Indicators of the state and development of regional education



(documents for the National Report for UNESCO
EFA 2015)

Note to the material:

The statistical output contains sets of tables and charts of development indicators for the regional education and substantive cross-sections of the structure. The first five sheets contain a description of the development of the basic indicators for the nurseries, primary and secondary schools since the present state. The second part shows the current status by founder and region. Other sheets focus on the evaluative indicators, such as school attendance, students/classes and students/teachers ratios and substantive cross-sections of the data (e.g. by sex, langu:

Prepared by:

Ing. Jana Čabalová

Mgr. Mária Lipská

Ing. Ján Urban

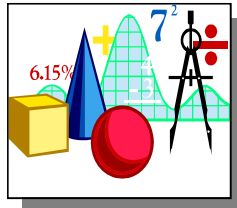
Mgr. Ján Herich

Slovak Centre of Scientific and Technological Information

Bratislava

2014

Development trends in indicators for nurseries, primary and secondary schools



trend analysis

Note to the task:

This trend analysis deals with development trends in the set of basic and derived indicators of regional education since 2000. It does so in the context of demographic trends, as well as in a retrospective and forecast. It categorises the phases of development, quantifies them and forecasts their course in the near future.

The material applies time series trend analysis methodology (indices, coefficients, correlations) the regional education system, up to and including the school year 2013/14

The chapter demographic assumptions include a *new population forecast*, processed by the Demographic Research Centre of the Slovak Statistical Office in 2012.

Data sources and materials:

1. Statistical Yearbook of Education for the SR.
Bratislava : Institute of Information and Prognoses of Education, 2000 to 2013.
2. Regional education data databases.
Bratislava : Institute of Information and Prognoses of Education, 2000 to 2013.
3. Slovak population forecast to 2050.
Bratislava : SR Statistical Office / Demographics Research Centre SR, May 2012.

Prepared by:

Mgr. Ján Herich
Department of Information Methodology and Creation
Institute of Information and Prognoses of Education

e-mail:
Jan.Herich@uips.sk

List of abbreviations:

The following abbreviations are used in this material:

<i>abbrev'n</i>	<i>meaning</i>
NS	nurseries
PS	primary schools
GS	grammar schools
VS + C	vocational schools plus conservatories
SO SR	Statistics Office of the Slovak Republic
DRC	Demographic Research Centre
P _i	population of i-year graders
P _{i-j}	population of i to j-year graders
Ch	children at nurseries
P	primary school pupils
N	newly received primary school pupils
L	pupils leaving from primary school
Cl	classes
T	teachers
CR	classrooms
S	schools
P/C	pupils/class ratio
P/T	pupils/teacher ratio
P/CR	pupils/classroom ratio
YYC	year-on-year change coefficient
PhI	change phase index (period-end value to period-start value)
pp	percentage point

colour designation of development phases:

	decline phase
	transitional phase (mixed)
	growth phase

Note:

Years in this material refer to the first year of the given school year. For example 2013 means the school year 2013/14.

Demographic starting points

The level of performance indicators in the regional education system (number of children, pupils, classes, teachers, classrooms, schools) is dependent upon demographic development and distribution ratios in the schools system. population development determines the degree of burden on the school system and, together with socio-economic factors, also the degree of demand for a given type of school and education service.

The influence of population development on the school system does not proceed clearly – deterministically, but is a reflection of stochastic (probability) laws. These, in terms of the system dynamic reflect processes from the micro level (specific units, children, pupils, classes, teachers, schools) in the resulting trajectories at the system's macro level.

1. Reference population of children in nurseries

The *mode* population for nurseries are children aged 3 to 5 years. Children younger than 3 years and older than 6 years in pre-school education have only a *marginal* representation. The number of **3 to 5 year old** children had been in long-term decline; the decline ended in 2006 at the level of 152 700. Since 2000, this population group has decreased by 26 000.

Table C1:

Development of pre-school age population forecast to 2025

year	3-year-olds	4-year-olds	5-year-olds	3 to 5 year-olds	annual index AI (P3-5)	phase type PhI (P3-5)
2000	58,556	59,464	60,697	178,717	.	decline phase PhI 0.85
2001	56,386	57,845	59,967	174,198	0.97	
2002	55,635	56,395	57,858	169,888	0.98	
2003	53,905	55,651	56,403	165,959	0.98	
2004	50,803	53,914	55,642	160,359	0.97	
2005	50,472	50,822	53,936	155,230	0.97	
2006	51,370	50,469	50,830	152,669	0.98	growth phase PhI 1.18
2007	53,398	51,390	50,469	155,257	1.02	
2008	54,121	53,409	51,412	158,942	1.02	
2009	53,659	54,138	53,423	161,220	1.01	
2010	54,270	53,663	54,149	162,028	1.01	
2011	57,077	54,439	54,008	165,524	1.02	
2012	59,805	57,141	54,464	171,410	1.04	
2013	57,722	59,725	57,077	174,524	1.02	
2014	60,692	57,724	59,725	178,141	1.02	
2015	60,081	60,697	57,728	178,506	1.00	
2016	59,800	60,091	60,703	180,594	1.01	
2017	59,453	59,816	60,102	179,371	0.99	decline phase PhI 0.90
2018	59,113	59,474	59,831	178,418	0.99	
2019	58,668	59,140	59,494	177,302	0.99	
2020	58,213	58,700	59,165	176,078	0.99	
2021	57,316	58,253	58,729	174,298	0.99	
2022	56,293	57,360	58,285	171,938	0.99	
2023	55,315	56,340	57,394	169,049	0.98	
2024	54,269	55,364	56,377	166,010	0.98	
2025	53,185	54,320	55,403	162,908	0.98	

Note:

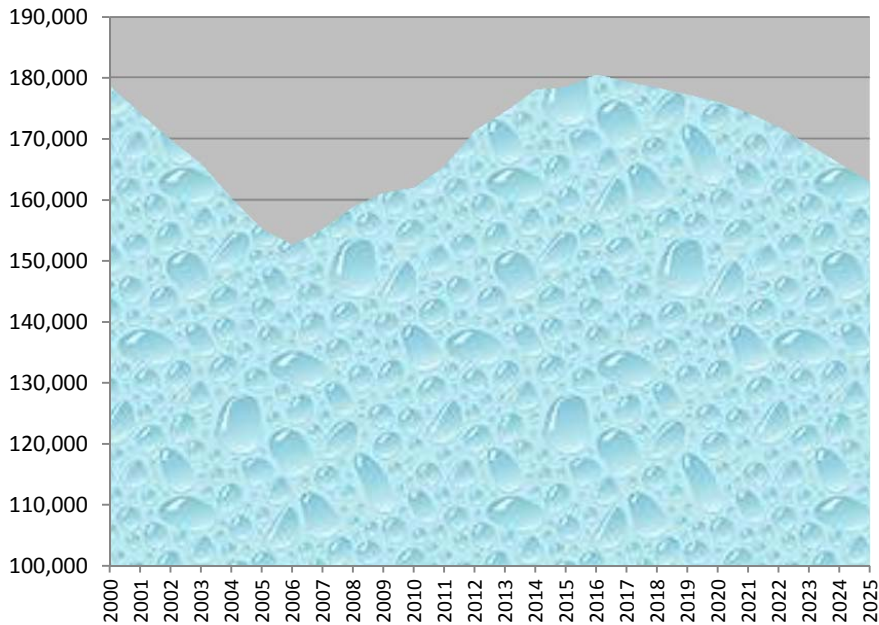
Source: DRC - SO SR

Data before 2012 are the real figures as at 31.12; figures from 2013 onward are forecast values

After a long period of decline, the number of new-born babies has been increasing since 2003. This fact has been reflected in the onset of the growth phase of the reference population of children at nurseries.

The growth phase began in 2007 and, according to the current demographic forecast, should last until 2016. In this period, the indicators should show a year-on-year increase averaging 1%, a total growth representing 18% (PhI). The number of children in this phase will increase to 180 600, which is almost 10 000 more than the current number.

Graph Ch1: *Development of the population 3- to 5-year-olds with forecast to 2025*



From 2017 onward the reference population should fall again. At an annual rate of -1%, the figure by 2025 should fall by 10% to approximately 163 000 3- to 5-year-olds.

* Current forecast of SR population prepared by the Demographic Research Centre of the SO SR in 2012.

2. Reference population of primary school pupils

Children entering the first grade of primary school are mostly **6 years old**. The number of them has declined on average by 3%. From 2000 to 2008, their number fell from 65 600 to 50 500. The growth phase began in 2009 and, according to a new forecast, should last until 2017. the indicator will grow at an annual rate of 1% and in total will increase by 10 200, i.e. by 20% to 60 700 children. In subsequent years, the number of 6-year-olds will decline, to reach approximately 56 000 children in 2025.

Table Ch2:

Development in the population of children in the first grade of primary schools with a forecast to 2025

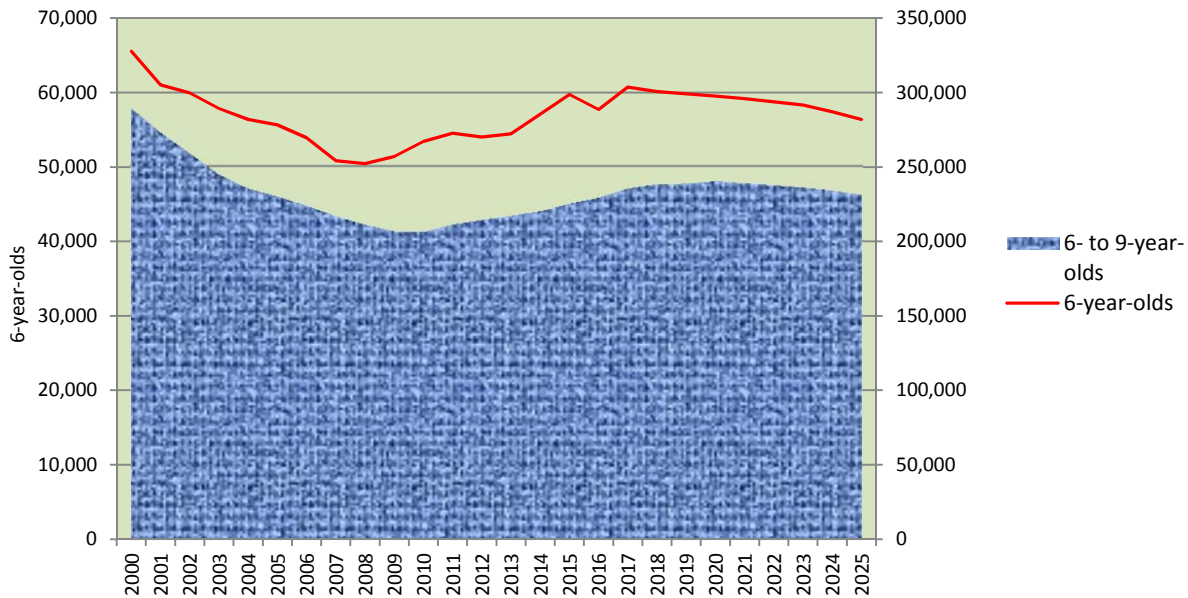
year	6-year-olds	annual coefficient AI(P6)	phase type PhI (P6)	6- to 9-year-olds	annual index AI (P6-9)	phase type PhI (P6-9)
2000	65,552	.	decline phase	289,078	.	decline phase
2001	61,038	0.93		272,902	0.94	
2002	59,961	0.98		259,030	0.95	
2003	57,863	0.97		244,720	0.94	
2004	56,400	0.97		235,303	0.96	
2005	55,644	0.99		229,917	0.98	
2006	53,939	0.97		223,884	0.97	
2007	50,842	0.94	PhI (P6) 0.77	216,834	0.97	PhI (P6-9) 0.71
2008	50,472	0.99	210,903	0.97		
2009	51,403	1.02	growth phase	206,690	0.98	growth phase
2010	53,432	1.04		206,153	1.00	
2011	54,527	1.02		211,156	1.02	
2012	54,015	0.99		214,207	1.01	
2013	54,439	1.01		216,976	1.01	
2014	57,074	1.05		220,031	1.01	
2015	59,725	1.05		225,238	1.02	
2016	57,732	0.97	PhI (P6) 1.20	228,973	1.02	PhI (P6-9) 1.17
2017	60,710	1.05	235,256	1.03		
2018	60,112	0.99	decline phase	238,309	1.01	decline phase
2019	59,846	1.00		238,448	1.00	
2020	59,513	0.99		240,246	1.01	
2021	59,188	0.99	PhI (P6)	238,742	0.99	PhI (P6-9) 0.96
2022	58,753	0.99		237,398	0.99	
2023	58,311	0.99		235,873	0.99	
2024	57,422	0.98	0.93	233,789	0.99	PhI (P6-9) 0.96
2025	56,407	0.98	231,019	0.99		

Note: Data before 2012 are the real figures as at 31.12; figures from 2013 onward are forecast values

Source: DRC - SO SR

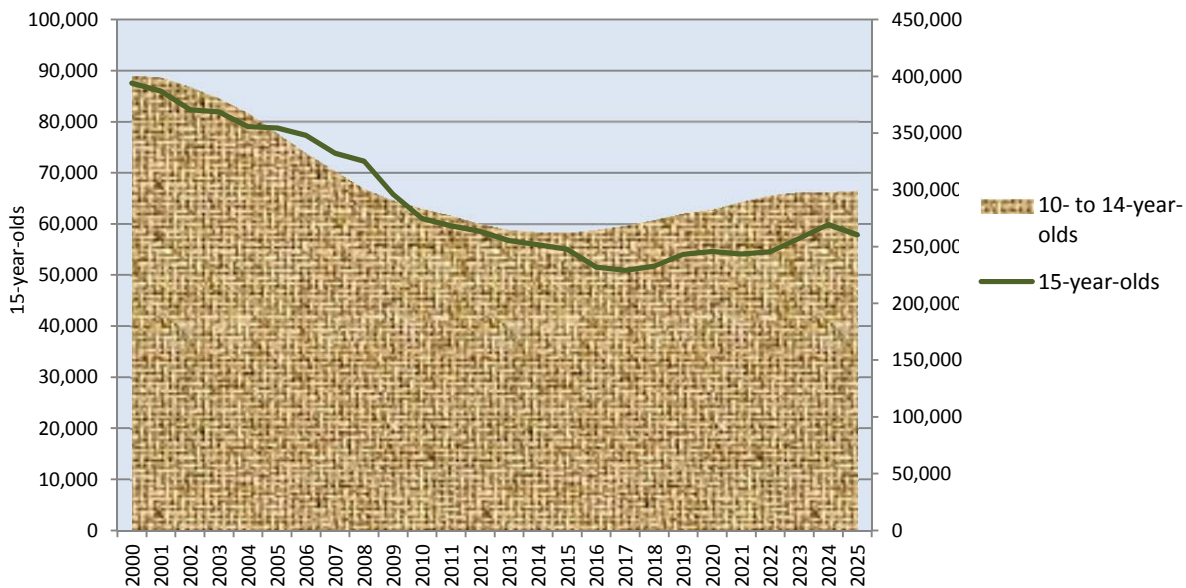
The reference population for pupils **first grade primary school** children aged **6 to 9 years**. The number of them fell over the period 2000 to 2010 by 83 000 to 206 200. The subsequent growth phase should last until 2020. With an average annual growth of almost 1% the number of them will increase by 17% to 240 200 children. In the subsequent period, the indicator will fall, reaching in 2025 approximately 231 000.

Graph Ch2: Development in the reference population of children for the first stage of primary schools to 2025



Second grade primary schools pupils are mostly aged **10 to 14 years**. This age group has since 2000 decreased by 33%, from 401 100 to the current 270 100, and should continue to fall. In 2015 it should reach its bottom level of 262 700 children. In the next growth phase the indicator will rise to around 300 000 in 2025.

Graph D3: Development in the reference population of children for the second grade of primary schools to 2025



Since 2000 the number of **15-year-olds** has been falling from 87 500 to the current 58 500. This trend will continue. At an average rate of 3% it should reached the figure of 50 900 in 2017. The subsequent years will see a growth phase of an annual rate of 2%. By 2025 the number of 15-year-olds should increased to about 58 000 children.

Table D3:

Development in the population of children in the second grade of primary schools with a forecast to 2025

year	10- to 14-year-olds	annual index AI (P10-14)	phase type Phi (P10-14)	15-year-olds	annual index AI (P15)	phase type Phi (P15)
2000	401,088	.		87,528	.	
2001	399,453	1.00		86,016	0.98	
2002	390,830	0.98		82,390	0.96	
2003	381,130	0.98		81,947	0.99	
2004	367,989	0.97		79,012	0.96	
2005	350,312	0.95		78,796	1.00	
2006	332,963	0.95		77,343	0.98	
2007	317,024	0.95		73,828	0.95	
2008	301,204	0.95		72,255	0.98	
2009	291,031	0.97		65,836	0.91	
2010	283,917	0.98		61,045	0.93	
2011	277,860	0.98		59,618	0.98	
2012	270,137	0.97		58,546	0.98	
2013	265,130	0.98		56,761	0.97	
2014	263,204	0.99	Phi (P10-14)	55,941	0.99	
2015	262,698	1.00	0.65	55,035	0.98	
2016	265,179	1.01		51,554	0.94	Phi (P15)
2017	268,728	1.01		50,936	0.99	0.58
2018	274,150	1.02		51,721	1.02	
2019	279,912	1.02		54,055	1.05	
2020	283,187	1.01		54,575	1.01	
2021	289,958	1.02		54,082	0.99	
2022	295,695	1.02		54,532	1.01	
2023	298,534	1.01		57,182	1.05	
2024	298,386	1.00	Phi (P10-14)	59,851	1.05	Phi (P15)
2025	299,895	1.01	1.14	57,881	0.97	1.14

Note: Data before 2012 are the real figures as at 31.12; figures from 2013 onward are forecast values

Source: DRC - SO SR

3. Reference population of secondary school students

Reference population of **secondary school** students are young people aged **15- to 18-years**. Its long-term and significant 41% phase decline phase is shifted up to 2019. When compared to the current 244 800 it should fall to 208 500, i.e. by a further 15%. In the subsequent period the indicator will grow at an average rate of 1%; in 2025 it will reach the level of 230 000.

Table D4:
Development of secondary-school population with a forecast to 2025

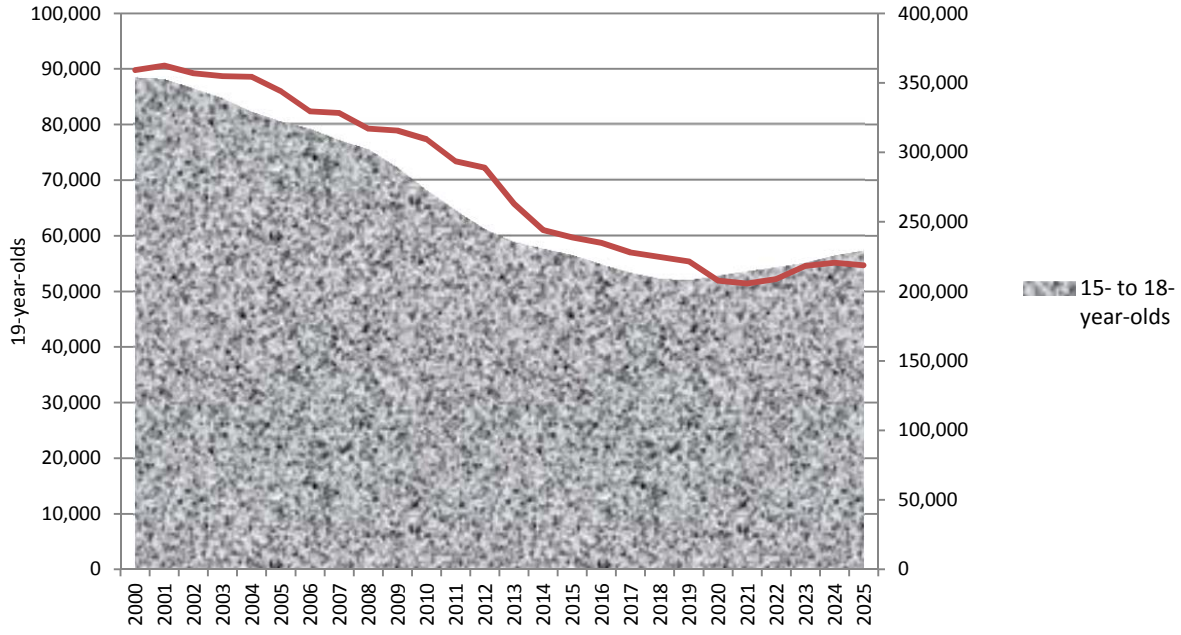
year	15- to 18-year-olds	y/y coefficient MK(P15-18)	phase type Phi (P15-18)	19-year-olds	y/y coefficient MK(P19)	phase type Phi (P19)
2000	353,999	.	decline phase	89,816	.	decline phase
2001	352,699	1.00		90,582	1.01	
2002	345,741	0.98		89,202	0.98	
2003	338,922	0.98		88,681	0.99	
2004	329,314	0.97		88,575	1.00	
2005	322,130	0.98		85,976	0.97	
2006	317,086	0.98		82,387	0.96	
2007	309,062	0.97		82,064	1.00	
2008	302,266	0.98		79,246	0.97	
2009	289,275	0.96		78,911	1.00	
2010	272,995	0.94		77,385	0.98	
2011	258,484	0.95		73,411	0.95	
2012	244,752	0.95	72,240	0.98		
2013	235,906	0.96	65,757	0.91	0.57	
2014	230,913	0.98	61,028	0.93		
2015	226,359	0.98	59,727	0.98		
2016	219,392	0.97	58,719	0.98		
2017	213,615	0.97	56,972	0.97		
2018	209,445	0.98	56,212	0.99		
2019	208,516	1.00	55,367	0.98		
2020	211,585	1.01	51,952	0.94		
2021	214,780	1.02	51,395	0.99	growth phase	
2022	217,625	1.01	52,229	1.02		
2023	220,778	1.01	54,600	1.05		
2024	226,078	1.02	55,151	1.01		
2025	229,899	1.02	54,688	0.99		

Note: Data before 2012 are the real figures as at 31.12; figures from 2013 onward are forecast values

Source: DRC - SO SR

The number of **19-year olds** grew until 1998, since then it has been decreasing. The decline phase with an average 3%-rate will last until 2021, when the value is expected to reach 51 400 of persons. Since 2022, the indicator should rise slightly to around 55 000.

Graph D4: Reference population of secondary school students



1. Nurseries

The long-term phase of decline in the number of children at nurseries began in 1986. The rate of decline increased at the start of the 1990s in connection with the social system changes. For example the rupture in the two years (1990, 1991) represented a fall in this indicator by some 22%. After this turning point there followed in the 1990s two cyclical stages with a trend toward ending the slump, after which there still followed a fall in this indicator. This development reflected the ambiguity of policies and the struggle over the new position of nurseries in the transforming school system.

Table N1: Development in the number of children at nurseries

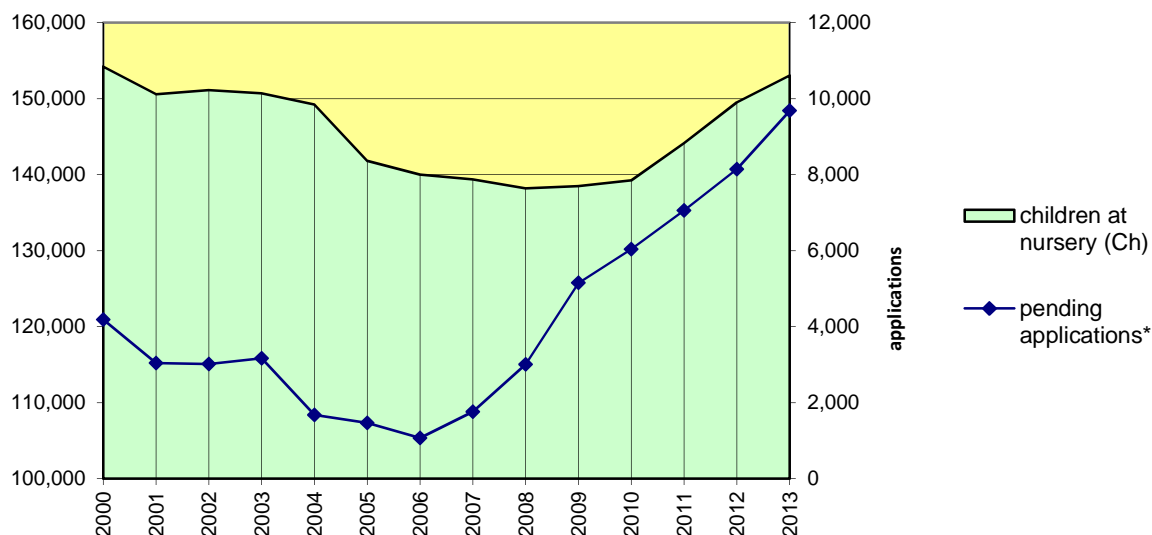
year	children at nursery (Ch)	year-on-year coefficient YYC(P19)	phase type PhI (Ch)	pending applications*	pending applications per 100 children at nursery
2000	154,232	0.95	decline phase 0.92	4,184	3
2001	150,587	0.98		3,038	2
2002	151,125	1.00		3,017	2
2003	150,718	1.00		3,169	2
2004	149,232	0.99		1,679	1
2005	141,814	0.95		1,470	1
2006	140,014	0.99	transitional phase	1,074	1
2007	139,374	1.00		1,764	1
2008	138,186	0.99		3,010	2
2009	138,496	1.00		5,151	4
2010	139,239	1.01	growth phase 1.10	6,042	4
2011	144,130	1.04		7,061	5
2012	149,511	1.04		8,144	5
2013	153,059	1.02		9,682	6

* number of applications for placement in nursery pending as at the survey date

Source: Institute of Information and Prognoses of Education

The third cycle began in 2000 and lasted five years, the number of **children in nurseries** during that fell from 154 200 to 141 800, i.e. by 8%. In the following transitional phase the indicator oscillated around an average of 139 000 children. This stage preceded an expected growth phase in the indicator, which began in 2011. Over the course of three years the number of children and nurseries increased by 10% from 139 239 to 153 000. The growth phase in the number of children at nurseries should continue until approximately 2017.

Graph N1: Development in the number of children at nurseries



The attendance (schooling rate) of individual population years since 1995 has been rising. The growth phase lasted 10 years, since 2005 the trajectory has been on a stationary trend (3-, 4- and 6-year-olds) or slightly falling (5-year-olds). In the case of children younger than three years old there has been a sudden turn and sharp fall.

Table N1:
(Share (Qi) of children at nurseries in the population age year

year	Q ₂	Q ₃	Q ₄	Q ₅	Q ₆	Ch ₃₋₅ /P ₃₋₅
2000	14.6%	54.2%	68.1%	83.5%	35.1%	0.86
2001	16.3%	55.9%	68.2%	81.4%	35.6%	0.86
2002	17.7%	57.3%	69.7%	83.6%	36.7%	0.89
2003	18.8%	60.1%	71.4%	84.2%	37.3%	0.91
2004	20.6%	60.6%	73.6%	84.7%	37.7%	0.93
2005	16.5%	59.5%	72.8%	84.8%	37.0%	0.91
2006	15.2%	62.0%	73.8%	83.9%	37.6%	0.92
2007	12.8%	62.6%	74.4%	82.9%	37.2%	0.90
2008	10.1%	60.9%	73.0%	81.8%	37.2%	0.87
2009	8.9%	60.0%	72.3%	81.4%	36.7%	0.86
2010	7.8%	60.0%	72.3%	81.4%	36.3%	0.86
2011	10.3%	62.2%	72.3%	80.6%	35.9%	0.87
2012	11.5%	61.1%	73.3%	80.9%	36.4%	0.87
2013	11.7%	64.0%	73.4%	80.5%	35.3%	0.88

Notes:

Source: Institute of Information and Prognoses of Education

1. $Q_i = Chi / F$ Di - i-year-olds at nursery

Pi - population of i-year-olds

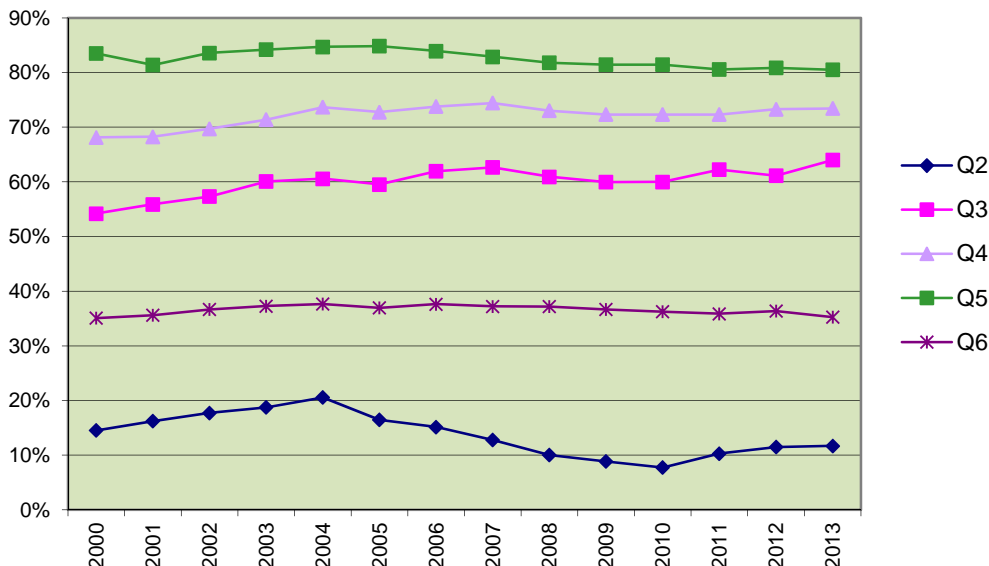
In marginal cases (Q2, Q6) this concerns children younger than 3 years or 6 years and older.

2. Ch3-5 / P3-5 (referred to as gross attendance) is the ratio of children at nursery to the group of 3 to 5-year-old children.

Since 2005 there has been a significant decrease in the representation of the youngest children. The share of them fell from 20.6% to 7.8% in 2010 whilst in the past three years the share has been growing. Also the share of 5-year-old children and nursery has been falling, from 84.8% to 80.5%. Also the integral indicator of gross attendance (Ch3-5/P3-5) since 2004 has fallen from 0.93 to 0.88, indicating a certain decrease in the overall attendance of children at nursery. Alongside this, demand for these facilities is growing; the number of pending applications since 2006, its lowest point, has increased 9-fold.

These signals indicate an adverse development in the age structure of children at nursery.

Graph N2: Development in the share of children attending nursery, by age



Development in the group of indicators: **classes, teachers and schools** strongly correlated with the number of children at nursery. This is shown by the following table of correlation coefficients for the period 2000 to 2013 (maximum $r = 1$):

r	children at NS
classes	0.871
teachers	0.886
schools	0.667

The dependence is reflected in the similarity of the trajectories of these indicators.

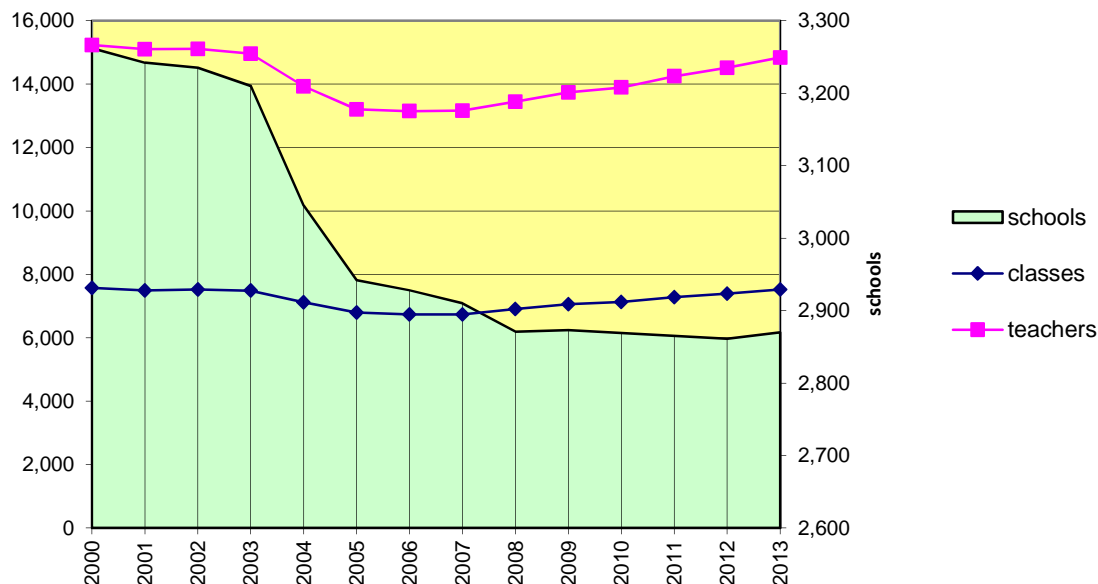
Table N3: Development in the number of classes, teachers and schools (nurseries)

year	classes	YYC (C)	teachers	YYC (T)	schools	YYC (S)
2000	7,576	0.97	15,229	0.96	3,262	0.99
2001	7,491	0.99	15,100	0.99	3,242	0.99
2002	7,524	1.00	15,115	1.00	3,235	1.00
2003	7,488	1.00	14,963	0.99	3,210	0.99
2004	7,117	0.95	13,931	0.93	3,045	0.95
2005	6,795	0.95	13,201	0.95	2,942	0.97
2006	6,736	0.99	13,149	1.00	2,928	1.00
2007	6,739	1.00	13,164	1.00	2,910	0.99
2008	6,908	1.03	13,445	1.02	2,871	0.99
2009	7,062	1.02	13,741	1.02	2,873	1.00
2010	7,126	1.01	13,896	1.01	2,869	1.00
2011	7,277	1.02	14,248	1.03	2,865	1.00
2012	7,395	1.02	14,515	1.02	2,861	1.00
2013	7,526	1.02	14,841	1.02	2,870	1.00

Source: Institute of Information and Prognoses of Education

In the decline face up to 2005 the number of classes fell by 10%, number of teachers by 13% and the number of schools also by 10%. After 2006 there was growth in the reference population of 3- to 5-year-olds, the number of classes and teachers and nursery schools increased by 12%, and 13% respectively. Alongside this, the number of schools fell by 2%. This disparity resulted in an increase in demand for nurseries in later years.

Graph N3: Development in the number of classes, teachers and schools (nurseries)



Evaluative indicators from 1990 onward, fell overall; the average number of children per class over twenty years fell by three from 23.3 to 20.3; the number of children per teacher by almost 3 from 23.2 to 20.6. The average size in 2001 was only 46 children/school, since which time it has grown to the current figure of 53.

Table N4: *Development in the number of children per class, teacher and school (nursery)*

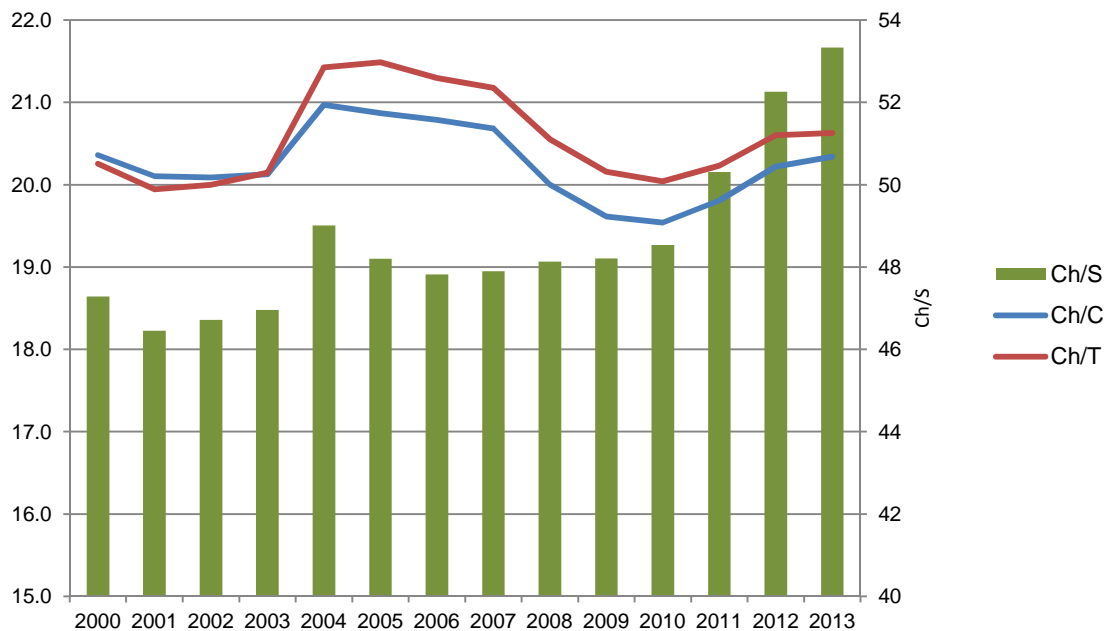
year	Ch/C	Ch/T	Ch/S
2000	20.4	20.3	47
2001	20.1	19.9	46
2002	20.1	20.0	47
2003	20.1	20.1	47
2004	21.0	21.4	49
2005	20.9	21.5	48
2006	20.8	21.3	48
2007	20.7	21.2	48
2008	20.0	20.6	48
2009	19.6	20.2	48
2010	19.5	20.0	49
2011	19.8	20.2	50
2012	20.2	20.6	52
2013	20.3	20.6	53

Key:
 Ch/C average number of children per class at nursery,
 Ch/T* average number of children per teacher at nursery,
 Ch/S average number of children per nursery school

Source: Institute of Information and Prognoses of Education

In the last decade the share values have not changed, and have remained at the same values. Class size ranged around 20.2 children per class, while the average number of children and teachers was 20.6. In connection with the growth in demand for places at nursery since 2007, the occupancy rate of schools has increased from 48 to the current figure of 52 children.

Graph N4: *Development in indicators for nurseries*



* in the case of nurseries, this indicator is calculated as 2 x Ch/T

2. Primary schools

Indicators of pupils at primary schools are, due to compulsory school attendance, closely tied to demographic development. After the "strong" years of the 1970s, the number of six-year-olds went into long-term decline. At present this population year ranges around 74.3% of its level from 2000.

The number of **new entrants** to primary schools declined up until 2008. The average 4% year-on-year rate decreased from 67 800 (year 2000) to 47 500, i.e. by 20 300. In connection with the growth in the number of new-born children in the first decade of the millennium, this indicator has also been increasing since 2009, and up to 2013 had increased by 6%. This growth phase should continue up until 2017.

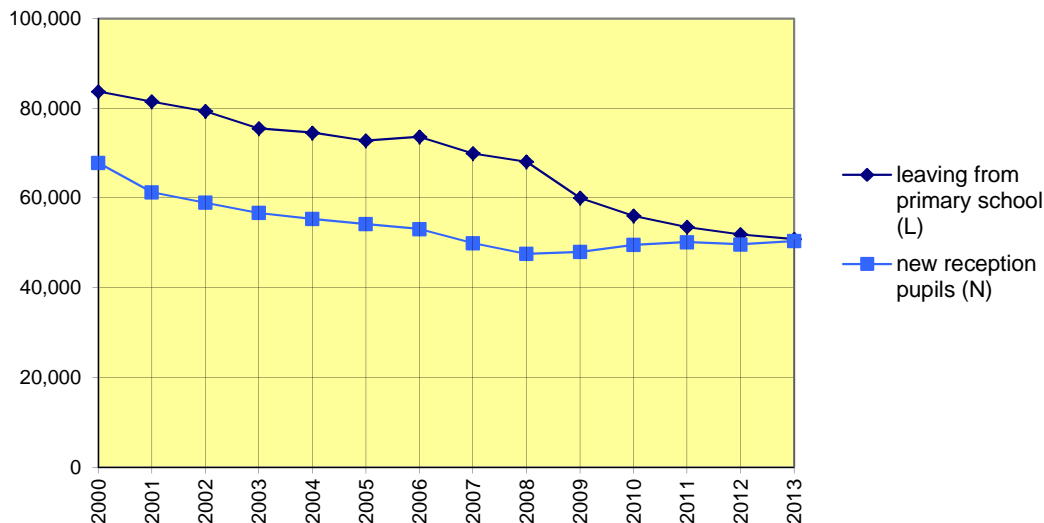
Table N1: Development of new reception pupils and leaving pupils at primary schools

year	new reception pupils (N)	year-on-year coefficient YYC(N)	phase type Phi (N)	leaving from primary school (L)	year-on-year coefficient YYC(L)	phase type Phi (L)	difference (N-L)
2000	67,829	.		83,722	.		-15,893
2001	61,265	0.90	decline phase	81,469	0.97	decline phase	-20,204
2002	58,955	0.96		79,328	0.97		-20,373
2003	56,693	0.96		75,515	0.95		-18,822
2004	55,310	0.98		74,529	0.99		-19,219
2005	54,166	0.98		72,780	0.98		-18,614
2006	53,074	0.98		73,610	1.01		-20,536
2007	49,927	0.94	Phi (N) 0.70	69,930	0.95	-20,003	
2008	47,531	0.95	growth phase	68,103	0.97	-20,572	
2009	47,945	1.01		60,007	0.88	-12,062	
2010	49,563	1.03		56,017	0.93	-6,454	
2011	50,145	1.01		53,539	0.96	-3,394	
2012	49,643	0.99		Phi (N) 1.06	51,908	0.97	-2,265
2013	50,383	1.01		50,837	0.98	FI (L) 0.61	-454

Source: Institute of Information and Prognoses of Education

Likewise, the number of pupils leaving from primary schools declined up until 2008, at an average rate of 3%; in later years this decline has become even more marked. In comparison with 2000, there are leaving from primary schools almost 40% fewer pupils, or in absolute terms, the ratio is 50 800: 81 900.

Graph PS1: Development in new reception pupils and leaving pupils at primary schools



Between 2000 and 2009, the numbers of pupils leaving was on average 17 900 higher than the number of new entrants, therefore the total number of primary school pupils fell significantly.

In the near future the balance difference will change in favour of new reception pupils, whereby the total number of pupils at primary schools will begin to rise.

The number of primary school **pupils** has declined over the long term (since 1987). An exception were the years 1997 to 1999, when ninth-year grades took up compulsory attendance. Since 2000, the total number of students decreased by 35%, from 650 900 to 424 000, i.e. by almost 227 000. the decline phase should last until 2014, then the number of primary school pupils should begin to rise.

Table PS2: *Development of primary school pupils in total and by stage*

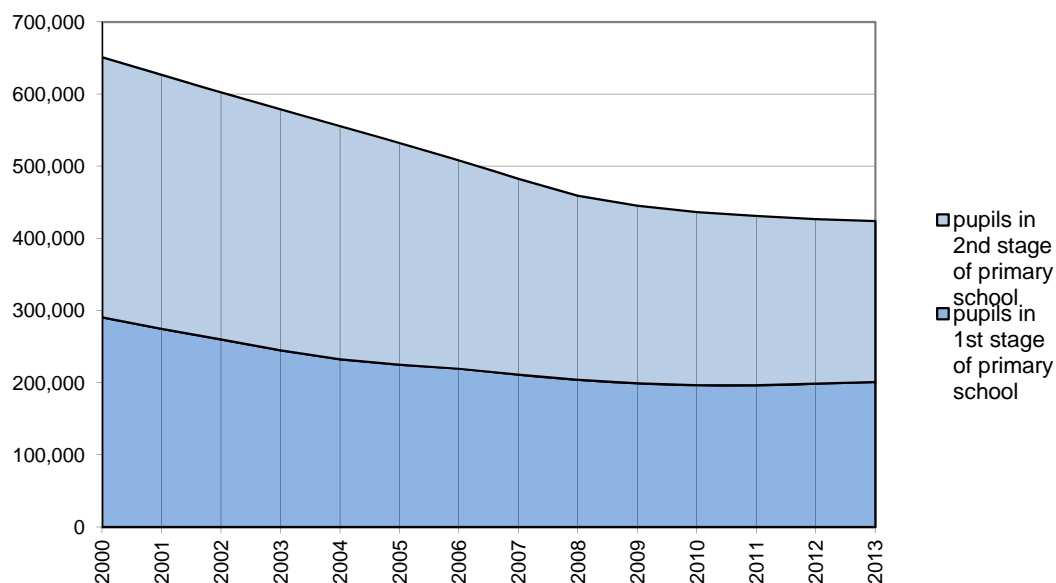
year	pupils in 1st stage of primary school	year-on-year coefficient YYC(P1)	pupils in 2nd stage of primary school	year-on-year coefficient YYC(P2)	pupils total	year-on-year coefficient YYC(P)	phase type Phi (P)
2000	290,653	.	360,313	.	650,966	.	phase decline
2001	274,684	0.95	351,961	0.98	626,645	0.96	
2002	260,022	0.95	342,338	0.97	602,360	0.96	
2003	245,031	0.94	333,980	0.98	579,011	0.96	
2004	232,528	0.95	322,807	0.97	555,335	0.96	
2005	225,005	0.97	307,183	0.95	532,188	0.96	
2006	219,461	0.98	288,669	0.94	508,130	0.95	
2007	211,461	0.96	271,105	0.94	482,566	0.95	
2008	204,240	0.97	254,933	0.94	459,173	0.95	
2009	199,067	0.97	246,170	0.97	445,237	0.97	
2010	196,439	0.99	240,212	0.98	436,651	0.98	
2011	196,816	1.00	234,358	0.98	431,174	0.99	FI (P) 0.65
2012	198,808	1.01	227,844	0.97	426,652	0.99	
2013	201,054	1.01	222,946	0.98	424,000	0.99	

Note: There is no "zero" year for primary school pupils.

Source: Institute of Information and Prognoses of Education

From 2000 to 2010, the number of **1st stage** primary school pupils fell from 290 600 to 196 400 at an average annual rate of 4%, i.e. by 94 200. In the following period the indicator entered a growth phase, which should culminate in 2020. The number of pupils at the **2nd stage** of primary school fell over the period from 2000 from 360 300 to 222 900, i.e. by 137 400. The average rate of decline was also 4%. The decline should continue until approximately 2015.

Graph PS2: *Development in the pupil structure by primary school stage*



Repetition rate is the ratio of the number of repeating pupils to the relevant number of pupils. It may relate to a school year, school stage or whole primary school.

Up until 2008, the repetition rate for the whole of primary school rose, against the figure for 2000, from 1.9% to 2.6%. In recent years the figure has declined slightly.

Table PS3:

Year repetition rate by primary school stage and overall

year	1st stage	2nd stage	overall	phase type Phi (overall)
2000	2.2%	1.8%	1.9%	growth
2001	2.3%	1.8%	2.0%	
2002	2.3%	1.7%	2.0%	
2003	2.5%	1.8%	2.1%	
2004	2.5%	1.8%	2.1%	
2005	2.6%	1.8%	2.2%	
2006	2.6%	1.9%	2.2%	
2007	2.9%	2.2%	2.5%	
2008	3.2%	2.3%	2.7%	decline
2009	3.1%	2.0%	2.5%	
2010	2.8%	1.9%	2.3%	
2011	2.9%	1.9%	2.3%	
2012	2.8%	1.9%	2.3%	
2013	2.9%	2.1%	2.5%	

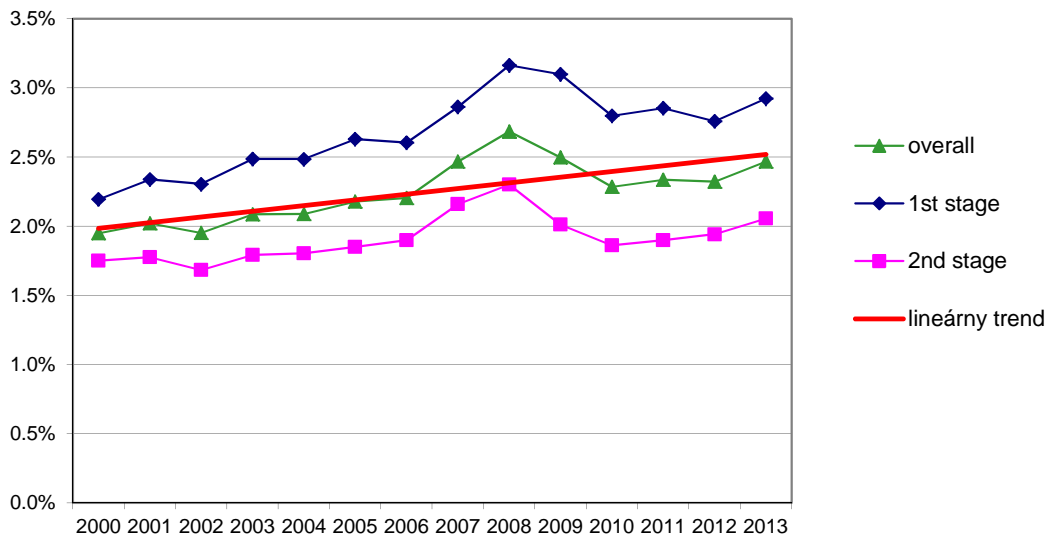
Source: Institute of Information and Prognoses of Education

The development in the repetition rate at both primary school stages was one of growth. In the first stage this rate up until 2008 increased from 2.2% to 3.2%.

Particularly significant was the growth in the number of pupils repeating in the first year, this rate from 2000 rose from 4.17% to 6.26% in 2009. Since 2010 there has been a partial reduction, the future will show whether this is an exception, or the onset of a new positive trend.

In the 2nd stage the repetition rate rose from 1.8% (in 2000) to 2.3% (in 2008). In other years the rate fell slightly.

Graph PS3: *Year repetition rate by primary school stage and overall*



Development in the group of indicators: **classes, teachers, classrooms and schools** strongly correlated with the number of children at primary school.

This is shown by the following table of correlation coefficients r (maximum $r = 1$):

r	<i>pupils in PS</i>
classes	0.982
teachers	0.976
classroom	0.897
schools	0.990

The network of dependence was even greater than in the case of nursery schools. Strong dependence is then reflected in similar development trajectories of these indicators.

The decline phase in classes and teachers lasted up until 2008. In this period, the number of classes decreased by 5600 and the number of teachers fell by almost 7000. The following two years, the indicators, despite the decline in the number of pupils, did not change substantially. This was due to stricter rules for the highest number of pupils in a class, stipulated by the new Schools Act (no. 245/2008 Coll.). Since 2011, however, the number of classes has been falling slightly and since 2012 the number of primary school teachers has likewise fallen.

Table PS4: *Development in the number of primary school classes and teachers*

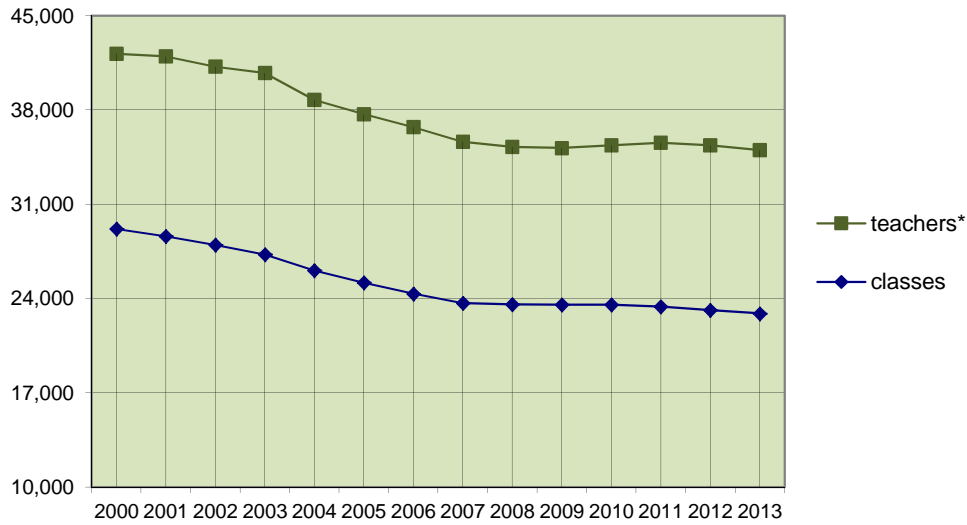
year	classes	YYC (T)	teachers*	YYC (T)	% external teachers
2000	29,181	.	42,174	.	5.8%
2001	28,625	0.98	41,983	1.00	5.5%
2002	27,992	0.98	41,213	0.98	5.9%
2003	27,272	0.97	40,747	0.99	7.5%
2004	26,090	0.96	38,758	0.95	7.2%
2005	25,172	0.96	37,690	0.97	7.4%
2006	24,360	0.97	36,734	0.97	8.2%
2007	23,648	0.97	35,633	0.97	14.5%
2008	23,556	1.00	35,246	0.99	14.8%
2009	23,541	1.00	35,171	1.00	14.7%
2010	23,542	1.00	35,382	1.01	14.8%
2011	23,401	0.99	35,571	1.01	14.9%
2012	23,143	0.99	35,384	0.99	14.7%
2013	22,885	0.99	35,006	0.99	14.8%

* total internal and external teachers

Institute of Information & Prognoses of Education

With regard to the expected growth in the number of pupils the current stable period is an intervening period before a growth phase in both indicators.

Graph PS3: Development in the number of primary school classes and teachers



The number of primary school **classrooms** up until 2008 fell by more than 2000. Since then, it has remained steady, averaging 33 000 classrooms.

Table PS5: Development in the number of classrooms and schools (primary schools)

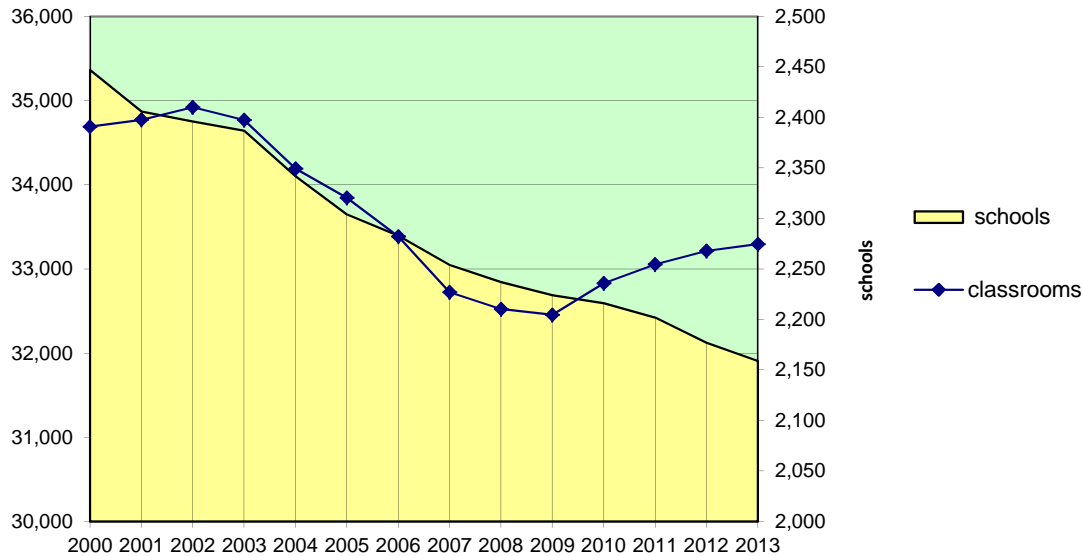
year	classrooms	YYC(CR)	schools	YYC(T)
2000	34,691	.	2,447	.
2001	34,772	1.00	2,406	0.98
2002	34,922	1.00	2,396	1.00
2003	34,769	1.00	2,387	1.00
2004	34,193	0.98	2,342	0.98
2005	33,846	0.99	2,304	0.98
2006	33,386	0.99	2,283	0.99
2007	32,725	0.98	2,254	0.99
2008	32,525	0.99	2,237	0.99
2009	32,456	1.00	2,224	0.99
2010	32,833	1.01	2,216	1.00
2011	33,055	1.01	2,202	0.99
2012	33,214	1.00	2,177	0.99
2013	33,294	1.00	2,159	0.99

Source: Institute of Information and Prognoses of Education

The indicator **schools** throughout the entire reporting period had a downward trend. In 2000 there were 2447 primary schools, whilst the current number is 2159. The number has thus decreased by 288, which in relative terms represents an 11.8% decrease.

With regard to the expected development in performance indicators in the primary schools system, in the coming years the need for both classrooms and new schools will grow.

Graph PS4: *Development in the number of classrooms and schools (primary schools)*



Evaluative indicators overall declined, the average class size since 2000 reduced by almost 4 pupils, whilst the number of pupils per teacher by 3 and classroom occupancy by almost 6 pupils. The average size of primary schools decreased from 266 to 196 pupils, i.e. by 70 pupils.

Table PS6:

Development in the number of pupils per class, per teacher, per classroom and school (primary school)

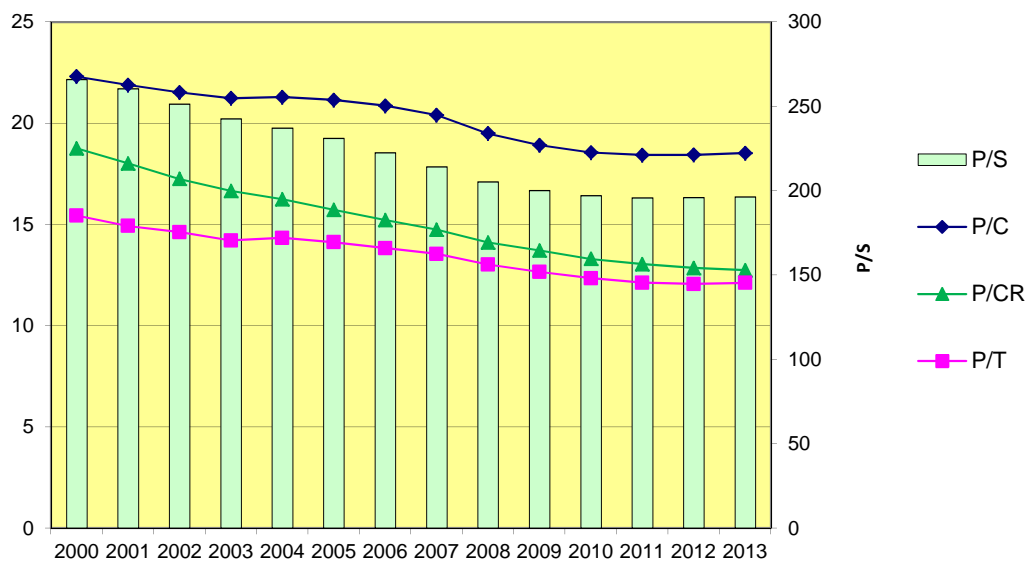
year	P/C	P/T	P/CR	P/S
2000	22.3	15.4	18.8	266
2001	21.9	14.9	18.0	260
2002	21.5	14.6	17.2	251
2003	21.2	14.2	16.7	243
2004	21.3	14.3	16.2	237
2005	21.1	14.1	15.7	231
2006	20.9	13.8	15.2	223
2007	20.4	13.5	14.7	214
2008	19.5	13.0	14.1	205
2009	18.9	12.7	13.7	200
2010	18.5	12.3	13.3	197
2011	18.4	12.1	13.0	196
2012	18.4	12.1	12.8	196
2013	18.5	12.1	12.7	196

Source: Institute of Information and Prognoses of Education

Key:

- P/C number of pupils per class (average class size)
- P/T number of pupils per teacher (average teacher load)
- P/CR number of pupils per classroom (average classroom occupancy)
- P/S number of pupils per school (average school size)

Graph PS5: *Development primary school ratios*



3. Grammar schools

Grammar schools are the only type of school in which the number of pupils has risen despite the declining demographic development. From 1990 through to 2007 the number of grammar school pupils increased 1.8-fold. In the coming period to 2019 grammar schools face a decline phase in the number of pupils.

Development in the number of **new entrants** to grammar schools in the years 2000 to 2008 was stable, around an average of 19 800. The jump in 2009 was caused by a change in the transition to 8-year grammar schools (from the 4th to the 5th primary school year). The number of new entrants to grammar schools in the coming period will fall up until 2017, in total by approximately 9%.

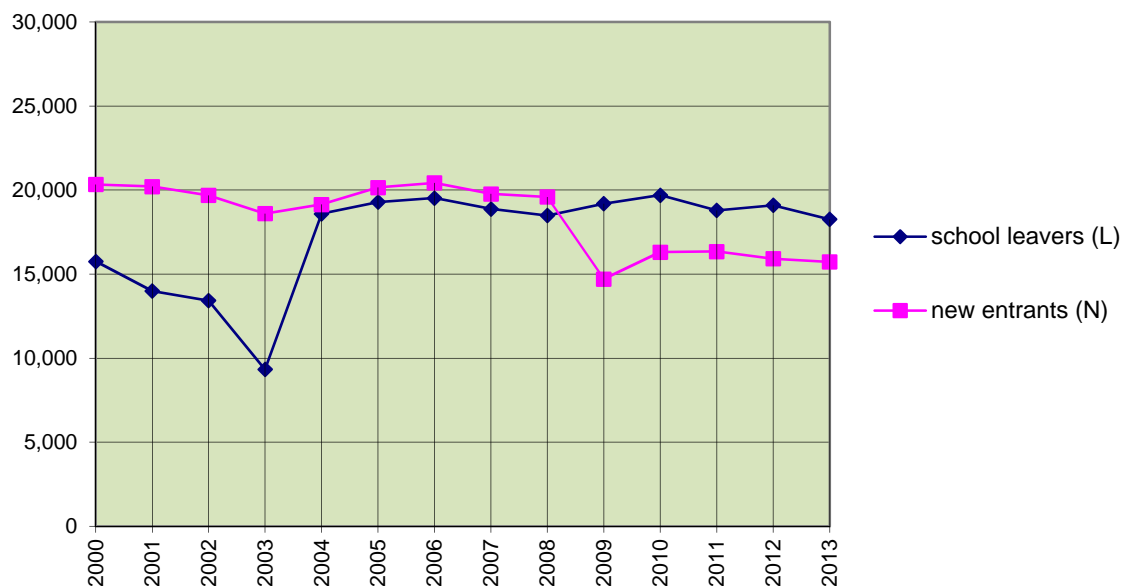
Table G1: *Development in the number of new entrants and school leavers at grammar schools*

year	new entrants (N)	year-on-year coefficient YYC(N)	school leavers (L)	year-on-year coefficient YYC(L)	difference (N-L)
2000	20,337	1.74	15,754	1.02	4,583
2001	20,208	0.99	13,995	0.89	6,213
2002	19,689	0.97	13,427	0.96	6,262
2003	18,603	0.94	9,331	0.69	9,272
2004	19,145	1.03	18,592	1.99	553
2005	20,156	1.05	19,284	1.04	872
2006	20,433	1.01	19,522	1.01	911
2007	19,771	0.97	18,875	0.97	896
2008	19,592	0.99	18,483	0.98	1,109
2009	14,713	0.76	19,191	1.04	-4,478
2010	16,306	1.11	19,692	1.03	-3,386
2011	16,348	1.00	18,796	0.95	-2,448
2012	15,916	0.97	19,098	1.02	-3,182
2013	15,730	0.99	18,260	0.96	-2,530

Source: Institute of Information and Prognoses of Education

Number of **school leavers** since 2004 has increased, and since that time has ranged around 19 100. The significant jump in 2003 was connected with the introduction of compulsory nine years at primary school (over the period 1997 to 1999). The indicator should fall from 2013 onward. There will be a significant fall of approx. 30% of the current number of grammar school leavers, which should continue up until 2022.

Graph G1: Development in the number of new entrants and school leavers at grammar schools



The growth in the number of grammar school pupils from the 1990s continued up until 2003, when it reached the symbolic 100 000 threshold. Over the following five years, the indicator remained close to the mean value of 99 800 pupils. Since 2009, the indicator has been on a downward trajectory, which should, up until 2019, decline by a further 16%.

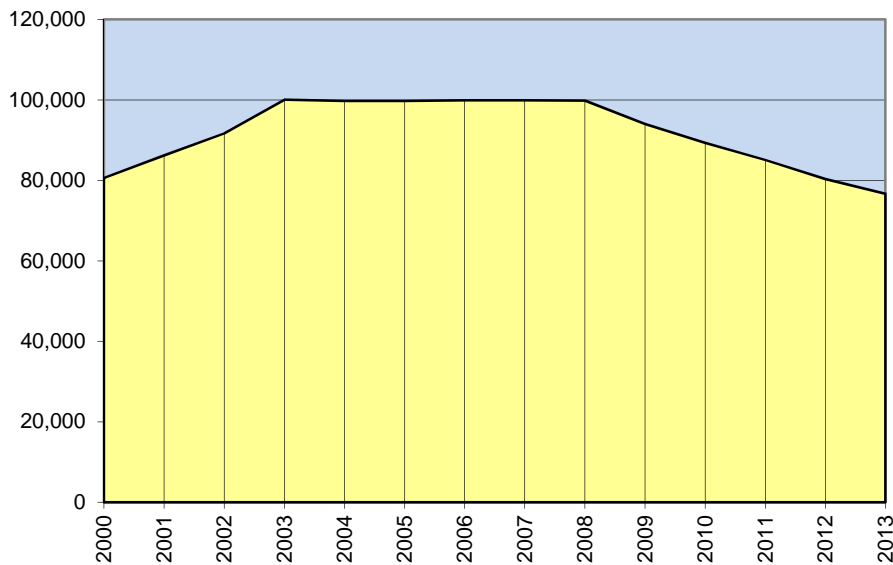
Table G2: Development in the number of grammar school pupils

year	pupils total	year-on-year coefficient $YYC(P)$	phase type $Phi (P)$
2000	80,615	1.05	phase growth 1.2
2001	86,239	1.07	
2002	91,661	1.06	
2003	100,057	1.09	
2004	99,738	1.00	transitional phase
2005	99,758	1.00	
2006	99,931	1.00	
2007	99,915	1.00	
2008	99,821	1.00	phase decline
2009	94,019	0.94	
2010	89,336	0.95	
2011	85,071	0.95	
2012	80,346	0.94	
2013	76,711	0.95	

Source: Institute of Information and Prognoses of Education

In terms of the length of study, 4-year study currently has the greatest representation (57.4%). Since 2000, when this type of study represented 50.2% of pupils, the share has increased by 7.2 percentage points. This was at the expense of 8-year grammar schools, which had the highest representation (45.8%) in 2001, while at present they are attended by 32.7% of pupils. The share of bilingual 5-year study rose from 3.8% in 2000 to 9% in 2012.

Figure G2: *Development in the number of grammar school pupils*



Of the group of indicators: **classes, teachers, classrooms and schools** only the first to strongly correlated with the number of pupils.

Correlation coefficients:
(For the years 2000 to 2013)

<i>r</i>	<i>pupils</i>
<i>classes</i>	<i>0.603</i>
<i>teachers</i>	<i>0.950</i>
<i>classrooms</i>	<i>0.110</i>
<i>schools</i>	<i>0.180</i>

The development in the number of classrooms was almost independent of the pupils indicator, particularly in the second half of this decade.

Number of **classes** at grammar schools increased over the period from 2000 to 2008 x 840, two then decline afterwards.

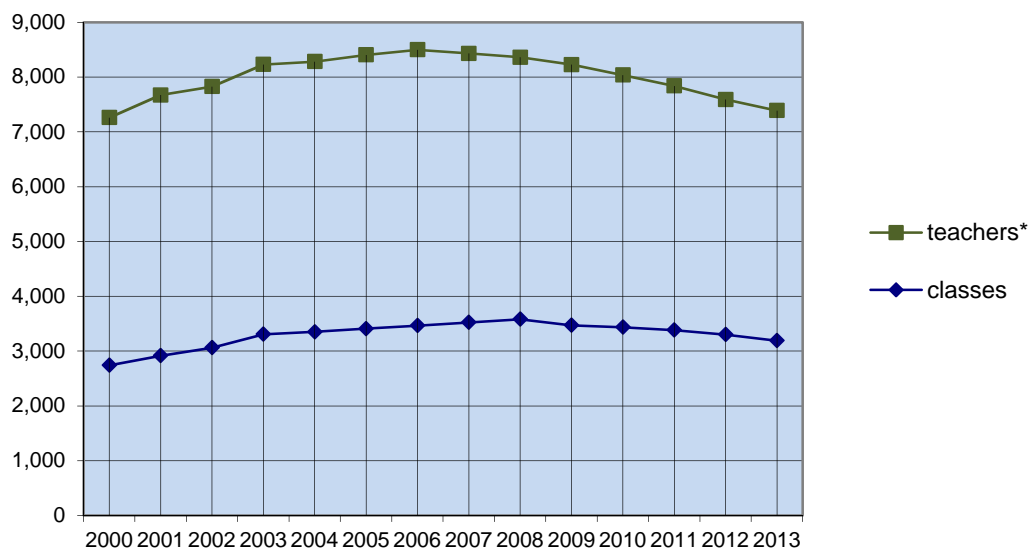
Table G3: *Development in the number of classes and teachers at grammar schools*

year	classes	YYC(C)	teachers*	YYC(T)	% external teachers
2000	2,741	1.05	7,260	1.01	13.8%
2001	2,916	1.06	7,672	1.06	13.3%
2002	3,062	1.05	7,827	1.02	11.5%
2003	3,308	1.08	8,230	1.05	9.9%
2004	3,351	1.01	8,282	1.01	8.9%
2005	3,409	1.02	8,404	1.01	9.9%
2006	3,465	1.02	8,498	1.01	10.5%
2007	3,523	1.02	8,431	0.99	18.2%
2008	3,581	1.02	8,359	0.99	18.2%
2009	3,472	0.97	8,225	0.98	18.4%
2010	3,437	0.99	8,035	0.98	18.3%
2011	3,385	0.98	7,837	0.98	18.7%
2012	3,303	0.98	7,590	0.97	19.2%
2013	3,191	0.97	7,387	0.97	20.5%

* total internal and external teachers *Institute of Information and Prognoses of Education*

The number of teachers and grew up until 2006, increasing against the figure for 2000 by 1238, since which time it has declined each year.

Figure G3: *Development in the number of classes and teachers at grammar schools*



The number of **classrooms** at grammar schools since 2003 has risen by 1300 to the current figure of 5400.

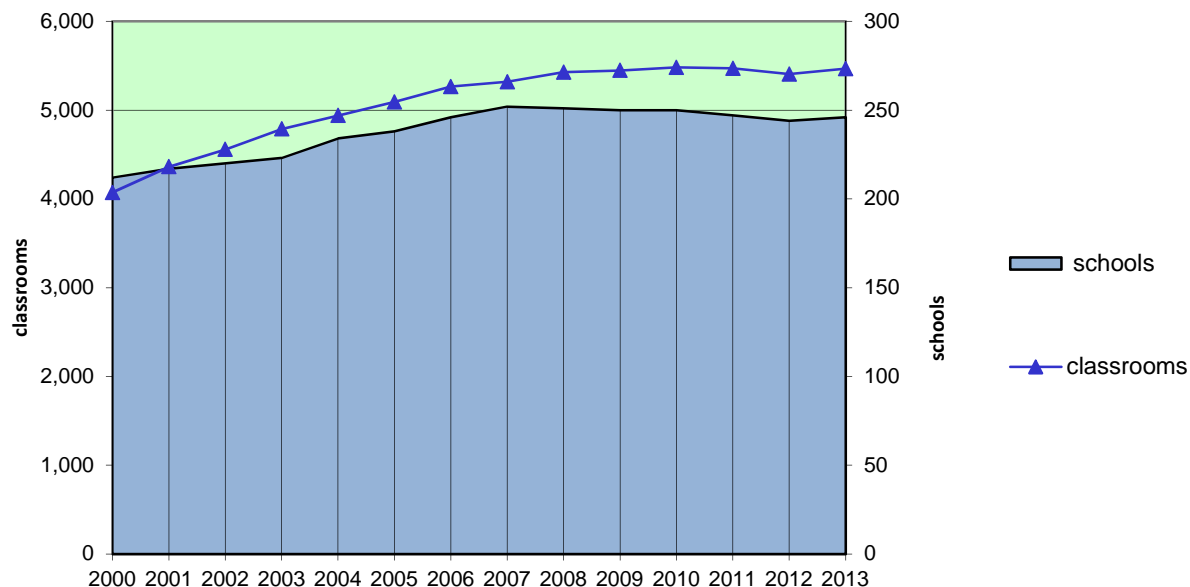
Table G4: Development in the number of classrooms and schools (grammar schools)

year	classrooms	YYC(CR)	schools	YYC(T)
2000	4,071	1.02	212	1.01
2001	4,361	1.07	217	1.02
2002	4,557	1.04	220	1.01
2003	4,787	1.05	223	1.01
2004	4,939	1.03	234	1.05
2005	5,091	1.03	238	1.02
2006	5,264	1.03	246	1.03
2007	5,318	1.01	252	1.02
2008	5,426	1.02	251	1.00
2009	5,447	1.00	250	1.00
2010	5,481	1.01	250	1.00
2011	5,470	1.00	247	0.99
2012	5,406	0.99	244	0.99
2013	5,466	1.01	246	1.01

Source: Institute of Information and Prognoses of Education

The number of **schools** increased by 32, from 212 to 244. Since 2008 this indicator has been stagnant or declining. With regard to the expected significant fall in pupils a decline in this group of indicators is also expected in the coming period.

Graph G4: Development in the number of classrooms and schools (grammar schools)



Evaluative indicators were rising until 2003, and then declined. The average class size since then has decreased from 30.2 to 25.8; the number of pupils per teacher from 12.2 to 11.2; and the number of pupils per classroom from 20.9 to 15.7. The average size of schools decreased from 449 to 349.

Table G5:

Development in the number of pupils per class, per teacher, per classroom and school (grammar school)

year	P/C	P/T	P/CR	P/S
2000	29.4	11.1	19.8	380
2001	29.6	11.2	19.8	397
2002	29.9	11.7	20.1	417
2003	30.2	12.2	20.9	449
2004	29.8	12.0	20.2	426
2005	29.3	11.9	19.6	419
2006	28.8	11.8	19.0	406
2007	28.4	11.9	18.8	396
2008	27.9	11.9	18.4	398
2009	27.1	11.4	17.3	376
2010	26.0	11.1	16.3	357
2011	25.1	10.9	15.6	344
2012	25.8	11.2	15.7	349
2013	26.7	11.5	15.6	346

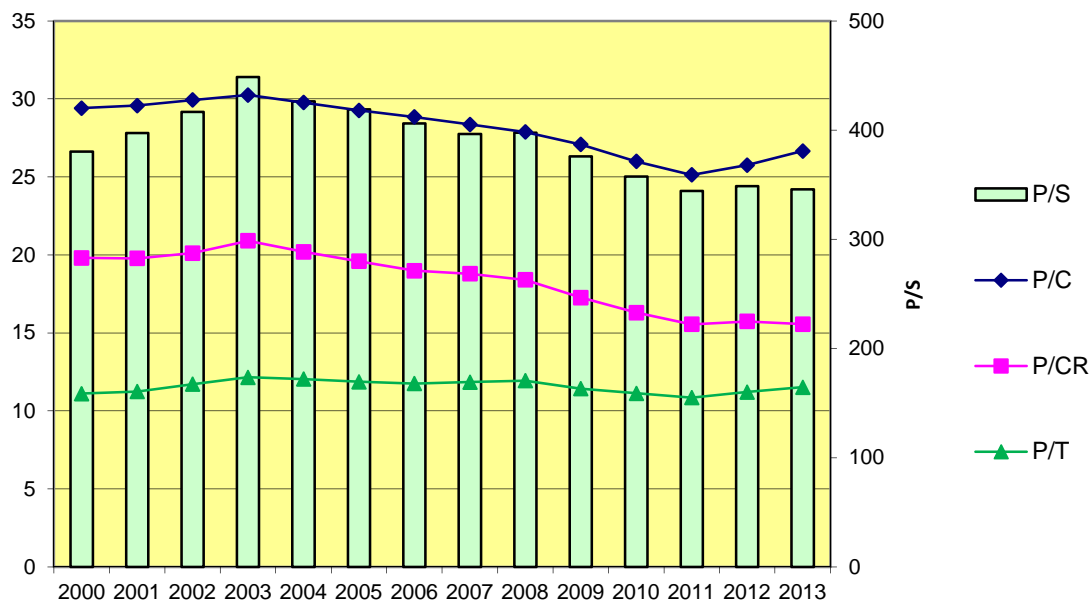
Source: Institute of Information and Prognoses of Education

Key:

- P/C number of pupils per class (average class size)
- P/T number of pupils per teacher (average teacher load)
- P/CR number of pupils per classroom (average classroom occupancy)
- P/S number of pupils per school (average school size)

In 2012, the ratios increased slightly.

Graph G5: Development in ratio indicators at grammar schools



4. Secondary vocational schools and conservatories

Secondary vocational schools have, since 2008, included also former secondary apprenticeship schools, the retrospective of indicators therefore is calculated according to the current schools system. Secondary vocational schools reached a quantitative zenith in the mid 1990s, since when the number of pupils at such schools has been in decline. Conservatories are a special type of secondary school, though in this analysis are included into one group together with secondary vocational schools.

The number of **new entrants** to secondary vocational schools and conservatories has fallen from 76 800 (in 2000), to a current figure of 44 900. At an average 4% annual rate the figure has fallen by some 32 000. This declining trend should continue also in the coming period, approximately until 2017. Then 11% fewer pupils should enter vocational schools.

Table V1: Development in the number of new entrants and school leavers at vocational school:

year	new entrants (N)	year-on-year coefficient YYC(N)	school leavers (L)	year-on-year coefficient YYC(L)	difference (N-L)
2000	76,848	1.53	67,016	0.95	9,832
2001	74,087	0.96	61,786	0.92	12,301
2002	67,629	0.91	49,863	0.81	17,766
2003	69,332	1.03	48,661	0.98	20,671
2004	67,922	0.98	58,805	1.21	9,117
2005	64,468	0.95	59,902	1.02	4,566
2006	64,014	0.99	58,005	0.97	6,009
2007	59,927	0.94	56,576	0.98	3,351
2008	56,372	0.94	51,433	0.91	4,939
2009	54,238	0.96	48,821	0.95	5,417
2010	48,893	0.90	49,354	1.01	-461
2011	46,481	0.95	48,012	0.97	-1,531
2012	44,893	0.97	46,479	0.97	-1,586
2013	42,780	0.95	42,904	0.92	-124

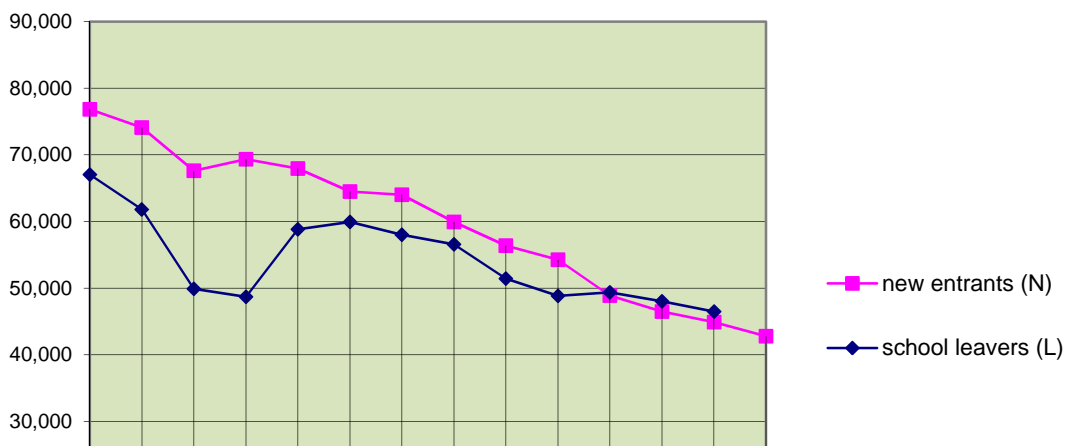
Source: Institute of Information and Prognoses of Education

The number of **school leavers** has fallen against 2000 by 20 500, to a level of 46 500.

The break in the trajectory over the years 2001 to 2003 was due to the compulsory fulfilment of the 9 years of primary school.

the decline phase should continue approximately until 2021, when 27% fewer pupils will be leaving these schools than at present.

Graph V1: Development in the number of new entrants and school leavers at vocational schools:



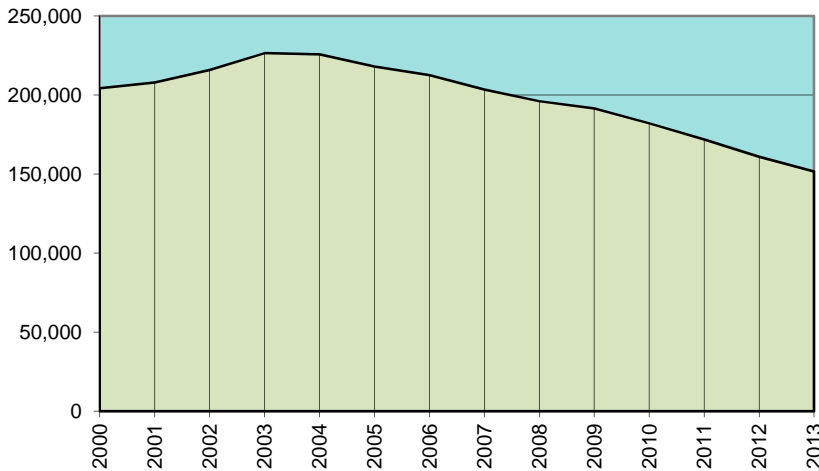
A local growth in the total number of **pupils** at secondary vocational schools and conservatory's was caused by the transformation of primary schools up until 2003. Since then the indicator has been on a downward trajectory and by 2011 had decreased by some 24%. This trend, with a further decline of 12%, should continue up until 2019

Table V2: *Development in the number of pupils of secondary vocational schools and conservatories*

year	pupils total	year-on-year coefficient YYC(P)	phase type PhI (P)
2000	204,200	1.01	growth phase 1.1
2001	207,979	1.02	
2002	215,865	1.04	
2003	226,459	1.05	
2004	225,796	1.00	decline phase 0.67
2005	218,052	0.97	
2006	212,594	0.97	
2007	203,477	0.96	
2008	196,080	0.96	
2009	191,540	0.98	
2010	182,102	0.95	
2011	171,833	0.94	
2012	160,941	0.94	
2013	151,688	0.94	

Source: Institute of Information and Prognoses of Education

Graph V2: *Development in the number of pupils at vocational schools*



Of the group of indicators (**class teachers, classrooms and schools**), the number of classes and teachers correlated strongly with the number of pupils. The number of schools correlated only moderately with the number of pupils.

Correlation coefficients:
(For the years 2000 to 2013)

r	pupils
classes	0.988
teachers	0.884
classroom	-0.430
schools	0.689

The number of classrooms, even during a fall in the number of pupils, rose (negative correlation coefficient).

The number of **classes** in vocational schools grew slightly in 2003, and has declined since then by 1400 to a current number of 7200.

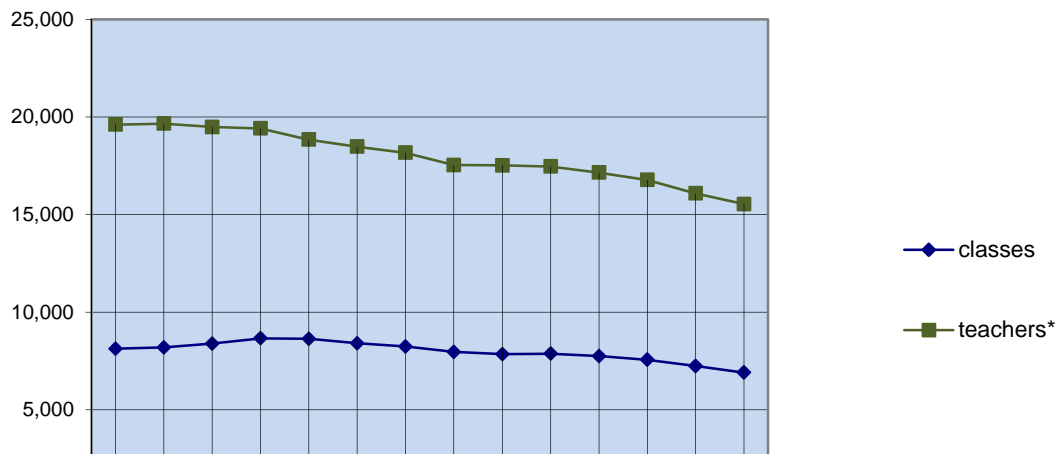
Table V3: Development in the number of classes and teachers at grammar schools and conservatories

year	classes	YYC(C)	teachers*	YYC(T)	% external teachers
2000	8,125	1.01	19,609	0.92	20.0%
2001	8,194	1.01	19,652	1.00	19.3%
2002	8,390	1.02	19,483	0.99	18.9%
2003	8,664	1.03	19,412	1.00	15.0%
2004	8,636	1.00	18,838	0.96	13.9%
2005	8,403	0.97	18,473	0.90	14.3%
2006	8,243	0.98	18,162	0.99	14.3%
2007	7,967	0.97	17,531	0.99	21.8%
2008	7,851	0.99	17,519	1.07	20.8%
2009	7,877	1.00	17,461	1.00	20.2%
2010	7,752	0.98	17,143	0.98	20.6%
2011	7,563	0.98	16,770	0.98	20.8%
2012	7,241	0.96	16,088	0.96	20.9%
2013	6,905	0.95	15,534	0.97	21.9%

* total internal and external teachers Institute of Information and Prognoses of Education

The number of **teachers** fell by 3500, from 19 600 (in 2000) to 16 100.

Graph V3: Development in the number of classes and teachers at vocational schools



Classrooms was the only indicator to grow up until 2011. From 2000 onward the figure increased by 587, from 11 900 to 12 500. In 2012, this figure fell to 12 300.

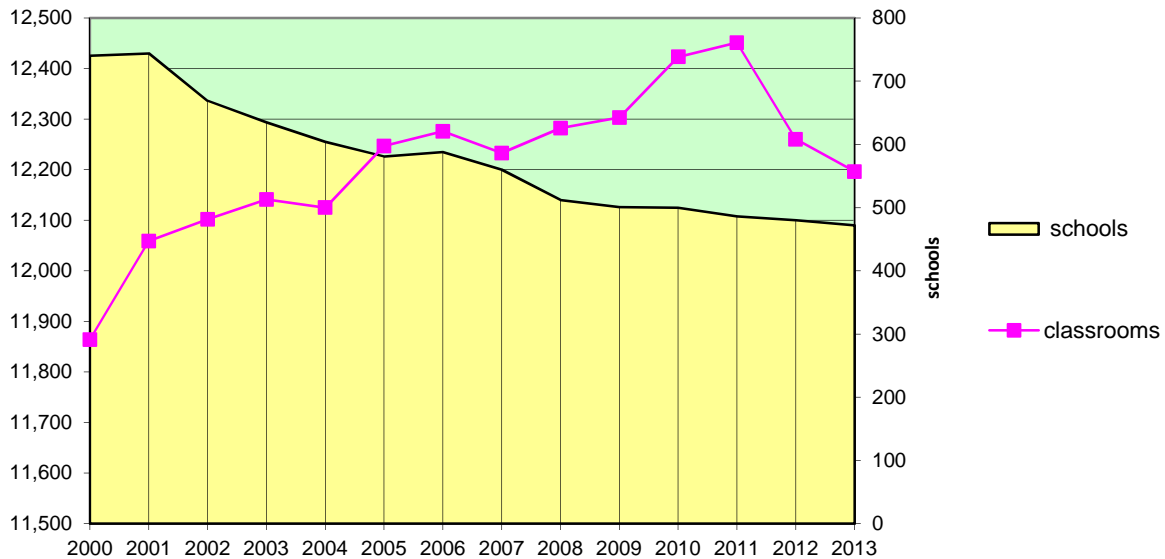
Development in the number of classrooms and schools Table V4

year	classrooms	YYC(CR)	schools	YYC(T)
2000	11,864	0.99	740	1.00
2001	12,059	1.02	744	1.01
2002	12,102	1.00	669	0.90
2003	12,141	1.00	635	0.95
2004	12,125	1.00	604	0.95
2005	12,247	1.01	581	0.96
2006	12,276	1.00	588	1.01
2007	12,233	1.00	560	0.95
2008	12,282	1.00	512	0.91
2009	12,303	1.00	501	0.98
2010	12,423	1.01	500	1.00
2011	12,451	1.00	486	0.97
2012	12,260	0.98	480	0.99
2013	12,196	0.99	472	0.98

Source: Institute of Information and Prognoses of Education

The number of **schools**, by contrast, over the same period decreased from 740 to 480, which is a decline of some 260.

Graph V4: Development in the number of classrooms and schools



Evaluative indicators grew until 2003, then declined until 2011. The average class size since then has fallen from 26.1 to 22.7. The number of pupils per teacher has fallen from 12.0 to 10.2, per classroom from 18.7 to 13.8. The average size of schools decreased from 276 to 354

*Development in the number of pupils per class,
per teacher, classroom and school (VS+C) Table V5*

year	P/C	P/T	P/CR	P/S
2000	25.1	10.4	17.2	276
2001	25.4	10.6	17.2	280
2002	25.7	11.1	17.8	323
2003	26.1	11.7	18.7	357
2004	26.1	12.0	18.6	374
2005	25.9	11.8	17.8	375
2006	25.8	11.7	17.3	362
2007	25.5	11.6	16.6	363
2008	25.0	11.2	16.0	383
2009	24.3	11.0	15.6	382
2010	23.5	10.6	14.7	364
2011	22.7	10.2	13.8	354
2012	23.7	10.7	14.0	358
2013	24.9	11.1	14.1	364

Source: Institute of Information and Prognoses of Education

Key:

- P/C number of pupils per class (average class size)
- P/T number of pupils per teacher (average teacher load)
- P/CR number of pupils per classroom (average classroom occupancy)
- P/S number of pupils per school (average school size)

In 2012, the evaluative indicators increased slightly to 23.7 (P/C), 10.7 (P/T), 14.0 (P/Ch) and 358 (P/S).

Graph V5: Development in ratio indicators at secondary vocational schools

