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SLOVAK GOVERNANCE INSTITUTE
INŠTITÚT PRE DOBRÉ SPRAVOVANIE SPOLOČNOSŤ

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Stredoeurópsky inštitút pre ekonomické a sociálne reformy

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National Report on Education Policy is the first contribution to a series of national reports published by SGI. These reports seek to contribute to public and experts' discussion on alternatives from amongst which our society chooses when providing for public services. The next national report, which is due in the first half of 2002, will be devoted to research and development, with other national reports to appear soon.

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Foreword

Experts often claim that in the future mankind will not divide into the rich and the poor, but into the educated and the uneducated. Slovak society is beginning to regard education and its quality not only as a private, family topic, but still more and more as an important theme of more general, political discussions.

The National Report on Education Policy aims at broadening the scope of this discussion. In its first chapter devoted to the analysis of basic external impacts on education, it seeks to describe the relation between education and society. We also focus on the principal relation between education and the system of values, demographics, the economy, and the political system.

The following two chapters of the National Report analyse the present state of the Slovak education system in terms of quantity and quality. They also present a case study on education in two significantly different regions of Slovakia: the Bratislava and Košice regions. In the third chapter, we deal with several issues that are, in our opinion, of particular importance for education policy, such as the governance and administration of schools, financing of schools, and issues related to teaching staff. We also deal with entry into the education system, disadvantages groups within the system, and final outcomes of education as measured through study results, all of which we consider important.

The National Report on Education Policy brings with it the good news that the ice is beginning to thaw in the area of education. Key conceptual questions concerning the education policy are being discussed by the government, ministerial officials, university rectors, and teachers. As a result, fundamental reforms are being prepared and implemented. This report has originated at a time that can be considered as crucial for the education system. The coming months should bring the introduction of many new rules – due to the transfer of school governance powers closer to citizens – to higher territorial units and municipalities – and the changes in the financing system. Other changes (such as the new Higher Education Act) are being drafted and undergoing negotiations. The ongoing education reforms are analysed in the fourth, closing chapter of this publication.

All the chapters provide an overview of problematic issues accompanied by measures for improvement. These are summarised at the end as nine key challenges to education policy in Slovakia. However, the main aim of publishing this report by INEKO and SGI is neither to criticise the situation in the current education system nor to provide immediate and perfect solutions to its problems. Rather, while writing the report, we aim to contribute to broadening the present discussion on education policy issues, alternatives to choose from and at what cost, and especially on what prospects the present education system will bring for our country in the future.

Chapter 1

Society and Education

The transition of the region, part of which is the Slovak Republic, towards a pluralistic democracy and market economy is accompanied by significant economic, social, and political changes. Such changes always bring about the need for new knowledge, abilities and skills. There is an institution within our society designated to meet such needs – the school.

This chapter will primarily be devoted to the relationship between society and education. The education system is outwardly affected by various characteristics of society, but with only a limited possibility to influence them in the short or mid-term. Thus, generally the education system should adapt to them and meet the needs of society and its changes.

However, social changes do not pertain only to post-communist transition countries. A European Union white paper "Schooling and Education, Toward a Learning Society" identifies three factors of change having impact on the functioning of society as well as the crucial importance of education in a changing society. These three factors include the rise of the information society, the degree of scientific advancement, and globalisation of the economy. Being the three characteristic features of the modern era, they pose a new challenge for mankind to face. In response to these factors, the vision of a learning society is presented, in which the role of education is to provide a sufficient basis for further development of knowledge and offer opportunities for people to find proper social and economic positions. At the same time, they suggest fundamental directions for new perception of education and its role in society. The introduction of information technology into the teaching process, support and orientation towards acquiring new scientific knowledge, and the interconnection of schooling and the labour market are all important strategies to be found in current European school systems.

Globalisation gives shape to a new form of society – a so-called learning society. It also transforms the nature of work and increases the need for mobility and flexibility of the workforce as well as the capability to utilise new technologies. However, it also brings about social exclusion for many people unable to meet the above criteria.

The education system should respond to changes within society and to the need for new knowledge and skills resulting from these changes. An efficient education system plays an important role in the process of social change as it allows for economic and social mobility – i.e. choosing individual life strategies.

The school system and the concept of education as presently known has evolved from a relatively simple socialising instrument and method of passing information between generations to a complex social institution with multiple functions. Among other things, these include mass education, support for scientific progress, and social and occupational selection. There are numerous links and complex relations binding the school system with the broader structure of society. The degree and quality of education affects the selection of life strategies, reproductive and economic behaviour, political preferences etc.

On analysing the educational system, it is therefore necessary to take into account the

complexity of the system and investigate it on multiple levels. On the macro-level, the research should focus on its function within the social structure, particularly **its relation to the system of values, social stratification, demographics, the economy, and political system.** On the mid-level it deals with the structure of the system itself and its functioning, whereas the micro-level analysis seeks to provide insight into existent relations within particular units – schools and classes and the role of students' families and environment.

The Value and Role of Education in the Society – Stratification and Mobility, Inequality and Exclusion

Since the second half of the twentieth century man's opportunity to be educated has been regarded as a fundamental human right and chance for better life. In meritocratic societies, social status increasingly tends to be allocated on the basis of level of education attained. Moreover, a correlation can be traced between the level of education and amount of earnings – thus corresponding with the standard of living. Education can therefore be considered one of the key factors as far as life opportunities are concerned.

In order to reduce the degree of social exclusion and poverty[1], it is not enough to improve the conditions of education; social and economic measures at multiple levels need to be taken as well. How successful the reduction can be depends to a large extent on the characteristics of the economy, its formal and informal rules and incentives they set for the behaviour of people, companies, and institutions. The rules in society should motivate people to appreciate the value of property and human capital as well. Highly qualified and educated people are more capable of adapting to changes in the labour market and their individual rate of return for their work (or education in this respect) in terms of earnings is high. People with poorer qualifications often face difficulties in finding a highly productive occupation and they are more vulnerable by changes in companies' demand for workforce. The importance of this fact has become apparent in the period of restructuring changes presently under way in post-communist countries. Inevitable economic changes within certain industries accompanied by employee redundancies are by far easier to cope with for people with advanced skills and higher qualifications.

The restructuring of formal and informal institutions, as part of the transformation process, contributes to the marginalisation and exclusion of individuals and whole social groups. It may depend on individual characteristics such as age, education, gender, family size, social class, or domicile. This issue has become more urgent in Slovakia over recent years after abandoning the former idea of a classless society and regulatory interventions of the state, which had been used to prevent both substantial social falls and rises. Following the removal of artificial barriers, the social inequality and real stratification have become fully manifested. The degree of education apparently plays an important role in relation to this issue. Recent economic difficulties have caused even greater differences to appear between the majority and groups which were marginalized even during the former regime – for example the physically and mentally disabled or ethnic minorities.

[1] Ongoing discussions in education and related policies, like in other fields of public policy, are focused on the necessity to struggle against poverty in a rapidly developing global economy. To provide for a definition of this problem, a notion of social exclusion is presently often used instead of too narrow a concept of poverty. It stresses social isolation as the most important aspect of exclusion, which is inevitably accompanied by a financial shortage and unemployment. People isolated and excluded in this manner are unable to participate in the economic, social and political life of the society, which subsequently slows down the development of the society itself.

In the following text, we will outline the theory of social stratification and define so-called vertical poverty. On that basis we will be able to understand in more detail movements going on in the society and work out answers to two questions of substantial importance:

- Does the education system possess instruments to eliminate, or at least reduce, vertical poverty and the related exclusion from the society?
- Are these instruments effectively utilised or is it the contrary and the current model of the education system only leads to replication of present problems?

These questions will accompany us though this chapter and will be analysed in more detail in Chapter 3, in the section devoted to the access of disadvantaged groups to education.

Social Stratification, Vertical Poverty

During the communist era two stratification pyramids – a social capital pyramid (relations) and a material capital pyramid (private property) were formed. They were complementary – the social capital was a prerequisite to obtaining the material capital. Based on these models, a stratification system emerged later, defined by new relations in the society. The social capital still plays an important role, as a means of eliminating the risk of an individual's social fall. Apart from an individual's fall, social falls involving whole groups can take place in the stratification structure – i.e. causing so-called vertical poverty, when whole groups are being cast to the very outskirts of society. Vertical poverty means not only material, but primarily social deprivation. This mechanism of exclusion mostly affects the categories of people with lower education and those qualified for vanishing professions. People stricken by poverty feel that all their skills, capabilities, and knowledge have become irrelevant. The high level of education and high occupational mobility in Communist countries were regarded as a guarantee of smooth transition from one regime to another. Poverty should have only been a temporary phenomenon, safeguarded by social welfare services. Yet, the history of past ten years clearly shows that these assumptions were not correct. On the contrary, inequalities within society deepened, unemployment and poverty emerged, and large groups of people found themselves on the outskirts of society. Instead of functioning as a life-belt after the failure of social welfare, the school system contributes to the state of exclusion. Whereas in the past poverty could be overcome by an individual life strategy, today's poverty is a result of systemic failures, including those of the educational system, and cannot be eliminated through systemic change alone. The equality of opportunities regarding access to education is a key requirement for reducing poverty which results from insufficient preparation for living in an economy based on knowledge and information. However, the education system itself produces inequalities, as it selects a few and lets them achieve high results, while leaving others far below them. This provides ground for stratification, often reflecting the social status, not actual ability. Therefore, the education system cannot be regarded as autonomous, since to a large extent it contributes to the replication of the social order and related social inequalities.

Social Exclusion and Education

Social exclusion means separation, or displacement, of a particular group to the periphery of a society owing to a number of different factors (origin, age, domicile, social links, or wealth). Education is a significant factor in determining individuals' success in society, with a considerable impact on their social status and wealth. In the following section we will deal with the relation of social exclusion and education in Slovakia and take a look at two corresponding cases: the degree of functional literacy as a manifestation of social exclusion in education and parents' payments related to

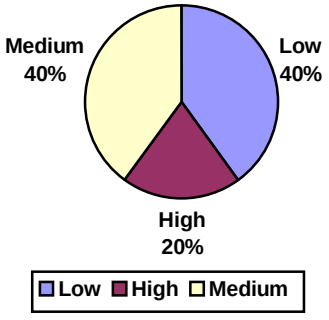
their children's education as one of the possible reasons behind it.

Functional Literacy

Contemporary trends worldwide suggest that education and schooling are going to become still more and more vital for any form of an individual's functioning within society. Information and data are becoming valuable commodities and groups lacking access to them are gradually marginalized and excluded.

Apart from formal education as an outcome of studies at a given type of school, even greater importance has to be given to mastering skills that allow the individual to maintain course in the information society. These skills are commonly referred to as functional literacy, sometimes known under the term "second literacy". It encompasses various activities such as computer work, e-mail communication, using a mobile phone or bank credit card, or managing more sophisticated household appliances. A research into functional literacy was carried in 2000 by the Institute for Public Affairs (IPA) and on the basis of achieved results the inhabitants of the Slovak Republic were classified into three categories in terms of an accomplished degree of functional literacy (low, medium, high) as shown in the following chart.

Chart: I.1: Degree of functional literacy – Inhabitants of Slovakia



Source: Velšic, M.: Druhá gramotnosť už aj na Slovensku (Second Literacy Already in Slovakia), SME July 27, 2000.

The IPO research shows that approximately half the adult population can adapt to new ways of communication with little or no difficulty. This group mainly includes younger, more highly educated people with better qualifications and higher social status, and the inhabitants of bigger cities. As little as a quarter of respondents (26%) admit that they find it very or rather difficult to adapt to modern technologies. Still, a relatively large group (22%) is made up of people who have never been in such a situation. The "outsiders" group mostly comprises the oldest generation of people, people with the lowest education, unskilled workers, people with the lowest social status, and inhabitants of the smallest villages. If the above chart showed a sample of the university-educated population, it would show completely different results – the degree of functional literacy reaches as much as 58%, in case of intellectuals and entrepreneurs even 79%. In addition to education, age has to be taken into account as an important factor – this survey was targeted at the adult population only, the younger generation is supposed to be much more "literate" in this respect. Other important factors are the respondents' economic activity, social status, or domicile. Generally, it still holds that functional literacy will be a more and more significant factor in social stratification.

Education-related Payments

The extent to which education is accessible for children depends largely on a so-called social demand for education by students and their parents as well as on the willingness and ability of parents to cover expenses related to their children's education.

According to a survey carried out in 2000 by Institute for Economic and Social Reforms (INEKO) and Transparency International Slovakia (TIS) dealing with parental payments for their children's education, the majority of respondents claimed that in a certain way they were subsidising the school their children were attending. In addition to tuition fees at private and religious schools, parents may choose to donor a voluntary

contribution to a school in a variety of forms: a financial contribution, material gift, their own labour, or in some other way. The overwhelming majority of respondents (78%) provide voluntary contributions to their children's schools, usually in financial form. This applies generally with the exception of respondents whose children are university students, where only 39% of respondents claimed to have submitted a voluntary contribution. Parents make these voluntary payments in good faith believing that it is good for their children (44.9%) and that their contribution is necessary for the operation of the school (36.4%).

Costs of Education

A good example to demonstrate the rise of payments with the higher degrees of education is the payment for school aids such as exercise books, school bags, sportswear etc. About 65% of parents whose children attend a kindergarten pay up to 750 SKK annually. When the children move on to elementary school, the situation changes considerably. Only 17% of parents manage to pay as little as 750 SKK, most of them pay 1001 – 1500 SKK annually (21%), or 1501 – 2000 SKK (17.6%). The situation in the first and second grades of primary schools is nearly identical. Similar levels of payments with slightly increasing trends apply to grammar schools (both 4-year and 8-year) and to a large extent to secondary schools completed by school-leaving exams. Secondary schools without school-leaving exams are a lesser burden for parents, where most of them manage to keep within the range of 751 – 1000 SKK annually (23%) or up to 750 SKK (22.2%). A more significant shift towards higher payments comes during the university education – the median value is about 2000 SKK per annum, and up to 16% of respondents even claim to more than 5000 SKK annually pay for school aids during their children's university studies.

In addition, parents must pay additional school-related costs, e.g. for teaching aids, catering, transport, accommodation etc. Although the investment in education has a high rate of return in the long run, such a burden may be impossible for many families living close to the level of minimum income to bear in the short term. This results in little support for their children's education after completion of compulsory school attendance or, in the better cases, a secondary school. It is worth noting that the higher the level of education, the higher costs tended to be incurred.

According to the survey results, a parent of a child studying at a secondary specialised school has to pay average monthly payments of 210 SKK for schoolbooks and aids (relevant for 95.6% of respondents), 287 SKK for commuting (relevant for 82.6% of respondents), 707 SKK for hostel or rented-room accommodation (applicable to only 10.5% of respondents), and about 400 SKK for school catering (37.3% of respondents). Compared to the minimum child allowance (for calculating state benefits) for one dependent child – 1720 SKK, we can clearly see that nearly the all of this amount is used to cover only some of the education-related costs[2], not including tuition fees and voluntary contributions. In the case of low-income families, providing their children with a complete secondary education means a substantial financial burden. These families can by no means afford university education and a prevailing motivation is to make children find employment as soon as possible after the completion of their studies, so they could begin to contribute financially to the family budget.

The present school system, although claimed to provide education free of charge, causes low-income families to limit the duration and mode of education for their children. Secondary education is preferred to university education, and so is education provided as close as possible to the family's residence. This problem is to a great extent due to the lack of a system of allowances and scholarships, which would allow even children of lower social classes to study and thus support their mobility. The social status

[2] This includes only main education-related costs, excluding for example non-school catering, clothes, pocket money, etc.

and related privileges and rights are allocated mainly by level of education and its quality. The free state school system does not solve the issue of equal opportunities, nor does the present funding model solve the problem of maintaining the quality of education.

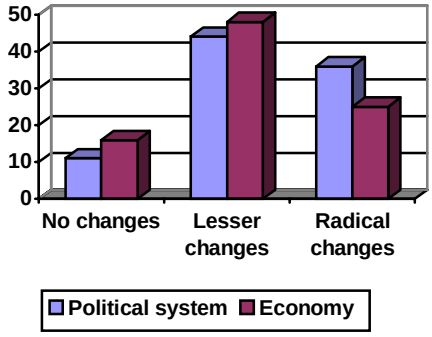
The quality of education is a crucial concept with regard to social stratification and related social mobility, and so is its accessibility in the modern world. It is one of the most important instruments in the struggle against social inequality and exclusion.

Metamorphoses of the Slovak Society

Since November 1989, Slovak society has undergone a complicated development. In 1993, after a territorial division of the former Czech and Slovak Federative Republic, it became an independent state, which is presently going through the process of substantial changes. Systemic changes are always being performed with optimistic expectations born in mind – yet they bring about a number of new problems, and new social situations, which require new knowledge and skills. These changes have had impact upon the whole society, from its government, though the functioning of institutions to the very nature of social integration. As shown by the IPA research[3], these changes are positively perceived by only a quarter of adult population. The IPA survey as of September 2001, questioning respondents as to what extent it was necessary to change the Slovak political regime and economy before November 1989, shows that people's views of the changes and reforms carried out are rather sceptical.

Economic problems, failing social securities, and rising social inequalities are all understood as negative consequences of the reform changes. Only few people regard them as the track to long-term improvements, instead they tend to perceive their immediate negative impact. This is also demonstrated by a hierarchy of social problems in Slovakia indicating how urgently people fix their attention to problems in particular fields of the public sector and what importance they ascribe to them (see Chart I.3).

Chart I.2: Perception of Necessity of Change

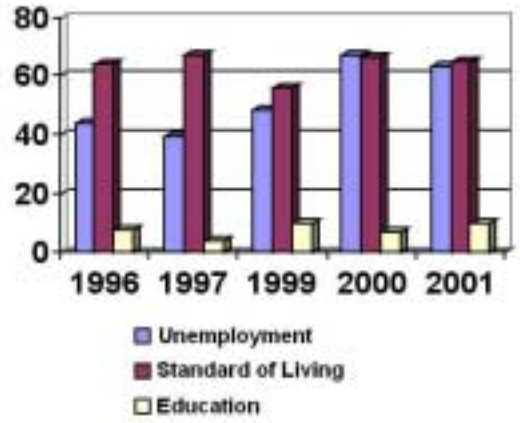


Source: Velšic, M.: Na Slovensku vládne nostalgia za minulosťou (Nostalgia for the Past prevails in Slovakia), SME, November 21, 2001

Year by year, the issues of unemployment and living standards occupy the top positions. On the other hand, politics and respect for democratic principles, formerly perceived of high importance, withdrew from their positions after the 1998 elections. Issues related to the school system and education only take positions in the second half of the hierarchy of significant social problems. The low importance ascribed to the issues of education might be due to a somewhat mechanical view of the education system working properly without any problems, which is also supported by a significant inertia effect in its functioning. It also points out the inability to see these problems as interconnected, with particular negative phenomena understood as symptoms of systemic malfunction.

[3] Velšic, M.: Na Slovensku vládne nostalgia za minulosťou (Nostalgia for the Past prevails in Slovakia), SME, November 21, 2001

Chart I.3: Hierarchy of social problems



Source: Slovakia 1996, 1997, 1998-1999, 2000, 2001, Súhrnná správa o stave spoločnosti (A Summary Report on the State of the Society). Institute for Public Affairs, Bratislava 1996-2001.

High unemployment, social dependence, criminality, drug abuse in young people, and the overall standard of living are often related directly to failures of public domain policies – social, employment, and educational policies. The attitudes of the public show only little inclination for deeper changes. However, it is only these changes that can bring a long-term and sustainable economic and social improvement.

Demographics

Over the past decade, demographic development has been characterised, as shown by the Statistical Office of SR data, by a gradual reduction in the growth-rate of the population, which can be attributed to falling birth-rate and stagnant death-rate in the general population. Although observable from as early as 1979, this trend has only become so marked since 1991, mostly related to the change of the state system. The transformation of the economic and political order has always considerably influenced the reproductive behaviour of the population. The socialist system supported families with children and provided for their needs. After the launch of the first economic reforms in the early nineties accompanied by a striking social and income differentiation, rapidly rising unemployment rate and shortage of accommodation units, these phenomena have had a great impact on young couples setting up their families.

Table I.1: Number of children in particular age groups divided by the number of years in a given age group

Year/Age	6 - 9	10 - 14	15 – 18	18 – 23
1990	89647	95341	90275	75245
1991	88467	93811	92743	77161
1992	87140	92544	94412	80286
1993	85295	91176	95079	83938
1994	83487	89585	95711	87449
1995	80977	88798	94761	90724
1996	79237	87679	93358	93099
1997	78235	86050	91734	94572
1998	76462	84398	89938	95145
1999	75209	82266	89099	94681
2000	72294	80217	88493	93651
2001	68158	78840	87197	92430
2002	64556	77297	85282	91050
2003	61056	75656	83425	89433
2004	59147	73286	80915	88634
2005	58352	70002	79169	87507
2006	57842	66369	78182	85888
2007	57457	63341	76421	84227
2008	57067	60442	75175	82103
2009	56576	58856	72258	80064
2010	55982	58122	68130	78691

Source: Demographic Research Centre - Infostat, Author's calculations

Demographic trends influenced by the insecure socio-economic situation have an impact upon the age distribution of the population. This is particularly apparent with regard to the number of the youngest population group – children and youth from 0 to 19 years of age, which is experiencing a constant fall. The education system as an institution targeted at the population from 6 to 23 years of age will be deeply affected by this ongoing trend. With the constantly decreasing youth population and continuing process of population ageing, the number of students at schools goes down accordingly. Tables I.1 and I.2 show a numerical forecast for particular age groups by 2010. In 2010, the age groups as stated in the tables should

indicate decrease in the number of children by 17.9, 26.3, 21.9, and 14.9% accordingly. Even greater decline appears upon comparison of the years 1990 and 2010: the number of students in the 6-9 and 10-14 age groups falling by as much as 49.4 and 47.2% (2001 = 100%).

Table I.2: Ratio of children in particular age groups divided by the number of years in a given age group, 2001=100%

Year/Age	6 – 9	10 – 14	15 - 18	18 – 23
1990	131,5	120,9	103,5	81,4
1991	129,8	119,0	106,4	83,5
1992	127,8	117,4	108,3	86,9
1993	125,1	115,6	109,0	90,8
1994	122,5	113,6	109,8	94,6
1995	118,8	112,6	108,7	98,2
1996	116,3	111,2	107,1	100,7
1997	114,8	109,1	105,2	102,3
1998	112,2	107,0	103,1	102,9
1999	110,3	104,3	102,2	102,4
2000	106,1	101,7	101,5	101,3
2001	100,0	100,0	100,0	100,0
2002	94,7	98,0	97,8	98,5
2003	89,6	96,0	95,7	96,8
2004	86,8	93,0	92,8	95,9
2005	85,6	88,8	90,8	94,7
2006	84,9	84,2	89,7	92,9
2007	84,3	80,3	87,6	91,1
2008	83,7	76,7	86,2	88,8
2009	83,0	74,7	82,9	86,6
2010	82,1	73,7	78,1	85,1

Source: Demographic Research Centre - Infostat, Author's calculations

Social Demand for Education

The current state and development trends concerning the numbers of children in the particular age groups in relation to respective types of schools are connected to a phenomenon called social demand for education. It stands for a quantitatively expressed interest in education and can be estimated on the basis of the number of applications for enrolment in a given school, taking into account the conditions and characteristics of particular types of schools.

As mentioned above, socialism's legacy was a high successfulness of school attendance and the principle of free education. The demand for education results from these two factors, although it has undergone transformation over past ten years and differs for various levels and types of schools.

Compulsory school attendance is 10 years, and so lasts until the 16th (or 17th) year. Students and particularly parents in the case of younger children usually[4] have to face the question of choosing the type of further education after completion of the 9th grade of elementary school, when the child is at the age of 14-15. As for secondary schools, data on the numbers of applications for particular schools are not available, but recent trends concerning the number of students at various types of schools let us assume that there is an increasing demand for schools preparing students for higher education. Table I.3 shows the variation in numbers of students at three key types of secondary schools. In spite of the evident variation, the influence of the rigidity of the school system can be clearly seen. The system restricts the capacity of schools, so the demand might be even higher than indicated by the numbers of students at particular schools, but schools do not sufficiently adjust to this demand.

The process of admission to secondary schools is closely connected to the issue of efficiency. The admission process should place students to secondary schools of their preference, in accordance with their abilities and aptitude and school capacities available. The present form of the admission process differs from the above, ideal definition particularly in two aspects: the contents of entrance exams and that students are not actually motivated to choose schools of their own preference.

[4] Some parents and students take this decision at even earlier time, since students can apply for 8-year grammar schools after completion of the first four grades of elementary school.

Supply and Demand for Education

Before 9-th grade students submit their only binding application to apply for a secondary school, they are provided with information on preliminary numbers of students applying for particular schools in a district and on admission plans of schools concerning their study and vocational courses. This information serves as a guideline for students in choosing a school to apply for. With the present system in force, students are motivated to mechanically choose "the second best" alternative, as will be explained later in the text.

For example, in the district of Trnava (data for the 2001/2002 school year) there is a high interest in grammar schools, with demand exceeding supply by over 56%. The preliminary interest in some secondary specialised schools is also high, for example courses in electrical engineering (63% excess demand), customs brokering, also trade schools, hotel academies, and nursing schools. Out of all secondary vocational schools, only the Secondary Vocational School of Trade shows a preliminary demand higher than its available capacity.

The principal limitation for both students and parents is the possibility to submit only one application for enrolment in a secondary school. Since entrance exams at most schools (except for conservatoires and 8-year grammar schools) are held on the same day and the capacity of high-demand schools fills up on this day, it is naturally far more risky for students to apply for the most popular and highest quality schools. The risk of failure amongst strong competition, which they cannot estimate in advance, and a resulting consequence of having to take part in the second round of examinations only at those schools with free places available make them apply for schools of lower quality and less in demand by students. The present model motivates students to give up their chance of studying at schools of their preference if such schools are in high demand and instead choose schools with a higher probability of successful admission after the first round of entrance exams. These issues will be dealt with in more detail in the analysis of the draft School Act in Chapter 4.

Table I.3: Secondary schools – Numbers of students, 1990-1999

Year	Grammar schools	Secondary spec. schools	Vocational schools
1990	55 949	79 941	168 000
1991	59 347	84 468	156 510
1992	63 678	91 298	152 325
1993	68 088	98 986	151 128
1994	72 114	106 136	155 136
1995	76 436	110 871	155 936
1996	80 023	113 997	152 009
1997	80 925	109 280	141 908
1998	82 038	103 348	130 312
1999	78 360	91 610	111 224

Source: Author's calculations based on the SIPI data (Institute of Information & Prognoses on Education)

As for the limited offer in the case of universities, this problem is more noticeable due to the availability of aggregated data, unbiased by the one-application restraint as in the case of secondary schools. There is a substantial demand for these institutions in Slovakia, with a large disproportion between the students applying and those actually admitted, particularly for popular courses (law, economics, medical science, etc.). As a result, there is strong pressure both upon students (the amount of memorisation), universities themselves and their teachers. The admission process is regarded as showing a high rate of corruption. According to the World Bank survey as of 2000 (http://www.government.gov.sk/bojprotikorupcii), 12% of students admitted to resorting to bribery as a means of gaining admission to a school and improving their grades. In case of universities, this figure was 22%. Typical features of the university school system in Slovakia include various preparatory courses organised by universities or private consultations provided by their teachers. The high demand for universities may be attributed to three phenomena. Low unemployment rates for university graduates compared to those with secondary

education, relatively high salaries of university graduates, and last but not least the high social status of university-educated people.

Table I.4: Social demand for education, 1990 - 1999

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Secondary school leavers (with school-leaving exam, who may apply for HEIs)		34 513	39 303	41 073	42 333	45 908	48 770	55 502	57 161	58 380	51 283
Applications for HEIs		27 617	42 707	68 814	81 114	73 810	93 866	89 996	116 706	123 719	115 052
Newly admitted, 1st-year HEI students	Total	13 404	13 178	16 008	18 093	20 027	20 809	22 293	23 120	23 212	22 866
	% of 18-year-olds.	15,9	14,9	17,2	19,3	21,1	21,8	23,3	24,1	25,4	25,5
	YoY change	1,03	0,98	1,21	1,13	1,11	1,04	1,07	1,04	1	0,98
	Index against 1990	1	0,98	1,19	1,35	1,49	1,55	1,66	1,72	1,73	1,7

Source: The Ministry of Education, Institute of Information & Prognoses on Education

Economy and School System

The relation between education and the economy is bi-directional: the school system should adapt to the needs and capacity of the economy, and on the other hand the economic capacity and potential largely depend on the quality of education in the country. This relation can be expressed by two fundamental questions: How shall we ensure that the school system responds sufficiently flexibly to the needs of the economy? How shall the school system be funded in order to develop the economic potential of the country?

Questions like these are often voiced in the ongoing discussions within the European Union, stressing the capacity of the economies to compete on the global market. In this respect, a principal thesis holds that European educational systems have to flexibly respond to changes in production, contribute to the growth of European economies, and ensure their competitiveness in the world. The economic pressure influences the field of educational policies as well as pedagogical theory and research.

To analyse the relation of the school system and economy in Slovakia, we shall draw our attention to two main areas: financial resources provided to the education system by the economy and feedback of the economy in terms of conditions on the labour market.

The funding of the Slovak school system is mostly based on the state budget resources coming from the budget section of the Ministry of Education and from the sections of particular ministries acting as founders of schools[5]. Also, municipalities subsidy certain schools (particularly nursery and elementary schools), yet these amounts are negligible compared to the overall volume of funds. Schools also have at their disposal so-called extra-budgetary revenues such as fees for kindergartens, school clubs, primary schools of art, secondary school accommodation facilities, etc.

The total amount of funds directed to the education system needs to be decreased by the amount of those revenues of schools (budgetary organisations) that are directly transferred to the state budget and not used in the school system. The final amount available shown in Table I.5 – Net expenditure for education – indicates what amount from public funds, including extra-budgetary revenues, is available for the

[5] This mostly applies to secondary vocational schools and applied training centres operating within multiple economic ministries, medical schools, and schools coming under the Ministry of Defence and the Ministry of Interior.

school system. Having adjusted these amounts by the consumer price index (CPI, 1995 = 100), it is noticeable that net expenditure for education was 27.59 billion SKK in 1991 and fell to 24.58 billion SKK by 2000. Table I.6 shows that from 1991 to 2000 there was a drop in the amount of funds for education by approximately four billion SKK in standardised prices, which amounts to 13.5%. The number of children in the age group from 6 to 23 years of age decreased by 3.8% over the past decade.

In the past decade, public expenditure for education was at its minimum in 1994, with 21.26 billion SKK (in standardised prices as of 1995). This data is supplemented by ratio indices in Table I.6, which indicate trends in the development of the public expenditure for education (or the expenditure of the Ministry of Education budget chapter) to GDP ratio over the past decade. The funding of the school system will be analysed in more detail in Chapter 3.

Table I.5: Structure of the education system resources (billions SKK)

Resources / Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Central state administration (MoE SR)	14,15	17,61	19,60	19,17	18,98	25,71	25,76	30,37	31,54	33,62	35,24
Central state administration (except MoE SR) [a)]	n/a	n/a	n/a	n/a	n/a	1,31	1,47	1,58	1,51	1,56	1,85
Municipalities [b)]	n/a	n/a	n/a	0,07	0,09	0,09	0,13	0,12	0,07	0,05	0,05
Extra-budgetary revenues [c)]	n/a	n/a	n/a	n/a	0,27	0,35	0,47	0,45	0,47	0,58	1,12
TOTAL	14,15	17,61	19,60	19,24	19,35	27,46	27,84	32,52	33,59	35,81	38,27
Others [d)]	1,36	1,27	1,50	1,78	1,91	1,09	1,10	1,07	1,03	1,18	1,79
Net expenditure for education	12,80	16,34	18,10	17,46	17,44	26,37	26,74	31,45	32,56	34,63	36,48

a. Data provided by the ministries other than the Ministry of Finance. Actual expenditures except for the Ministry of Health where planned expenditures are stated. This data corresponds to Table I.6.
b. Source: The Ministry of Finance
c. Extra-budgetary revenues monitored since 1994.
d. Revenues of educational institutions (budgetary organisations) that constitute the state budget revenues and hence do not cover expenditure of these organisations.
Source: Institute of Information & Prognoses on Education except "Central state administration (ministries)" and "Municipalities"

Table I.6: Public expenditure for education as a share of GDP and the state budget (a comprehensive table is located in the annex.)

Indicators	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Public expenditure for education as % of HDP (current prices) [a) d)]	5,49	5,51	5,90	5,21	4,39	5,31	4,84	4,97	4,68	4,59	4,31
State budget expenditure (MoE SR) for education as % of HDP (current prices) [a) d)]	5,1	5,51	5,9	5,2	4,38	5,05	4,55	4,71	4,46	4,39	4,14
State budget expenditure (MoE SR) for education (constant prices) [a) d)]	n/a	29,74	30,10	23,89	20,86	25,71	24,35	27,05	26,32	25,38	24,76
Public expenditure for education in constant prices	n/a	29,74	30,10	23,98	21,26	27,46	26,31	28,97	28,04	27,03	25,79
CPI (1995=100)	n/a	59,22	65,11	80,24	91,002	100	105,81	112,3	119,8	132,5	148,4

a. Source: Institute of Information & Prognoses on Education
b. Source: The Ministry of Finance SR
c. Public expenditure for education is made up of: state budget expenditure (the MoE SR section), education expenditure of municipalities since 1993, expenditure of other ministries since 1995(The Ministry of Health – planned budget, other non-MoE SR ministries involved – actual expenditure) since 1995. Data for these ministries before 1995 and municipalities before 1993 are not available.
d. To determine net public expenditure for education and net state budget expenditure for education, it is necessary to subtract the revenues of educational institutions, which are revenues of the state budget and cannot be spent in the school system. This calculation was not carried out in order to ensure other calculations were performed with the whole of the state budget (the MoE SR section) and its current and capital expenditure.

In the public discussion presently under way in Slovakia, a greater emphasis is put to expenditure for higher-education institutions (universities) than to overall funds for education. The government of the Slovak Republic has undertaken to annually increase the higher education budget by 0.1% of GDP over four years, which actually happened last year (an increase in the higher education budget by 700 million SKK, at the same time a part of these funds was allocated to increase the number of students admitted). Not before 2003 the higher education budget shall have accounted for 1% of GDP, while the average value in the OECD countries is 1.33% of GDP. Naturally, GDP per capita in the OECD counties is higher than in Slovakia.

Education and Labour Market

From the view of the economy, the greatest benefit of education is the preparation of people for the labour market. In return, the quality of human capital has effect upon economic results. Returns to education constitute the rise of an individual's productivity, which is a benefit for the whole society as well as the individual. People receive returns to their education in the form of earnings for work they do on the basis of their education. An inefficient educational process does not contribute to the rise of productivity and hence has a negative impact of the economy of the state. It is also related to unemployment.

The level of wages, unemployment rate, and demand for education are mutually interrelated. Naturally, there is an increasing demand for such a type of education that minimises the risk of unemployment and ensures a highly paid occupation. Ideally, each type and level of education should allow for the attainment of a proper occupation within the existent demand of the market. An inefficient system generates many school leavers for whom there are no real working opportunities on the market.

The principal causes of unemployment in Slovakia are considered to be the fall of economic growth dynamics and the decrease in effective performance of the Slovak economy. Unemployment trends are, among other important factors, influenced by an insufficient coupling between the school system and labour market.

Table I.7 shows a general trend on the labour market as a continual proportion between the level of education and long-term unemployment rate of a population group with the given level of education.

Table I.7: Unemployment rate by level of education, 1994 – 1999

	1994	1995	1996	1997	1998	1999
Total	14,1	12,4	10,8	11,6	11,9	17,2
Primary ed.	27,7	27,3	23,9	27,6	25,8	35,4
Vocational education	14,8	13,4	11	11	12,7	18,1
Secondary specialised education	14	13,2	10,2	11,3	10,8	20,6
Vocational with school-leaving exam	16,1	9,9	8,2	10,6	9,6	15,6
Grammar school	13,8	14,7	12,1	14,6	13,8	17,3
Complete Secondary specialised	10,3	7,4	7,7	8,3	8,7	13,6
Extended specialised	-	-	3,5	6,1	4,5	6,1
Higher education	3,9	2,9	3,5	3,3	4,1	6
No education	44,2	39,5	64,3	66,7	88,5	40

Source: Statistical Office of SR

A characteristic feature of unemployment figures concerning Slovakia is the high occurrence of young people from 15 to 29 years of age in unemployment. At the same time, a specific problem within this group is the unemployment of school leavers. Undoubtedly, there are differences between school leavers from various types of schools in how successful they are at getting employed, but, in general, it holds that an unemployment rate of secondary-school leavers is relatively high. At the end of July

2001, 28 390 school leavers from secondary schools were registered as unemployed, which accounts for 5.6% of total number of the unemployed. School leavers from secondary vocational schools constituted the largest group within the group of unemployed school leavers[6]. On the basis of data shown in Table I.7, we can keep track of the unemployment trends in the period of 1994 – 1999 classifying population groups by levels of education attained. The data reveals a huge gap between the high unemployment rate of people with primary or no education and the very low unemployment rate of people with higher (university) or extended specialised education.

Motivation and demand for education are also determined by the amount of wages resulting from the type and level of completed education. Returns to education in terms of wage are shown in Table I.8. Wages tend to rise depending on level of education completed. For primary education, the average gross pay is 75.4% of the average wage in the national economy (which was 12 064 SKK in the second quarter 2001). School leavers with secondary education without the school-leaving exam (*maturita*) earn on average 87.1%, school leavers with the school-leaving exam go up to 96.1% of the average wage. University graduates' pay is equal to 168.8% of the average wage. While returns to education at lower levels rise evenly, there is a significant difference between returns to secondary and university (higher) education. As mentioned above, in the today's information society only higher and superior education can provide sufficient preparation for a highly productive occupation with a high rate of return.

Table I.8: Structure of wages. Average gross wages by level of education, 1996 – 1998

Year / Degree of Education	1996	1997	1998	Average
% of the average wage by level of education:				
Primary	81,7	66,1	78,3	75,40
Vocational	94,5	86,1	92,6	91,10
Secondary specialised	87,6	75,3	86,4	83,10
Complete sec. specialised	93,9	93,9	101,3	96,40
Grammar school	99,6	86,9	101,0	95,80
Higher education	156,9	189,1	158,6	168,20

Source: Lubyová (2000), pp173, Author's calculations

Education and Politics

The present government has set its priority in the field of education as "stopping the decline and launching a positive conceptual development of education as well as ensuring equal education opportunities". In its programme, the government has undertaken to formulate a long-term concept of education development and consequently prepare a new Schools Act[7].

In the concept preparation, the government sought to take account of comments and viewpoints of dominant political parties, regional representatives, employers, trade unions, teachers and parents in order to ensure that this concept might become a basis for education development for the coming 15 – 20 years regardless of changes of ruling governments. In the beginning of 2000, a Millennium project was submitted for public discussion as a draft concept of education development in Slovakia. This document was based on education trends of developed European countries. After implementation of comments, a draft of National Programme of Education was drawn up, which should govern this field for the next 15 to 20 years.

[6] Report on Social Situation in the first half of 2001, the Ministry of Labour, Social Affairs, and Family

[7] The analysis of the draft Schools Act and long-term concept of education development is dealt with in Chapter 4.

As for ensuring equal education opportunities, the government guarantees the right to free education within the scope of their abilities for all citizens at least until they have become independent entities within the labour market. However, when considering the proportion of costs of education in the free education system and low-income families' earnings, apparently the equal opportunities are not exactly what they seemed to have been. These issues have been openly discussed since debates started on a new Higher Education Act, higher education funding and tuition fees, which have been devoted a separate analysis in Chapter 4.

In the following sections, we are going to present viewpoints on educational policy given by relevant political parties, which are likely to become parliamentary parties according to present public opinion surveys. It is not surprising that Slovak political parties do not regard education as a priority issue in their programmes, after all this corresponds to the perception of social problems by citizens shown in the beginning of this chapter. Moreover, these programmes may be blamed for an inner inconsistency – on the one hand, the political parties propose to increase public expenditure (for example by higher funding for education), and on the other hand, they advocate tax cuts.

Should the elections have been held at the beginning of November 2001, there would have been 8 political parties represented in the parliament as shown by the public opinion survey conducted by Statistical Office of SR: Movement for Democratic Slovakia (HZDS), Direction (SMER), Hungarian Coalition Party (SMK), Slovak Democratic and Christian Union (SDKU), New Citizen's Alliance (ANO), Christian-Democratic Movement (KDH), Slovak National Party (SNS), and Party of the Democratic Left (SDL), listed in descending order by percentage of votes received. Given the long-term importance of education and school system, each of these parties highlights it in its programme accordingly.

Attitudes to education issues are framed by the parties' orientation and ideology. Some of their viewpoints are listed here. In the HZDS programme, education is perceived as a long-life process, with its fundamental attributes laying emphasis on Christian cultural heritage, human rights and acceptance of the main principles of Christianity. A priority issue is the availability of education at all levels.

SMER highlights "the cultivation of human capital as the most prospective, long-term investment – for the benefit of an economically, socially, and culturally prosperous and educated society in the coming age of information and humanisation". They support a special approach to gifted children and seek to establish new, attractive study courses at universities, stressing the utilisation of new technologies. SMER refuses any political interventions into the education and scientific process.

According to the Hungarian Coalition Party (SMK), the main causes of a critical condition in education are due to failure to constitute a principally new school system, SMK claims the former Communist educational concept has not changed and that the present school system is not compatible with education in EU countries. One of major aims of SMK educational policy is the provision of education for Slovak citizens of Hungarian nationality in their mother tongue.

Educational policy of the Slovak Democratic and Christian Union is targeted at supporting "the educational growth policy corresponding to market needs", providing greater space for private and religious schools, and levelling out all types of schools. With regard to education funding, they seek to support students' participation in financing their university studies and intend to implement a system of

scholarships and loans ensuring equal education opportunities for students from lower-income families. Elementary education should be fully financed from public funds.

ANO supports the transformation of traditional school to a modern school of the third millennium, capable of preparing young generation for both life and work.

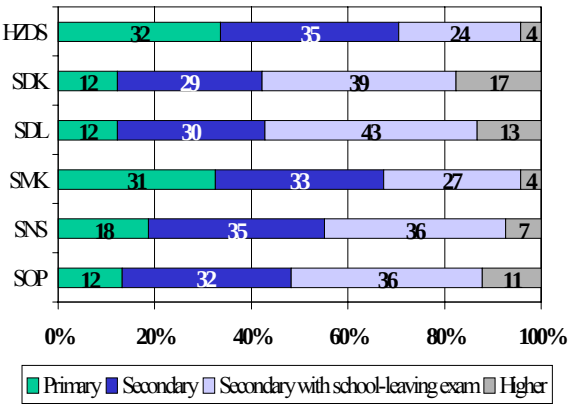
The Christian Democratic Movement (KDH) is in favour of gradual "increasing a GDP share allocated for education, with the aim of getting closer to the European average, supporting the transfer of administrative responsibility over elementary schools to municipalities, school system diversification in relation to types of schools and forms of study, establishment of other state and religious schools, allowing for entrance exams at multiple secondary schools, removal of administrative barriers for the foundation and operation of schools, and in their financial management of schools, as well as the higher-education reform (Concept Proposal for Higher Education in 21st Century)."[8]

The Slovak National Party (SNS) declares in its programme the need to establish the school system based on the national principle, "with the focus on its gradual, content and organisation approximation with the school systems of developed European countries". According to the SNS concept, elementary schools have to provide all citizens with education in the state language.

The primary policy values of the Party of Democratic Left (SDL) are solidarity, social justice, and equality, with the latter one perceived very intensely through access to education and healthcare. SDL is strongly opposed to implementation of tuition fees for higher education, and considers free education to be the greatest investment in the development of society. It also seeks to achieve the transformation of the whole system and implementation of information technology.

What almost all these programmes have in common is support for approximation of education to European standards and adapting education to new trends – mostly by implementing new technologies, extending the coupling between education and the labour market, and support to life-long education. They take critical standpoints against phenomena contradicting their programme principles and orientation. It can be stated that all of them at least declaratively support the transformation of the school system. It can only be estimated according to their overall openness towards reforms how far their support to transformation reaches. It is questionable whether the particular parties' education policies will manage to address citizens, who do not regard this field as problematic (see Chart I.2). On the other hand, it is no doubt that the education of electors will have impact on their decisions at elections.

Chart I.5: Education structure of Slovak electors in the 1998 parliamentary elections



Source: Bútora,M. - Meseznikov, G. - Bútorová, Z. (ed.): Slovenské voľby '98 Kto? Ako? Prečo?(Slovak Elections 1998 Who?, How? Why?) IPA, Bratislava 1999.

A good indicator showing the relation between education and professed values of

[8] KDH, "700 Days" Programme

the civil society is an educational structure of electors of individual political parties.

As proven by the 1998 elections, completed education is an important element in forming attitudes and viewpoints. In terms of education, there were substantial differences between the profiles of HZDS and SDK electors, particularly in the lowest and highest categories. This preferential trend given by the education profile is still relevant. A public opinion survey carried out in October 2001 by Statistical Office of SR shows that electors' preference for HZDS decreases with an increasing level of education. In October 2001, HZDS would receive votes from 42% of citizens with primary education, 26% of citizens with incomplete secondary education, 18% with complete secondary education, and only 14% of university-educated people. On the other hand, the greatest share of electoral preference among citizens with higher education is still kept by the SDK successor – SDKU – up to 22%.

Chapter 2

Education System in Slovakia

The education system in Slovakia has undergone significant development, particularly in the past century. At the beginning of the 20th century, a high proportion of the population were illiterate[1], secondary schools were not developed and churches were typical founders of schools.

According to Průcha (1999), the Slovak education system has passed through three waves of massive development. The first wave[2] set in when Slovakia joined the Czech Republic to create a single state in 1918 and lasted until 1938. It was marked by the introduction of 8-year compulsory school attendance, forming a network of grammar schools and secondary specialised schools and the establishment of Comenius University in Bratislava in 1919. The second wave of development began in the 50's and 60's when "the network of schools of all types and educational mobility were gradually, but very quickly, reaching the same level as in the Czech Republic". As a result, as early as in 1970 the share of university-educated people in Slovakia (3.0%) and the Czech Republic (3.4%) was nearly equal. The third development period comes after November 1989 and will be dealt with in more detail later in this publication.

The present education system in Slovakia can be simply divided into two main groups: local schools and higher-education institutions. The two key parts of this chapter will describe both of them with regard to their principal qualitative and quantitative characteristics. A special part of this chapter includes the analyses of quality and its evaluation for both local schools and HEIs[3] as well as a case study concerning school systems in the regions of Košice and Bratislava carried out in 2000/2001.

Local Schools

The present system of local schools in Slovakia is made up of:

- nursery schools,
- primary schools,
- secondary schools (grammar schools, secondary specialised schools, secondary vocational schools and applied training centres),
- special schools,
- primary schools of arts.

The system is supplemented by school facilities, which are fully or partially funded from the state budget, including:

- education and training facilities (pre-school facilities, school clubs, after-school activity centres, community centres, student dormitories, and school camp facilities),[4]

[1] In the 1910 census, the literacy rates among the Austro-Hungarian nations were: Czechs 97.3%, Germans 94.4% (in the Czech territory), Slovaks 69.1%. (*Kuzmin, 1981*)

[2] According to historian D. Kováč, in the period between the wars Slovakia experienced probably the largest boom in culture and education. *(Průcha, 1999)*

[3] The quality analysis of local schools has been worked out by doc. RNDr. Vladislav Rosa, CSc. (State School Inspection Agency), the quality of HEI was analysed by prof. RNDr. Miroslav Urban, DrSc. (Faculty of Natural Sciences, Comenius University). Both analyses were presented at the workshop "The Quality of Education in Slovakia" organised by INEKO and SGI on November 5, 2001.

[4] In 1990/2000 there were 142 after-school activity centres and community centres in Slovakia, with the staff of 2437 employees (1014 full-time employees). There are 38 school camp facilities (38 pedagogical and 381 operational employees), 118 student dormitories (106 state-run, 2 private, and 10

- counselling and special education facilities are according to the Act No. 239/300 classified as follows: a) educational prevention facilities (educational and psychological prevention centres, medical and education sanatoria, diagnostic centres), b) remedial education facilities (residential remedial facilities). Pedagogical and psychological counselling centres and special needs counselling facilities i.e. children's integration centres and special needs counselling centres are part of the system of counselling facilities, which includes educational counsellors, school psychologists, special needs pedagogues, therapeutic pedagogues, school speech therapists, preventative measures co-ordinators; pedagogical and psychological counselling centres, special pedagogy centres, children's integration centres, educational and psychological preventative activities centres, medical and educational sanatoria, diagnostic centres, residential remedial education facilities for children, residential remedial education facilities for youth,[5]
- special interest educational facilities (classified as: language schools, state language schools, the State Institute of Stenography),
- special-purpose school facilities - school catering facilities, applied training facilities, school-service facilities, school data-processing centres, school libraries.

A new draft of the Schools Act, submitted for public discussion by the Ministry of Education in October 2001, identifies a system of schools providing standardised levels of education as follows: primary schools, secondary schools, special schools, including nursery schools and special nursery schools. A system of schools not providing standardised levels of education consists of primary schools of arts, language schools, and stenographic schools. In addition, the draft bill also classifies the system of school facilities[6].
The structure of the Slovak education system is schematically shown in Chart II.1.

Primary schools

Primary education is mandatory for all children and is to a large extent the same for all of them. Transition from a family environment, or alternatively from a less formalised nursery school environment, is an important moment in a child's psychosocial development. While attending the school, children acquire habits, values, and models of relations, which they will benefit from throughout their future lives. As part of their occupational training, they obtain a theoretical foundation and practical skills to be further developed in the higher levels of education.

The 1st – 4th forms[7] constitute the first grade of primary education. According to ISCED classification, this stage should primarily lay the foundations of systematic schooling – skills in reading, writing, mathematics, and acquisition of basic constituents of literacy. Rather than acquiring a theoretical knowledge, it should consolidate children's positive attitudes towards education, themselves, and other people. It is also important at this stage to identify culturally disadvantaged children and make efforts to overcome the gap between them and their schoolfellows.

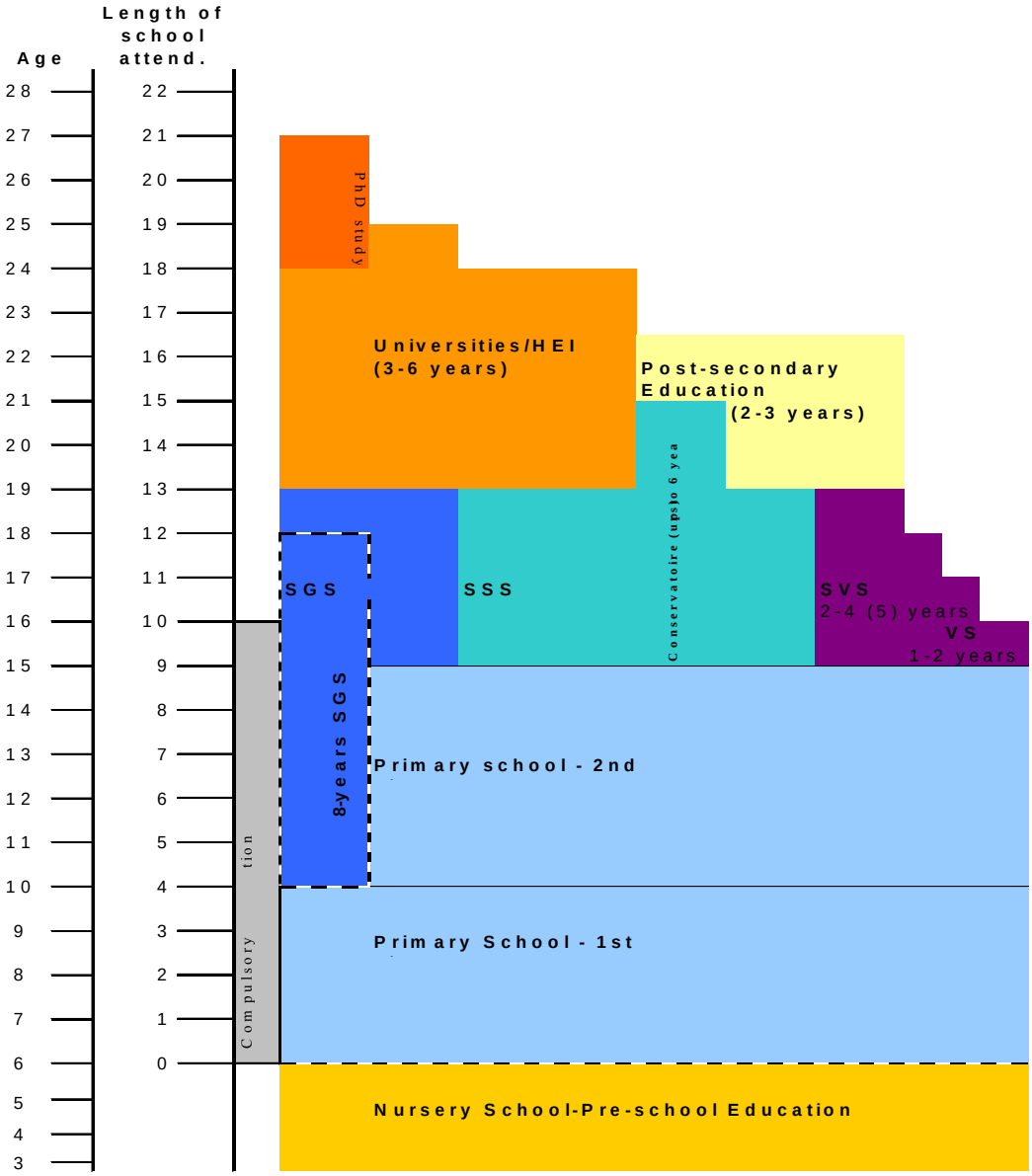
church-run) providing accommodation for a total of 13842 students. Supervisory and educational tasks are performed by 445 tutors (383 of which are women) and 46 assistant tutors. (*Source: the Millennium Project).*

[5] In 1990/2000, there were 1280 employees (1128 full-time) in educational and psychological prevention centres, pedagogical and psychological counselling centres, medical and educational sanatoria, and children's integration centres. This staff includes 30.5% pedagogical employees and 85.5% women. (*Source: the Millennium Project).*

[6] The draft bill is analysed in detail in Chapter 3.

[7] At present, the first grade of primary school comprises the 1st - 4th forms. A draft of the new Schools Act (for its analysis see Chapter 3) defines the first grade as comprising the 1st - 5th forms.

Chart: II.1 A simplified scheme of the Slovak education system[8]



The second stage of primary school (forms 5 - 9) is characterised by a structured arrangement of school subjects and acquired knowledge, with higher specialisation and differentiation. Its task is to provide schooling of high quality, still not homogeneous for all, but rather individualising and motivating an individual in accordance with his capabilities and interests. Many Slovak primary schools are faced with the challenge to move from emphasising the volume of knowledge and facts to focusing on ways of their retrieval and application in particular. School leavers from the Slovak primary schools are expected to have acquired a relatively

[8] Source: Grajcár, Š. - Skovajsa, P. (1999).

profound knowledge in Slovak language and literature, their mother tongue (if a schoolchild belongs to an ethnical minority), one or two foreign languages, mathematics, fundamentals of natural and social sciences, ethics or religion, and basic work skills. The network of primary schools in Slovakia has been relatively stable over the last decade, as proven by figures in Table II.1 and II.2 showing the development of statistical indicators for state primary schools and private and religious primary schools.

Demographic trends (such as a significant drop in birth-rates over past 10 years) have had the predominant influence on primary schools. The decrease in the number of students has been further boosted by their partial outflow to newly established private and religious schools and the possibility to enrol in 8-year grammar schools after completion of the first grade of primary schools. At the end of the nineties, the number of private and religious elementary schools reached 97, the number of state schools was 2362.

Demographic trends

Demographic prognoses forecast a significant drop in the number of students at primary schools in the future. The expected figures for the year 2005 in the given age groups are 85.6%, 88.8%, 90.8%, and 94.7% of the respective number in 2001. By 2010, these figures will have fallen to 82.1%, 73.7%, 78.1%, and 85.1%. This means that, compared to the 2001 figures, the number of pupils in the 6-9 age group will have decreased by 17.9% by the year 2010, in the 10-14 age group by 22.3%, and so forth. Demographic trends and their impact on the school system are analysed in Chapter 1.

As for these figures, the development of average-school-size and average-class-size indicators is also worth mentioning. Both of the indicators, except for 1999, are slightly decreasing. From 1990 to 2000, the average size of state schools came down from 306 to 266.1 students and the average number of students per class from 25.4 to 22.4.

Table II.3: School size by number of students

Country	Primary schools (ISCED 1)	Lower secondary schools (ISCED 2)
Italy	132	103
Austria	101	204
Portugal	78	443
Greece	100	234
Sweden	142	276
Germany	191	203
Denmark	213	639
France	95	578

Source: Průcha (1999), p. 82

The average school size indicator shows some general trends in many OECD countries (see Table II.3):

- Proceeding from lower to higher degrees of education, the average school size tends to rise.
- In most countries, the average size of public (state and other) schools is bigger than that of private schools.
- As for primary education, there are significant differences in many counties between the size of primary schools and lower secondary schools.

In the Czech Republic, the average size of 1-9-form publicly-funded schools (founded by municipalities or the Ministry of Education, Youth, and Sport) was 266 in 1997/98. The average size of its 32 private schools was 121 students. These figures are largely similar to the Slovak ones.

The interpretation of the average-class-size indicator is not so straightforward. From the economic point of view, we can argue that the lower the number of students per class, the higher the costs of education incurred. On the other hand, the theory of pedagogy holds that the lower the number of students per class, the more efficient the educational process. It needs to be said that the average indicator has been used and no scatter was taken into consideration (education system

homogeneity for primary education in the Czech Republic and Slovakia is relatively low). Several surveys have been conducted in order to disclose a correlation between class size and schooling results. According to Průcha (1999), a relatively high negative correlation was determined between class size and reading literacy in the Czech Republic (-0.31 for population A, -0.58 for population B). Another research has shown that better results for the efficiency of teaching of reading skills have been achieved by schools that have (1) a higher total number of students and (2) a higher number of students per class. These findings still apply even when compared on the international scale. Likewise, better results in mathematics in terms of TIMSS methodology were achieved by more populated (21-30 students) or highly populated (31-40 students) classes. This paradox can be partially explained on the basis of the fact that the more efficient schools from the Czech survey have more characteristics in common: for example, they are located in bigger cities, with easy access to well-equipped libraries, with more out-of-school education opportunities, these schools are usually staffed with better qualified teachers, and the social structure of urban students and parents is different. Based on this data, we can assume that other indicators bear more significance for educational process results than the class-size indicator (schooling organisation and methods, differentiation of students among and within classes, etc.).

Table II.1: State primary schools (as of September 15th and 30th of the given year).

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Schools	2356	2387	2397	2401	2394	2394	2401	2391	2389	2375	2350
Students	720920	707032	681370	664884	650044	635135	619641	621065	622665	645384	625265
Classes	28364	28580	28289	27500	27173	27189	26971	27341	27790	28596	27925
Students per school	305,99	296,20	284,26	276,92	271,53	265,30	258,08	259,75	260,64	271,74	266,1
Students per class	25,42	24,74	24,09	24,18	23,92	23,36	22,97	22,72	22,41	22,57	22,4
Full-time teachers	37198	37256	38520	37368	37196	34575	37510	37852	38680	39173	38022
Part-time teachers	0	0	0	0	0	0	0	0	0	2326	2260
Other pedagogical employees	8359	7416	7142	5995	5566	5414	5490	5640	5714	5650	6927

Source: Statistical Almanacs of Education 1990-2000. Institute of Information & Prognoses on Education, Bratislava.

Table II.2: Private and religious primary schools (as of September 15th and 30th of the given year).

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Schools	2	28	75	82	88	91	92	91	95	96	97
Students	767	9384	22749	25305	25806	25947	25261	24876	25212	26322	25701
Classes	26	362	918	1018	1056	1096	1088	1091	1128	1177	1168
Students per school	383,50	335,14	303,32	308,60	293,25	285,13	274,58	273,36	265,39	274,19	265,0
Students per class	29,50	25,92	24,78	24,86	24,44	23,67	23,22	22,80	22,35	22,36	22,0
Full-time teachers	n/a	556	1347	1506	1617	1649	1703	1705	1802	1777	1723
Part-time teachers	n/a	0	0	0	0	0	0	0	0	190	169
Other pedagogical employees	n/a	114	227	233	227	231	234	236	240	241	237

Source: Statistical Almanacs of Education 1990-2000. Institute of Information & Prognoses on Education, Bratislava.

Based on the above figures, it can be expected that such a demographic development will impose pressure for changes in the network of primary schools to take place in the future.

Changes in the network of schools

The network of schools and school facilities is established by the Ministry of Education SR. According to the MoE analysis[9], the objective of rationalisation efforts with regard to this network is to "optimise it so as to take account of the decreasing demographic curve, constitutional right to education even in regions with poorer accessibility of school and in territories with mixed nationalities, the required level of the educational process, and more efficient spending of funds for the operation of schools". A primary intention behind the rationalisation of the school network was to achieve economic savings, with regard to the demographical prognoses and normative methods of primary schools funding. The rationalisation process actually began only in 2000, when the Ministry specified the lower and upper bounds for the class size limit and obtained from regional and district offices education-related statistical data, including per-student costs at limited-grade schools and full-grade schools. At the regional level, rationalisation boards prepared proposals for modification of the school network by removing schools from and incorporating them into the network, proposals for temporary suspension of the operation of schools, or proposals for the establishment of schools with both Slovak and Hungarian teaching languages with joint headteachership, proposals to reduce the number of classes in schools, or proposals for the experimental implementation of formative school subjects in joint grades 5 to 9 in municipalities with no other possibilities to regulate the class size limits or school network. All the proposals were discussed with the respective municipal authorities and school self-government bodies. The second stage of rationalisation proceeded from September 1, 2001. According to the MoE data, the rationalisation measures implemented by September 1, 2001 will save 120.323 million SKK and help to obtain 41.461 million SKK from the co-financing of municipalities that requested to retain schools with per-student cost significantly exceeding the district average. The outcome of rationalisation measures carried out by the MoE SR for the school year 2000/2001 is shown in Table II.4.

The rationalisation measures were the least effective in mixed-nationality territories, in regions with difficult transport conditions – in mountain and upland districts and districts with high unemployment rates. In the school year 2000/2001, 22 detached workplaces and 9 joint-administration schools were established in the mixed-nationality territories.

Limited-grade schools

The network of primary schools incorporates, among other things, so called limited-grade schools. These schools do not provide education in the 1st to 9th form, but only in the first grade as 1-, 2-,3-, or 4-form schools. With the exception of 4-form schools, such school do not have separate classes for individual forms. They can be found in small villages or in mixed-ethnic territories, and account for one third of primary schools in Slovakia. In 1999, these schools were attended by 23927 schoolchildren.

The majority of limited-grade schools are located in the Košice and Prešov regions, where they account for 40-45% of the total number of schools, their students and teachers. A special type of limited-grade schools are Slovak-Hungarian schools in the southern regions of Slovakia, where indicators showing average numbers of students per teacher and per class appear to be lower due to concurrent existence of separate classes for both ethnic groups.

[9] The **MoE SR (2001):** Analysis and Rationalisation of the Network of Primary and Secondary Schools in Relation to the Labour Market Needs

Table II.4: Changes in the framework of primary schools as of 2001/2002.

Region	Dismissal proposals	Retained in the network	Detached primary schools	Joint-administration schools	Temporarily suspended schools	Actually dismissed schools	Incorporated into the network
Bratislava	2	1	0	0	1	1	0
Trnava	6	0	3	0	0	6	1
Nitra	2	0	0	1	2	2	1
Trenčín	6	2	1	0	0	4	1
Žilina	6	1	5	0	0	5	0
Banská Bystrica	27	5	5	8	5	22	8
Prešov	14	1	6	0	0	13	0
Košice	16	0	2	0	0	16	0
Total	**79**	**10**	**22**	**9**	**8**	**69**	**11**

Source: Analysis and Rationalisation of the Network of Primary and Secondary Schools in Relation to the Labour Market Needs, The Department of Primary Schools, Secondary Schools, and School Facilities, The Ministry of Education SR, September 200, available from http://www.education.gov.sk.

Problems of limited-grade schools are not so much the indicators of average numbers, but rather high fixed costs arising from the operation of a school for a small number of students.

The number of limited-grade schools gradually decreased from 859 in 1997 to 835 in 1999, with the rate of decrease being higher than for primary schools as a whole. The number of students attending these schools is also slightly decreasing, on the other hand there are increasing numbers of teachers at these schools, particularly in the regions of Košice, Prešov, and Nitra.

Table II.5: Limited-grade schools

Year	Limited-grade schools	Full-grade schools	Ratio
1997	859	2513	34,18%
1998	852	2517	33,85%
1999	835	2507	33,31%

Source: Author's calculations based on UIPS data

Secondary schools

Secondary education begins after completion of the primary level of education and compulsory school attendance. A large majority of the population attains this degree of education. It is either regarded as the final stage of education, with school leavers passing directly to the labour market, or a transition and preparatory stage prior to tertiary education.

In accordance with Section 7 of the Act No. 29/1984 Coll. governing the network of primary and secondary schools (Schools Act) as subsequently amended, secondary schools are classified as follows:

- grammar schools,
- secondary specialised schools,
- secondary vocational schools.

In the school year 2001/2002, the framework of secondary schools incorporates a total of 874 schools, out of which there are 213 grammar schools, 352 secondary specialised schools, 283 secondary vocational schools, and 26 joint secondary schools.

Grammar schools provide general education and are primarily intended for students wishing to pass directly to tertiary education. Therefore, they are not principally designed for occupational training, although they provide sufficient qualifications for certain occupations in the field of public administration, culture, etc. Students are given a certain degree of flexibility in opting for facultative subjects. Grammar school studies are completed by the school-leaving exam ("*maturita*", for details see Chapter 3). Most grammar schools offer four-year study programmes. In addition to these, there are 8-year grammar schools including the second stage of primary school, with a smooth transition from the primary to secondary level of education.

Secondary specialised schools prepare students for performing a specific occupation in the field of technology, medicine, administration, economics, or pedagogy. Studies at these schools last for 4 years and are completed with the school-leaving exam. These schools provide a sufficient preparation for performing an occupation, and, due to studies being completed by the school-leaving exam; they allow students to continue in higher education. Compared to 4-year study programmes at vocational schools, studies at secondary specialised schools put more stress on theoretical knowledge. In comparison with grammar schools, the selection of school subjects taught is narrower and more specialised. Due to this fact, students from these schools are slightly disadvantaged at HEI entrance exams, compared to grammar school leavers.

Secondary vocational schools provide training for qualified, skilled workers. They offer vocational programmes, which may, or may not be completed by the school-leaving exam. The studies without the school-leaving exam last for 2 to 3 years, and upon their completion, students are awarded a vocational certificate, but they cannot apply for university. Studies with the school-leaving exam usually last for 4 years, and whilst their school leavers are trained in a certain profession, at the same time, they can continue in higher education. This case is, however, rather exceptional. School leavers from vocational schools with the school-leaving exam are qualified for higher positions with a greater degree of decision-making and responsibility than those without the school-leaving exam certificate.

Special vocational schools are designed for physically and mentally handicapped students, or for students with poor results at primary schools – usually those from special primary schools. In addition to occupational training, emphasis is laid upon the integration of a handicapped individual into society. There are many controversial issues in connection with this type of school, some of which are discussed in Chapter 3 – section Educational opportunities of disadvantaged groups.

The MoE SR figures indicate that the most secondary schools are in the Prešov region (128) and in the Banská Bystrica region (125), the fewest in the Trnava region (77). By types of schools, the most grammar schools are in the Bratislava region (41), the fewest in the Trenčín and Trnava regions (17). The most secondary specialised schools are in the Banská Bystrica region (55), the fewest in the Trnava region (31). The highest number of secondary vocational schools is indicated for the Prešov region; on the other hand, there are only 27 of them in the Trnava region.
The most private secondary schools are in the Bratislava region (21), there are 9 religious schools in the Bratislava and Prešov regions and 3 of them in the Banská Bystrica region. By types of secondary specialised schools, secondary industrial schools account for the greatest share of these schools (98), closely followed by business colleges and hotel academies (total of 86). There has been a significant drop in the number of specialised schools for girls (44), and only 31 of them are proposed to continue operation in the 2002/2003 school year. On the other hand, the number of joint secondary schools is increasing (presently 26), the plan for the next school year anticipates at least 75 of them to be in operation (the MoE SR: Analysis and rationalisation of the network of primary and secondary schools in relation to the labour market needs).

Tertiary Education – Higher Education Institutions, Science, And Research

Tertiary education is the next stage of education following after secondary education completed by the school-leaving exam. According to the ISDEC classification, this category includes non-university education as well. It is the highest

level in the hierarchy of education and a final stage before entering the labour market. In addition to schooling of graduates, tertiary education institutions (particularly universities) have another social role of high importance – they are centres of science and research.

As stipulated by the law, universities (HEI – higher education institutions) are the highest institutions of education, science, and art, and they are part of the science, research, and development base of the Slovak Republic. The present HEI framework is made up of 21 state and 2 non-state higher education institutions. Out of the 21 state HEIs, there are 18 civil universities, 2 military academies, and 1 police academy. In the 1997/1998 academic year, new universities were founded, so that each regional capital now has at least 1 higher education institution. The first non-state HEI was established in Trenčín – College of Management founded by City University, Bellevue. At the same time, the first religious university began operation: the Catholic University in Ružomberok. The state is dominant in the area of tertiary education in Slovakia, being both the main founder and the primary source of funding. The majority of Slovak HEI funds come from the state budget, in spite of increasing pressure upon universities to rely on extra-budgetary revenues to cover their costs.

The following tables II.6 and II.7 demonstrate the development of public funds allocated for the higher education system and numbers of HEI students in Slovakia.

Table II.6: HEI expenditure by source (in millions of SKK)

Source	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Central state administration (MoE SR)	2 707,9	3 048,4	3 246,7	3 050,0	2 839,7	4 009,8	4 270,9	5 045,7	5 431,6	5 448,8	5 845,9
Central state administration (non-MoE SR) [a)]	n/a	n/a	n/a	n/a	n/a	n/a	542,1	711,2	698	682,8	860,8
Municipalities [b)]	0	0	0	0	0	0	0	0	0	0	0
Extra-budgetary revenues [c)]	n/a	n/a	n/a	n/a	152,3	276,8	371,7	376,8	365,8	469,2	532,9
TOTAL	2 707,9	3 048,4	3 246,7	3 050,0	2 992,0	4 286,6	5 184,7	6 133,7	6 495,4	6 600,8	7 239,6
Others [d)]	222,7	189,9	168,6	208,8	342,2	475,9	604,5	569,9	623,5	754,1	875,0
Net HEI expenditures ("Total" less "Others")	2 485,2	2 858,5	3 078,1	2 841,2	2 649,8	3 810,7	4 580,2	5 563,8	5 871,9	5 846,7	6 364,6

a. Figures for the other ministries, excluding the MoE SR (real expenditure).
b. According to the Ministry of Finance, municipalities do not provide funds for HEI; they only partially finance local schools.
c. Extra-budgetary revenues recorded since 1994.
d. Revenues of educational institutions (budgetary organisations) transferred directly to the state budget.
Source: UIPS, particular ministries ("Central state administration (non-MoE SR)"), Ministry of Finance SR ("Municipalities").

Table II.7: HEI students in Slovakia

Year	Students	%	Students by form of study			Internal students by length of study (%)			
	Total	Women	Internal	External	Foreign	3 years	4 years	5 years	6 years
1990	63 784	47,1	52 669	9 434	1 681	0,5	31,7	57,9	9,9
1991	61 272	47,8	52 430	7 307	1 535	2,2	20,7	66,4	10,7
1992	64 311	48,3	55 564	7 281	1 466	3,1	11,7	74,9	10,3
1993	68 575	49,7	58 843	8 351	1 381	7,9	7,2	74,0	10,9
1994	76 576	49,5	66 900	8 279	1 397	7,7	5,9	77,7	9,6
1995	84 320	49,9	72 525	10 457	1 338	9,5	6,6	73,5	10,4
1996	92 801	49,6	78 045	13 323	1 433	12,0	6,5	73,4	8,2
1997	101 732	50	82 432	18 040	1 260	9,8	5,7	76,8	7,7
1998	110 643	50,9	85 742	23 526	1 375	6,6	5,4	80,6	7,4
1999	118 641	51,2	88 192	29 108	1 341	4,8	7,5	80,7	7,1

Source: UIPS

Table II.8: HEI students structure by field of study (%), 1990-1999

Year	Natural sciences		Technical sciences		Medical science and pharmaceutics		Agriculture & veterinary sciences		Humanities and services		Artistic and cultural sciences	
	Int.	Ext.	Int.	Ext.	Int.	Ext.	Int.	Ext.	Int.	Ext.	Int.	Ext.
1990	3,9	0,4	43,6	30,1	9	0,1	7,9	8,3	34,1	58,6	1,4	2,5
1991	4,3	0,4	40,1	23	9,2	0,2	7,6	10	37,1	64	1,7	2,4
1992	4,3	0,3	38,4	16,9	9	0,4	7,1	7,8	39,5	72,8	1,7	1,8
1993	4,3	0,2	36,7	19,3	8,5	0,3	7,1	7,1	41,5	72,4	1,9	0,7
1994	4	-	36,1	20,6	7,6	0,8	7,7	8,2	42,4	70,3	2	0,1
1995	4,1	-	35,7	18,3	7	0,9	8	7,2	43,2	73,5	2	0,1
1996	4,2	-	35,4	16,3	6,1	1,2	8,4	6,5	43,8	75,9	2,1	0,1
1997	4,8	1,5	35,3	14,4	5,8	1,4	7	6,6	44,9	75,6	2,2	0,3
1998	5,5	1,4	34,7	12,8	5,5	1,7	7,4	6,9	44,6	76,8	2,2	0,3
1999	5,8	1,4	33,9	10,7	5,3	1,5	7,8	6,9	44,7	79,3	2,4	0,2

Source: UIPS

HEI study courses can be divided into the following basic categories – natural sciences, medical sciences, technical courses, humanities, law, and business. Recently, there has been a shift in students' interest and preference from technical courses in favour of humanities. A steady demand can be seen for courses in medicine, pharmaceutics, veterinary medicine, and agriculture. The gradual change in preferences is shown in Table II.8. Higher education institutions in the Slovak Republic can be classified into four groups in terms of their size, origin, and development strategies.

1. Big universities in Bratislava: Comenius University, Slovak Technical University, University of Economics

These three universities located in Bratislava constitute the core of the Slovak tertiary education sector. In 1999, their students accounted for 41.6% of all students, including external students. Their share of internal students is 43.8%. These are the oldest Slovak universities and their current expenditures are 48.5% of total current budgeted expenditures (for details see Chapter 3, the section devoted to education funding). Compared to the 1995 status, however, their shares of the number of students and current budgeted expenditures have decreased to some extent.

2. Other universities with tradition and moderate growth: College of Fine Arts, College of Visual Arts, Technical University in Košice, University of Žilina, University of Veterinary Medicine

This group includes five universities, including two schools of arts (College of Fine Arts, College of Visual Arts), two technically

oriented universities (Technical University in Košice, University of Žilina) and University of Veterinary Medicine.
In the late nineties, the growth rate of these universities was lower that the average, mostly because of limitations on the number of external students. Their share of the number of students fell from 19.3% in 1995 to 17.5% in 1999. In spite of this drop, their share of internal students in the given period remained at the stable level of 21%. The share in current budgetary expenditures decreased from 21% in 1996 to 20.3% in 1999.

3. Older Slovak universities with rapid growth

Another group consists of the following five universities: Matej Bel University in Banská Bystrica and the University of Constantine the Philosopher in Nitra, both offering courses in humanities, accompanied by two universities specialising in forestry, agriculture, and technical sciences: Slovak Agricultural University in Nitra and Technical University in Zvolen. The last university in this group had been a generally oriented university in the east of Slovakia, which split to form P.J. Šafárik University in Košice and University of Prešov. This group has recently experienced a far greater growth in terms of the number of students and current expenditures than the previous groups, thus significantly increasing its share in the whole system. Such significant growth can be mostly attributed to the growth of external students, whose share increased rapidly from 27.8% in 1995 to reach 35% in 1999. Over the same period, their share of internal students changed only from 27.1% to 29.9%. The share of this group in current expenditures only slightly increased, from 26.7% to 27.2% in 1999.

4. New universities established in 1990s

This group is made up of relatively heterogeneous universities founded during 1990s in smaller regional capitals (University of Trnava, Fine Arts Academy in Banská Bystrica, Cyril and Methodius University in Trnava, University of Trenčín). Their share in the number of students and expenditure has been increasing during the second half of 1990s, as they were founded or expanding in this period. Despite this, their position among the Slovak institutions of higher education is still of minor importance. Their share in total number of internal students increased from 1.6 % in 1995 to 5.3 % in 1999 and their share in total current expenditure increased from 1.1 % of all current expenditure in 1996 to 4 % in 1999.

Case study: Primary and Secondary Education in the Bratislava and Košice Regions

(Note: The case study was conducted at the turn of the years 2000 and 2001.)

Description of the Regions

Both regions have one large city and surrounding rural areas. However, in case of Bratislava, the city dominates the region as its population of 448 292 makes up 73 % of the overall regional population of 616 982 inhabitants. In the Košice region, the city of Košice with its population of 241 874 only accounts for 31 % of the regional population of 765 294.
The Košice region is historically underdeveloped (particularly outside the city of Košice itself). This fact, together with relatively low financial in-flows into the education sector in Košice region, is reflected in the material and technical underdevelopment of schools in the region. The structure of its education system brings further negative impact as well. Secondary specialised and vocational schools in the region used to be affiliated with factories or agricultural cooperatives. Bankruptcies or other problems of many of them brought practical problems to be faced by these schools and also decreased demand for their school leavers, sometimes to a near-zero level. Also, the share of minorities in the Košice

region is substantial, especially Hungarian and Roma, but also Ukrainian and Ruthenian.

On the other hand, the Bratislava region is the most urbanized one, with very low unemployment, high income and education levels, and a low share of minorities. It is, therefore, much more oriented towards education that prepares for HE study. Higher income allows parents, particularly at some schools, to make substantial, direct or indirect, contributions to the schools. It also allows for the operation of a number of private schools. Based on the results of multiple analyses, it also seems that the city attracts and draws in the best secondary school students from the surrounding area. Some of its districts are expected to face a dramatic demographic decline in school-age children in the coming years.

Description of the education system in both regions

Generally, the following statements hold for most types of schools in the Bratislava and Košice region:

- Bratislava, due to its higher urbanization and lower share of minorities, has a smaller (in terms of number of schools) and more efficient (in terms of students per school) **state** school network than the Košice region. Košice region shows greater efficiency only in the case of special schools (students per school, per teacher and per class) and secondary vocational schools (students per school).
- Compared to the Košice region, there are more **private** and **religious** schools in Bratislava. On the other hand, there is a higher utilisation of private and religious schools in Košice (more students per school and per class) and these schools also show higher efficiency (especially primary schools, grammar schools)
- Generally, the number of schools remains stable or is slightly decreasing, with some exceptions in both regions (for example private nursery schools, private primary schools, private grammar schools). This very modest expansion of private schools in both regions goes along with the increasing number of students per school.
- Secondary schools in the Bratislava region show higher shares of external students.

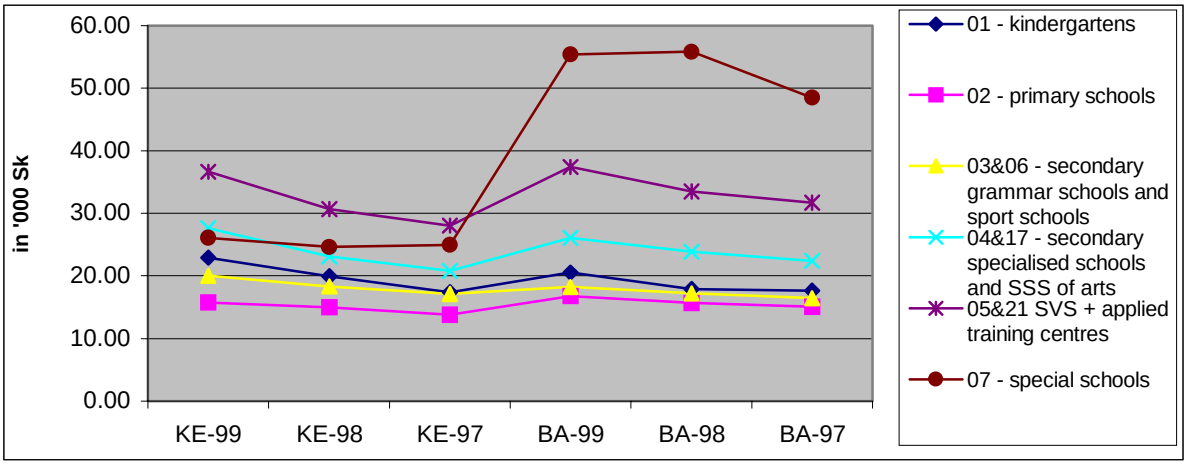
Management and Governance

Case studies in both regions have confirmed existing problems with a mismatch in accountability. In general, primary schools report to district offices, while secondary schools report to regional offices[10]. District and regional offices have education departments, which oversee the education sector in their area. The heads of educational departments are appointed and removed by the heads of district and regional offices. These officers are appointed and removed by the government (cabinet). As a consequence, the heads of regional offices have no appointment and removal powers over the heads of district offices in their regions.

The heads of education departments at regional offices do not have any legal power over the heads of education departments at district offices and their relationship is based on moral persuasion. The same is true for the MoE SR and its relationship with district and regional offices. Reportedly, the relationship works quite well due to historical institutional and personal ties. Problems mostly arise when politics becomes involved, particularly in minority issues.

[10] Districts manage primary education, kindergartens and special primary schools. Regions manage remaining education facilities, primarily secondary education and some other facilities in particular cases, which can differ from region to region (such as remedial education facilities, orphanages, etc.)

Chart II.2: Unit current costs per student in the Bratislava and Košice region in 1997-99. (in thousands of SKK, including payment arrears in the Košice region)



Source: Regional Offices of Bratislava and Košice

Education Financing

Nearly all funds for primary and secondary schools are disbursed through the budget sections of regional offices.[11] Since regional offices have their own budget sections, they negotiate directly with the Ministry of Finance. Regional offices distribute the funds to secondary schools and other schools under their management, and also to district offices, which distribute the funds to primary schools. To determine allocation of funds for respective schools and districts, regional offices use the formulas shown below.

The Bratislava region - Budget allocation formula in force from 1996 to 2000

Wages (610): Determined on the basis of the approved number of classes for the school year (changes in capacities from September 1 of the current year are reflected in the regular budget adjustment). Education departments provide data on the approved number of teaching hours, which are converted per number of teachers based on their teaching load (teaching duty – the number of lessons a teacher is obliged to teach per week). Funds for tariff wages are calculated based on the actual qualification and age structure of teachers at a particular school. Performance bonuses are allocated as percentage of allocated tariff wages, based on available budget funds, managerial bonuses are granted as lump sums. Some other wage constituents are allocated based on the actual requirements of each school (time-based pay scale changes, jubilee bonuses (*extra money paid upon employee's reaching certain age*), etc.)

Insurance funds contributions (620) are calculated as 37.75 % of the amount of wages.

Goods and services (630)
The following are fixed expenditures as given by the Regional Office of Bratislava:
- energy costs[12] (632)
- rental costs (636)
- expenditure on food or catering in student dormitories at special primary schools with all-day care and in remedial facilities (sub-items 63313, 63331)
- payments to external teachers.

[11] The exceptions are most secondary vocational schools, which receive capital funds from their governing ministries.

[12] Example of energy expenditures calculation in 2000: Actual expenditures of 1999 (minus) settled bills for the year 1998 (plus) outstanding bills for the year 1999 (plus) corrections due to change of ownership of buildings or heating systems.

After the above items have been covered, further funds are allocated for the settlement of unexpected emergency situations (accidents, etc.), for new activities, and the financing of special-purpose projects. The remaining funds are divided among schools according to the adjusted number of students for all types of schools. Where outputs cannot be measured, the budget is allocated ad hoc.

Budget 630 = (fixed expenditures) + (number of students) . k . X

k = cost coefficient (determined by the type of school or school facility)
X = adjustment coefficient based on the overall available funds disbursed to a regional office from the state budget (may differ year by year).

As for subsidised organizations in the Bratislava region, in most cases the funds were sufficient to cover their expenses in accordance with the MoE SR decree. Yet, there were some minor exceptions: in the years 1998 and 1999, available funds in Item 640 decreased substantially and religious schools and subsidised organisations other than secondary vocational schools (e.g. state language schools, State Institute of Stenographics) received lower funding than publicly-funded schools. At present, the financial requirements of schools can be satisfied in accordance with the MoE SR decree.

The Košice region - Budget allocation formula in force in 1999

Budgetary organisations:

Wages (610): After covering all obligatory items, there is 8.6% left for variable wage costs – performance pay (the percentage varies every year according to the budget).

Insurance funds contributions (620) equal to the required percentage of the volume of wages.

Goods and Services (630)
Funds allocation order:

1. Outstanding bills from the previous years
2. Social fund (equals to 0.6% of wages)
3. External teachers
4. Fuel (if part of educational process – for example SVS of Transportation)
5. Food and clothes where necessary (student accommodation, school catering, etc.)
6. Rental costs – 50% of actual requirements (% varies with the budget)
7. Energy (heat, electricity, gas, etc.) – 50% of actual requirements (% varies with the budget)
8. Unit costs per student (800 SKK secondary, 400 SKK primary schools)
9. Current transfers (emergencies, social scholarships, partial retirement benefits, etc.)

Subsidized organizations: (religious schools, school camp facilities, language schools, joint secondary schools, school enterprises):
Full budget coverage (100% of the requirements determined as in state schools) for wages and salaries (610), insurance payments (620), and the social fund. Partial coverage for operational costs (70%), unit costs per students (different for each type of schools according to the official cost coefficients).

Conclusions:

It seems that funding for the Košice region is relatively lower than for the Bratislava region. This hypothesis is backed by the current unit cost per student analysis. In case of special schools the unit cost shows significant difference – in the Košice region unit costs are some 50% of those in Bratislava. This partially reflects an extensive network of special schools in the Košice region, which absorbs a substantial proportion of Roma pupils. Surprisingly, current unit costs in primary schools are slightly lower in Košice (current unit cost per student in Košice including payment arrears) than in Bratislava, despite the fact that Košice has

1) a substantial share of minorities (providing education in minority languages decreases the economic efficiency of schools),

2) a relatively high number of limited-grade schools due to a greater share of rural population in Košice.

For other types of schools, the difference in current unit cost is relatively small (nursery schools, grammar schools, and sports schools are slightly more expensive in Košice, secondary vocational schools are less costly in Košice than in Bratislava) and the tendency over the period 1997-99 has been similar in both regions.

Due to the factors mentioned above (the extensive network of schools in the Košice region, higher share of minorities and rural population) and the current unit cost development as shown in the figures, several items, such as energy and rental costs, can be covered only partially in Košice, which leads to payment arrears and unpaid bills. This is to some extent caused by a radical one-shot cut in the goods and service budget in 1997, which withdrew nearly 50 % of funds from the Košice region budget.

Key Issues in Education

Access to education and minorities

In the Košice region, schoolchildren's commute to school becomes a relatively high financial burden, limiting attendance to secondary schools not located in the immediate vicinity. In the Bratislava region, this is much less of a problem due to both higher urbanisation and income level.

Access to education is related to the issues of minorities, which have a substantial representation in the Košice region. In case of the Hungarian minority, the school network is relatively well-developed, but due to political constraints, separate rather than integrated schools are preferred even if the schools are quite small. This puts additional strain on funds and leads to even higher competition in funding and its politicisation. Access to education is a much more significant issue for the Roma minority. The problems can be divided into two groups:

- General social problems. The Roma have a very low level of education. The exact data are unavailable, but according to regional offices representatives and other officials in charge of education, the overwhelming majority of Roma only attain primary education or the most rudimentary secondary education without the school-leaving examination. The reasons can be related to broader social problems afflicting the Roma minority.
- Specific problems in education related to discrimination and segregation. According to regional offices representatives and other officials in charge of education, the Roma face significant obstacles in their access to education. Some religious schools essentially practice segregation by not admitting Roma children using various practices. Also, those Roma students that attend secondary vocational schools, face difficulties in obtaining the required practical vocational experience. Such vocational training is usually provided in small and medium enterprises, whose managers reportedly tend to refuse Roma students.

Entrance exams and appeals

Students not admitted by the school usually submit an appeal to the Regional Office. Appeals almost never contain a protest against violation of law by the school during the entrance exams. In appeals, students rather argue by their social conditions, outstanding study results, etc. A committee at the Regional Office can either accept or deny the student appeals. There are no formal guidelines on processing appeals and practice varies among regions. The decision is essentially arbitrary and may create a potential for corruption.

Students who did not succeed in the first round of entrance exams and whose appeals were not accepted can take part in the second round of entrance exams. These are held by schools with free capacity after the first-round

exams. Students who do not succeed in passing the second-round exams and whose appeals are denied have to be accepted by the secondary schools with free capacity (usually secondary vocational schools), because there is obligatory 10-year school attendance in the Slovak Republic.

Table II.9: the Košice region (school year 1999/2000)

Entrance Exam (EE)	Number of appeals	Accepted
Talent exams	135	40
1-round EE	612	458
wherefrom grammar schools	361	289
sec. specialised sch.	218	148
sec. vocational sch.	33	21
EE for 8-year grammar schools	n/a	46
2-round EE	n/a	20
EE for extended post-secondary study	n/a	n/a
Total	more than 813	564

Source: Regional Office in Košice

Table II.10: the Bratislava region (school year 1999/2000)

Entrance Exam (EE)	Number of appeals	Accepted
Talent exams	164	12
1-round EE	270	6
EE for 8-year grammar schools	231	3
2-round EE	101	20
EE for extended post-secondary study	62	12
Total	828	53

Source: Regional Office in Bratislava

There is a substantial disproportion between the share of accepted appeals and appeals total in both regions, which confirms the indication of a different regional practice and arbitrariness of decisions.

Quality

The quality and availability of teachers in relationship to the size of the town/city can be expressed by an inverted U-curve. This means that difficulties in recruiting qualified teachers are worst in rural and remote areas, while the situation tends to improve with the size of the town and its proximity to urban areas. However, in Bratislava and other large cities with lower unemployment, the problem arises again, particularly in areas with high demand for similar skills on the labour market (foreign languages, IT, economics).

As far as the quality of outcomes is concerned, the only results available are those from the MONITOR 1999 pilot program that took place among school leavers from secondary schools as part of their school-leaving exams. The results show a highly significant disparity between the city of Bratislava and its surroundings in nearly all aspects being monitored. Apart from that, the city of Bratislava has a significant lead in English compared to other cities. The Košice and Bratislava regions do not show significant differences, which might seem puzzling taking into account challenges faced by the Košice (the high share of minorities, funding problems). However, the overwhelming majority of Roma students do not take school-leaving exams as their education finishes much earlier. (Standardised school-leaving exams are analysed in more details in Chapter 3, part "Education Results".)

Table II.11: MONITOR 1999 results in both regions and the national average

	Slovak	English	History	Mathematics 1	Mathematics 2	Mathematics 3
Bratislava – city	63.2%	64.6%	73.3%	62.0%	49.1%	56.4%
Bratislava – vicinage	58.8%	55.7%	72.6%	53.3%	34.7%	49.5%
Košice region	64.7%	58.1%	72.9%	63.9%	44.8%	58.1%
Slovakia	62.9%	60.0%	71.5%	60.0%	44.0%	54.9%

Source: Monitor 1999, State Pedagogical Institute

Demographics

The following tables show numbers of pupils in each form in each district of the two regions in question. They show the considerable differences between the two regions, but even more significant differences between the districts.

Table II.12: Number of students at all primary schools in the Bratislava and Košice regions (2000/2001 school year)

District / Form	1	2	3	4	5	6	7	8	9	Total
Bratislava I	471	483	530	581	432	441	468	514	509	4429
Bratislava II	1124	1187	1237	1359	1178	1105	1029	1106	1065	10390
Bratislava III	533	601	675	674	635	635	616	629	595	5593
Bratislava IV	1081	1222	1194	1403	1176	1175	1209	1264	1071	10795
Bratislava V	888	868	903	1056	965	1116	1236	1502	1788	10322
Malacky	808	809	813	866	803	739	750	815	830	7233
Pezinok	678	689	688	739	678	639	634	686	710	6195
Senec	505	604	592	677	566	636	603	569	614	5366
District Office BA	159	137	140	158	104	80	99	128	88	1093
Total	6247	6600	6772	7513	6537	6620	6644	7213	7270	61416

District / Form	1	2	3	4	5	6	7	8	9	Total
Gelnica	520	491	453	409	404	460	405	457	405	4004
Košice I	979	1016	1161	1138	1164	1045	954	874	794	9125
Košice II	1160	1092	1200	1156	1193	1316	1407	1411	1425	11360
Košice III	357	361	351	336	332	347	372	374	405	3235
Košice IV	645	700	638	631	559	567	532	504	556	5332
Košice vicinage.	1885	1565	1524	1483	1403	1404	1364	1366	1263	13257
Michalovce	1731	1605	1625	1626	1558	1687	1611	1752	1557	14752
Rožňava	859	872	831	834	770	832	795	829	826	7448
Sobrance	344	315	335	324	335	320	361	349	330	3013
Spišská Nová Ves	1589	1439	1461	1454	1405	1404	1446	1348	1386	12932
Trebišov	1516	1489	1501	1429	1433	1411	1478	1438	1444	13139
District Office										
Total	11585	10945	11080	10820	10556	10793	10725	10702	10391	97597

Source: District Offices of Bratislava and Košice

For the Košice region totals, the curve is downward-sloped, indicating that the intake of students entering higher forms will have an ascending tendency in the next few years. This is true for most of the districts, except for Košice II and Košice III. In the Bratislava region, the development is contrary; there is, in general, a moderate tendency of decreasing student numbers. This is true mainly for districts within the city of Bratislava. A dramatic development is expected for the Bratislava V region, where its primary school population is going to decrease by half in the next 8-9 years.

Improvement measures

- The rationalisation of the school network as a possible improvement measure can be applied in both districts. It seems even more important in Bratislava as the number of children tends to decrease more rapidly here, yet there are hardly any proposals for removing schools from the network. In the Košice region, it is expected that the rationalisation measures should be applied to limited-grade schools, but this may cause other issues to arise such as students' commuting within low-income areas and minority issues. Generally, rationalisation is not an issue for grammar schools as the demand exceeds the available capacities in the long-term.
- Support for joint secondary schools. They usually provide greater choice for students, higher variability of teachers and cost reduction opportunities.
- Low capital funding and maintenance funds result in a greater wear of the physical capital in schools. This could be prevented by regular maintenance and investments in the school property, accompanied, however, by further incurred costs.

Quality of Schools and Education in the View of Theory of Pedagogy and Management Theory

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The Notion of Quality

Quality – this word is used more and more frequently throughout society. The area of education is no exception. This fact reflects the multidimensional perception of this term. To demonstrate this, let us mention the following definitions of quality:

Quality means doing the right things in the right manner.
(Tribus, M., 1994)

Quality stands for a sum total of properties and attributes of a product or service, due to which it has a faculty to satisfy previously specified or assumed needs.
(STN ISO 84 02)

Quality is a desirable and optimal level of functioning or a result of certain processes or institutions that can be objectively measured and assessed.
(Průcha, J., 1997)

Quality is no less than satisfying objectives defined by school, standards of education, and customers' requirements.
(Tóth, T., 1998)

This multivariability of perception is accompanied by a diverse characterisation of its outcomes, i.e. various forms of quality.
- **Guaranteed quality** (-"standard"- is assessed according to the extent of fulfilment of a curriculum, study plan, and according to students' performance);
- **Agreed quality** (requirements posed by this type of quality are specified in "a contract" between a provider (such as a

school) and a customer (e.g. the participants in education);

- **Customer-driven quality** (expressed in terms of requirements and expectations; e.g. in relation to the content of education, educational process organisation, etc.);

In my understanding, quality is a standard, contract, and the expression of expectations all at once.

Education and Quality

With regard to the area of education, quality is particularly closely connected with **value** (usefulness, expedience), which the **products** of education bear for individuals and the society. The notion of objectives is of high importance, with many questions still waiting to be answered from the point of view of the school as well as society – Do we have a human, professional, moral, social, religious, … right to educate, i.e. to shape man in pursuing any "noble" goal whatsoever? Do we lack enough evidence on misuse of pedagogy as a means and school as a place for shaping so called *working class, fascist opinions, or communist viewpoints?* Should pedagogy be anything more than a mere means of making conditions for man's own development, in which man himself formulates goals, and opts for methods and options for his being? Why should school force upon students its own view of the world and picture of life's goals? *This is to show how thoughts related to the concept of "the quality of school" can be underestimated on the one hand, or misused on the other*[13].

To "relax" a bit, we go on with taking a look into the past: To paraphrase Comenius a quality school is one **that provides education that best suits a student and facilitates his full development.** In the MILLENNIUM project, it is said that the outcome (product) of a quality school is (should be) a person who is **wise, kind, active, successful, healthy, …**

[13] Note: Personally, I strongly disavow such extreme standpoints.

The Quality of School

The **systemic view** of the quality of school thus covers particularly monitoring, analysis, and assessment of the level of school in terms of various goals and particular criteria: the quality of a student, teacher, contents, methods, conditions, outputs, management, and relations. Quality is perceived as a certain degree of perfection, it becomes a **normative category** that needs to be objectively articulated by means of **indicators**. For such assessment (using **instruments**), two dominant approaches are presently used as presented below:

- *resultant*, where the quality of school is judged on the basis of actual achievements, quality schools being those creating *added value*, i.e. widening the gap between students' results before and after completing the school;
- *process-related,* where the quality of school depends on the characteristics of its functioning i.e. processes employed by the school in achieving its results.[14]

Foreign sources and trends show that school quality *indicators* can be classified into four **principal categories**[15], namely:

[14] ***Note:*** *It might be appropriate here to briefly explain the relation of the terms used: criterion → indicator → standard → instrument:*
Quality criteria (viewpoints) are understood as a selection of key properties, activities, phenomena, which are characteristic for the operation of school;
Quality indicators (indexes, aspects) are selected properties which a phenomenon in question either possesses or not, or only to a certain extent, and it is assessed on that basis;
Standards of quality are binding benchmarks on the basis of which certain phenomena are judged acceptable (*standard*) or non-acceptable (*non-standard, deviating*);
Instruments (variables) constitute a set of means for measuring a level of criteria in question.

[15] ***Note****: there is a general consent with regard to fundamental elements of the quality of school – indicators. It is broadly accepted that an indicator has to be identifiable as an aspect of quality, i.e. observable, measurable, and expressible. As far as norms and variables for these indicators (generally referred to as* ***standards****) are concerned, the contrary is often true. The explanation is quite simple: it reflects both historical and cultural*

a) *PRODUCTION* (including: results, outputs)
b) *TEACHING AND LEARNING PROCESSES* (including: school curriculum, coordination of students, quality of teachers, evaluation and grading, communication relations, and pedagogic atmosphere)
c) *GOVERNANCE* (including: school management, organisation, administration, information system, feedback, and human resources development)
d) *CONDITIONS* (including: infrastructure, economy, social structure of students, legal framework, and supportive structures outside of school).

Indicators in the principal categories of education:

a) PRODUCTION

- *results, achievements* (by means of variables such as exam and test results, inspectors' evaluations, competitions, surveys, success rate in admission to schools of a higher type)
- *added value* (i.e. a measurable increment in knowledge, skills, habits, attitudes as a result of the school's shaping of a student)
- *learning skills (ability)*
- *abilities to make use of social skills in one's life*
- *satisfaction of students, parents, "customers"*
- *professional achievements of school leavers*
- *attendance and participation*

b) TEACHING AND LEARNING PROCESSES

- *study courses offered by school*
- *content* (based on variables such as subject standards, adequacy, curriculum topicality, structuring of learning matter, etc.)
- *teaching* (based on variables such as structure, motivation, comprehensibility, strategy, evaluation, differentiated approach, efficiency, etc.)
- *learning* (based on variables such as planning, activity, feedback, strategies, skills, co-operation, evaluation, time utilisation, etc.)
- *pedagogical atmosphere* (based on variables such as the fairness of relations, individual {differentiated} approach, communication, safety, attraction, etc.)
- *class management*

c) GOVERNANCE

- *defined quality credibility*
- *management*
- *creation of programmes and projects*
- *school-level communication*
- *organisation*
- *management and development of human resources*
- *external contacts (outside of school)*

d) CONDITIONS

- *characteristics of environment* (variables such as urbanisation, health situation, social conditions, availability, etc.)
- *structure of students* (variables such as socio-economic situation, language environment, family support to education, system of preferential values, level of relations, etc.)
- *infrastructure* (variables such as premises, buildings, economic conditions, provided, equipment, ICT, etc.)
- *school staff* (variables such as qualifications level, stability, working performance, teaching level, in-house and external relations)
- *specific issues* (variables such as language {or other} skills, supply to demand ratio, admission criteria, special educational needs {gifted children, handicapped children}, etc.)

CONCLUSION: The efforts described here have been made to truly and comprehensively answer the

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tradition and dominating systems of values preferred in societies of particular countries. Furthermore, it confirms a social and community background behind the notion of "quality school". It is because standards comprise a normative view – every criterion has a certain form and/or characteristics allowing for judging a particular indicator either positively (if present) or negatively (if absenting). Coming into agreement is often a sluggish and uneasy process.

question of the quality of school, i.e.:

* *Is the content of education provided by school appropriate to present and expected future needs of the society and individuals living in it?*
* *Do educational processes, activities, and methods used in the school at present induce desirable changes in personal characteristics of an individual in accordance with a general concept of person who is educated and respecting ethical norms?*
* *Does the school system function rationally, purposefully, and efficiently and does it bring about outcomes expected by the society and individuals?*

Evaluation Results – The Quality of Particular Types of Schools and School Facilities in Slovakia

The following **categories** are used and **school quality indicators** are applied in the complex inspection and evaluation of schools and school facilities in the Slovak Republic:[16]

1. Tendencies and orientation in education, with a partial objective to determine and assess fundaments and intentions of educational activities

1.1 Main objectives of educating students
1.2 Accomplishment of educational intentions (educational programme);

2. Management, with a partial objective to determine the condition and level of management, inspection, organisational structure of a school/facility, school documentation management

2.1 Planning and implementation of conceptual intentions and objectives
2.2 Professional and pedagogical management
2.3 Supervision system
2.4 Information system
2.5 The quality of pedagogical and working documentation and insight into school legislation
2.6 The state and methods of handling injuries, work health and safety issues, work discipline, and complaints;

3. The Conditions of Education, with a partial objective to assess the conditions of educational activities in connection to the conceptual intentions of a school/facility, accomplished tasks, effective pedagogical documents (curriculum, study plans) as related to the number of classes and students

3.1 Personnel, spatial, material and technical, and psychologically appropriate conditions

4. The process and results of education, with a partial objective to assess the course of the educational process as related to the quality of teachers' activities, learning results, student's personality development, and the activities of a school/facility with substantial impact on its operation

4.1 The quality of teaching in terms of teacher performance
4.2 The quality and results of learning in terms of students' activities
4.3 The quality of school in terms of student's personality development
4.4 Preventative and multi-disciplinary activities
4.5 Activities with significant impact on the educational activity of school

Evaluation criteria are formulated for each indicator and key category, thus ensuring objectivity of the output. For example, for indicator 1.2 these criteria are as follows:

[16] ***Note:*** Each of the above 14 indicators can be further divided into key items such as the following for indicator 1.1:

1.1.1 good conceptual intentions of the management, specification of educational objectives,
1.1.2 significant internal and external factors providing a basis for the orientation of a school (traditions, regional conditions, accomplished quality, support, etc.),
1.1.3 the sustainability of stated intentions and objectives in relation to actual starting basis (accessibility, graduates' rate of success (employment opportunities), wide range of offers. etc.).

a) Positive criteria

1.2.1 the implementation of curriculum complies with declared objectives, approved curriculum and study plan (and other approved pedagogical documents) are observed;

1.2.2 the school leaves room for the individual selection of educational activities, provides opportunities for students with special abilities or with special educational needs;

1.2.3 the school prepares individual programmes for students with special educational needs;

b) Negative criteria

1.2.1 the orientation of the school and its educational programme are specified only in general and declaratory (formal) terms

1.2.2 the curriculum and study plan (and other approved pedagogical documents) are not observed;

1.2.3 the educational programme does not respect the requirements and needs of parents, students, or a region;

1.2.4 the educational programme of the school does not provide additional activities or opportunities for students with special educational needs

For data collection, we use various **tools** such as analyses of school documentation, free and controlled interviews, observation of the school environment, inspection of the premises, class observations, students' work survey, participation in the proceedings of methodological and other consultative bodies and the following **measuring instruments**:

* General inspection questionnaire
* Informative inspection questionnaire
* Scale inspection questionnaire for teaching staff
* Scale inspection questionnaire – record sheet
* Scale inspection questionnaire – scale profile
* School atmosphere inspection questionnaire for teaching staff
* School atmosphere inspection questionnaire – scale profile
* Working observation record
* Auto-diagnostic questionnaire for teachers
* Outline for a controlled interviews with school management representatives
* Questionnaire – The observance of primary pedagogical documents for teachers

Final evaluation is based on a 5-level **evaluation scale** reflecting discovered facts, **sign pattern**, and **numerical and verbal** expression of the evaluation level:

(+++++)
Substantial prevalence of positive aspects
minor deficiencies *very good* *+2*

(++++-)
Prevalence of positive aspects
less important material deficiencies
good *+1*

(+++- -)
Balanced positive *satisfactory* *0*
and negative aspects

(+++- - -)
Prevalence of negative aspects,
substantial deficiencies *less satisfactory* *-1*

(- - - ++)
Substantial prevalence of negative aspects
fundamental deficiencies *unsatisfactory* *-2*

(- - - - +)

Based on the above methodology, *The Report on the State and Level of Education in Schools and School Facilities in the Slovak Republic* is worked out annually for the respective school year. The 2000/2001 report is based on 1600 inspection reports and 6652 inspection observation records from state, private, and religious schools and facilities. The number of schools that have been observed and evaluated accounts for 23% of the school network, except for nursery schools and other school facilities. On both the overall and regional scale, the report presents substantial findings, basic **positive** and **negative aspects**, and **development trends**

for the particular types of schools and school facilities based on a uniform procedure driven by the above methodology. It is characteristic of the whole system that although the overall state is relatively **positive**, there is a warning **retrogressive** trend in all the monitored areas and the **polarisation of levels** (increasing numbers of schools and facilities with high quality as well as those whose quality is poor). This leads to an excessively wide range of evaluative judgements. The following evaluations have been chosen to demonstrate the level of quality for the key types of schools and school facilities:

Nursery schools

a) Substantial positive aspects: good managerial skills of headteachers, headteachers' ability to assess the quality level, the implementation of new trends into the educational process through experience learning and stimulating environments, satisfactory level of communication, working, and socio-cultural skills;

b) Substantial negative aspects: nearly one third of headteachers show deficiencies in managerial work, frontal teaching methods in heterogeneous classes, an increasing number of children with speech disorders, low stimulation for independent communication, the prevalence of teacher-controlled activities, the low level of pro-social education tasks, inconsistent analytical and supervisory activities in development of thinking skills;
c) Development trends: substantial increase in demand for alternative nursery schools and those offering a wider range of activities, steadily good achievements in preparation of children for entering primary school, increasing average age of teachers.

Primary schools

a) Substantial positive aspects: pupils' discipline and working atmosphere, positive influence of school on shaping environmental awareness and attitudes of pupils, implementation of problem-solving activities in limited-grade schools, logical reasoning development, implementation of integrated thematic education, cooperation with parents;
b) Substantial negative aspects: the poor condition of school building, perfunctory inspection activities, a high share of non-qualified teachers, the shortage of specialised classrooms, out-of-date teaching aids, out-of-date and inappropriate library collections, learning through memorising, lacking opportunities for independent oral presentation and interpretation of students' own opinions in the Slovak Language and Literature subject, students' achievements in Mathematics below the level of educational standards;

c) Development trends: a remaining discrepancy between declared educational requirements and conditions of schools, worsening material and personnel conditions having impact upon the quality of education, students' knowledge and skills in the mother tongue and mathematics are on the decline.

Primary schools of arts

a) Substantial positive aspects: highly qualified teachers, very good parent-student-teacher interaction, achievements in international competitions, and presentations in Slovakia and abroad, introduction of alternative educational programmes;
b) Substantial negative aspects: insufficient criteria for evaluation and remuneration of teachers, inconsistent fulfilment of study plans, shortcomings in material and technical equipment at some schools, high share of non-qualified teachers in dancing courses;
c) Development trends: persistent demand for primary schools of arts, declining material, technical, and spatial conditions.

Grammar schools

a) Substantial positive aspects: a very high level of teachers' qualifications and teaching process, foreign languages treated as priority subjects, generally better results in Mathematics compared to peers at elementary schools, the highly stimulating effect of the FAST Project, positive attitudes towards preparation of a new type of school-leaving examinations;

b) Substantial negative aspects: subject committees at 8-year grammar schools working perfunctorily and lacking in conceptual work, biased (benevolent) grading in Mathematics, shortage of teaching aids in language teaching (missing audio and video recordings accompanying textbooks);
c) Development trends: declining educational results (particularly in Mathematics) at 8-year grammar schools, the overestimation of results, increasing number of these grammar schools narrows the difference between educational results of primary schools and those of 8-year grammar schools.

Secondary specialised schools

a) Substantial positive aspects: a relatively high share of qualified teaching and teachers with required qualifications, prevailing positive motivation for language learning, the satisfactory level of students' environmental knowledge;
b) Substantial negative aspects: an inconsistent implementation of curricula and study plans, insufficient furnishing of laboratories and specialised classrooms with modern equipment and teaching aids, poor assessment of school leavers' options on the labour market, a weak influence of specialised subjects on shaping students' environmental attitudes, most applied training instructors lack pedagogical qualifications,
c) Development trends: a decline in the standard of equipment of specialised classrooms and laboratories, shortage of modern teaching aids, worsening technical conditions of buildings, increasing demand for study courses in economic services, decreasing demand for technical study courses in extended secondary education.

Secondary vocational schools

a) Substantial positive aspects: the interest of students in applied training, the overall good level of professional skills, significant effort by teachers to modernise education, particularly in non-production courses, higher quality final exams with participation of professional representatives, possibilities for improving qualifications and occupational opportunities in extended vocational courses.
b) Substantial negative aspects: worsening material and technical conditions, lack of interest in engineering courses, out-of-date textbooks for specialised subjects, little attention paid to the opportunities of school-leavers on the labour market, missing specific study plans and basic textbooks for foreign language teaching.
c) Development trends: deepening of the gap between individual vocational schools in terms of their material equipment, persistent demand for business and service-oriented courses, the substantial level of content innovation in specialised subjects of extended education.

Special schools

a) Substantial positive aspects: good social atmosphere at these schools, availability, the acceptance of parents' requests for integration of children with special needs, good educational achievements of integrated students at secondary schools;
b) Substantial negative aspects: an unsatisfactory degree of teachers' qualifications at special schools, the high turnover of tutors, unsatisfactory communication between school and family, an insufficient equipment of primary schools integrating students with special needs, deficiencies in special pedagogy diagnostics, lack of special pedagogues at secondary schools, deficiencies in teachers' qualifications, the absence of a barrier-free environment;

c) Development trends: a long-run decline in material and personnel conditions at most special primary schools, increasing numbers of students with behaviour disorders and students whose legal guardians fail to sufficiently provide for basic school needs of their children, adverse effects of integration of students with special needs due to prevailing negative conditions at elementary schools, a failure to create proper conditions for integration at secondary schools results in the prevailing socialisation problems of students due to their impairment.

Basic Quality Control Systems

Quality Control
The instruments and standards of quality are the curricula (centrally issued and binding for schools), school inspection, and system of examinations. The quality of the educational process is also assessed on the basis of students' acquired knowledge. On the other hand, the risk of errors + absence of standards and standardised tests → an insufficient accuracy of measurement → minimal effect upon teachers, school, etc.

Quality Assurance

Even here, quality is defined by curricula (standards), but some requirements are imposed upon teachers as well – teaching plans, besides giving a concrete form to the curricula, also specify teaching methods and forms, teaching aids, and didactical equipment as well as educational plans. The curricula (still centrally issued) can be customised (by 10 – 30%) based on local conditions. In addition to external inspection, internal inspection has been introduced as well.[17]

Total Quality Management

The attention of school is primarily drawn to requirements of the **state** (as a primary source of funding), **founder**, **parents** and **students, local communities,** and **school staff** ↔ TQM (Total quality management) means an agreement between a founder, school, and "customers" on what the quality shall represent for all the parties involved (*what the quality is, how it can be ensured and what instruments are used for its assessment*). Standards (general curricula) only set minimal required achievements → schools have chance to make "extra offers" → the onset of a self-developing system (focus is drawn to **the quality of teacher's work** at all levels). TQM therefore recommends concentrating on the quality of the educational process. What affects the quality in this respect?

- Curricula
- Teaching methods and forms
- Personality and competence of a teacher
- Equipment of a school
- Atmosphere of a school
- Quality of teaching aids and textbooks
- External contacts (relations) of a school
- School achievements
- School management.

The implementation of TQM is expected to bring:
* improvement in functioning of the school
* a higher quality of educational activities at school
* the satisfaction of all parties involved
* increase in competitiveness
* a better reputation.

CONCLUSION: The task of TQM in education is to **make schools active.** It aims to lead the school to permanently and initiatively struggle to improve their work. A key to success in TQM is the motivation of people and competence of each individual (*the following formula shall read: $V = C \times M$ – output equals competence multiplied by motivation*).
When is the right time to begin with TQM?
A most terse answer is that of Deming's (1986):
"It doesn't matter when you begin, provided that you begin right now."

ISO and EFQM Standards

Quality management systems frequently used in Europe are ISO 9000 – 9004 standards and EFQM quality model - European Foundation for Quality Management.

The ISO 9000 quality assurance system was originally developed for manufacturing processes (electrical engineering, mechanical engineering), ISO 9002 – 4 allow for the

[17] Note: Over the past 10 – 15 years, quality control has been gradually replaced by quality assurance in our school system as well. The remaining drawback and obstacle is an unresolved issue of quality measurement accuracy with regard to student achievements.

implementation of standards in the area of services. As a result, the possible use of the ISO 9000 standards in the area of education is limited (*the educational process cannot be exactly defined*).

The EFQM organisation was established in 1998 in Brussels. Its founders were worldwide companies such as KLM, FIAT, BOSCH, VW, PHILIPS, RENAULT, etc., seeking a primary goal to coordinate their activities concerning the issues of quality (*thus strengthening their positions on the world market*). The EFQM model implementation consists of three stages:

1. *Auto-evaluation (determination of strengths and weaknesses)*
2. *External evaluation*
3. *Quality enhancement*

A Swiss management research and development centre *Frey Academic AG – Zurich* has modified the EFQM model to better suit the needs of education in the nine fields of specialised school activities:

1. School management
2. School policy and strategies
3. School staff management
4. Resources management
5. Educational process management
6. Customer satisfaction
7. School staff satisfaction
8. Effect of school upon its neighbourhood
9. Educational and non-educational achievements

The auto-evaluation stage is followed by setting up the goals and reviewing their fulfilment. This cycle is constantly repeated. Indicators for particular fields are as follows:

Ad 1. – School management: *the task of the management in the field of quality; permanent and complex support to quality, observation and support to the success of an individual and group; systematic support to quality; the out-of-school promotion of quality;*

Ad 2. – School policy and strategies: *the position of quality management in school policy and strategies; application of school policy and strategies in educational programmes and projects; school policy and strategies as a common communication topic, regular re-assessing of school policy and strategies;*

Ad 3. – School staff management: *the planning and development of human resources for the benefit of quality; groups and individuals regularly set up new goals and oversee their fulfilment; colleagues' participation in permanent development, efficient vertical communication in both directions;*

Ad 4. – Resources management: *fund disbursement, data processing, the utilisation of resources (appliances, equipment, teaching materials, premises, etc.), making use of educational technology (multimedia, computers, etc.);*

Ad 5. – Educational process management: *the elaboration of curricula and teaching plans, the selection of appropriate teaching materials, the specification of suitable teaching methods and forms, the measurement of educational process successfulness, the exploitation of acquired data for improving the educational process, the implementation of changes to the educational process, the efficiency assessment of the above changes;*

Ad 6. – Customer satisfaction: *To what extent is the school aware of the requirements and expectations of customers? Do the school's proposals match the expectations? Does the school collect information about its clients? How does the school communicate with its customers? To what extent are the school educational programmes publicly available? Are the school's performance standards defined and published? How are complaints handled? Is an assessment of the schools' success performed? How and by what methods is the client satisfaction evaluated?*

Ad 7. – School staff satisfaction: *What is the working atmosphere at the school like? What attention is paid to working conditions? How are the conditions for further education of teachers provided for? How and by what methods is the school staff satisfaction assessed?*

Ad 8. – The effect of the school upon its neighbourhood (the society): *To what extent are the expectations of the society fulfilled? How and by what methods are the local community's opinions concerning the school activities ascertained? What is the local community's view of the educational programmes offered, performance, flexibility, social responsibility, etc. of the school?*

Ad 9. – Educational and non-educational achievements: *final examination results, the number of applicants, the number of school leavers continuing studies at a higher type of school; the number of graduates that have succeeded in finding employment; the number of certificates and other honours obtained; economic results of the school.*

The Quality of Education and Science at Higher Education Institutions in Slovakia

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Introduction

When judging the level of society, the civilised world increasingly tends to put emphasis on the importance of "intellectual wealth", the level of general education as well as the creative faculties of elites (Holländer, Koutecký, Kurzweil, Tondl, FORUM SCI, 7-9/97). It is necessary to provide education at such a level that the largest possible spectrum of population can master, but, at the same time, it is important to ensure superior education and consequently a very high level of at least some higher education and research centres. This, however, can hardly be achieved on an overall scale, due to the reasons of finance, but most of all due to the human factor restricted by a limited potential of top scholars and higher education teachers. Any evaluation of education and science as well as the accreditation process put the most emphasis on professional figures that an institution concerned has at its disposal. No state has an unlimited supply of figures that could make up a reliable backbone of educational and scientific institutions with the required quality. Hence, no intense growth of such institutions is possible without the concurrent diversification of their mission.

The quality of education and science is an important prerequisite to the development of an individual as well as society. Higher education institutions (HEI) have a most important role in this area. Accreditation and evaluation are to serve the purpose of improving their quality. The assessment of HEI quality is of high importance for students, the public, executive authorities of the state as well as employers on the common labour market, for the sake of mobility and cooperation.

Legislation and the History of Accreditation

First of all, it is necessary to draw a sharp distinction between accreditation and evaluation. These two processes are interrelated, but not identical. The history of accreditation and evaluation of HEIs and their faculties in Slovakia has not been long; after all, this process has also not been under way for much longer time in many other European countries. A key move in launching these processes was the federal Higher Education Act No. 172 Coll. as of 1990. It stipulated, among other things, that the Accreditation Board was to be established as a governmental advisory body, whose task was to "*oversee, judge, and independently evaluate the level of education and scientific or artistic activities at HEIs and their faculties in the Slovak Republic and provide support for the improvement of their quality*". The Accreditation Board tasks are specified in detail in the Government Resolution No. 422/1990 Coll. on the Accreditation Board as subsequently amended. The Accreditation Board is the only institution in Slovakia entitled and obliged by law to perform the evaluation of HEIs. The first evaluation was performed in 1990; it was actually the first

evaluation of science ever performed in Slovakia (prior to the Slovak Academy of Sciences evaluations). In its preparation, the Accreditation Board co-operated with the Slovak Academy of Sciences (SAC) chairmanship; they even arrived at a conclusion on the basis of which an almost identical selection of indicators and their interpretation was made for both HEIs and SAC.

The Accreditation Board, a governmental advisory body, is the member of INQAAHE (International Network for Quality Assurance Agencies in Higher Education), based in the Netherlands. Within this framework, a regional subsection was established in 2000 - CEE-INQAAHE, Regional Subnetwork for Central and Eastern Europe of the INQAAHE based in Budapest, Hungary. The Accreditation Board activities are also connected with other institutions such as ENQA - the European Network for Quality Assurance, the Confederation of Rectors' Conferences (CRE) and the European Universities Association. The CRE evaluations are mostly concerned with management and its improvement. The Accreditation Board has been participating in international activities since its establishment – OECD, Paris (1993), UNESCO, Bucharest, etc.

Accreditation – Definition and Content

Accreditation is the examination of a HEI's capacity to administer state examinations in the Bachelor, Master of Arts, Master of Science degree studies, doctoral degree studies, rigorous and dissertation examinations, and habilitation and inauguration proceedings in respective study courses. A higher education institution can be awarded accreditation if the quality of education completed by the state examination meets the minimum standard required to fulfil the mission declared by the institution. The accreditation is institutional; it does not ensure the standard and quality of each individual. The result of the accreditation proceedings is a binary statement - YES/NO. Besides recommendations on the rights to be granted, the findings of the Accreditation Board contain the analysis of the faculty's state and possibilities of its improvement. The Slovak Accreditation Board (AB) does not possess decision-making competence, only a recommendatory one. The decision itself is up to the Minister of Education. Different models are also used; for example in the Czech Republic the minister is not entitled to make an affirmative decision on the right to administer state examinations without the consent of the Accreditation Board of the Czech Republic.

A faculty has so far been regarded as a basic unit for the AB assessment during the accreditation proceedings. The AB recommendation is based on documents submitted by the faculty and primarily takes into consideration its personnel capacity, guarantors of study courses, and the level of departments. An accreditation proposal is drawn up following the structure required by the Accreditation Board in accordance with the Government Resolution No. 422/1999 Coll. The document contains the faculty state analysis elaborated by its management, with a particular focus on its mission, development concept, strengths and weaknesses assessment and improvement measures, and other data such as:

1. Faculty data (organisational structure, structure and numbers of employees).
2. Faculty's petition – courses and degrees of education to be assessed in respect to the right to administer state examinations, habilitation and inauguration proceedings.
3. Description of study courses (study duration, the structure of lectures and lecturers, syllabuses for main subjects, teaching staff available, scientific and educational characteristics of guarantors and lecturers, graduate profile and employment opportunities).

4. Criteria for habilitation and inauguration proceedings.
5. Material equipment and information technologies (laboratories, specialised classrooms, computer equipment).
6. Scientific activities of the faculty (significant scientific, technical, artistic works, patents, grants)
7. International scientific cooperation, foreign grants, mobility of teachers and students.
8. Social and cultural background for students, sporting and cultural activities, etc.

Classification of study degrees and courses, ISCED

The accreditation and evaluation ought to take into account the mission of the institution. In this respect, it is appropriate to rely on the ISCED classification (International Standard Classification of Education) including:
- a degree of study,
- a course of study.

A uniform classification of the fields of study is necessary for students' mobility, but it is far from satisfactory, be it in ISDEC documents or at Slovak HEIs. This document does not primarily focus on this issue, therefore, we can only point out that the list of study courses in Slovakia is too extensive and **needs to be shortened, particularly in certain groups of courses.**

In terms of higher education degrees, we can distinguish them as follows:

- **5A** – the first degree of tertiary education, which does not allow obtaining higher qualifications directly (i.e. to continue in degree 6).
- **5B (Bachelor's),** allows continuing in the second degree.
- **6 (Mgr.** – roughly equivalent to Master of Arts, **Ing.** – Master of Science, **PhD.**), the second degree of tertiary education (equivalent to "graduate school" in the USA) assumes a scientific work as a prerequisite to obtaining a degree. The highest level, completed by the PhD degree, requires research of international significance.

Implementation of accreditation standards and their relation of the evaluation

In order to assess the competence to administer state exams at a particular degree of education, there have been several attempts at implementing **standards** in Europe. The standards are important for students and teachers' mobility, for employers, graduates' opportunities on the global labour market, and recognition of degrees. To provide for their implementation, it is necessary to ensure **the comparability of procedures and their convertibility** (not the identity of various systems, but their mutual relation).

The standards can be applied to:

- **a sum of knowledge and competences graduates are expected to possess**
- curricula for particular degrees of education – content, scope, the organisation of study, the credit system of study, standards defining the quality of a study programme or institution, which is required to obtain accreditation as given by the European agreement on standardisation.
- HEI competence **to ensure and improve quality**
- teaching and scientific qualifications of teachers, high-quality teaching staff available at HEI,
- **technical conditions** required for study courses, ways of supporting students during their studies,
- **the quality of HEI management**, information systems, libraries, access to information networks, computer equipment,
- **HEI premises** (campus – a term rarely used in Slovakia), sporting and cultural opportunities for students.

Is "the European model of standards" feasible at all? Among other things, it

requires the accreditation of accreditation boards (so called *meta-accreditation*), bringing a certain degree of overruling national and institutional particularities, complicated accreditation process, different conditions on labour markets. No agreement over these issues was reached at a conference in Lisbon (2001). In the USA, the process of setting standards includes the participation of accreditation and evaluation bodies (both state and private) as well as professional associations (such as the American Chemistry Association, Medical Association, etc.).

J. Randall[18] has specified knowledge and skills that can be expected from graduates for particular degrees of study (List of standards – point 1), briefly summarised below:

Bachelor's degree:
The systematic understanding of fundamental aspects of the study field, ability to apply and develop exactly specified techniques related to the field, ability to study independently, to critically judge arguments, solve problems, and understand certain aspects of research within the given field. **The ability to perform independent research is not required.**

Master's degree:
The systematic understanding and critical judgement of contemporary issues and new perspectives of the field, the understanding of field techniques and **their application in graduate's own research**, the original application of acquired knowledge and understanding of concepts within the field of study. The theoretical background is much broader than in the Bachelor's degree courses, resulting in graduate's easier adaptability. Graduates should be able to provide creative solutions to problems, deepen and apply their knowledge and skills, and **make independent decisions in complicated and unpredictable situations.**

[18] INQAAHE Conference, Bangalore, India, 2001; www.inqaahe.nl

Doctoral (PhD) degree:
The **creation** and interpretation of **new knowledge through original research** developing the given field, **whose results should be publishable after their review**. Deep theoretical knowledge of the field, keeping track of the latest developments within the field, the development of new concepts, and solution to new problems and techniques, which a graduate should be able to interpret and clearly and efficiently present in discussions with both professionals and laymen. The graduate should be able to **solve complicated conceptual matters** in unpredictable situations, often without all the data necessary for such solutions.

The Quality of Higher Education Institutions

HEI mission and quality, the evaluation – accreditation relation

The primary mission of HEIs is:
- **schooling** – the training of professionals with the highest qualifications,
- the development of knowledge **– scientific work, the development of a given field of study,**
- **the dissemination of knowledge** through research, developmental, artistic, or other creative activities.

An apparent contradiction is connected with the HEI mission thus defined, due to **the dual role of HEI teachers – schooling and scientific (artistic) work.** However, it is only their scientific (artistic) achievements that are considered important for their professional (academic) growth almost everywhere in the world, perhaps with some exceptions at the ISCED 5A level. Having considered the standards listed in Section 3.2, it seems apparent that the ability of HEIs to comply with these standards is directly connected with HEI teachers' scientific work, particularly at the Master's and doctoral level. If a HEI wants to award Master's or higher degrees, it has to be

involved in scientific activities. These activities must be of international importance at the PhD level and be performed by guarantors, professors, and associate professors. In this manner, the requirements for the right to appoint professors and associate professors are set. Hence, the accreditation and evaluation are interrelated and, due to the given standards, they are also related to the mission of HEIs.

The evaluation of faculties and HEIs is a process the task of which is to determine the educational and scientific level of the institution in question and support its improvement. The HEI quality assessment needs to judge **to what extent the institution fulfils its mission** as defined in the report produced by the faculty and according to its preferred type of study. Unlike the accreditation providing only a binary final statement, **the evaluation can serve for ranking HEIs**, i.e. classifying them as excellent, standard, satisfactory, or unsatisfactory (this level should result in rejecting the accreditation proposal).

Mass and "top" education and their relation to quality

There are apparent efforts in Slovakia to eliminate quality assessment by external evaluators, backing it up by claiming that a university ***alone*** bears responsibility for its quality, although it is financed by the society as a whole from the state budget. There are clear tendencies towards mass education, without properly taking account of quality. Society demands still higher and higher numbers of university-educated people (in connection with technological development, globalisation, etc.), even as much as 30% of 18-year olds, thus levelling out with the EU countries. However, is it not a kind of misunderstanding? Should it not rather refer to the tertiary education up to the ISDEC 5A level (at higher specialised schools, for example) – i.e. such education that does not allow continuing directly with studies in Master's and doctoral degree courses? This option is practically unavailable in Slovakia.

It seems that the only solution possible is the consistent diversification of HEIs according to their mission.

The use of external evaluation results and possible consequences

1. Information for faculties as a means of maintaining/improving the quality of their educational, scientific, or artistic work. The improvement of HEI work, including efforts at improving their future positions, is for the benefit of these institutions themselves and in this respect their internal affair.
2. Efforts of HEIs to recruit top-quality staff, or support for the professional growth of their own employees.
3. Information for the public, students and their parents, employers, for example by publishing results in the press. The openness and public presentation of the evaluation results may help to improve the public's view of the HEI.
4. Under ideal conditions, HEIs with better results should be more in demand of students. **The graduates from elite educational institutions might expect better opportunities on the labour market and higher salaries.**
5. **Differentiated financing of HEIs according to quality.** In Slovakia, the Higher Education Act No. 172/1999 Coll. as subsequently amended in Article 15, Section 1c states that the Ministry of Education is obliged to take into consideration the HEI evaluation issued by the Accreditation Board while allocating funds for individual institutions. This does not, however, prevent the state from supporting some of the regional HEIs, or some strategic fields of study in spite of their quality being temporarily lower.
6. One of the sources of information for the decision-making process in parliament and central administration authorities in charge of science and higher education. Higher education institutions (particularly research universities) are generally considered to

be at the forefront of the scientific progress in a state, so their evaluation is important for the executive policy of the state in the fields of both education and science.

7. **Consistent evaluation inter-connected with accreditation** should bring about desirable structural changes in HEIs, including **the termination of state and private HEIs with permanently low quality**, or reassessment of their mission.

Evaluation Fundaments of the Accreditation Board

The experience from previous HEI evaluations since 1992 has been used, pointing out several problems. Indicators to assess the quality of HEIs and their faculties and their fulfilment need to be evaluated on the basis of the level of education, mission, and study fields for which a faculty (HEI) provides study courses and performs academic research. In some fields of study, there may be foreign publications or sources more frequently than in others, some fields may be expected to produce patents more frequently, etc. The faculties criticised the Accreditation Board acting from 1995 to 1998 for using the same indicators on the overall scale, relying on scientiometric indicators only and a so-called point system for the interpretation of scientiometric data. For these reasons, the procedures used in 1992 – 1995 have come into use again, according to which the faculties choose significant works on their own to be reviewed by the Accreditation Board working groups.

As far as the **entities subject to evaluation** are concerned (individual study courses, faculties, or HEIs as a whole), the faculty has been retained as **a basic unit for both evaluation** and accreditation. **The following principles have been adopted:**

Principle 1: **When claiming that HEIs need to be differentiated based on their mission,** it is inadmissible to regard any HEI**, for example the one offering the Bachelor's degree courses only,** as deficient, **or *a priori* of lower quality compared to HEIs offering higher degree courses. HEIs can be excellent, standard, or satisfactory at any level depending on how well they manage to fulfil their mission.**

Principle 2: Based on the mission, **emphasis** will be placed on various indicators of **scientific and educational activities** and their significance for the **evaluation and accreditation**.

Principle 3: Evaluation criteria, particularly for the assessment of scientific work **at research universities (with a significant share of doctoral students)**, **have to be roughly identical (equally demanding) as for corresponding institutes of the Slovak Academy of Science**, with a particular focus on the amount and quality of scientific works published by top foreign publishing houses.

Principle 4: **The abolishment of point-based evaluation**. Instead, the faculty should be awarded a ranking based on fulfilling criteria relevant for its specialisation and mission. The assessment takes into account in how many substantial indicators the faculty has been deemed excellent.

The evaluation shall be performed according to the following steps:

a) The selection of indicators of educational efficiency and scientific work. The following is required:

- long-term stability and generally acceptable interpretation
- expressive value and relevance in relation to the faculty's mission
- reliability, verification possibilities, and transparency
- their relation to the quality of professional staff at the institution concerned
- the correlation of different indicators.

b) The collection of data on faculties and their computer processing (in cooperation with UIPS)

c) Data accuracy **verification**

d) The evaluation of data and publication of results

e) Data storage and long-term trends monitoring (in cooperation with UIPS).

Selection of indicators, criteria, and their interpretation

The selection of indicators, their processing, verification, and interpretation are the crucial issues in any evaluation. The selection of indicators has a long-term impact, because **its feedback influences the behaviour of the evaluated entity**. To demonstrate a wrong selection of indication, we can point out the point-based evaluation employed by the former Accreditation Board in 1995 – 1997. For example, since this evaluation awarded 4 points for "publications from international conferences" (i.e. often attended only by a couple of colleagues from the Czech Republic or Poland), there was a large increase in the publishing output of this kind over 4 years, whereas the number of publications in recognised international journals (10 points, also for top scientific journals) remained very low. This led to the underestimation of scientific work at quality HEIs and the low volume of citations from our publications, particularly in the Science Citation Index (SCI). Slovakia is one of the weakest European countries in this field. The present Accreditation Board has rejected this system and adopted the **following solutions**:

a) The differentiation of criteria and the weight of indicators by the specialisation of faculties:

- Natural sciences, medicine, and related specialisation (faculties in category „P")
- Humanities (category „H")
- Technical sciences (category „T")
- Economics (category „E")
- Arts (category „U).

Each category has several subcategories (for example technical faculties – engineering, electronics, civil engineering, etc.). The basic evaluation is carried out by specialised workgroups for particular fields of study; the final evaluation is issued by the plenum of the Accreditation Board.

b) **The differentiation of criteria and the weight of indicators by the prevailing level of education as specified in the following scheme:**

- Bachelor's study programmes
- HEI training teachers for the 1st and 2nd grade of primary schools, or general subjects teachers
- MA and MSc degree programmes
- Extensive doctoral (PhD) programmes (faculties at research universities)

The faculties reported the fulfilment of indicators by forms available at **the Accreditation Board web page www.akredkom.sk**, section "evalvacia". Here, a very brief overview of them will be given.

Indicators and the Evaluation of Educational Work

I assume that such an evaluation can be reasonably carried out during the process of accreditation, with the evaluation workgroup being present at the faculty's premises. It is at least necessary to attend some lectures, which are part of a standard educational process, and talk to students. The evaluation of the quality of education is a problematic issue worldwide, and in essence, the only generally accepted method is to monitor graduates' success in finding employment, which is, however, a difficult task to manage, particularly if we want to determine their employment within the field of their study.

Among other things, the indicators to assess the educational work selected by the Accreditation Board included:

a) The structure of teachers by qualifications, number of professors, doctors of science, associate professors, etc. and their share in teaching activities
b) The compliance of study plans with the UNESCO standards
c) The capacity to staff study plans with full-time lecturers in at least 80-90% of key subjects, the quality of guarantors and study courses

d) The capacity to produce high-quality diploma and dissertation works
e) Laboratory equipment, libraries, computer centres, students' access to computers, infrastructure, information systems, management, integrity
f) The use of modern teaching methods – brain storming, modular education, problem-solving education and their share in the educational process
g) The evaluation of the educational process by the faculty and students, and its methods
h) International exchange programmes for both students and teachers
i) The monitoring of graduates' success at finding employment.

A problematic issue is the verification of the accuracy of education-related indicators.

Indicators and the Evaluation of Scientific Work

Evaluations performed in the past were often criticised for a mechanical application of scientiometric indicators. As stated above, when combined with the point-based evaluation, scholars at Slovak HEIs often resorted to little demanding works published in this country, bearing little significance on the international scale. For this reason, the Accreditation Board at present combines scientiometric indicators with expert reviews of works submitted by the faculty as the most significant ones. It is based on a "peer review" technique, commonly used in academic communities abroad, based on sending scientific works to prestigious publishing houses and journals for review. The full list of indicators in the required structure is available at the Accreditation Board web page. The list includes the following indicators:

Extensive indicators, (the results shown have been **adjusted to match the number of active scholars**)

- Scientiometric indicators such as monographs published in Slovakia and abroad, textbooks, chapters in monographs and textbooks, works published in journals classified as recognised, non-recognised, home, foreign, etc.
- Citations in SCI and other ISI databases (taking account of a different occurrence of the citations in different fields)
- Other indicators such as patents, implemented patents, substantial new technologies, diagnostic methods, works of art
- Assigned domestic and international grants and their financial volume
- Invitations to deliver lectures at congresses, the organisation of conferences, participation in foreign editorial boards and scientific committees, etc.

Qualitative indicators subject to the experts' assessment

- The most important works produced by a faculty (HEI) over the past 2 years, selected at its own discretion appropriately to the number of active scholars and professors
- Works that have been cited more that 50 times or more than 10 times, other scientific achievements of high importance, particularly the most significant works written by professors and associate professors, and 5 of the most important works written by scholars under the age of 40. All these works have been submitted by faculties for external experts' review.
- Outstanding projects or patents, extraordinary technical, artistic or other works.

The Quality Evaluation Results in 2000

The evaluation was based on documents presenting the faculties' activities in the 1998 – 1999 period, which have been submitted by the faculties in accordance with the Accreditation Board Resolution No. 6.2.1 and the letter (No. 20/2000-AK) to HEI's rectors as of January 2000 (www.akredkom.sk).

The Accreditation Board has issued the evaluations for faculties with similar educational and scientific (artistic) specialisations and missions. Evaluation proposals have been elaborated by 13 workgroups and summarised at the 10th AB plenary session into five categories.

The Accreditation Board has classified the faculties into groups such as **"a"** (excellent faculties), **"b"** (standard faculties), and **"c"** (satisfactory faculties) based on the evaluations results. Four faculties failed to meet the minimum standards of education and scientific (artistic) work, and one faculty (Faculty of Law, Comenius University) did not submit the required documents. The evaluation results are shown in Table II.13 at the end of this section.

The presented results show a relative evaluation of the faculties within each category. The efforts to harmonise the evaluation amongst the categories have failed, despite the Accreditation Board's intentions. Still, the Accreditation Board has pointed out differences in the scientific performance of faculties in different categories. The basic conclusions are as follows:

- The majority of faculties in category "P" (natural sciences, including Faculty of Food Chemistry, Slovak Technical University - STU) achieved much better results with regard to publications in international recognised journals and international SCI response to their works than other faculties specialising in humanities, technical and economic fields of study. Most faculties in categories "H", "T", and "E" focused more on publishing in proceedings (Table 2). The Accreditation Board recommends that the faculties should focus more on publishing in international and domestic scientific journals.
- The Accreditation Board has stated that even excellent faculties find it still more and more difficult to keep up with the European standards of education and science. With the present structure and financing of HEIs in Slovakia, no efforts of faculties are sufficient to prevent the decline in their quality. To meet the requirements of the society, the number of HEI students has doubled over past 10 years, but if HEIs should satisfy their ambitions in the field of education and science, mere efforts of their staff and management do not suffice.
- The Accreditation Board has warned the government, responsible ministries, and the parliament that educational and scientific goals of faculties can be by no means fulfilled given that the Slovak HEI budget as a share of GDP is one of the lowest in Europe and at the same time, there is the highest number of universities per head of population. The Accreditation Board emphasises that all the faculties urgently need substantial funds for improving their material equipment and access to specialised literature.

The fact that top-quality faculties of natural sciences publish most of their output in recognised foreign journals is shown in Table 2. It is a model table as it would not be appropriate to publish figures for concrete faculties without complete UIPS data. The figures have been converted on a per-scholar basis. In absolute numbers, they indicate that some faculties with the staff of 100 HEI teachers have published only a few (fewer than 10) works in international recognised journals.

Differences in the rate of publishing are partly due to the frequency of publications in certain fields of study, but most likely, many faculties are simply lacking a clear intention that it is necessary to produce internationally acceptable scientific publications – particularly at the faculties with PhD studies. It is not enough to have works published in domestic proceedings - this indicator is short of a respective expressive value. There are even greater

differences in citations registered in SCI or other ISI databases (Institute for Scientific Information).

It is worth mentioning that top-quality faculties of natural sciences are not lagging behind the technical ones as far as patents are concerned. A detailed analysis shows that at some faculties important international achievements have been attained only by several individuals or groups – this applies to the most significant works and publications cited in SCI more than 50 or more than 10 times a year. Some publications are well known worldwide and have been cited more than 200 times. A large majority of faculties are completely lacking such achievements. The AB evaluation has also reflected some significant technical and artistic works and patents. Again, there are substantial differences between faculties as in the case of publications.

Acceptance of the Evaluation by HEIs and its Utilisation by the Ministry of Education

Several HEIs and their faculties have used the evaluation results for improvements in their work. For example, some faculties have introduced special salary bonuses for publications issued in recognised international journals. The evaluation results were made public at on the Internet, but not in the daily press. The number of their recipients from the public is therefore limited. The Ministry of Education has not used the evaluation as an instrument for the differentiated financing of HEIs based on their quality and mission. Another important fact was the rejection of the evaluation by HEI rectors, who thus denied it as a motivating tool and *de facto* refused a performance-based financing of HEIs with respect to scientific activities. They justified their attitude by expressing mistrust of the evaluation[19]. After the evaluation results were made public, a discussion was held at the 11th AB plenary session in which rectors and the Minister of Education took part. The Accreditation Board permitted rectors to inspect all the documents at the AB's disposal (including the most important publications), but none of them did so. It seems that HEIs would prefer the point-based evaluation model to be used, which, however, they had previously rejected as well when the evaluations were performed by the former Accreditation Board. Rectors did not propose any other alternative models of evaluations. Nor did a discussion held at INEKO workshop "The Quality of Education in Slovakia" bring any constructive proposals. The standpoint of the Higher Education Institutions Board is not quite clear. On the other hand, deans and teachers at the faculties showing the best results in the scientific work and PhD study courses have felt disappointment over the rejection of the evaluation.

Alternative models for scientific work evaluation

Among several models for scientific work evaluation, the English one is particularly sophisticated. This model is used for funds allocation by HEFCE (Higher Education Funding Council). In the Great Britain, nearly one third of **institutional funds** (other funds are provided through various grants) is allocated on the basis of the scientific work evaluation according to its results expressed on the following 7-level scale (levels of excellence in research): HEIs at level 1 and 2 receive no funds from this batch, HEIs at level 3b receive funds with factor 1.0, and HEIs at the following levels receive funds with the factor increasing accordingly: 1.5 (3a), 2.25 (4), 3.325 (5), and 4.04 (5*). The 5*-level HEIs are truly superior educational and scientific institutions recognised worldwide.

The English evaluation model relies on expert review of significant scientific works produced by the staff at the HEI in

[19] The Accreditation Board informed the rectors about the proposed methodology at its 4th session in October 1999 and asked them to submit their comments. In January 2000, the AB chairman asked them to submit required documents, repeatedly informed them about the evaluation methodology, and called for their comments again.

question. The following criteria need to be met for HEIs to be placed in the highest category – 5*: the quality of scientific work reaches the top international level in most fields of study in which research is performed and the top national level in remaining fields. The two lowest categories still receiving certain funds for science are 3a (a significant share of scientific disciplines is of the top national quality or the international quality in some of them and national quality in most of the others) and 3b (the top national level of scientific quality in most disciplines).

Conclusion: The Problems of HEIs in Slovakia in Relation to Quality

Unlike at secondary schools, it is not possible to use common knowledge tests in higher education. The fulfilment of a HEI mission can be evaluated for example on the basis of graduates' employment figures. HEI graduates generally have better prospects to find employment; the education as such has value in itself. In the narrower sense, many of them do not work in their field of study; the quality of HEIs or faculties can therefore be evaluated only indirectly as far as employment is concerned. Among other things, while evaluating the educational results of the faculties, the Accreditation Board paid attention to keeping track of their graduates, their success at finding significant career positions, etc.

It has been found out, however, that responses to the above questions are of little expressive value. I suppose that MA and MSc degree courses at Slovak HEIs are of average quality compared to European standards as can be proven by Slovak graduates' career prospects abroad or their prospects in doctoral course. Faculties of natural sciences are nearly plundered by foreign institutions. The quality of doctoral courses is definitely low. Problems are easy to identify, on the other hand, the state executive authorities are not likely to be too eager to solve them. The following problems can be mentioned:

1. Deficient structure of the Slovak HEI framework

Slovakia has the highest number of universities calculated per 100 000 inhabitants of all the countries of Europe (the governmental paper on the HEI conception), the lowest number of students per university and allocates the lowest share of GDP for higher education institutions. All these facts necessarily have effect upon quality. The number of HEIs has roughly doubled since 1999 without allocating any additional funds. For example, there were 3 faculties specialising in natural sciences in 1990, at present there are 9 of them. The situation is even worse in case of faculties with humanities or economic courses. This rapid growth of the university-type HEIs has to be halted, or, even better, radical reduction measures should be taken without hesitation.

There is a lack of good non-university HEIs focusing on professional education, with lower requirements on theoretical knowledge, providing shorter and cheaper Bachelor's degree courses. This type of HEIs accounts for less than 10% of graduates, significantly fewer than in EU countries. The only school of this kind is a private Institute of Management in Trenčín. The HEI diversification by their mission has been one of the key OECD recommendations with regard to the Slovak framework of HEIs since 1999; still it has not yet been complied with. Otherwise, it will not be possible to achieve a broader extent for mass education (30% of population after completion of secondary education) without a significant decrease in quality and increase in costs.

2. The clash of mass education and quality

The generally proclaimed goal in Slovakia, to provide higher education for at least 30% of the 18-year-olds, is being pursued in a manner making its fulfilment actually impossible. **It is not possible to reach this level almost exclusively in MA or MSc degree courses (about 95% of graduates**

so far). Even if there were sufficient funds, it would not be possible due to the Gaussian distribution of population by ability to be educated at a particular level without a significant decrease in quality.

How will mass education affect the quality of the higher degrees of education and scientific work of universities? This issue dominated the conference held in Birmingham (April 2001), where the following questions were raised: „**End of Quality**"? **Has external quality review had its days**? **Has control of quality** been usurped **by the market** and by information technology? Does the development of **mass education necessarily mean the end of quality**? It seems that Slovakia has succeeded in solving this problem – a massive extension of the HEI network and share of external study is an easier and better-paid way that the operation of research universities specialising in scientific work.

3. External education

External education as such cannot be regarded as negative. However, this form of education is excessive in Slovakia; some faculties, including those at newly founded HEIs, have more external than internal students. It is provided at affiliated branches of HEIs, charging tuition fees collected through various private companies. HEIs build on the accreditation for internal study programmes, but they usually do not submit external study programmes for accreditation (provided through 1-week sessions – equivalent to one semester). **Such study courses are illegal**. In this manner, teachers can benefit from additional incomes, but the quality fails to meet the required standards. Teachers are often overworked and cannot be engaged in scientific research. The external education is not necessarily a closed form of Bachelor's degree education – its graduates are often permitted to continue studying in internal Master's degree courses.

4. The lack of personalities

The rapid increase in the number of HEIs over last decade and particularly in the past 5 years is not backed up by a sufficient number of scientific and educational personalities. A mechanism motivating top scholars to move from the Slovak Academy of Sciences to HEIs has not been created. The advantage of HEIs is that they can recruit young talents at early age, but their training requires good equipment and competitive salaries, otherwise they will not be motivated to replace the ageing teaching staff. As a consequence, the positions of professors at HEIs (particularly at new ones) are often occupied by pensioners (the Accreditation Board only accepts guarantors older than 65 to a limited extent). Since salaries do not reflect engagement in scientific work, teachers tend to have jobs at several HEIs and be involved in external education through private limited companies instead of scientific work and the development of scientific fundaments of their fields of study. The lack of professors has caused their number to increase twice since 1995, but the scientific reputation of some of them can hardly match international standards. This has been proven by the review of appointment proposals over the past three years.

5. Insufficient and extensive financing of HEIs

The low share of GDP for HEI funding and the manner of its utilisation has a devastating impact on the quality of education. The allocation of funds (the Ministry of Education) takes into account extensive criteria only: the number of students, "experimental work costs", and "staff qualifications structure". Since professors and associate professors can accumulate the largest portion of funds, there is pressure to reduce requirements for their appointment. The differentiated, quality-based financing is absenting, which would also reflect the quality of professors and associate professors acting in the formulas of qualifications structure. According to the law presently in force (Section 15 of the Higher Education Act), the Ministry of Education is obliged to take into account the quality evaluation issued by

the Accreditation Board when allocating funds, but it has not been doing so since 1999. Due to insufficient financing by the state, even those universities that might otherwise be of good quality are suffering from the shortage of funds. As salaries and professional opportunities (obtaining better equipment, for example) do not reflect the quality of HEIs, this results in the demoralisation of HEI teachers, especially young ones, and mistrust in the evaluation of their efforts. Yet, active departments can obtain funds for equipment (usually not for salaries) from international projects, which can improve their professional conditions.

6. HEI financing does not reflect the quality and scope of their scientific work

As rectors and the Ministry of Education have refused the quality-based financing, the scientific performance of HEIs will not be reflected in financing at all, except for funds according to Section 1 of the Act (scientific employees at HEIs, an extensive parameter again). A draft bill on support for research and development will be no remedy, because it only stipulates that an institution has to undergo the evaluation as a prerequisite to institutional financing. A clause on the quality-based financing has been omitted. **Some universities only declare to be engaged in scientific work** instead of actually doing so**.**

7. The low share of doctoral study and its quality

An average share of doctoral students compared to internal students (BA, BSc, MA, MSc degrees) at the Slovak HEIs is less than 2.2% (Statistical Yearbook of Education, 2000), Chart II.2. These figures also vary among individual faculties of the same university. Even the best Slovak faculties have a share of doctoral students 2 – 3 times lower than foreign universities (the best universities have this share up to 40%). Many doctoral students drop out before completion of their study, it is not efficient. The doctoral study is an essential indicating the scientific nature of universities and their mission as ultimate educational and scientific institutions with a significant meaning for the social and technological development. The objective of this type of study is not only to provide schooling for future scholars and HEI teachers, but also to develop their skills to analyse and solve unexpected situations, and think strategically, which is important for the economy and the state. This type of study is underdeveloped at Slovak HEIs, even top departments cannot afford to admit doctoral students up to their capacity, and the Ministry of Education does not allocate doctoral positions on the basis of quality. Its low share fits into the overall quality of Slovak HEIs, with insufficient scientific performance. Notwithstanding this condition, some faculties manage to prepare **doctoral students that can be accepted by any scientific department abroad. Differences in quality between HEIs and fields of study are the most apparent in the case of doctoral study.**

8. Technical equipment of HEI departments including laboratories does not meet the minimum standards, let alone providing support for laboratories with state-of-the-art technologies.

9. The unavailability of literature, particularly international scientific journals. I do not hesitate to say that there is not a single scientific library in Slovakia (and then none of the Slovak universities can be regarded as accredited in terms of international criteria). Students often voice strong objections against this shortage of literature. With regard to points 8 and 9, it is necessary:

- to establish an authority for the assessment of proposals to establish common departments equipped with state-of-the-art technology (regardless of the branch, HEIs or the Slovak Academy of Sciences),
- to establish a Slovak scientific library with access to scientific journals (at least) on-line, with a licence for all HEIs, SAS, and other scientific institutions.

10. Conclusion: The **enthusiasm** of many HEI teachers partially helps to overcome the

above problems. **These problems are identifiable** and can be solved through participation of both decision-making authorities and HEIs:

a) HEIs and their representatives should be more realistic in judging their educational and scientific capacities. It would be more fair and useful to provide quality Bachelor's degree education than opening Master's degree courses without sufficient full-time staff, properly working departments, and technical equipment. The cases of non-accredited fields of study are well known: the Ministry of Education granted the right to administer state exams after completion of poor-quality study courses financed at the expense of quality HEIs, despite the fact that the Accreditation Board pointed out the deficiencies and did not recommend the administration of state exams. HEIs themselves are engaged in illegal, non-accredited external education paid through private companies and in pseudo-competition created by professors working full-time at several universities in the same field of study – as competition to themselves. Many HEIs are not motivated to participate in scientific research although it is required for the level of education they provide. There is the lack of will to accept the evaluation, to efficiently improve and meaningfully use the evaluation procedures. Mass education dominates the field; the highest education suffers from the lack of supportive mechanisms within HEIs and decision-making authorities.

b) Most of all, decision-making authorities should increase the GDP share for financing HEIs, particularly if HEIs show efforts to improve quality (in addition to apparent increase in performance and number of students). The financing should be dependent on demanding quality evaluations; otherwise the problems of the highest education cannot be solved. Parliament should gather the courage to reduce the framework of HEIs. The Accreditation Board has long recommended that the two universities in Trnava should merge (the present condition is hardly justifiable), the Academy of Arts in Banská Bystrica be affiliated with Matej Bel University, or some other HEIs should merge as well. The names of existing universities should be changed so as to better express their actual state (this should have been dealt with in the annex to the draft Higher Education Act). Politicians need to overcome the temptation to establish new universities on political grounds. The Research and Development Act shall stipulate that research universities (unfortunately, this term has not been used in the Higher Education Act) have a scientific status and respective funds allocated as is common in all developed countries.

I assume that, in spite of some critical remarks voiced here, the quality of education in Bachelor's, Master's and doctoral degree courses (medical education) is sufficiently high for many of **our graduates to succeed on the European labour market**, although the quality of education is on the decline as far as my knowledge permits to judge. **Mass education is often preferred at the expense of quality. The unsatisfactory condition is at the highest level of education, in doctoral studies, and scientific work at universities**. If such a state should remain unchanged, our **universities will become unable to meet their primary mission – to contribute to the development of scientific knowledge.** It will also have an impact upon lower levels of education and, as a consequence, the capacity to develop science will be restricted to the Slovak Academy of Science and other scientific institutions. **Slovakia might soon become unable to play its part in technological development and later even unable to keep up with development trends in the world.**

Table II.13: The evaluation of HEIs and their faculties in the period 1998 – 1999

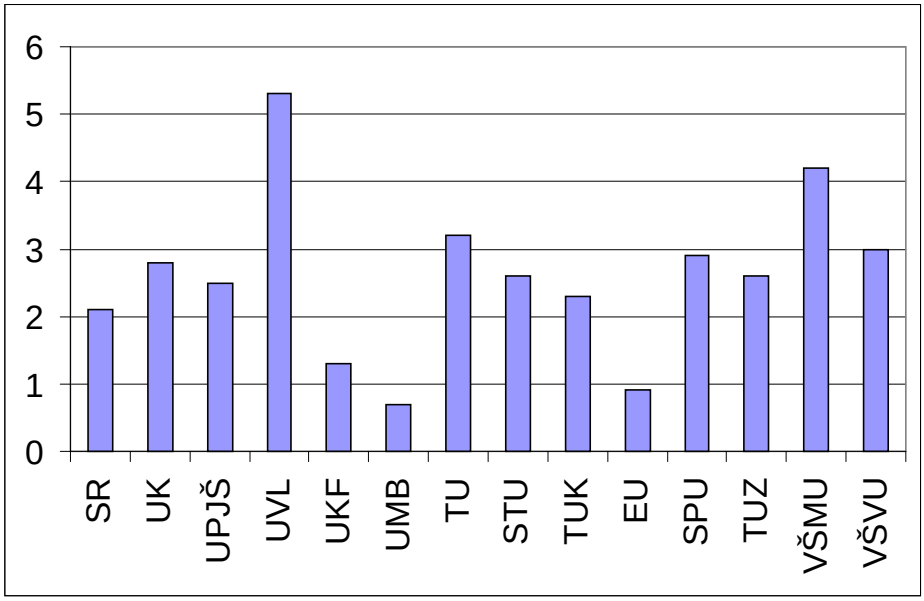
P-b	Faculty of Medicine UK
P-b	Jessenius Faculty of Medicine UK
P-b	Faculty of Pharmaceutics UK
P-b	Faculty of Medicine UPJS
P-a	University of Veterinary Medicine
P-a	Faculty of Health Care and Social Work TTU
P-a	Faculty of Physics, Mathematics, and Informatics UK
P-a	Faculty of Natural Sciences UK
P-a	Faculty of Natural Sciences UPJS
P-c	Faculty of Natural Sciences UCM
P-b	Faculty of Natural Sciences UKF
P-b	Faculty of Natural Sciences UMB
P-c	Faculty of Natural Sciences ZU
P-a	Faculty of Chemical Technologies STU
P-b	Faculty of Industrial Technologies TNU – Púchov
H-a	Faculty of Arts UK
H-a	Faculty of Arts PU
H-c	Faculty of Humanities and Natural Sciences PU
H-b	Faculty of Arts UCM
H-c	Faculty of Mass Media Communication UCM
H-a	Faculty of Arts UKF
H-c	Faculty of Philology UMB
H-b	Faculty of Humanities UMB
H-b	Faculty of Humanities TTU
H-a	Faculty of Education UK
H-a	Faculty of Physical Training and Sports UK
H-c	Faculty of Education PU
H-b	Faculty of Education UKF
H-a	Faculty of Education UMB
H-b	Faculty of Education TTU
H-a	Roman Catholic Faculty of Theology UK
H-a	Evangelical Faculty of Theology UK
H-b	Greek Catholic Faculty of Theology PU
H-a	Orthodox Faculty of Theology PU
H-b	Faculty of Theology TTU
H-b ¦	Faculty of Catechistical Education ZU – Ružomberok
H-n 0	Faculty of Law UK
H-b	Faculty of Law UPJS
H-b	Faculty of Law UMB
H-b	Faculty of Law TTU
H-b	Academy of Police Forces
T-a	Faculty of Electrical Engineering and Informatics STU
T-a	Faculty of Electrical Engineering and Informatics TU K
T-b	Faculty of Electrical Engineering ZU
T-b	Faculty of Management and Informatics ZU
T-b	Faculty of Engineering STU
T-b	Faculty of Material Technologies STU
T-b	Faculty of Manufacturing Technologies TU K
T-b	Faculty of Mining, Ecology, and Geotechnology TU K
T-a	Faculty of Metallurgy TU K
T-b	Faculty of Engineering TU K
T-a	Faculty of Engineering ZU
T-c	Faculty of Special Technologies TNU
T-c	Faculty of Mechanical Engineering TNU
T-a	Faculty of Mechanisation SPU
T-c	Faculty of Environmental and Manufacturing Technology TU Z
T-a	Faculty of Civil Engineering STU
T-b	Faculty of Civil Engineering TU K
T-a	Faculty of Civil Engineering ZU
T-c	Faculty of Special Engineering ZU
T-a	Faculty of Architecture STU
T-a	Faculty of Agronomy SPU
T-c	Faculty of Horticulture and Landscape Engineering SPU
T-a	Faculty of Forestry TU Z
T-b	Faculty of Wood Engineering TU Z
T-a	Faculty of Ecology and Environmental Studies TU Z
T-b	M.R. Štefánik Military Air-force Academy KE
T-b	Faculty of Ground Army Forces VA
T-b	Faculty of Air-Defence Forces VA
T-b	Faculty of Logistics VA
T-b	Faculty of Commandership VA
E-b	Faculty of Management UK
E-d	Faculty of Public Administration UPJS
E-c	Faculty of Political Sciences and Int. Relations UMB
E-c	Faculty of Finance UMB
E-a	Faculty of Economics UMB
E-b	Faculty of Transportation and Communications ZU
E-c	Faculty of Economics TU K
E-c	Faculty of Socio-Economic Relations TNU
E-a	Faculty of Corporate Management EU
E-a	Faculty of Trade EU
E-b	Faculty of Economic Informatics EU
E-b	Faculty of Corporate Economics EU
E-a	Faculty of National Economy EU
E-a	Faculty of Economics and Management SPU
U-b	Faculty of Applied Arts TU K
U-a	Faculty of Film and Television VSMU
U-a	Faculty of Drama and Puppetry VSMU
U-a	Faculty of Music and Dance VSMU
U-a	College of Visual Arts
U-d	Faculty of Theatrical Arts AU BB
U-d	Faculty of Fine Arts AU BB
U-d	Faculty of Visual Arts AU BB

Notes:
0 - n – no evaluation, documents for review have not been submitted
¦ - the faculty has been terminated – transformed into the Catholic University
P – faculties of natural sciences, medicine and related fields of study
H – faculties of humanities
T – technical faculties
E – economic faculties
U – artistic faculties
EU – University of Economics
TNU – University of Trenčín
AU BB – Academy of Arts in Banská Bystrica
STU – Slovak Technical University
SPU – Slovak University of Agriculture
UMB – Matej Bel University
UK – Comenius University
UKF –The University of Constantine the Philosopher
UPJS – P.J. Šafárik University
ZU – University of Žilina
UCM – Cyril and Methodus University
TTU – University of Trnava

Table II.14: Typical differences in selected indicators shown by faculties in categories "a", "b", "c" in the groups of natural science faculties (P), technical faculties (T), and economic faculties (E). All the faculties provide Master's degree courses and various scopes of doctoral study courses. The table shows the number of publications per academic staff member.

	International recognised journals	International reviewed proceedings	Domestic proceedings	SCI and multi-field ISI citations	Patents
P-a	0.6	0.3	0.30	3.5	0.01
P-b	0.1	0.6	0.50	0.1	-
T-a	0.05-0.10	0.5	0.5	0.1-0.7	0.01-0.03
T-b	0.01-0.04	1.0	0.5	0.05-0.1	
E-a	< 0.05	0.5	0.7	0.03-0.3	-
E-b	0.01	0.7	0.3		-

Chart II.2: Internal doctoral students to internal Bc and MSc/MA degree students ratio (%)



Chapter 3

Important Issues in Education Policy

The following sections will be devoted to several issues of particular importance for the education system as a whole. First, school management and administration system will be presented, later we will draw attention to the financing of education and several issues concerning teachers. Moreover, we provide insight into one of the quality enhancement methods in education, standardised school-leaving exams, as well as looking at the access of disadvantaged groups to education.

School Management and Administration[1]

This section analyses the education system management, reporting and accountability mechanisms, legal personality of schools, and status of school boards.

Table III.1 details the responsibilities for the education system at various organisational levels. The Ministry of Education bears responsibility for formulating general education policies, drafting legislation, and management of the whole system, including curriculum preparation and textbook selection. On the other hand, it has no direct power over financing of the education system. Following the state administration decentralisation and the new territorial division (8 regions and 79 districts) in 1996, district and regional offices have become founders for most schools and school facilities. Heads of education departments are appointed by the heads of district and regional offices, while these officials are appointed and removed by the government. Education departments are part of district and regional offices, under the MoE SR methodological guidance. Likewise, the Ministry of Interior should regulate the activities of district and regional offices, but it lacks any direct mechanism for actually doing so. In practice, there are frequent cases when district and regional office do not respect the ministerial regulations.

Most funds for primary and secondary schools[2] are disbursed through regional offices. Since regional offices have their own budget sections, they negotiate directly with the Ministry of Finance with regard to their budgets. Regional offices then transfer funds to secondary schools and district offices, which allocate funds for primary schools. Besides administering the budget, another key role of regional offices is that they, as founders, decide on quotas of students to be admitted to secondary schools and on appeals filed by students not admitted after entrance exams. By setting school capacity quotas, regional offices can efficiently regulate competition between secondary schools. They have also powers to appoint and remove school headteachers. In the new system, school boards can have a say in the choice of candidates; however the decision itself remains with the founder – the district or regional office.

[1] The present state of affairs is described here. Changes to come into force after July 7, 2002 are presented in Chapter 4.

[2] With the exception of secondary vocational schools falling under particular ministries, secondary medical schools, and schools falling under the ministries of defence, interior, and justice.

Table III.1: Institutional responsibility for the management and financing of schools in Slovakia

Entity	Main tasks and responsibilities	Educational institutions
The Ministry of Education	- outlining education policy, standards, curricula, quality assurance systems, - drawing up resource allocation directives - consultancy tasks in the preparation of local education budgets - responsibility for the school network	- HEIs - directly subordinated organisations (State Professional Education Institute, State Pedagogical Institute, Departments of Methodology, etc.)
Regional Offices – Education Departments	- the preparation of draft budgets - allocating funds for secondary schools and education departments of district offices - appointing headteachers of secondary schools - setting the capacity of secondary schools	- secondary schools - special schools
District Offices – Education Departments	- allocating funds for schools within the district - appointing headteachers of primary schools - the operation of schools and labour relations (for schools without legal personality)	- primary schools - nursery schools
Municipalities	- possible financial subsidies for the operation of schools	- primary and secondary local schools
School Boards	- proposals to appoint/remove the headteacher - supervision over the headteacher's work	
Schools	- the operation of schools and labour relations (for schools with legal personality)	

Source: World Bank

This system is faced with two principal problems:

- Generally, schools are accountable to district or regional offices, which are in turn accountable only to the government. This accountability chain leads to a problematic relation between powers and responsibilities of the parties in the system. The heads of regional and district offices are appointed on political grounds and are unlikely to be held responsible and removed for problems in the education sector, particularly as the budget and resource allocation system are non-transparent[3].
- District and regional offices and sometimes schools themselves have multiple accountability relations, which is particularly harmful as Slovak public administration is characteristic of a low level of coordination and use of available information.

Legal autonomy

In Slovakia, all secondary schools as well as all private schools have legal personality by law. Among primary schools, only a few of them are autonomous legal entities, the rest of them are organisational units under district offices. Schools with legal personality have more autonomy, particularly in financial issues. The school headteacher decides on the use of available funds (in accordance with the law). This means that:

- such a school should not experience a situation when even routine decisions or budget changes take 2 – 3 months as they have to be made by the district or regional office,
- more autonomy for the school in reallocating funds between different budget categories,
- more flexibility in remuneration matters (for the headteacher),
- an enhanced ability to plan activities and financing ahead,
- increased motivation for the headteacher and teaching staff,
- slightly higher costs due to the costs of accounting and wage-processing services.

[3] Education financing is dealt with in more detail in the second part of this chapter.

The whole process of granting legal personality to schools began in 1990, when the act governing the organisation of schools was substantially amended. According to this act, secondary schools received legal personality automatically. Primary schools were originally supposed to gradually achieve the same status, but the process has ended up differently. To achieve legal personality[4], primary schools have to actively pursue it and gain approval from their founder – the district office in case of state primary schools. In 1990, only 14.6% of all state primary schools were legal entities, mostly schools in the western regions of Slovakia.

School boards

Primary and secondary education in Slovakia is now partially self-governed. Each school, regardless of its legal status, should have an elected school board[5]. The school board's role should mainly be supervision over the management of the school. School boards have a four-year term of office and are composed of 5 to 11 members including teachers and other school employees, parents, representatives of the municipality and other parties involved (trade unions etc.), and students (in case of secondary schools). Their primary responsibilities are to propose the appointment and removal of the school headteacher (in private and religious schools, they only confirm the appointment) and to supervise the headteacher's work.

School boards and an efficient quality assurance system could improve the quality of the accountability system in schools. The present status of schools boards is rather problematic, as the process of board elections is not sufficiently regulated, thus lowering their credibility. Another problem is the fact that school boards are mostly occupied by persons directly involved in the operation of a school, who therefore prefer to avoid any dispute with the headteacher, who they should actually supervise (be it teachers, parents, or students).

[4] The Millennium project as well as the decentralisation process require that all schools will gradually become legal entities. Both measures are analysed in Chapter 4.

[5] There are also district and regional school boards, which are supposed to supervise the work of district and regional offices in the area of education.

Financing of Education

This section explores the financing of education, both primary and secondary (local) education and higher education. The Schools Financing Act (governing the financing of primary and secondary schools and school facilities) and the Higher Education Act (presently under preparation in parliament) will bring substantial changes to the present system. Here, we will not consider these changes and describe the system as functioning before they come into force. Still, both legal norms are dealt with in Chapter 4.

Sources of funds

The total funds coming to the education system are allocated from public and in part private funds. The overall funds include the state budget, extra-budgetary revenues and municipal subsidies. Official figures do not indicate donations or fees charged by private schools and HEIs[6].

Local education – Primary and secondary schools

The budgeting process and funds allocation mechanism

The budgeting process for the primary and secondary education is essentially based on a relationship between the state budget and regional offices, which have their own budget sections[7]. As the overall funding and

[6] For details see Table I.5.

[7] Some schools are financed from the budget sections of other ministries, mostly secondary vocational schools operated under economic ministries (the Ministry of Economy, the Ministry of Transport, Post, and Telecommunications, etc.), medical school, military schools.

number of employees in any given budget section is specified by the State Budget Act. This provides legal limits for the regional chief officials in their work. Funding for primary and secondary education[8] is also exactly specified in the law, which should prevent these officials from using education funds for other purposes.

When analysing the financing of primary and secondary schools in Slovakia, it is necessary to draw a sharp distinction between the budgeting process and actual resource allocation. The budgeting process for regional offices is generally based on actual, present and historical data of individual schools and districts, which are adjusted in a certain way. However, in reality, the manner in which education funds are distributed within regions and between various types of schools is left entirely to the regional offices themselves. The MoE SR is supposed to provide guidance in this area, but this is reportedly ignored in many cases

The budget structure is identical throughout the whole Slovak budgetary sector, including the education system. It distinguishes between current and capital expenditure[9], which are then subdivided into several subcategories.

Generally, it is funds cannot be transferred between these categories (so called Budget Items), with the exception of using savings from Item 620 – Insurance for Item 630 – Goods and Services. Therefore, this current expenditure division can be considered a 'hard' limit. In addition to that, the funds are structured by the so-called paragraphs[10].

Budget paragraphs should denote for what purposes the funds in individual budget categories should be used. However, the regional offices are not bound by this classification and can reallocate funds from for example secondary grammar schools to nursery schools. Therefore, this division can be considered a 'soft' limit.

Regional offices directly fund secondary schools[11]. Since secondary schools have legal personality, the funds have to be allocated and transferred to each school separately. Primary education is funded through district offices, which receive the respective funds from regional offices. Only the small minority of primary schools that are legal entities receive funds directly from the district office budget. The remaining funds are directly administered by the district office, which covers all expenditures of non-autonomous primary schools from its budget.

The present system lacks transparency, because the amount each school receives is largely determined by the regional and then district office. When deciding on funds, regional and district offices have to adhere to the legislation presently in force (e.g., teaching load limits, teacher remuneration system, etc.). Moreover, the reality is even more problematic, because since 1996, the education sector has received less funds, particularly for goods and services, than has been necessary to cover its essential expenditure. This is partially due to budget problems and attempts of the Ministry of

[8] Later in the text, we will mostly refer to primary and secondary schools.

[9] Current expenditure (600), Wages and salaries (610), Insurance (620), Goods and services (630), Current transfers (640), Capital expenditure (700). These items differ slightly for subsidised organisations, these differences will not be taken into consideration here.

[10] Budget paragraphs within Item 40 – Schools – are as follows: nursery schools, primary schools, grammar schools, secondary vocational schools, secondary specialised schools, sports schools, special schools, school catering, remedial education facilities, student dormitories, special interest education schools and facilities, community centres, school camp facilities, school-services facilities, educational counselling facilities, further education facilities, secondary specialised schools of arts, HEIs, theological faculties, seminaries and dormitories, foreign students' care, staff training, entrepreneurial entities, religious schools, private schools, educational prevention facilities, religious school facilities, private school facilities, municipal school facilities, other educational activities.

[11] Chapter 4 deals with decentralisation and changes it will cause to the financing of schools and school facilities by transferring foundation powers.

Finance to force reforms by imposing financial pressure upon schools. However, as this budget restriction is the soft one, it results in substantial debt for schools and even higher non-transparency in the budgeting. Recent changes in the financing system are presented in Chapter 4.

Budgeting procedure for state schools[12]

The budgeting process, by which the budgets of regional offices are determined, is based largely on an adjusted combination of current and historical data. We will briefly describe the creation of budgetary items 610-640. Item 610 – Wages and Salaries is based on actual data on teachers (such as qualifications and work experience) and then adjusted to allow for some performance pay and to reflect the fact that the real number of teachers is below limits on teaching load and other regulations. External teachers are paid from Item 630, not 610.

Item 620 – Insurance – i.e. the employer's payments to insurance funds are calculated as 37.75 % of the amount in Item 610. This is the item where some savings can be achieved, particularly as teachers who have passed the retirement age(a large group of teachers) are not subject to insurance contributions and the funds thus saved can be used for the purchase of goods and services (630). Items 630 – Goods and Services and 640 – Current Transfers[13] are calculated based on historical data and since 1996 have been constantly lowered because of budget constraints, which has resulted in significant payment arrears by state schools for goods and services (mostly utilities payments).

Religious and private schools

Both types of schools are financed from Item 640 – Current Transfers. As this budget item is underfunded, there are significant discrepancies between the official resource allocation mechanism and the actual budget. According to the resource allocation mechanism, religious schools should be funded equally to the equivalent state schools and private schools should receive 70 % of the subsidies of the equivalent state school. The actual figures are 80 % for religious schools and only 37 % for private schools[14]. Tables included in the end of this section and worked out by the Ministry of Education indicate the status as of 2000 based on budgetary figures. Table III.3 shows the amount necessary to increase the volume of current transfers for private schools so as to reach 70% of subsidies granted to state schools. Table III.4 shows the actual percentage of equivalent subsidies received by private schools. This comparison confirms substantial differences in financing both across regions and types of schools.

School debts, hard and soft budget restrictions

Since 1996, the education sector has received funding, particularly for goods and services, which in its present form has not been sufficient to cover essential expenditures of the education sector. This has led to the incurrence of substantial payment arrears. Therefore, the budget restriction is not credible and obscures actual expenditure. At the end of the section, Table III.3 shows the development of budget arrears in 1997-1999 by regions. Most of these arrears (60 – 75% of the overall amount in respective years) are debts incurred by schools administered by district offices. The analysis of the payment arrears shows that most debts incurred in the item *Goods and Services*, mostly from outstanding payments for utilities[15].

[12] The budgeting procedure effective from January 1st, 2002 is described.

[13] Item 640 concerns mostly the transfers of funds to private and religious schools and secondary vocational schools that are subsidised organisations.

[14] The figures are estimates made by the MoE SR staff.

[15] The table shown a more detailed subdivision of Item 630 (Goods and Services): 631 – Travel Expenses, 632 – Utilities, 633 – Materials and Services, 634 – Transport Costs, 635 – Routine and Standard Maintenance, 636 – Rental Costs, 637 – Other Goods and Services.

Table III.2 shows evidence that debts are incurred mostly in items 632 – Utilities and 640 – Current Transfers. These items have accounted for 77.5%, 80.0%, and 69.2% of all debts in 1997, 1998, and 1999 accordingly. The reason for this is the large volume of these items (like the item Wages and Salaries), which makes the restriction particularly soft and ineffective in this case.

The role of extra-budgetary funds

There are formal and informal extra-budgetary revenues of schools. Formal revenues are accumulated from students' fees for services provided by nursery schools, school clubs, primary schools of arts, and secondary school dormitories. These funds should serve for the development of the institutions that have collected them and headteachers of schools and school facilities decide on their use. In some districts, regional and district offices tend to lower budgets for schools by the expected income from these activities and so effectively take away these funds.

State schools and school facilities are mostly budgetary organizations and their revenues are the income of the state budget. There are only limited incentives for schools to better utilise their property or to gain additional funds, or such activities are performed on an informal basis[16]. The amount of funds obtained in this way is wholly impossible to estimate[17].

[16] Legally autonomous schools are entitled to have a separate account for donations, etc. Since the District Office can keep track of this account, schools put themselves at risk that the District Office will force them to cover certain costs from these funds which would otherwise have to be covered by the state. If a school can obtain a larger volume of funds in this way, it is more convenient to establish a foundation or a non-profit organisation with only personal links to the school.

[17] Some information can be found in the survey made by INEKO and Transparency International Slovakia, presented in Chapter 1 and in Annex to this book.

Higher education institutions

Sources of funds

The actual budget for HEIs has shrunk considerably over the past decade. In nominal terms, the capital expenditure (period 1990-1999) has risen by 29.1%, current expenditure (except wages) by 76%. CPI (Consumer Price Index) has increased by 169.6% over this period. What is more, the overall number of HEI students has increased from 63 784 (1990) to 124 336 (2000) and the average length of studies has increased as well. This has resulted in a significant drop in the real budgetary expenditure per student[18]. Expenditure on higher education as a percentage of GDP decreased from 0.98 % to 0.7 % between 1992 and 1999. The significant cuts in HEI funds have not been followed by emerging competition between schools, which would have eliminated low-quality, uncompetitive schools. On the contrary, other universities have been founded, mostly on political grounds.

Table III.5: Expenditure on higher education

Year	HEI expenditure		From which			
			HEI science and research		Wages and personnel costs	
	billion SKK	% HDP	billion SKK	% total	billion SKK	% total
1992	3,25	0,98	0,31	9,49	1,35	41,61
1993	3,05	0,82	0,25	8,23	1,36	44,69
1994	2,84	0,64	0,20	7,11	1,43	50,35
1995	4,01	0,77	0,29	7,31	1,79	44,69
1996	4,27	0,73	0,34	7,84	2,01	47,16
1997	5,05	0,77	0,50	9,99	2,24	44,29
1998	5,43	0,76	0,58	10,64	2,46	45,36
1999	5,45	0,7	0,59	10,88	2,60	47,66

Source: the MoE SR (2000)

[18] In nominal terms, per-internal-student expenditure was 51 400 SKK in 1990 and 61 800 in 1999. When adjusted by the CPI index, the 1999 amount is less than a half of the 1990 amount, still not taking into account the significant increase in external students over this period.

Budgeting and resource allocation

Budget funds are allocated to universities, which then distribute them to their faculties. Like in the local education sector, the budget for higher education is divided into current and capital expenditure. It is also divided into the so-called 'paragraphs' – expenditure categories. The two paragraphs most relevant for HEIs are 4018 (HEIs) and 2001 (Science and Research)[19]. Total budget funds for the budget items in each paragraph are then determined by negotiation between the Ministry of Finance and the Ministry of Education. Subsequently, the MoE SR distributes current expenditure funds in the following way (based on status as of 2000)[20]:

Paragraph 4018

Item 610 – Wages and Salaries – for individual schools contains the sum of expenditure in the previous year, taking into account any changes in tariff wages. The balance of funds is then divided based on an annual evaluation (performance) coefficient. The three new universities receive funds based on the average wage in the HEI sector and the number of employees. The insurance payments account for 37.75% of the wage bill[21]. Any savings in this item can be used for the purchase of goods and services. Item 630 is made up of fixed and variable subsidies. The fixed subsidy is based on previous-year payments for energy costs, rental costs, catering contributions for all employees including full-time doctoral students and other students, accommodation contributions per bed and a maintenance and repair allowance. If the fixed subsidy leaves some funds still available, these are then divided as the variable per-student subsidy. Item 640 – Current Transfers - is the least transparent one and serves as a source of funds for social scholarships (its volume determined by the number of entitled applicants). Other outlays are based on actual expenditure incurred in the previous year.

Paragraph 2001

The distribution of funds within Item 310 and 620 is similar to Paragraph 4018, but here it applies to research workers and internal doctoral students. Funds for Item 630 – Goods and Services – are allocated on the basis of the number of research workers, teachers, internal students, and a research intensity coefficient for a given area. Item 640 – Current Transfers – provides for PhD scholarships payments and its funds are based on the actual number of doctoral students as reported in November of the previous year.

Evaluation of the system

By law, the use of 610 funds is limited to wages and 640 funds to social scholarships and other allowances. The school can flexibly use and transfer only funds in items 620 and 630. As many fixed expenditure funds are budgeted on the basis of historical data, there are no incentives for schools to cut costs by investment. On the other hand, the system is relatively transparent[22] and its allocation formulas are subject to approval by the Board of Higher Education Institutions (still, the ministry can ignore its decision).

The budget restriction applicable here is a soft one in the sense that the state grants additional funds to schools if they become insolvent. Besides, HEIs as state institutions do not fall under the Bankruptcy and Settlement Act. This situation could change, however, with the adoption of the draft

[19] Paragraphs of minor importance are not taken into consideration here. The current expenditure item within two paragraphs is divided into four categories: 610, 620, 630, 640. Item 700 – Capital expenditure is important – it serves to pay for nearly all goods and services with the value and service life exceeding 20 000 SKK and 1 year respectively.

[20] A different system was used in 2001.

[21] Not paid for employed who have reached retirement age or employees working on the basis of temporary work agreements, etc.

[22] Except for a somewhat unclear manner of fund allocation during the year and for capital expenditure.

Higher Education Act. In this act, it will probably be necessary to treat insolvent schools in some way and consider the implementation of a receivership instrument[23].

Table III.5 provides an overview of HEI expenditures over the period from 1996 to 1999, adjusted on a per-student basis.

The trends in HEI expenditures during this period can be characterised as follows:

- The current expenditures of individual universities (per student) have been uneven; the mutual differences have further deepened during this period. It ranged from 208 000 SKK per student at the University of Veterinary Medicine in Košice to 26 000 SKK per student at the University of Economics, Bratislava. However, different financial needs of programmes provided by both schools render any direct comparison misleading.
- In general, universities specialising in humanities and economics and with a large number of external students showed the lowest current expenditure per student (despite the fact that external students are calculated with a low coefficient of 0.2). Universities focusing on technical areas and arts and research universities with few external students showed the highest expenditure per student.
- A comparison is frequently drawn between the older universities and the newly established ones that emerged in the nineties. In case of HEIs specialising in arts, the new Academy of Arts in Banská Bystrica has shown the current per-student expenditure much higher than the average of the other two artistic HEIs (240 % in 1997, 241 % in 1998 and 132 % in 1999). This cannot be generalised for all HEIs founded in the nineties, though, nor attributed solely to the start-up costs of new HEIs (for example, current per-student expenditure for Cyril and Methodus University, University of Trnava, and University of Trenčín was below the average of comparable HEIs).

- The share of personnel expenditure in the overall current expenditure has not been rising in the second half of 1990s, although it is often claimed so. At the four universities with the highest number of students, this share has fallen down from 72 %, 72 %, 72 % and 73 % in 1996 to 70 %, 69 %, 68 % and 73 % respectively in 1999. However, the share of personnel expenditure in the overall expenditure is largely stable across the board, with the average of 2.8% and standard deviation of 0.57 in the 1996-1999 period.

[23] These issues are analysed in Chapter 4, where the analysis of the Higher Education Act is presented.

Table III.5: HEI expenditure per student (in '000 SKK, weighted)

Year	1996			1997			1998			1999		
School	**Total**	Capital	Current	**Total**	Capital	Current	**Total**	Capital	Current	**Total**	Capital	Current
UK Bratislava	**45,07**	2,15	42,92	**50,58**	3,02	47,56	**63,62**	3,21	60,41	**66,72**	4,34	62,38
UKF Nitra	**29,97**	4,7	25,27	**35,83**	8,05	27,78	**32,41**	3,21	29,2	**32,11**	3,33	28,78
STU Bratislava	**57,87**	5,59	52,28	**61,29**	5,06	56,23	**69**	4,63	64,37	**69,45**	4,21	65,24
TU Košice	**37,59**	1,81	35,78	**37,86**	1,46	36,4	**40,45**	0,94	39,51	**44,71**	3,01	41,7
VSVU Bratislava	**78,56**	6,57	71,99	**128,7**	52,92	75,74	**156,9**	77,94	79,02	**175,2**	93,63	81,59
EU Bratislava	**28,62**	7,43	21,19	**23,46**	0,87	22,59	**27,05**	2,4	24,65	**28,98**	3	25,98
VSMU Bratislava	**100,2**	29,24	70,97	**107,2**	38,83	68,41	**122,8**	41,42	81,37	**139,2**	50,22	89,01
TU Zvolen	**57,57**	5,07	52,5	**62,08**	4,59	57,49	**68,23**	6,35	61,88	**70,77**	7,42	63,35
UVL Košice	**211,8**	7,22	204,6	**191**	21,51	169,5	**233,2**	10,99	222,2	**224**	15,95	208
SPU Nitra	**51,92**	6,65	45,27	**64,17**	19,6	44,57	**70,99**	21,38	49,61	**58,23**	11,18	47,05
ZU Žilina	**48,12**	13,58	34,54	**44,02**	5,97	38,05	**44,83**	2,72	42,11	**44,14**	2,4	41,74
UPJS Košice	**49,6**	6,86	42,74	**53,71**	2,49	51,22	**69,62**	5,59	64,03	**78,29**	13,58	64,71
PU Prešov	**61,52**	20,64	40,88	**47,29**	13,04	34,25	**48,92**	10,79	38,13	**40,72**	2,93	37,79
UMB B. Bystrica	**32,35**	7,82	24,53	**83,09**	42,32	40,77	**51,35**	10,17	41,18	**46,43**	10,71	35,72
AMU B. Bystrica				**742,6**	569,6	173	**597,8**	404,4	193,4	**135,8**	23,39	112,4
TRU Trenčín				**50,81**	11,75	39,06	**105,6**	58,73	46,88	**40,67**	7,42	33,25
TTU Trnava	**38,03**	9,19	28,84	**41,72**	18,83	22,89	**35,1**	4,64	30,46	**39,05**	5,17	33,88
UCM Trnava				**47,7**	27,47	20,23	**136,6**	81,61	54,75	**47,62**	14,21	33,41
Average	**46,6**	6,15	40,45	**52,34**	9,46	42,88	**52,43**	7,19	45,24	**51,34**	5,78	45,56

Source: the MoE SR.

Note: In calculating expenditure per student, weighting coefficients are used for external (0.2) and PhD students (2). For abbreviations of HEIs listed, see Table II.13.

HEI revenues

Higher education in state institutions is officially free of charge, but the reality is somewhat different for certain groups of students. Some schools charge fees to external students, whilst this income is usually directed through a private company or a foundation associated with the school. Due to unofficial nature of these fees, it is impossible to estimate how many students actually pay and how much[24], but related figures indicate clear incentives to admit the increasing number of external students.

Table III.6: External to internal students ratio

Year	External to internal students ratio (multiplied by 100)
1990	17,9
1991	13,9
1992	13,1
1993	14,2
1994	12,4
1995	14,4
1996	17
1997	21,8
1998	27,5
1999	33

Source: UIPS

Across-the-board analysis shows that between 1995 and 1999 the number of external students increased by 16 529, whereas the number of internal students increased only by 10 445. This does not apply evenly to all HEIs. For example, 12

[24] INEKO and TIS surveys presented elsewhere in the book claim that students' fees range from 6000 to 30000 per annum.

faculties reduced the number of external students over this period (religious faculties, University of Žilina, etc.). 16 other faculties did not have any external students across the whole period (arts, medicine, pharmacy, natural sciences, and the faculties of Slovak Technical University). 21 faculties increased the number of external students by less than 300, altogether by 2673 students. The last group to mention consists of 18 faculties, which took in more than 300 external students each during the period, (the total of 14739 external students - i.e. 89 % of the total increase). These faculties belong to just four universities - University of Economics in Bratislava, Matej Bel University in Banská Bystrica, University of Trnava and Constantine the Philosopher University in Nitra. What these universities have in common is their specialisation in humanities, economics, business and management, and pedagogy.

The high intake of external students is usually a tendency of the whole university, not just some of its faculties and is more characteristic of younger universities[25]. The key issues of the present system are the lack of transparency providing incentives for various rent-seeking activities and the lack of quality assurance in external studies.

There were 1347 foreign students studying at Slovak HEIs in 1999. These were either fee-paying students or studied for free on the basis of international agreements. At present, the number of foreign students is stagnating. As the fees paid by foreign students are higher than the funds HEIs receive per student, there are incentives for schools to crowd out domestic students in favour of foreign ones and to make their studies as long as possible. Most foreign students study at medical faculties (579 in 1999), where they account for 11 – 17% of all their students, including external ones.

Besides external study fees and foreign students' payments, schools can receive income from fees they charge for entrance exams, various administrative procedures as well as those from rental agreements, commercial activities, and external grants.

[25] with two substantial exceptions – Faculty of Law at Comenius University and University of Economics in Bratislava.

Table III.2: Total payment arrears (by regions, end of year status, in '000 SKK)

1997-Regions	610	620	630	631	632	633	634	635	636	637	640	600
Bratislava	0	0	35 990	0	31 279	688	27	2 947	1 000	49	106	36 096
Trnava	0	0	13 754	88	11 493	663	23	1 225	19	243	0	13 754
Trenčín	0	11 997	35 938	0	31 711	785	623	2 156	78	585	1	47 936
Nitra	0	0	33 677	5	26 064	2 311	32	4 005	553	707	55	33 732
Žilina	0	1 126	53 742	0	42 055	1 032	203	8 733	734	985	636	55 504
B. Bystrica	0	589	59 352	146	41 404	4 524	162	8 772	3 270	1 074	39 684	99 625
Prešov	0	2 198	66 565	7	43 319	6 621	224	11 383	2 780	2 231	12 806	81 569
Košice	0	0	88 684	103	73 486	5 104	42	3 952	3 773	2 224	0	88 684
TOTAL	0	15 910	387 702	349	300 811	21 728	1 336	43 173	12 207	8 098	53 288	456 900

1998-Regions	610	620	630	631	632	633	634	635	636	637	640	600
Bratislava	37	2 709	43 759	5	36 887	1 195	47	3 575	1 418	632	0	46 505
Trnava	0	0	29 434	17	23 767	1 792	124	1 716	65	1 953	0	29 434
Trenčín	0	7 907	45 079	9	40 339	620	61	2 399	23	1 628	80	53 066
Nitra	0	0	61 438	2	51 676	3 346	41	4 266	1 189	918	245	61 683
Žilina	0	1 686	61 939	15	44 759	2 214	372	5 374	3 217	5 988	31 637	95 262
B. Bystrica	0	4 223	113 242	77	85 193	7 965	195	7 095	6 812	5 905	23 281	140 746
Prešov	6 038	7 197	138 661	140	104 229	8 148	377	14 075	5 849	5 843	18 635	170 531
Košice	0	0	192 132	181	170 416	6 878	177	4 611	6 637	3 232	829	192 961
TOTAL	6 075	23 722	685 684	446	557 266	32 158	1 394	43 111	25 210	26 099	74 707	790 188

1999-Regions	610	620	630	631	632	633	634	635	636	637	640	600
Bratislava	0	0	16 342	0	9 438	870	0	1 502	2 013	2 519	3 442	19 784
Trnava	0	0	7 509	1	6 102	675	20	461	31	219	8 995	16 504
Trenčín	0	4 410	35 566	18	29 922	875	0	2 029	0	2 722	9 357	49 333
Nitra	0	0	24 128	5	15 839	1 753	54	1 551	1 379	3 547	1 187	25 315
Žilina	25 232	6 306	27 348	0	18 932	1 065	21	959	1 190	5 181	23 003	81 889
B. Bystrica	0	1 220	52 356	36	34 262	4 330	90	2 021	6 598	5 019	19 462	73 038
Prešov	16 299	1 977	71 599	9	52 164	2 905	505	5 489	2 664	7 863	37 817	127 692
Košice	0	0	64 657	10	47 355	3 067	81	2 340	4 556	7 248	8	64 665
TOTAL	41 531	13 913	299 505	79	214 014	15 540	771	16 352	18 431	34 318	103 271	458 220

Source: the MoE SR

Table III.3: Additional funds needed to fulfil the 70% state-subsidy quota (by regions, in '000 SKK)

	Bratislava	Trnava	Nitra	Trenčín	Žilina	B. Bystrica	Prešov	Košice	TOTAL
Nursery schools	372,6	243,0	0,0	432,0	120,0	209,0	0,0	281,0	1 657,6
Primary schools	864,0	0,0	0,0	0,0	230,0	0,0	0,0	192,0	1 286,0
Grammar schools	11 704,0	1 333,0	0,0	708,0	0,0	1 691,0	1 562,3	611,0	17 609,3
Sec. specialised sch.	7 679,8	7 304,0	3 719,0	0,0	750,0	1 337,0	5 371,7	0,0	26 161,5
Sec. vocational sch.	473,1	6 313,0	2 053,0	0,0	1 250,0	0,0	0,0	1 974,0	12 063,1
SVS – at joint-stock companies	5 124,7	0,0	3 065,0	1 960,0	0,0	0,0	0,0	0,0	10 149,7
Primary schools of arts	1 318,8	0,0	0,0	1 976,0	250,0	365,0	273,3	190,0	4 373,1
School catering	4 000,0	0,0	0,0	1 136,0	0,0	0,0	0,0	0,0	5 136,0
Student dormitories	1 941,8	307,0	0,0	0,0	0,0	0,0	0,0	0,0	2 248,8
Community centres	0,0	0,0	0,0	0,0	300,0	0,0	0,0	0,0	300,0
TOTAL	33 478,8	15 500,0	8 837,0	6 212,0	2 900,0	3 602,0	7 207,3	3 248,0	80 985,1

Source: the MoE SR

Table III.4: Actual percentage of equivalent state subsidies compared to state schools (by regions)

	Bratislava	Trnava	Nitra	Trenčín	Žilina	B. Bystrica	Prešov	Košice	TOTAL
Nursery schools	41,3	41,3	-	41,3	39,6	44,8	-	51	43,9
Primary schools	32,6	-	-	-	24	-	-	34,5	31,6
Grammar schools	18,6	17,1	-	18,7	-	17,3	13,2	36,4	18,9
Sec. specialised sch.	34,5	28,8	41,3	-	37,7	50,2	37,2	-	36,4
Sec. vocational sch.	43,7	40,6	49,7	-	49,3	-	-	53,3	46,5
SVS – at joint-stock companies	41,9	-	41,9	43,7	-	-	-	-	42,3
Primary schools of arts	48,6	-	-	48,6	60,3	46,3	48,6	51,8	50
School catering	21	-	-	21,5	-	-	-	-	21,1
Student dormitories	32,3	32,3	-	-	-	-	-	-	32,3
Community centres	-	-	-	-	54	-	-	-	54
TOTAL	31,7	34,3	44	41,6	48,9	40,8	34,7	50,6	37,6

Source: Author's calculations based on the MoE SR data

Teachers

The following section is aimed at the issues of teaching load, teacher compensation, qualifications, and age structure.

Teaching load

Teaching load is defined by a government decree. Effective from July 1, 2000, the decree has been amended and teaching load slightly increased for most teachers. The teaching load is defined in the number of lessons taught per week (1 lesson - normally 45 minutes). Table III.6 shows teaching loads for main categories of teachers.

The base teaching load is subsequently reduced if a teacher is in charge of a class or engaged in counselling work at the school. The decree also stipulates teaching loads for school headteachers, their deputies and other managerial employees.

Table III.6: Teaching load in the main categories of teachers

Teacher category	Weekly teaching load in lessons
nursery school and special nursery school teachers	28
primary school, primary school of art, special primary school and other special school teachers	23
teachers for the first grade of primary school, primary schools of arts, special primary school and other special schools	22
secondary school, special secondary school, vocational school, secondary vocational school, conservatoire, and language school teachers	22
applied training instructors in vocational education	21-35
educational employees in school clubs	27
educational employees in dormitories, community centres and P.E. instructors	30

Source: the Government Resolution No. 229/1994 as subsequently amended

Teacher compensation[26]

Teacher compensation system is based on the same principles as apply to other public servants. The system is based on a pay table that reflects mostly work experience (years of service) and qualifications. There are different pay tables for teachers and other employees (administrative staff), with the latter using the same table as other public administration employees.

[26] Effective from April 1, 2002, this area will be governed by the Civil Service Act, which includes a special pay table for teachers with 14 pay grades and opportunity to receive one extra wage per year provided certain conditions are complied with.

The pay table consists of 12 pay grades. Employees with higher education fall under grades 8 to 12. Teachers in primary and secondary education, including managerial employees, are only entitled to grades 8 to 10. Grade 8 is used only for a very short period for new teachers (up to 3 months). Grade 9 is the standard grade for teachers. If teachers pass a special qualification exam (they are entitled to take it after 5 years of experience) or receive other postgraduate qualifications (such as PhD or other similar degree), they can be placed in the grade 10. Within each grade, there are 10 levels, which reflect the length of work experience. The lowest level signifies no experience, whilst the highest level applies to employees with more than 27 years of experience.

Table III.13 at the end of this section shows the development of average gross wage for pedagogical staff at various types of state schools and draws its comparison to the average wage in the education sector and the national economy as a whole.

Numbers of teachers, their age and qualification structure[27]

Table III.7 shows the distribution of pedagogic employees in the Slovak primary and secondary education. It clearly shows that pedagogical employees in nursery schools and primary schools dominate the overall picture, representing 60.4 % of all pedagogic employees. Therefore, any measures aimed at increasing efficiency should primarily take into account the impact on these groups.

Table II.8 shows the gender structure of pedagogic employees and confirms that while women certainly dominate, their dominance is unevenly distributed. They constitute an overwhelming majority in nursery schools and in the first grade of primary schools. On the other hand, their dominance is significantly lower in secondary schools. This table shows a negative correlation between the wage conditions and status of individual types of schools on the one hand and increasing number of women teaching in the education system on the other.

Table III.8: Gender structure of pedagogical employees

Type of school	Teachers	Men	%	Women	%
Nursery schools	15480	13	0,08	15467	22,61
Primary schools (1st grade)	16844	1489	9,26	15355	22,45
Primary schools (2nd grade)	22135	4926	30,65	17209	25,16
Grammar schools	5976	1662	10,34	4314	6,31
Secondary specialized schools and conservatoires	10791	3715	23,11	7076	10,34
Secondary vocational schools	6334	2565	15,96	3769	5,51
Special schools	3424	627	3,90	2797	4,09
Primary schools of arts	3499	1076	6,69	2423	3,54
TOTAL	84483	16073	19,03	68410	80,97

Source: UIPS

The age structure of teachers is one of the hot issues in Slovakia and considered to be one of its most important problems. As Table II.11 shows, the percentage of teachers in retirement age or those to reach retirement age in the next 10 - 15 years (46 and above) is quite high – 39.3 %. However, as the section on demographics shows, there is 24 – 30 % drop in the number of children expected in the primary and secondary education in the coming decade, so the problem might not be as serious as it seems now after all, depending on the outcome of the school system reform. These figures are complemented by statistics on numbers of teachers past retirement age (Table III.10), which makes clear that these teachers are overwhelmingly concentrated in primary schools – 59 % of such teachers, which accounts for 10.9 % of all teachers in these schools (and more than 14.7 % in the first grade of primary schools). As table III.11 shows, the current proportion of retired teachers is higher than in previous decades.

[27] All data used in this subsection are from a pedagogical staff census carried out by Institute of Information & Prognoses on Education in the autumn of 1998

Table III.7: Pedagogical employees in the Slovak education sector

Schools and school facilities					Pedagogical employees			
Type		Sum	Total	%	Teachers	Tutors	VET instructors	Unknown
Nursery schools		3276	15674	15,69	15480	21	0	173
Primary schools		2440	44770	44,82	38979	5496	0	295
Primary schools of arts		180	3562	3,57	3499	0	0	63
Grammar schools		182	6102	6,11	5976	16	0	110
Secondary specialised schools (SSS) and conservatories		343	11245	11,26	10791	235	139	80
of which	SSS industrial	103	4288	4,29	4127	76	65	20
	SSS economic	89	2915	2,92	2815	34	51	15
	SSS pedagogic	9	304	0,30	285	7	0	12
	SSS agricultural	31	935	0,94	885	43	2	5
	SSS of forestry	3	85	0,09	79	6	0	0
	conservatoires	7	583	0,58	559	8	0	16
	SSS for librarians	1	47	0,05	47	0	0	0
	SSS for girls	60	981	0,98	964	7	1	9
	SSS nursing	31	837	0,84	790	47	0	0
	other SSS	9	270	0,27	240	7	20	3
Secondary vocational schools		307	12636	12,65	6328	465	5614	229
Applied training and vocational centres		57	394	0,39	6	7	355	26
Special schools		383	5497	5,50	3424	1111	574	388
TOTAL		7168	99880	100,00	84483	7351	6682	1364
%		---	100,00	---	84,58	7,36	6,69	1,37

Source: UIPS

Table III.9: Teachers' age structure (%)

Type of school	Total number of teachers (100%)	below 25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	above 61
Nursery schools	15480	7.38	9.13	15.16	21.12	15.10	18.24	12.18	1.34	0.36
Primary schools (1st grade)	16844	10.37	13.82	13.05	9.69	14.51	13.03	11.75	10.90	2.89
Primary schools (2nd grade)	22135	7.06	7.03	8.89	10.79	18.66	18.40	19.43	7.21	2.55
Grammar schools	5976	10.91	11.30	10.88	14.07	17.67	16.90	8.80	6.17	3.30
Sec. specialised and grammar schools	10791	6.77	9.36	12.01	15.86	17.24	14.70	12.45	7.67	3.95
Secondary vocational schools	6334	4.99	7.39	10.70	19.83	19.20	14.16	12.43	7.72	3.58
Special schools	3424	4.92	9.46	11.59	15.04	17.64	16.33	12.09	7.83	3.10
Primary schools of arts	3499	16.78	10.92	13.86	12.92	12.66	12.09	9.92	6.92	3.94
TOTAL	84483	8.26	9.65	11.86	14.28	16.68	16.06	13.71	6.91	2.60

Source: UIPS

Table III.10: Teachers - past retirement age

Type of school	Teachers	Teachers – past retirement age					
	Total	Total	%	Men	%	Women	%
Nursery schools	15480	405	5,67	0	0,00	405	7,21
Primary schools (1st grade)	16844	2439	34,12	137	8,93	2302	41,00
Primary schools (2nd grade)	22135	1813	25,36	430	28,01	1383	24,63
Grammar schools	5976	459	6,42	169	11,01	290	5,17
Sec. specialised and grammar schools	10791	883	12,35	382	24,89	501	8,92
Secondary vocational schools	6334	505	7,06	244	15,90	261	4,65
Special schools	3424	357	4,99	68	4,43	289	5,15
Primary schools of arts	3499	288	4,03	105	6,84	183	3,26
TOTAL	84483	7149	100,00	1535	100,00	5614	100,00

Source: UIPS

Table II.14 shows historical data on the number of qualified teachers as a percentage of the total. It indicates that the worst situation is in special schools, primary schools, and secondary specialised schools.

However, in special schools this is due to stringent requirements on their teachers, which have historically led to low levels of qualified teachers in this area, although these teachers would be regarded as qualified in other areas. Special schools and issues concerning the access of disadvantaged groups to education are analysed in the final section of this chapter.

The situation is also critical in primary schools, where the level of qualification keeps falling and a high percentage of post-retirement-age teachers is reported. The level of primary school teachers' qualifications was the highest in the 1984/85 school year and has been decreasing ever since. This trend reflects some well-known facts: the gradual retirement of teachers, their migration to other types of schools (mostly secondary ones) or to other branches, accompanied by the low intake of graduates taking teaching jobs after completion of university studies.

Table III.11: Teachers past retirement age as % of total (1972/73 - 1997/98)

Type of school	School year				
	1972-73	1984-85	1988-89	1995-96	1997-98
Nursery schools	.	.	.	.	2,62
Primary schools	.	2,6	3,21	x	10,91
PS of arts	.	.	.	x	8,23
Grammar schools	.	2,43	2,51	x	7,68
SSS	.	4,5	4,01	x	8,18
SVS	.	2,3	1,2	x	7,97
Special schools	.	5,54	4,09	x	10,43

Source: UIPS

Table III.12: Teachers with professional and pedagogical qualifications as % of total (1972/73 - 1997/98)

Type of school	School year				
	1972-73	1984-85	1988-89	1995-96	1997-98
Nursery schools	.	.	.	.	96,58
Primary schools	84,25	97,4	94,8	81,33	78,67
PS of arts	.	.	.	82,85	81,25
Grammar schools	.	85,4	92,03	95,27	94,29
SSS	.	63	84,82	97,61	80,45
SVS	.	61,5	74,54	83,76	84,43
Special schools	.	41,9	47,15	59,04	55,81

Source: UIPS

Table III.13 – Average gross wages of pedagogical employees [a) b) c)]
(State schools only, except for 1995 where both state and religious schools are listed)

	1992	1993	1994	1995 [i)]	1996	1997	1998	1999
Nursery schools	n/a	n/a	5271	5930	6034	7292	7840	8092
Primary schools	n/a	n/a	6644	7711	7967	9341	9801	10119
Grammar schools	n/a	n/a	6457	7983	9402	10606	11142	11692
Sports schools (grammar schools)	n/a	n/a	6559	8258	9042	10446	12408	11204
Secondary specialised school [f)]	n/a	n/a	6340	7959	8784	10434	10944	11251
Secondary vocational schools [g)]	n/a	n/a	6436	7364	7776	9279	10228	10689
Artistic secondary specialised schools	n/a	n/a	n/a	n/a	8 661	9 780	10 450	10 975
Special schools	n/a	n/a	6 610	7 926	8 312	9 812	10 491	10 676
HEIs	7 288	7 619	8 305	10 599	11 738	12 584	13 456	13 861
Local schools + HEIs average [d)]	n/a	n/a	n/a	7 501	8 034	9 384	9 994	10 308
Local schools average	n/a	n/a	n/a	7 257	7 739	9 112	9 689	9 988
Local schools + HEIs average – state schools [e)]	n/a	n/a	6 361	7518	8048	9403	10008	10325
Local schools average – state schools	n/a	n/a	6 187	7 270	7 746	9 125	9 697	9 997
National average [h)]	4 519	5 379	6 294	7 195	8 154	9 226	10 003	10 728

a. *The average wage is derived from the volume of funds allocated for wages and salaries. It does not include so called other personal settlements, which accounted for 1.5-2.5% of the total wage bill. Since 1996 other personal settlements are zero.*

b. *There are no statistical data for private school teachers' wages.*

c. *District offices also pay wages to employees of other types of schools and school facilities, which are not specified in detail, but only in the average figures (language schools, joint secondary schools, community centres, dormitories, school catering facilities, etc.) These employees' wages are usually closer to the lower bound of the wage scale.*

d. *The average wage in local and higher education is based on UIPS data (data for district offices and HEIs).*

e. *The difference between state and religious schools results from the fact that in the given period, there were only state HEIs (with the highest wages).*

f. *Since 1996, secondary specialised schools are reported without artistic SSS, which are listed separately.*

g. *Data for secondary vocational schools of ministries other than the MoE SR were not reported in the period 1992-1995.*

h. *Source: Statistical Office of SR – up to 1992 data for enterprises with 25 and more employees, up to 1994 without enterprises not registered in the Companies Register, in 1992 without agricultural cooperatives.*

i. *The local schools average wage as well as local schools +HEIs average wage was higher than the national average in 1995 only. Most likely, this can be attributed to the increase in public expenditure on education to about 26 billion SKK in current prices in 1995, whereas the volume of this expenditure in the period of 1992 – 1994 was stable within the range of 19 – 20 billion SKK.*

Source: *Author's own calculations based on UIPS data. The national average as reported by Statistical Office of SR.*

Education Results

To begin with, we have to admit that there is a relative lack of objectively measurable data on the quality or deficiencies of the Slovak education system. Quality assurance in Slovakia mostly counts on institutions (such as the long-established State School Inspection Agency), rather than on independent and objective methods. In recent years, there have been attempts at improving the situation: standards are being established for individual subjects taught at primary schools to be soon supplemented by skill and competence tests. In secondary education, a project aimed at implementing standardised written school-leaving exams is presently under way at the State Pedagogical Institute and constitutes a rare source of data on the comparison of education results' quality achieved by schools in Slovakia[28]. This part of the book will therefore deal mostly with data obtained in this way.

The Ministry of Education intends to introduce a standardised school-leaving examination (SLE) for secondary schools. Thus, two types of school-leaving exams will be used: a basic SLE organised and evaluated by schools themselves and taken by students not applying for HEIs and the standardised (written) SLE evaluated centrally on the nationwide basis (more details later in this section). The schools will continue to be responsible for the oral part of the school-leaving exam.

To exemplify this, we will present some results from the standardised SLE testing pilot project – MONITOR 2000[29]. The testing covered 239 schools (175 grammar schools, 27 business academies, 37 secondary specialised schools), and 55 079 tests and 52 180 teachers' and students' questionnaires were processed.

MONITOR 2000 consisted of 6 tests in four subjects:

- Slovak Language and Literature - 235 schools and 18 501 students,
- Mathematics for students not taking the school-leaving exam in Mathematics (N) - 231 schools and 9 610 students
- Mathematics, version M1, for students taking the school-leaving exam in Mathematics – 232 schools and 8 463 students
- Mathematics, version M2, for students taking the school-leaving exam in Mathematics – 173 schools and 6 834 students
- English Language - 173 schools and 8 655 students
- History - 167 schools and 3 016 students.

The results of the testing can be summarised into the following conclusions:

- There is only a limited correlation between students' marks and their achievements in the tests. While students with excellent marks tend, on the average, to achieve better results in the test than students with poorer marks, there is no significant statistical relationship between the average marks for a class or school and the ranking of the class or school in the test. This indicates that even though individual teachers rank the students in a given class by an algorithm similar to the test, there is little comparability between different classes or schools.
- There were differences between different types of schools. Academic secondary grammar schools achieved

[28] Other available data include for example the results of international tests. Slovakia took part in the testing of 8-form students within the TIMSS programme (Third International Mathematics and Science Study) in 1995 and 1999. Slovak students scored better than the average of 23 counties participating in TIMSS (1995) and 41 countries in TIMSS-R (1999) and they achieved the 8th position in mathematics and natural sciences. This is a proof of a relatively high level of mastery of these subjects at primary schools.

[29] Data used here have been provided by the State Pedagogical Office for the purpose of this analysis only.

better results than more practically oriented secondary specialised schools. Contrary to expectations, the differences were usually relatively small. Since secondary grammar schools are generally considered to receive the intake students with higher academic aptitude, it is impossible to evaluate whether the disparity can be attributed to how capable students are at a particular school or rather to the education value added by the school.

- There were only minor regional differences reported. The city of Bratislava and the regions of Trenčín and Košice scored the best, while the districts surrounding Bratislava fared the worst. The results indicate that regional differences are not tied to any north-south or east-west axis. The difference between Bratislava and its surroundings evidences that the capital city concentrates intellectual and other resources of the region, which is well reflected in the tests' results.
- There were significant differences between schools depending on their founders. Religious schools had generally higher scores than state schools, which in turn outran private schools. While this phenomenon is not easy to explain, it is generally believed that private schools admit students with somewhat lower aptitude.
- The testing proved significant differences between individual schools and significant differences between individual classes in a given school. Therefore, there are significant variations in the quality of Slovak schools and the quality within these schools as well.

The new system of standardised school-leaving exams should help to solve two of the present problems in the Slovak education: little objectivity (incomparability of students' results between different schools) and low validity (the evidence value of marks with regard to students' knowledge and competences).

The idea of standardised SLE is certainly worth winning our support as it provides for three main objectives: to prove a school leaver's aptitude to study at HEI, to certify the attainment of the particular level of secondary education, and to set comparative standards for secondary schools. Still, if the new model of standardised school-leaving exams should not apply to professional secondary schools (secondary specialised/vocational schools) as proposed by the present plans, it would not be acceptable for employers as a certificate on school leavers' competence to perform the professions they have been trained for.

Besides the above problems, the implementation of these exams gives rise to some new questions. Let us point out two groups of possible problems:

- The risk of paying too much attention to formal and technical aspects of the exams at the expense of discussion over their content, which will thus remain more or less unchanged (the risk of form over content precedence).
- The risk that the quality of schools will be compared based on their results, which would objectively require also data on the input quality of students (the risk of incommensurability)

Some of the problems presented here also concern SLE in their present form. What is important is the fact that the authority of SLE will increase through implementing their standardised form. At the same time, we can expect their results to be more widely utilised for example by HEIs while admitting students or the state when comparing schools. Any deficiencies in SLE would therefore have a much broader impact than up to now.

The risk of form over content precedence

Discussion being under way concerning the SLE implementation is mostly aimed at formal issues: it is concerned with the appropriate number of subjects to be tested, compulsory or non-compulsory

Mathematics tests, appropriate difficulty levels for various types of schools. Still, the decision on standardised SLE is by no means a formal one – it is a fundamental decision of high importance and with a long-term impact.

In order for the standardised SLE to objectively assess student aptitude to study at an HEI and to certify the completion of quality secondary education, they have to test the students' **aptitude for HEI studies** as well as the **relevant attributes** of the secondary education.

The standardised SLEs are mostly limited to knowledge tests[30] in individual subjects. The majority of these exams (and the education system as well) are based on the encyclopaedic knowledge of facts: the most successful are students that are able to accumulate the largest amount of information over a short time. The exams do not sufficiently test students' capabilities in handling the information, tracing logical connections, or their application in changed situations. The SLE discussion has not tackled issues like these at all, despite the ministry itself pointing out handling these problems as one of its priorities in its Concept of Education for the next 15-20 years. The limited focus of SLE on knowledge testing also means that it is not always students with the **best HEI aptitude** that succeed best in the standardised SLE.

Furthermore, the system discriminates some students at the expense of others on the basis of regional and social criteria. It preserves the present social stratification – chances to pass knowledge tests successfully are higher with students with access to better schools (bilingual schools, schools for gifted children), libraries and other information sources (mostly in bigger cities) and students from families with better financial backgrounds (access to private preparatory courses, private lessons, etc.).
The standardisation of the SLE system will lead to an overall pressure on unification of teaching methods, which may threaten various local initiatives, be it at the level of schools, regions, or nationwide, which make efforts at changing the focus of education from teaching and testing knowledge to a complex development of human personality and its learning skills. The Millennium project formulates corresponding goals, but the standardised SLE as presently proposed fail to comply with them. As a result of the standardised SLE, innovative teachers allowing students to develop extra-curricular skills may be exposed to pressure exerted by students, their parents, school headteachers, and inspectors will not pursue the best education results, but rather the best scores in the standardised SLE. These objections should not stand against the very idea of standardised SLE, but rather against the misdirected focus of their application.

The risk of incommensurability

The standardised SLE opens the possibility for mutual comparison of SLE results not only between individual students, but also between classes, schools, types of schools, or regions, which may influence students' choice of schools. The SLE results comparison is, however, limited to showing the best achievements in areas within the actual SLE focus only. Note that for several reasons **the comparison of "objective" results may not necessarily be objective as well.**

The standardised SLE results do not allow for the objective assessment of value added by individual schools due to missing data on the input quality of students. Comparing two schools solely on the basis of the SLE results, with one of them admitting highly motivated, gifted children only and the other mostly children with much lower academic abilities, would resemble comparing medical results or mortality rates between the

[30] Student testing systems used in foreign countries can be divided into two basic types: knowledge tests (testing acquired knowledge in individual subjects) and skill/competence tests (testing students' capabilities in logical reasoning and their analytical skills).

emergency department and the cosmetic surgery.

To objectively compare schools, input data is required – on the quality of students enrolling in a school. Such data can be obtained through a placement exam or in other ways; if this data is missing, the standardised SLE results are necessarily of lower value. The added value assessment for individual schools is a highly important guideline for strategic and conceptual decisions. It would allow comparison of working models, teaching efficiency, the effective spending of funds, and implementation of an incentive-based financing model for the education system.

Further risks

- **Limited coverage.** This reform is not concerned with education issues relating to the majority of students that will not take the standardised SLE (only the part of SLE that applies to further HEI studies will be subject to standardisation).
- **Delayed participation of HEIs in the SLE process.** The MoE SR advises that the final SLE version should be adopted in January 2002 after consultations with HEIs. During this period, however, the HEIs will only be entitled to submit their comments and influence the formal aspects of the SLE model, but not its overall concept.
- **Insufficient public discussion.** Proponents of the reform have provided much room for discussion on the formal aspects of the standardised SLE, but there has been a complete lack of discussion on the overall SLE concept, educational objectives of secondary schools, and HEI admission criteria.

Access of Disadvantaged Groups to Education

General expectations hold that a network of special schools should resolve any problems of disadvantaged groups. A special school is an institution that should act as a mediator of social inequalities, facilitating the integration of the handicapped into the society.

It is necessary to distinguish between types of handicaps and their manifestation. The group of disadvantaged children can, for example, include both those with a mental handicap and those marginalized as a result of poverty. Doctors, psychologists, and special pedagogues are concerned with the professional issues of how to educate people with particular types of impairment. This section will, however, be primary aimed at the education of socially disadvantaged groups, which are presently being deprived of their right to education, which is identical to that of the majority of the population.

Special pedagogy concept

The key notion of the general concept of special pedagogy is integration. Two main motions that have contributed to the origination of the integration movement have been:

- the finding that many children and young people attended special schools, although it was not necessary,
- the realisation that standard schools can actually satisfy a much broader scope of students' needs provided that appropriate conditions are created.

In 1994, a World Conference on Special Needs Education was held in Salamanca, Spain, with the primary focus on special education. The final proclamation contained several appeals for turning schools into places where all children could be educated regardless of their physical, psychological, emotional, social, linguistic, or other characteristics. All these propositions were based on the assumption that an inclusive specialisation of schools is the most efficient weapon against discrimination, thus developing a tolerant and inclusive society. In practice, it means that disadvantaged children, be it physically, mentally, or

socially, are educated together with other children. Of course, such a system counts on a whole framework of support institutions providing for such inclusive education.

The inclusive education belongs to the domain of human rights. By no means should anybody be excluded from any area of social life because of their disability. The segregated education of disabled children is an obstacle to the selection of life strategies and plans. Integration issues have been successfully treated in the world for several decades, and incorporated in all progressive and humanistic streams of education. These systems largely make use of the non-segregated education for all children[31].

Terminology

In education, impairment is used as a synonym of a defect. There are somatic, sensorial, speech, mental, and psychosocial impairments.

There are special facilities providing care for children with the following types of impairment: aural, visual, bodily, mental, communication disorders, autism, disorders in psychosocial and emotional development, and multiple impairments

In Slovakia, integration much depends on its subjective reception and interpretation by the responsible officials at district and regional offices. Its application fully depends on school staff and the headteacher's and teachers' will. Still, the legislation essentially allows for the integration. The Millennium project also contains the requirement that "it is necessary to reduce the numbers of children in special schools, particularly special needs schools, by improvements in the diagnosis and integration of children with special needs into standard schools; to elaborate efficient educational programmes for these children and to train teachers for such work.

[31] This trend is obvious in Scandinavian countries (Sweden, Denmark, Norway); a Montessori integration model has been used successfully for years in Germany, by prof. Hellbrügge in Children's Centre. In most states of the USA, the integration is a common part of the school attendance in standard schools and required by law.

Legislation

There is a legislative basis[32] for educating children with special educational needs in the following ways:

- individual integration into standard schools,
- social integration in special classes at standard schools,
- education in special schools – segregated education.

Special schools have generally binding rules for the education of children with special educational needs. Special schools and school facilities are administered by regional offices. Special needs counselling facilities with legal personality are managed by district offices. There are regulations and decrees governing the founding, operation, and functioning of special schools. Not all of them are fully observed, though.

The establishment of special classes

A special class in nursery, primary, and secondary schools can be established provided that the following principal conditions are met:

- thorough diagnosis by means of special needs counselling facilities, children's integration centres, and pedagogical and psychological counselling facilities,
- a resolution on placement of a child in a special class (form SEVT 49 286 0),
- necessary equipment and premises,
- a qualified special needs pedagogue.

A special class can be established with the consent of the founder. A child may be placed in such a class upon a special class placement resolution made in writing on the basis of a thorough psychological, medical, and special pedagogical diagnosis.

[32] Act No. 29/184 Coll. governing the network of primary and secondary schools and Act No. 279/1993 Coll. governing school facilities and executive guidelines to these acts.

The placement of a child in a special school[33]

The placement proposal is made by child's parents. When a child reaches the age of 6, his/her parents are obliged to register the child for enrolment in a primary school in their residence or directly in a special school or school facility. Prior to placement in any school, a disabled child's parents have to seek a special needs counselling facility, children's integration centre, or pedagogical and psychological counselling facility. When all required examinations and recommendations are assessed, the parents can decide on the most suitable education stream for their child.

It is the special school headteacher that decides on placement or transfer of a child to this special school, on the basis of a proposal made by an expert committee of teachers, a psychologist, and a medical specialist. In case of placement in a special class at primary school, the expert committee has to include a representative of a special needs counselling facility or pedagogical and psychological counselling facility. The school headteacher is the head of the committee. The child's placement or transfer has to be discussed with his/her legal guardians. Each placement or transfer has to be supervised by a qualified special pedagogue from the school or a special needs counselling facility or children's integration centre, as these experts are qualified to assess the examination results and make judgements on the child's real education prospects and appropriate education procedures.

Numbers of schoolchildren in classes

The numbers of schoolchildren in special classes at primary school are governed by the MoE SR Decree No. 212/1991 Coll. on special schools[34].

Actual conditions

Child's placement in special schools

Romany children are often placed in a special school without any psychological examination. On the other hand, these examinations are focused on testing such abilities and skills that are often missing in a Romany child's personality. They frequently have problems with mastering the Slovak language, limited vocabulary, and poor expressive capabilities. Other problems include: a limited attention span, patience, endurance, underdeveloped motor functions, a different experience and knowledge of the world, different interests and needs[35]. These deficiencies often result in their failing standard psychological tests, based on which results these children are classified as mentally retarded.

[33] An informative and methodological material on the integration of children with special needs into primary schools.

[34] Section 2 of this Decree states that "the class can be established for a minimum of four schoolchildren."
Section 6 of the Decree No. 212/1991 Coll.:
(1) Classes at primary schools for school children with aural, visual impairments, speech disorders, for mute schoolchildren, and children with physical impairments may have a maximum of 8 schoolchildren in case of a preparatory form and forms 1-3, and 10 schoolchildren in forms 4-9.
(2) Classes at special needs schools may not have more than 8 schoolchildren in form 1, not more than 10 in forms 2-5, and not more than 12 in forms 6-9.
The maximum number of students in mixed classes at these schools is determined on the basis of the lowest form present in the class.
(3) Lower-grade classes at special needs schools may not have more than 8 school children, medium, higher, or vocational-grade classes not more than 10 schoolchildren
Classes at schools for schoolchildren with multiple impairments cannot have more than 6 schoolchildren.
Article (6) defines the number of schoolchildren in special classes: classes for schoolchildren with developmental learning disorders at primary schools – not more than 12 schoolchildren, for schoolchildren with developmental behaviour disorders – not more than 10 schoolchildren.

[35] Wagnerová, E. (2001)

Numbers of schoolchildren and facilities

The first table in the Annex to the book gives evidence to a most interesting trend. While the number of schoolchildren unequivocally decreases or remains the same at all other types of schools, this number goes up in case of special schools, whose number is also on the decrease. Taking into account different birth-rate curves of the major population and the Romany population, we may well assume that the largest proportion of special schools students are Roma. This is also evidenced by the distribution of special schools across the regions.

Table III.14: Special schools

Region	Schools	Students
Bratislava	39	3453
Trnava	40	2641
Trenčín	19	1763
Nitra	35	2790
Žilina	41	2382
Banská Bystrica	69	4429
Prešov	70	6854
Košice	57	6271

Note: The figures include nursery schools, special needs schools, 1-9 form schools, grammar schools, secondary specialised schools and vocational schools for students with special educational needs.
Source: UIPS, students and schools, internal studies.

Most special schools are based in the Prešov region, where the majority of Roma settlements are also situated. The overwhelming majority of children from these settlements attend special schools, although there are no nationwide figures available. Even so, cases have been reported when a child could not start attending school, as there was no free class capacity. The numbers of pupils in special classes for Roma highly exceed permitted limits.

Special schools are often located in premises failing to meet basic criteria. These are various buildings of closed-down primary schools and other buildings not designed for such purposes, with only some of them having been modernised. The capacities and distribution of the present network of special schools do not match the present structure of special needs students, do not allow for professional differentiation or for close contact of students with their families.[36]

Founders of the schools fail to provide for elementary material and personnel conditions needed for the establishment of special classes and the integrated education of special needs students. There is frequent breach of rules concerning the students' placement, their numbers per class, and the educational process organisation. It threatens the efficiency of the education and development of disabled students' personalities. This inconsistency will have a long-term impact on their personality development and the outcomes of their education.

As far as school equipment (technical instruments/aids, gymnasia, etc.) is concerned, this is insufficient as well and not adequate to teachers' demanding work with disabled children. Also, there is a shortage of teaching and support aids especially crafted for the disabled to facilitate their learning. This can be attributed to insufficient funding for this area as there is a sufficient supply of such teaching aids available on the market.

Teaching staff

Special schools show the lowest percentage of qualified teaching staff in comparison to other types of schools. This is a paradox, because it is just the special needs education that should stand out as the most active in introducing innovative methods and alternative approaches to the educational process – for which qualified staff are a necessary precondition. For details, see figures in Table III.12 earlier in this chapter.

[36] The Concept of Education for Children with Medical Impairments – Annex 2 - Analysis

Roma and education

The issue of equal opportunities and access to education is recently becoming of particular significance. A gap between the education of urban children from well-off families and poorer rural children keeps widening. With the same access to education theoretically, their experience of school is absolutely different. There is no doubt that discussions on inclusive societies should also make enough room for the inclusive system of education, which should in turn ensure a future equality in participating in the creation of values.

Demographic poverty had existed even before 1989, afflicting an above average proportion of Roma. It had been attributed mainly to the number of children in their families and perceived as an individual failure, rather than a social status. A new social characteristics of poverty has come into use only recently – vertical poverty. It is a result of structural changes in the employment structure – which is how the whole social group becomes socially dependent, mostly due to insufficient education and consequent long-term unemployment. The vertical poverty ceases to be a mere individual failure, and turns out to be a systemic failure.

A socio-cultural character of separated, or rather segregated Roma settlements matches the type of collective marginalisation and social exclusion. Some socio-culturally marginalized areas in Slovakia show 100% unemployment, often being referred to 'famine valleys'. There is a threat of total social disorganisation and the emergence of a culture of poverty. The Roma living in marginalized regions are faced with so called 'double marginalisation'. Such a situation cannot be simply overcome by an individual life strategy – the Roma's life strategy is aimed at the very survival, obtaining essential material needs, leaving no potential for any other activities.

For Romany children from marginalized, segregated settlements, school is an unknown, strange, and highly institutionalised and formalised environment. Home preparation is a problem for them, without which it is, however, impossible to acquire information taught at school. The Romany children lack home preparation opportunities, their parents do not motivate, help, or supervise them. Furthermore, there is no pro-education social model worth following in the settlements. In higher forms, the gap between Romany children and the others becomes so wide, that Romany children start playing truant just to avoid being permanently confronted with their own failures[37].

Children from poor families suffer from the inequality the most. They are often deprived of fundamental rights – starving, physically and emotionally underdeveloped, with limited access to education, they have hardly any hope for positive socialising experience and their future integration into the society is thus at stake. These children are most likely to become poor when they grow up. Likewise, socially excluded children are less likely to obtain qualifications necessary for finding employment. They end up as non-skilled workers, who find it difficult to adopt and acquire new skills.

Case studies: Hermanovce, Chminianske Jakubovany

Hermanovce and Chminianske Jakubovany belong to a so-called Big Four, as the most problematic villages with Roma settlements located in the region of Prešov are referred to. Although there are individual particularities in each settlement, they share the same problem: education. Any improvements in this area might enhance the overall situation both in the region and outside of it.

[37] Radičová, I. (2001), pp56-77

Chminianske Jakubovany

The village has a population of about 470 non-Roma inhabitants and 1100 Roma people. The Roma settlement is situated some 1.5 km outside the village itself. The unemployment rate there is 100%. There are only 3 Roma inhabitants holding vocational certificates. Most of the children attend a special primary school. In the 1999/2000 school year, the school staff succeeded in motivating 13 of its school-leavers to enrol in vocational schools in the towns of Stará Ľubovňa and Prešov. The special school is the only institution operating in the marginalized settlement that can significantly influence young people's life and shape it in the right direction. There is a community centre at the special school, operated by its teaching staff, which organises a lot of free-time activities for both pupils and their parents. All these activities are aimed at stirring the settlement's human potential and making its inhabitants more involved in civil affairs. They are taking pains to break the communication barrier separating the Roma and non-Roma living in the same village.

Hermanovce

The village of Hermanovce has the population of 1500, of which there are 343 Roma. The main school building is relatively well equipped, with its own gymnasium, etc. On the other hand, the special classes are located in a small, ground-floor house, with no floor and enormous heating problems in winter. Four small rooms are not big enough for 87 children, so lessons are organised in shifts. Non-Roma parents do not wish their children to share the schools with Romany children. Year by year, therefore, Roma children are transferred to the special school, without any tests or diagnoses, where they are said to belong automatically, due to their intellectual and social underdevelopment.

The educational process at the special schools is insufficient, resulting in the loss of interest in continuing with schooling ever after. There is a non-governmental organisation presently operating in the village, whose social workers organise free-time activities for the Romany children and help them acquire information taught at school. Nearly all the teaching staff and other inhabitant refuse to participate in these activities.

The segregation prevents the two ethnic groups from getting to know each other and renders mutual understanding impossible. In a situation like this, it is the society itself that puts the greatest obstacles to the disadvantaged people, not their actual defects (often illusory), as is the case of Roma. Differences between people are natural and the school should adopt a way of teaching to match children's needs rather than placing them into artificially created categories, thus determining the future course of their education. Support for non-segregated education should be a primary objective of the education policy. Integration, participation, and inclusion are all helpful social orientations, whose positive impact is indeed beyond measure.

Chapter 4

Reforms in Education

This chapter is devoted both to implemented and proposed reform measures in the field of education. In its five subsections, an overview of particular proposals is presented together with analyses and commentaries.

Firstly, our attention will be aimed at the Development Concept of Education along with the National Programme (Millennium Project), which have been submitted to the government session by the Ministry of Education. Changes in the education system resulting from the decentralisation reform adopted in 2001 will be presented. Also, we will deal with the Schools Financing Act governing the financing of primary schools, secondary schools, and school facilities, which has recently been enacted by parliament. Furthermore, we will analyse a draft bill of the so-called 'Schools Act' submitted by the ministry for public discussion in October 2001. Finally, we will consider the government draft Higher Education Act, which is presently being discussed in parliament.

Millennium Project

The Development Concept of Education and the National Educational Programme – or Millennium Project – was formed on the basis of a broad public discussion in connection with the Draft Concept of Education. The Concept, together with the National Programme, was made public by the Ministry of Education at the beginning of 2001 in compliance with the Programme Declaration of the Government of the Slovak Republic as of October 1998[1]. Later in this chapter, both parts of the Millennium Project – the concept and the national programme – will be presented.

The Concept describes the present condition of education in Slovakia, the strengths and weaknesses of its development since 1990, provides arguments advocating changes to this area, and outlines the target state of the Slovak education system along with the fundamental principles of the transformation measures.

The Programme sums up the main priorities to be respected and put into practice by those in charge of the education policy in Slovakia, it defines changes required at particular levels of the education system, deals with management and economic issues in education, teacher status, quality issues, and presents the 12 cornerstones of the national educational programme for the next 20 years.

Positives and Negatives of the Development of Education

The Concept lists several positives in the development of education, including the establishment of private-sector schools and experimenting with alternative educational programmes, curriculum reduction at primary and secondary schools, further support for language teaching, academic rights and freedoms for HEIs, higher integration of special-needs schoolchildren into the "standard" system of education, and

[1] The Government of the Slovak Republic regards education as one of its most important and permanent priorities. (…) The government shall draft a long-term development concept of education (…) so that it could become a basis for the development of the education system in Slovakia for the next 15-20 years regardless of any changes of governments. In reference to the concept, the government shall prepare a new Schools Act (Education Act)."

so forth. Principal shortcomings are the actual level of education being lower than expected[2], problematic financing of the school system (education and science expenditure accounts for only 3.7% of GDP, in EU countries the average is 6.3%) providing low salaries which often cause teachers to leave the profession or prevent graduates from taking jobs at schools. As a result, up to 34.78% of teaching lessons at primary and secondary schools are taught by non-qualified teachers. The framework of grammar schools does not provide education for a sufficient number of students. The authors of the Concept consider too high a share of students at 8-year grammar schools to be a disadvantage and contrary to the concept of equal opportunities. Vocational education suffers from a large discrepancy between its curriculum and market requirements, thus leaving a high share of its school-leavers unemployed. Another disadvantage is that schoolchildren have to decide on their future profession at an early age, with the system of secondary schools providing only a limited chance to change their decision later. As for the system of special schools, there are risks resulting from little use of pre-emptive measures, insufficient placement criteria for particular types of schools, and an absence of further diagnosis. The share of students in tertiary education (higher specialised schools and HEIs) in Slovakia reaches only 8%; in the European Union, it is up to 15% of the total number of students. There are no non-university HEIs, our HEIs provide 693 fields of study, although the international ISCED classification distinguishes only 251 of them. The problems of education are closely related to the problems of society, the crisis of family and young people's system of values.

The necessity of change and its grounds

Any long-term concept of education needs to reflect social and economic conditions within the country as well as general trends in other countries. Amongst these are information access, social education, change in the status of schools, which cease to be the sole source of information, greater flexibility and mobility demanded by the labour market, and the increasing importance of the service sector at the expense of primary and secondary sectors.
Furthermore, the position of Slovakia is influenced by its effort to join the European Union and the new challenges resulting from that.

A Target State of Education

The Concept anticipates changes in three main areas:

- the population's level of education,
- general educational principles,
- curriculum,
- life-long education system.

To increase the level of education, it is necessary to increase the number of students studying at HEIs[3], the number of school leavers that have passed the school-leaving examination[4], to extend the term of compulsory school attendance, to ensure mobility between schools and education streams, to increase the level of functional literacy, to lay emphasis on computer and information literacy skills, to reduce the number of children in special schools[5], to extend the scope of activities in nursery schools, and to regard non-state schools as part of the whole system.
With regard to changes in general educational principles, the Concept seeks to

[2] There is a very low share of labour force (25-64 years of age) with tertiary (post-secondary) education in Slovakia – 10%. This figure is 48% in Canada, 26.6% in the USA, 24.2% in the Netherlands, 23.7% in Norway. The EU average share of the 23-64-years-old population with tertiary education is 21% (data for the year 1996).

[3] Their share should increase from 25% of population year to 30% by 2002 and to 35% by 2015.

[4] Their share should increase to 80% by 2010.

[5] The Concept calls for reducing this number by a more precise diagnosing and integration of children with special needs into standard schools

point out that "*our reason has reached up to the 21st century, yet our heart remains in the Stone Age.*" The objective is to transform the traditional encyclopaedic education into a creative and humanistic one. It requires changes in the theory of education and its contents, teacher training and methodology, and the application of the principles of management decentralisation. The Concept proposes that the centralised management exercised by the state should be retained only in the areas of basic contents of education, personnel policy, nationwide legislation, and just and verifiable financing. Training at schools should concentrate on the development of key human competences such as communication skills, personal skills (self-improvement, responsibility), creative thinking and problem-solving, working with modern information technology, and civic society development.

The intent of these changes is to create an environment with free choice of educational opportunities, with the right to freely select any stream of education. It also seeks to support a competitive educational environment, life-long education programmes, to provide for active participation of citizens, parents, and communities in administering education-related issues. Changes should result in the transformation of the curriculum, enacting legislation for education, and implementing an unbiased, transparent, and socially-oriented state system of education financing accompanied by increased funds for education, and the modernisation and decentralisation of management.

Curriculum-related changes need to be undertaken due to school leavers' difficulties in finding employment. This indicates that schools teach knowledge other than that which is needed in practice. In accordance with the EU trends, Slovakia will apply a 2-level knowledge participation model consisting of a state and school curriculum at primary and secondary schools[6]. The objective of these changes is to reduce the amount of unnecessary information and facts in the subject matter, to promote general education subjects at secondary specialised schools and vocational schools, to create an overall education quality review concept and its constituents (evaluation, auto-evaluation), to improve the state inspection powers, etc.

The Slovak education system should be based on the ISCED classification, its school system (for the youth population) being made up of the following constituents:

- pre-school training (ISCED 0)
- primary schools (forms 1 – 5 ISCED 1, forms 6 – 9 ISCED 2)
- higher secondary schools: grammar schools, secondary specialised schools, secondary vocational schools (ISCED 3)
- secondary specialised schools providing higher secondary (post-secondary) education (1.5 – 2 years) ISCED 4
- higher secondary schools (2-3 years) providing practical knowledge and skills (ISCED 4)
- Bachelor's degree courses at specialised HEIs (ISCED 5B)
- Bachelor's, Master's, and doctoral courses at universities (ISCED 5A and 6)

The system will also include special schools, primary schools of arts, and school facilities. The Concept states that the framework of higher education institutions needs to be diversified through establishing non-university HEIs, focusing more on professional practice, with 3-year study

[6] State authorities determine the state curriculum including general objectives of education, basic knowledge to be taught, binding target students' performance requirements, standards, standards compliance evaluation methods, and model educational programmes. The basic knowledge (teaching matter) teaching should be present at all types of schools, but its acquisition will require only 60% of overall teaching time. Schools can decide how the rest of the teaching time is used upon their own discretion, thus creating their own curricula based on local conditions.

courses (Bachelor's degree). The diversification also needs to be applied in case of post-secondary education at secondary specialised schools.

The National Educational Programme (further referred to as "the National Programme") defines 5 strategic priorities and is based on 12 cornerstones, which will be introduced below.

The strategic priorities laid down in the programme are as follows:

- Adaptation of the contents and process of education to the needs to a *learning, information-driven* society;
- Creation and securing of the management and quality control system in education adapted to the new conditions;
- Determination and evaluation of the quality and efficiency of education;
- Turnover in the provision of quality, status, and career prospects of teachers;
- Systematic support for interconnecting the education market and the labour market.

The programme provides an overview of changes to be made in the particular constituents of the life-long education system.

Nursery schools

- making more children involved in pre-school education – thus levelling out the differences between various socio-cultural environments,
- a gradual introduction of one compulsory year of pre-school education,
- excluding nursery schools from the School Facilities Act and incorporating them in the Schools Act as the first stage of the education system,
- increasing the share of nursery school teachers with higher education and making them equal to teachers at other types of schools.

Primary schools

- providing for the organisational fusion of nursery schools and the first grade of primary schools and integration of after-school activity centres and community centres into primary and secondary schools,
- a change of the primary school structure so it would be made up of the first grade (forms 1-5) and the second grade (forms 6-9),
- the transformation of the contents of education and its outputs: primary school curriculum, standards and the efficient system of evaluation, basic methodological documents for teachers, schoolbooks, methodological materials, flexible educational programmes,
- narrowing the scope of information taught at primary schools,
- no grading should be used in the first grade of primary schools, an alternative system of verbal evaluation needs to be elaborated,
- specialised education is recommended to begin as early as in the first grade of primary schools
- the elaboration of standards covering not only the output of education and school subjects, but also more complex skills of the children,
- the preservation of the existing system of limited-grade schools.

Special schools

- support for the opening of special classes (for children with special needs) in standard schools and preparatory classes in special schools, completion of the network of special needs counselling facilities, evaluation of the efficiency/inefficiency of placing special-needs schoolchildren in standard classes,
- also making special schools accessible for children with serious mental impairment and with multiple impairments,

- mobility within the education system (horizontal, vertical) through drafting output standards and legislative changes,
- a reduction of the number of children in special schools (mainly those with mental disabilities). Pupils should be placed in special schools or special classes for mentally-disabled children only after a thorough examination and re-diagnosis should take place every 3 years,
- commercial companies should be motivated to provide applied training for special schools students.

Primary schools of arts

- these schools will provide primary artistic education,
- creating conditions for a pre-graduate education of teachers in artistic pedagogy by transformation of some conservatoires to specialised HEIs with study programmes covering the field of arts in forms 1 – 9 for primary schools.

Grammar schools and general secondary education

- grammar school education as a basis for HEI study, providing general education for the longest possible time, without too narrow and early specialisation
- efforts at making the mobility of students between various types of schools as straightforward as possible,
- the reduction of the number of 8-year grammar schools which restrict equal opportunities[7] for all students, these grammar schools should educate gifted children only,
- providing for the maximum mobility between 8-year grammar schools and primary schools, and modifying the process of admission to these schools, with the aim to have 25-30% of students in one population year studying at these schools,
- creating a complex system of monitoring quality on completion of the particular levels of education, preferably at the beginning of the next term. Completion of standards (both content and performance) including tests and methodological materials,
- providing for unbiased, standardised school-leaving examinations administered by the state.

Specialised secondary education

- Not more than 70-75% of primary school leavers will continue in specialised secondary education. Most of them will complete their secondary education with the school-leaving examination. Secondary vocational education (at present represented by 2-3 year courses at vocational schools) will be provided, depending on business demands, at schools run by enterprises, or in a dual system.
- reducing and updating the system of study and vocational courses along with the opening of courses with broader specialisation,
- the redesigned secondary specialised school will provide various levels of general and specialised education such as lower or basic vocational education, secondary vocational education, and complete secondary education. Study programmes shorter than 4 years will be completed by a final exam, 4-5 year programmes by the school-leaving

[7] According to the National Programme, "8-year grammar schools restrain the basic principle of democracy – equal opportunities and justice in access to education because they segregate schoolchildren, adversely affect the quality of education at primary schools regarding them as second-class schools, change the status of secondary specialised schools, and have a negative impact on the quality of the education system as a whole. The schooling of gifted children will be more efficient if it is based on a differentiated approach to students at primary schools and only actually gifted students are chosen to study at 8-year grammar schools."

examination. Secondary specialised schools will be constituted by the transformation of existing secondary vocational schools, secondary specialised schools, and joint secondary schools,
- according to the new concept, secondary schools will provide higher secondary as well as extended education courses (also for grammar school leavers not continuing at HEIs). Provided they are awarded accreditation, they will be able to provide higher specialised education, retraining courses, etc.
- the contents of education should define elementary knowledge common for all fields of study (60% of teaching time) and specify fundamental competences of school leavers,
- in order to postpone pupils' decision on their future career until an older age and leave chances open for changing course later, the first year at secondary specialised schools will be general and informative, roughly equal to the first year of grammar school, common for all study courses and aimed at acquiring general knowledge and basic know-how.

Out-of-school education

- state funds support for organisations providing leisure-time activities for children and the youth,
- opening positions for leisure-time pedagogues with higher education, youth-work specialists with higher education, and extend powers of senior tutors in student dormitories.
- enabling school clubs and community centres to obtain legal personality and extend the scope of their activities to include secondary school students.

Support services for schools, counselling, school facilities

- incorporation of support activities, counselling, etc. into the Schools Act,
- equalising the remuneration of all pedagogical employees and experts in the area of education, making tutors and nursery school teachers financially and socially equal to other teachers. The remuneration of other specialised employees (psychologists, IT experts, etc.) should reach the level common in other areas.
- specifying counselling competences in relation to educational counsellors, special pedagogues, speech therapists, health care workers, drug prevention coordinators, career advisors, professional orientation advisors, methodologists, class teachers, leisure-time pedagogues,
- determining regional and extra regional types of child care facilities and special educational facilities - educational prevention facilities (educational and psychological prevention centres, medical and education sanatoria, diagnostic centres) and remedial education facilities (residential remedial education facilities for children and youth) should fall under specialised state administration due to their supra-regional scope of operation,
- eliminating the consequences of non-systemic exclusion of some remedial education facilities from the Ministry of Education and their incorporation under the Ministry of Labour, Social Affairs, and Family on the basis of an interdepartmental agreement so that complex and permanent care could be provided for children and teenagers,
- improving the framework of language schools in line with standards, the establishment of a methodological body responsible for awarding accreditations to language schools, ensuring that international language certificates are recognised

in Slovakia, finding a proper institutional position for the State Institute of Stenographics in the education system.

Tertiary and further education

- 50% of population should be educated at tertiary education institutions (higher secondary schools, higher specialised education, specialised HEIs, universities) by 2020, tertiary education programmes should be based on the credit system of study,
- a reduction of study courses at HEIs and their compliance with the ISCED classification, a 3-level study system at HEIs: Bachelor's, Master's, and doctoral degree courses,
- increasing the importance of state school-leaving examinations for admission to HEIs by ensuring their objectivity, validity, and transparency,
- providing all students with access to the Internet and electronic media in libraries,
- further education programmes should provide retraining for the unemployed and people at risk of unemployment, the state and employers should stimulate people to continue their education.

Management and Financing of the Life-long Education System

The National Programme proposes to increase the Slovak education expenditure to at least 5% of GDP by 2006. It stresses the importance of decentralisation and rationalisation of the management of school and school facilities by transferring responsibilities to self-governing bodies of municipalities, communities, and schools. It also requires changing the manner in which the MoE SR functions. The Ministry of Education's tasks are:

a) to incorporate schools into or remove them from the school network,
b) to award teacher's licences with qualifications indicated instead of qualification notices presently used,
c) to specify requirements for teachers' qualifications and their life-long career growth,
d) to analyse the state of education and prepare legislative measures,
e) to order the conduct of research tasks and allocate necessary funds,
f) to specify budget normative directions and deal with their variations.

The National Programme proposes creating a rational model with full legal personality[8] for all schools and school facilities as non-profit organisations and adopting necessary legislative instruments. It demands that the administration should be reduced and financing simplified. The programme proposes to change legal status so that schools will become *non-profit educational institutions governed by an administrative board or school board*, with powers to appoint and remove headteachers, to decide on distribution of allocated funds, curriculum contents, and textbooks used.

As a consequence, it seems necessary to adopt a law on the financing of schools including related norms and monitoring of state (public) budget funds utilisation, objective and transparent allocation of funds, the equalising of state and non-state schools financing, and drafting a new Schools Act so that the decentralisation of powers would be connected with responsibilities across the area of education, the efficient utilisation of funds, and managing schools and school facilities at

[8] The granting of legal personality to schools is connected with application of a subsidiarity principle, due to which schools can work more independently, define their own teaching contents in addition to the national content of education (curriculum) and provide their own educational programmes, alternative approaches and personnel policy.

particular levels of the specialised[9] state administration in charge of schools.

As laid down in the National Programme, "there is no need to constitute new institutions and departmental institutes, but it is quite important to restructure organisations directly subordinated to the MoE SR and reduce their number. The National Programme supports the development of non-state schools and establishment of other joint schools (such as incorporating primary and nursery schools or primary and secondary schools, etc.)."

Specific issues to be dealt with are relating to *Roma children*, socially and motivationally neglected. It is recommended to make use of a day-long education system, open preparatory classes in nursery schools for children with deferred school age, and zero forms at primary schools for children from stimuli-lacking environments. 5-year-old children from such environments should be placed in nursery schools, their diagnosing needs to be improved; there should be a special training for teachers and tutors in charge of Roma children, more Roma people should be motivated to obtain pedagogical education, and counsellors for Roma population appointed. A system has been set up for motivating Roma children's parents to cooperate with the school with regard to their entrance and attendance at schools as well as their future training at secondary and higher schools. Support education programmes should take place, focusing on entrance exams at secondary and higher schools, and a system of tutors for children from stimuli-lacking environment needs to be verified. It is also necessary to provide higher salaries (or reduced teaching load) for pedagogues teaching children from these environments.

Teachers' Status

Actual changes to the education system can only be achieved through a conscientious and highly motivated work of all teachers and tutors. Therefore, the National Programme advocates that the social and financial remuneration of teachers needs to be enhanced[10], and their pedagogical and further education improved. Each school should be allocated targeted funds for teacher education and make teachers take part in such training programmes as are considered of particular importance for the schools.

To maintain the high quality of teachers' training, *nationwide pedagogical competence standards* need to be implemented including standards for pedagogical graduates, novice teachers, inspectors, school headteachers, etc. These standards will lay the basis for obtaining the respective certificates.

Furthermore, it is necessary to put into practice the law governing the public service of teachers and pedagogical employees, and elaborate a system for teachers' protection against excessive mental stress, perform regular medical and psychological examinations of teachers for the sake of prevention, care, and treatment, provide for a legislative protection of pedagogical employees as public servants against increasing aggression and violence from students and parents, elaborate and implement an ethical code for pedagogical employees.

The National Programme proposes to increase financial remuneration for teachers and pedagogical employees and introduce a differentiated remuneration system based on the level of education, work quality and quantity assessment as well as re-evaluating

[9] Although the Millennium Project counts on the specialised state administration as an alternative in the education system, the draft Schools Act and the Schools Financing Act governing the financing of primary and secondary schools rely on the powers of district and regional offices in this area.

[10] Various career levels need to be defined such as: 1) novice teacher, 2) junior teacher, 3) senior teacher, 4) teacher with first attestation, 5) teacher with second attestation. The attestation will result in higher salaries, but also in the extended scope of responsibilities and duties.

the status of teachers' profession. It suggests that a system of attestation examinations (qualification examinations) should be implemented in relation to the teachers' remuneration and career growth.

The programme also deals with the quality of education, which shall be evaluated both internally and externally. In addition, it states that the Slovak government should invite EU and OECD authorities to perform an audit of the education system in Slovakia.

As a conclusion, the National Programme lists the following twelve cornerstones of education in Slovakia for the coming 20 years:

1. Keeping up with modern trends in the world and Europe in science, research, and knowledge, while retaining our independence.
2. The practical implementation of a creative and humanitarian theory of education.
3. Changes to the content of education, its reduction and altering it to make it more functional, customisable, and viable.
4. The diversification of principles, methods, and forms of education.
5. The enhancement and decentralisation of the management
6. The teacher – the key element in education.
7. Financing of a modern education system.
8. Support services for schools.
9. Information technologies.
10. Foreign language competences.
11. Professional and life-long education.
12. The transformation of the school system.

The National Programme includes a strategy of reform changes and definition of levels at which these changes should be implemented.

Analyses and Commentaries

First of all, it is the very existence of the Millennium Project that needs to be appreciated, as it has launched a discussion among professionals and has taken into consideration their comments in its modified version as of 2001. The Millennium Project analysis will deal with two fundamental issues: the proposal of systemic measures and actual measures taken at particular levels of the education system.

Before embarking on a more detailed content analysis, we will focus our attention on several commentaries on the philosophy of the project and its elaboration.

The project itself is very ambitious and expansive. Unlike the original document "The Concept Proposal of Education…", it has turned many intentions into more concrete recommendations. Its problem, however, is that its authors do not seem to take account of available funds for education, so many proposals and priorities may vanish in the multitude of ambitions and desires as the programme does not indicate priorities or the time sequence of their implementation (except deadlines for adopting the Schools Act and the Schools Financing Act). This is mostly true about the section devoted to concrete proposals for reforms in the system of life-long education.

The programme can also be blamed for relying too much on the authoritative enforcement of changes in a "top-down" fashion. This presents a risk in the area of education with thousands of classes, students, and teachers, where substantial changes should take place mostly within the teacher-student interaction. If the project fails to persuade and motivate the main actors – teachers – to support the changes, it may easily fail.

Systemic recommendations

Proposed systemic recommendations can be deemed positive to the extent that they support the decentralisation of the school system, which may make its management more rational and efficient. The project boosts competition between schools and regards non-state schools as integral parts of the education system, which is also reflected in the concepts of the Schools Financing

Act and the Schools Act, which are dealt with later in this chapter.

To a large extent, we can agree with the project proposals concerning education financing. This mostly applies to the increase in expenditure for education, with a concurrent reform of the whole system. Likewise, the project pursues the rise in teachers' salaries and the elimination of some systemic deformations (such as nursery school teachers' salaries); at the same time it specifies the need to create a more transparent remuneration system designed to maintain the quality of teachers and coupled with pedagogical competence standards.

Subjects in the school system and their relations

The project does not pay enough attention to the definition of a framework for institutions and subjects involved in the process of education. It is not quite clear what a headteacher's position should be, or the positions of the school board or administrative school board. These issues are analysed in the section on decentralisation in this chapter.

The project properly defines the dominant role of the Ministry of Education in drafting legislative proposals relating to education, defining the basic scope of state education, etc. Also, the project outlines key ideas of subsequent legislative norms[11] with recommended time sequences. These changes should be mostly performed by the Ministry of Education; the authors therefore propose that a temporary structure for the reform management be created within its organisational structure. However, the constitution of this structure is defined somewhat too broadly, which might put its flexibility and operation at risk.

As far as subjects and management relations are concerned, the project only brings a general conclusion that "organisations directly subordinated to the MoE SR need to undergo restructuring and downsizing" and "the position of State Institute of Stenographics within the system structure needs to be resolved."

Demographics, the size of schools

The project does not sufficiently take into account the demographic situation in Slovakia and a gradual decrease in the number of pupils entering the education system. For example, the number of children in the 6-10 age category fell by 20% in the period 1998-1999. Although the project supports further merging of schools (for example nursery and primary schools or primary and secondary schools), the adopted Schools Financing Act brings about contrary incentives. The project also suggests retaining the system of limited-grade schools, but it does not take any definite standpoint concerning the efficiency threshold and its determination for these schools. This is precarious as far as economics is concerned, particularly because the Schools Financing Act may give incentives for retaining even very small limited-grade schools.

Concrete changes

Following the implementation of concrete changes proposed in the Millennium Project, several questions have arisen. As mentioned above, the project neither defines the priority level for individual proposed measures nor their time sequence, nor does it take account of possible budget restrains. Besides, some proposals lack a clear mechanism for their implementation, which adversely affects the credibility of the project.

For example, it is not clear by what methods and under what criteria the authors want to perform a significant reduction in the framework of 8-year grammar schools. Likewise, it is difficult to understand how the authors want to achieve (optimal, in their opinion) a distribution of secondary school students, according to which 30% of them

[11] This mostly applies to the Schools Act and the Schools Financing Act. Their analyses can be found elsewhere in this chapter

should attend grammar schools and the rest should study at other specialised schools. After the decentralisation reform, decisions on the capacity of schools will be taken at the regional level and will be most likely to reflect parents and students' preferences, which will not necessarily match those of the authors of the project.

Educational mobility

Several sections of the project are devoted to the need to increase mobility within the education system. This concerns the mobility within secondary education institutions, between special and standard schools, and 8-year grammar schools and primary schools. The proposed placement of special school students into "standard schools" is positive, yet it is necessary to consider whether present primary schools without special pedagogues are ready to cope with such a task.

School System and Decentralisation

Decentralisation in the education sector is part of a broader intent to decentralise public administration in Slovakia. Its basic principle is to effectively transfer powers and responsibilities in certain areas from state administration authorities to territorial self-governing authorities: municipalities and higher territorial units.

School system administration after the transfer of powers to regional self-governing authorities

The decentralisation reform has transferred certain powers from state administration authorities to municipalities and higher territorial units[12]. Some of these powers are exerted by self-governing authorities as transferred[13] from state administration, required funds are allocated from the state budget as stipulated by the Budgetary Rules Act. Other, "self-governing" powers are financed from their own funds. The reform has been reflected in the amendment to the State Administration in Education and School Self-Governance Act No. 542/1990 Coll.

The most significant changes in education system administration are as follows:

1. State administration of education will be at both municipal and higher territorial unit level[14].
2. The establishment of regional self-governing bodies for education at municipal and higher territorial unit level.
3. Due to points 1 and 2, there will be a change of financial flows in public administration and the transfer of the state property to municipalities and higher territorial units.
4. The further definition of the school self-governing status and establishment of a special school governing body –students' board.

Powers of municipalities and higher territorial units in education[15]

The most significant change ensuing from the new enactment is the transfer of powers to found schools and school facilities from regional and district offices to municipalities

[12] see: Table IV.1

[13] Section 4 of the Act No. 416/2001 Coll.: if the law does not state that it is a transferred power of state administration while defining the force of a municipality or higher territorial unit, it holds that it is the exerting of a self-government power of the municipality or higher territorial unit.

[14] The State Administration in Education and School Self-Governance Act No. 542/1990 Coll. in Section 2, Article 1 placed municipalities and higher territorial units among present state administration authorities in charge of education (i.e. headteacher of a school or school facility, district and regional office, State School Inspection Agency, the Ministry of Education, possibly other state administration authorities)

[15] see: Table IV.2

and higher territorial units[16]. Table IV.2 shows what powers self-governing authorities have to found certain types of schools and school facilities[17]. Municipalities and higher territorial units administer schools and school facilities founded by them. In connection with that, the law grants certain rights and duties to them as shown in Table IV.1. An important power transferred from regional and district offices is **budget and investment plan drafting** for schools and school facilities. To allow the educational process to take place, municipalities or higher territorial units will **allocate funds** for the operation and maintenance of schools and school facilities as well as **investment funds** from the state budget and their own sources – depending on the type of administration exercised. At the same time, they have **a supervisory responsibility** in the operation of schools, spending of allocated financial and material resources, and efficiency of usage with regard to the school-administered properly belonging to a municipality or higher territorial unit.

Powers of District and Regional Offices[18]

The District Office is obliged by the law to found pedagogical and psychological counselling facilities. It founds other schools and school facilities only if a municipality fails to ensure the provision of compulsory school attendance. In legal terms, this is referred to as "*a special condition*". In such a case, students attend a school founded by the District Office and the municipality hands over the funds for students' schooling to the District Office and covers proportional school maintenance and operation costs and other costs of goods and services by the number of students. The *special condition* is deemed fulfilled by the Regional Office if a higher territorial unit fails to ensure the observance of compulsory school attendance, or if the facility in question is a school or school facility with an international coverage or has been founded on the basis of an international treaty or agreement.

Regional and district offices have similar powers over schools and school facilities in their territorial domain. They prepare **a plan and budget for the areas of wages, service incomes, and other personal payments, reallocate these funds, and supervise the expedience of their spending**. Furthermore, they are in charge of counselling and methodological activities, monitoring the observance of generally valid legislative norms, and keeping account of unemployed pedagogical and non-pedagogical employees in their territorial domains. In relation to schools and school facilities that they have founded, they have similar powers as municipalities/higher territorial units towards schools/school facilities founded by them.

School Headteacher

School headteachers are appointed and removed by the founders – municipalities or higher territorial units (formerly district and regional offices) upon a motion by the respective school board. The founder appoints and removes the headteacher by **a decree issued by a municipal council or higher territorial unit council**. Unlike the former enactment, the law stipulates that a candidate for this position has to meet the requirements of pedagogical and professional competence, have 5-year work experience in education, and have passed a qualification examination. The headteacher performs the first level of state administration, whereas the second level is performed either by state administration authorities or self-governing authorities depending on a subject matter of the first-level decision.

[16] Section 4, Article 1, 2 and Section 4a Section 1, 2 of the Act No. 542/1990 Coll.
[17] see: Table IV.2
[18] see: Table IV.3

School Self-Governance

According to the amended law, school self-governance is administered by a school board, municipal school board, and territorial school board (instead of a district school board and regional school board)[19]. A new special school governing body is a students' board. In essence, the scope of operation of self-governing bodies has not changed. The amendment to the Act has only refined the conduct of their tasks. The boards further declare their opinions concerning the activities of founders of schools and school activities, development concepts of schools and school facilities, and their material and technical conditions. The amendment has provided an institutional background for the origination of so-called students' school boards at secondary schools, whose task will be, if constituted, to represent students at the school and act on their behalf towards the headteacher and school officials.

[19] The first sentence in Section 7, Article 2 of the Act No. 542/1990 Coll.: A school board, municipal school board, and territorial school board are initiative and advisory self-government bodies that express and advocate parents and teachers' public concerns in education.

Table IV.1: According to the Act No. 416/2001 governing the transfer of certain powers from state administration authorities to municipalities and higher territorial units, the following powers have been transferred to self-governing bodies:

Municipality competence in education[20]	**Higher territorial units competence in education[21]**
- state administration for schools and school facilities	- second-level state administration dealing with matters of schools and school facilities founded by the HTU
- appointment and removal of headteachers	- appointment and removal of headteachers
- founding and removing schools and school facilities	- founding and removing schools and school facilities
- creating conditions for the observance of compulsory schools attendance at primary schools	- administration of schools and school facilities founded by HTU and providing for the needs of the educational process
- performing supervision over the school management of funds, material resources and property	- supervision over the school management of funds, material resources and property provided on the basis of expedience monitoring of the management of HTU property administered by the school or school facility
- providing catering services for students at schools and school facilities founded by the municipality	- providing catering and housing services for students at schools and school facilities
- specifying a primary school district which students from a closed primary school will attend as part of their compulsory school education if the primary school is closed and thus removed from the school network	- specifying a secondary school or school facility that will supersede a closed school or school facility
- processing and provision of information related to education within its scope of operation	- processing and provision of information related to education within its scope of operation
- allocation of funds to private schools, religious schools, and performing supervision over the management of these funds	- allocation of funds to private secondary schools and school facilities, secondary religious schools and school facilities, and performing supervision over the management of these funds
- approving rental contracts concerning school buildings and rooms, attached premises of schools or school facilities founded by the municipality	- approving rental contracts concerning school buildings and rooms, attached premises of schools or school facilities founded by HTU

[20] Section 2, letter g) of the Act No. 416/2001 Coll.; subsections 3.1 – 3.8 not listed
[21] Section 3, letter g) of the Act No. 416/2001 Coll.; subsection 1 – text in brackets not listed

Table IV.2: The powers of municipalities and higher territorial units

Municipality[22]	**Higher territorial unit**[23]
As part of ***transferred state administration***, it founds and removes the following schools and school facilities as part of the network: - primary schools	As part of ***transferred state administration***, it founds and removes the following schools, school facilities, and applied training centres as part of the network: - secondary schools - secondary vocational schools - applied training centres
As part of **territorial self-government**, it founds and removes the following institutions within the network of schools and school facilities: - primary schools of arts - pre-school facilities - school clubs for children - after-school activity centres - community centres - school kitchens and cafeterias providing catering services for primary schools and pre-school facilities - language schools at primary schools	As part of **territorial self-government**, it founds and removes the following institutions within the network of schools and school facilities: - secondary schools of arts - special interest and educational facilities except language schools at PS - student dormitories - school catering facilities - applied training centres - school-service facilities - school camp facilities

Table IV.3: The powers of district and regional offices

The district office founds and removes the following institutions within the network of schools and school facilities: [24]	**The regional office** is in charge of the following institutions[25]:
- pedagogical and psychological counselling facilities for primary schools	- pedagogical and psychological counselling facilities for secondary schools - special nursery schools, special primary schools, special secondary schools, special professional and vocational schools, special needs counselling facilities, school kitchens and cafeterias, kitchens and cafeterias in accommodation facilities belonging to schools and school facilities founded by the RO.
If ***special conditions*** require so, the district office founds: - nursery schools - primary schools - school kitchens and cafeterias in accommodation facilities belonging to schools and school facilities founded by the DO	If ***special conditions*** require so, the regional office founds: - secondary schools - applied training facilities - secondary school student accommodation

[22] Section 4, Article 1, 2 of the Act 542/1990 Coll.
[23] Section 4a, Article 1, 2 of the Act 542/1990 Coll.
[24] Section 5, Article 1 of the Act 542/1990 Coll.
[25] Section 5a, Article 1 of the Act 542/1990 Coll.

Analysis of Key Issues

Like in other areas, the decentralisation in the school system generally means the transfer of powers from the territorial state administration (district and regional offices) to the territorial self-governing authorities (municipalities and higher territorial units). This change seeks to increase the responsibility of decision-making authorities to their electors as well as to extend the possibilities for adapting their decisions better to local conditions. Therefore, the success of the decentralisation mostly depends on the following factors:

- What are key decision-making authorities and in what manner do they bear responsibility towards their electors?
- What motivations will the decentralisation bring the decision-making authorities (self-government and state administration authorities) and how will these stimuli affect their decision-making?
- How clearly will powers and duties be divided among the parties within the system?
- To what extent does the distribution of responsibilities match the powers granted.

With regard to decentralisation in education, these questions can generally be answered affirmatively. Decentralisation takes the responsibility for decisions made directly to elected representatives at the level of higher territorial units and municipalities, which have been entitled to found and remove schools as well as decide on financial matters. Nevertheless, we cannot avoid mentioning some serious problems and issues resulting from this process.

The Schools Financing Act does not provide a neutral motivational basis for the decision-making of municipalities and HTU on the existence of schools and school facilities. The Act motivates them to keep small independent schools running even in cases when merging them would be more efficient[26] (for more details, see the analysis of the Schools Financing Act).

The Act does not provide sufficient stimuli for cooperation between municipalities. This is a hot issue in Slovakia as many municipalities are small and scattered. Slovak municipalities tend to be very small as public service providers. The adopted legislation does not actually prevent their cooperation[27]; still this is far too little as shown by domestic and foreign experience. First, the high number of municipalities and transaction costs of communication make their cooperation less likely. Information barriers are even more important. The majority of electors have or may have access only to very limited information concerning the quality of education provided. Therefore, it can easily happen that they judge only those facts they can analyse and that bear some value for them instead of rather abstract aspects of quality and efficiency. Such facts can be represented by a binary analysis of whether a municipality has or does not have a school, which bears a strong emotional and political element. This makes the municipal cooperation and school network rationalisation less likely to take place.

Another problem results from a lack of fiscal decentralisation - i.e. a deeper relation between local/regional revenues and local/regional expenditures. The school system financing will still be determined by reallocation through the state budget, which reportedly lowers voters' interest in supervising the efficiency of their spending. The project of fiscal decentralisation is likely to be on the agenda in the next electoral term.

A specific issue is their relation to the network of schools and school facilities. As part of transferred state administration,

[26] It would be efficient in two aspects: either ensuring a higher quality of education with the same amount of funds or providing the present quality of education with a lower amount of funds.

[27] Except the above mentioned financial stimulus acting in a contrary fashion.

municipalities and higher territorial units will found and remove schools and school facilities such as primary schools, secondary schools, vocational schools, applied training centres (see Table IV.2). However, none of the above can be done without the approval of the Ministry of Education. The Act itself provides the MoE SR with a lot of freedom and specifies no criteria for making such a decision. The MoE SR can enforce their decision by levying a fine (a procedure specified by administrative proceedings). The situation is the same with regard to performing territorial self-government functions and school facilities (see Table IV.2).

In relation to schools and school facilities, the community can be divided into two categories:

- so-called wider public – i.e. all relevant electors in a municipality or higher territorial unit,
- so-called directly-involved public – i.e. students attending schools and school facilities, their parents and close relatives.

The representative democracy means that issues concerning the existence, financing, and staffing of schools are decided by self-governing authorities of municipalities or higher territorial units occupied by broader-public representatives. This fact is justifiable since schools are maintained and financed from the funds of all taxpayers and the education is a public concern domain. On the other hand, it can be seen that the directly involved public's concern is much higher as they are directly involved in the quality of education their children are being provided with.

In connection with former reforms, the decentralisation process seeks to resolve this issue by the continuation of so-called school boards with elected representatives of students' parents, teachers, other school officials, municipalities, and higher territorial units. School boards are a result of an effort to grant certain powers to the directly-involved public. They are consultative and supervisory bodies that are to oversee the school management, particularly the headteacher. The primary power of school boards is to propose the appointment and removal of a headteacher.

This approach can be seen as positive; yet, some risks need to be highlighted:

- It is unclear to whom the headteacher as a chief school manager is accountable. The division of powers over his appointment and removal between the school board and a territorial self-governing body (municipal, regional authority) results in his unclear accountability, providing room for the headteacher to misuse this inconsistency and joint efforts needed to remove him from the office for avoiding his responsibility.
- There is a significant lack of regulations concerning the school board elections and these elections are frequently organised by the headteacher. The fact that elections to the supervisory body are organised without actual regulation and by the one to be supervised decreases the efficiency of school boards.

A new element of the system is a so-called "special condition": if a self-government authority fails to ensure the provision of compulsory school attendance, a school is founded by a district office. This principle is to some extent necessary as the state guarantees that each student will have a school to attend as part of compulsory school attendance. On the other hand, the law does not take into account the possibility that the district office might make arrangements with another municipality on providing the compulsory school attendance by a school founded by this municipality. Schools falling under the district office are financed as follows: the municipality hands over per-student funds and covers the proportional costs of maintenance, operation, and goods and services payments. This provision is contrary to the Schools

Financing Act, according to which per-student funds should be transferred from the state budget directly to the founder and subsequently to the school (in this case to the district office and then to the school), so there would be no funds for the municipality to hand over. Furthermore, the municipality, not being the founder, has no power over the management of the school but is still obliged to pay the proportional amount of certain costs. A question arises here what motivation there will be for the efficient functioning of such a school.

Financing of Primary and Secondary Schools and School Facilities

The new Schools Financing Act for the first time seeks to resolve the financing of these institutions at the level of law. The Act distinguishes capital expenditures and 4 categories of current expenditures in compliance with standard budgetary classification:

a) Salaries, wages, service incomes, and other personal earnings for employees in charge of the educational process and employees in charge of services related to the operation and development of a school and school facility,
b) Insurance funds contributions and contributions of employers to insurance companies and the National Labour Office,
c) Goods and other services (operation costs)
d) Expenditures according to special regulations through current transfers.

The expenditures according to special regulations through current transfer (for example social scholarships) are allocated according to actual demands resulting from special regulations; therefore, they will not be dealt with in this chapter.

While determining funds allocated for category 1, the key instruments are normative directions issued by the Ministry of Education in line with restrictions given by law. When determining the normative directions, the numbers of pedagogical and non-pedagogical employees that a school is entitled to have are stated first. Normative methods for determining the number of pedagogical staff in state schools are based on the number of students, classes or groups, lessons taught per week, and teaching load. For state-funded school facilities, these methods are based on the number of students at primary and secondary schools or school facilities (thereinafter only "students"), and education work duty. A normative determination of the number of non-pedagogical staff depends particularly on the type, kind, and technical equipment of a state school or school facility.

Table IV.4: CATEGORY 1
(Salaries, wages, service incomes, and other personal earnings for employees providing for the educational process and employees providing for services related to the operation and development of a school and school facility + insurance funds contributions and contributions of employers to insurance companies and the National Labour Office)

Type of facility	State financing	Method
state	YES	normative
state subsidised	YES	normative
religious	YES	unclear[28]
private	YES	unclear

Subsequently, the state provides funds for employees in state schools and public school facilities to cover their wages, service incomes, and other personal earnings the volume of which is determined normatively based on the number of employees and their wage classification as stated by the Civil Service Act.

According to the law, setting the normative directions and normative methods of determining the number of staff further take into consideration the provision of:

a) mother-tongue education at schools and school facilities where the

[28] See the analytical part

teaching language is different from the state language,
b) education for students with special educational needs,
c) education for gifted children,
d) religious teaching,
e) education for children from socially disadvantaged environments,
f) education at limited-grade schools,
g) nursery school education,
h) bilingual education,
i) foreign languages teaching,
j) sports training.

In case of fully-funded organisations, the state provides at least those funds necessary to cover the payments of state schools and public school facilities for energy and water supplies (fixed costs) and rental costs. The volume of funds to cover other expenditure for goods and services (variable costs) depends on available state budget funds.

Table IV.5: CATEGORY 2
(Goods and services (operational costs))

Type of facility	State financing	Method
state	YES	covering basic needs if necessary
state subsidised	YES	depending on available state budget funds
religious	YES	unclear
private	YES	unclear

In case of subsidised (partially-funded) organisations, the volume of these funds depends on available state budget funds.

Table IV.6: CATEGORY 3
(Capital expenditure)

Type of facility	State financing	Method
state	YES	depending on available state budget funds
state subsidised	YES	depending on available state budget funds
religious	NO	
private	NO	

Private schools[29]

The following funding principles apply to private schools:

- Subsidies are provided on a per-student basis,
- The amount of subsidies will be announced by the MoE SR by January, 31st of a given year,
- The basic amount of a per-student contribution equals to 100% of current expenditure per student at a comparable type of state school or public school facility unless a respective state administration authority, municipality, or higher territorial unit decides on reduction of the contribution.
- The contribution is decreased by 30% where tuition fees are charged,
- The contribution is decreased by 10% if the school does not adhere to curricula and study plans in force at a comparable type of school or public school facility based on the finding of State School Inspection Agency.

During a 5-year transitional period, a reserve fund is maintained at the central level, accumulating 3-5% of the expenditure for the financing of schools and school facilities. This fund is intended to "level out the differences resulting from enforcing the provisions of this Act."

After the breakdown of available funds, a respective state administration authority, municipality, or higher territorial unit is entitled, based on a request made by a state or non-state school, public or non-state school facility, to adjust the volume of allocated funds for these facilities in case of qualified requirements through negotiations or dispute proceedings.

[29] The law uses the term *non-state schools*, which includes religious and private schools. Due to decentralisation, we find the term *non-state school* rather misleading as there are public institutions not falling under the state domain that are generally regarded as non-state. We therefore use the term *private* as an umbrella term for private and religious schools and school facilities.

Analysis of Key Issues

The adopted Schools Financing Act **contributes to a higher transparency** in the financing of primary and secondary schools, **equalising private** schools and school facilities, it **does not, however, exert sufficient pressure on rationalising** the school network and its **adaptation to demographic trends**.

The allocation of funds for individual schools and school facilities has so far been administered by district and regional offices, which were in return responsible for the functioning of that part of the school network they provided funds for. The lack of rules made room for a non-transparent allocation of funds among individual districts (and secondary schools) by regional offices and among individual primary schools by district offices. Most regions used at least partial formulas for the allocation of funds, but these were often incomplete or were not observed at all.

As far as this aspect is concerned, the new Act can be seen as a radical breakthrough as it guarantees that two schools or school facilities identical in all aspects will be given the same volume of funds from the state budget (except for capital expenditure).

At the same time, the Act regulates the entitlement of private schools and school facilities for state budget subsidies, which has not so far been defined by law and for that reason funds were often allocated in a non-transparent fashion, with differentiation between individual regions, and lower subsidies for private schools in comparison to the state ones. Assuming that tuition fees are not charged and identical pedagogical methods are used, a private school should receive the same per-student contribution as an equivalent state school (100% of current expenditure per student at a comparable type of state school or public school facility). If this principle were consistently observed, there would have to be comparable normative directions for both state and private schools, or normative directions for state schools could be directly applied to private schools as well. Apparently, this has not been the legislators' intention as the MoE SR will announce the amount of the contribution every year as required by the law. It can therefore be stated that the principles and methods for determining the amount of the per-student contribution for private schools are not clearly defined.

Moreover, to a large extent the new Schools Act ignores what should have been its primary benefit – creating the same conditions for all schools and exerting pressure for rationalisation of the school network in compliance with local needs and demographic development. The pressure should be guaranteed by a per-capita financing principle (financing per student) with a minimum of adjustments (such as different heating periods in various regions of Slovakia).

This principle has been deformed in the final wording of the Act, particularly in the following two ways:

The first problem is the manner of setting normative directions for allocating funds to cover personal costs and fund contributions. The normative directions are based on "**the number of students, classes or groups, lessons taught per week, and teaching load**". Further, the Act stipulates that setting the normative directions and normative methods of determining the number of staff take into consideration the provision of "mother-tongue education at schools and school facilities where the teaching language is different from the state language, education for students with special educational needs and for gifted children, religious teaching, education for children from socially disadvantaged environments, **education at limited-grade schools**, nursery school education, bilingual education, foreign languages teaching, and sports training."
These provisions make it possible to set the normative directions in such a way that there

can be substantial differences between schools as far as the per-student financing of personal costs and fund contributions is concerned. This is mostly due to the utilisation of a **per-class** financing principle with a low minimal class size threshold.

The other significant problem relates to the financing of goods and services costs as the Act guarantees that the actual costs of energy and water supplies and rental costs in budgetary organisations will be covered. Stable or increasing costs resulting from the operation of buildings along with a falling number of students pose one of the most significant problems to the Slovak education system and contribute to a gradual increase in per-student costs. The adopted principle therefore manipulates decisions of municipalities and higher territorial units in favour of retaining the existing network of schools even in cases when self-governance representatives might have decided otherwise provided that the per-capita financing was consistently observed.

As far as political economy is concerned, a key problem is the fact that normative directions are issued by the Ministry of Education. At first sight, this seems to grant substantial powers to the MoE SR, which might support the rationalisation process and pressure for using per-capita financing. In fact, it acts on the contrary. The setting of normative directions has important political consequences particularly with regard to:

- territories with mixed nationalities,
- regional and local interests.

In case of a country with a coalition government and more nationalities, it can be assumed that if normative directions should put too much pressure on the rationalisation of the network, it would give rise to a very strong political opposition. The minister of education, let alone administrative staff at the ministry, could hardly stand such pressure, so it is obvious they are trying to avoid it. The absence of broader political agreement concerning education-financing policies and regarding the Act as "a technical norm" paradoxically lead to pre-emptively giving in to even a potential political pressure, resulting in a counter-productive impact on the rationalisation reform.

In addition to these substantial problems, there are others worth mentioning. Schools and school facilities that are state-subsidised organisations will be discriminated in comparison to state-funded and private schools and school facilities in the field of basic needs concerning goods and services. The financial requirements of budgetary organisations will be guaranteed and state subsidies for private schools will be allocated in the amount equal to 100% of current per-student expenditure in an equivalent state school. Subsidised organisations, however, will be dependent on whether there will be available funds in the state budget.

The Act does not deal with the question of allocating funds for capital expenditure for state schools (these will not be allocated to private schools), which creates room for non-transparency.

Neither does the Act govern the process of distributing the reserve fund consisting of 3-5% of expenditure for financing of schools and school facilities over 5 years, nor it specifies any criteria for its balancing. One of its provisions stipulates that "after the breakdown of available funds, a respective state administration authority, municipality, or higher territorial unit is entitled, based on a request made by a state or non-state school, public or non-state school facility, to adjust the volume of allocated funds for these facilities in case of qualified requirements through negotiations or dispute proceedings." It does not specify, however, what the "qualified requirements" are, which further limits the transparency of the whole process and make room for corruption.

Draft Bill on Education in Schools and School Facilities (Schools Act)

In October 2001, the Ministry of Education submitted for public discussion a draft bill on education in schools and school facilities. This law, referred to as the Schools Act, seeks to regulate the conditions of education, status of employees at schools and school facilities, and rights and duties of all parties involved. This Act supersedes the former Act No. 279/1993 Coll. governing school facilities and Act No. 29/1984 Coll. governing the network of primary and secondary schools as subsequently amended.

Institutions and Subjects

The draft bill submitted by the MoE SR more extensively governs the conditions and contents of the educational process, functions of particular institutions and subjects involved, and mechanisms and instruments serving to shape the educational process. A central position in the Slovak system of education is held by **the Ministry of Education**. It prepares related legislation, issues general educational programmes defining the obligatory content of education required by the state, approves textbooks, and decides on incorporating schools into or removing them from the school network.

There are other important subjects in the educational process whose tasks are defined by the draft bill such as founders of schools, headteachers of schools and school facilities, State School Inspection Agency, school governing authorities, and pedagogical boards.

As far as the founders are concerned, state schools are founded by municipalities, higher territorial units, state administration authorities in charge of education, and central state authorities. Religious schools are founded by state-recognised churches or religious communities; in case of private schools, their founders can be other legal persons, natural persons, and foreign legal persons. Schools founded by foreign legal persons may employ foreign educational models applicable in the respective country of the founder. The founders of schools and school facilities are responsible for creating conditions for the educational process, express their opinions concerning the school educational programme, and, in the case of religious and private schools, approve textbooks, and submit proposals for the incorporation or removal of schools and school facilities into or from the school network, etc[30].

The State School Inspection Agency assesses the compliance of the educational programmes of schools with the general educational programme as specified by the Ministry of Education, which is binding for schools and stands as a basis for preparing textbooks, the evaluation of schools and school facilities, and evaluation of student achievements. In addition, the chief school inspector is entitled to propose the removal of a school or school facility from the network in legitimate cases.

The headteacher of a school or school facility bears responsibility for the management of the school, school documentation, issuing in-school and working rules, judging students' applications for individual schooling, deciding on educational measures in schools and school facilities, expelling students from the study, and admission of students from other school districts during their compulsory school attendance. Also, the draft bill exactly specifies professional and pedagogical

[30] The draft bill specifies respective numbers of students at which schools and school facilities are normally founded or closed down. At the same time, it generally formulates the need to take into account the accessibility of similar facilities, the needs of children's population, etc. Founding and removing schools therefore need to be perceived in connection with the Schools Financing Act, which should provide basic economic incentives for founding or closing down a school. This draft bill is analysed elsewhere in the text.

requirements to be met by the headteacher and deputy headteacher of a school or school facility.

Levels of Education

The draft bill describes the general content and detailed conditions of education at various levels of education, from pre-school education to extended specialised education. It inclines to support a scheme with 9 levels of education as shown in Table IV.7. The draft bill distinguishes the network of schools providing one of the standardised levels of education (primary, secondary, etc.): primary, secondary, and special schools including nursery and special nursery schools. On the other hand, there is the network of schools not providing a particular standardised level of education that is made up of primary schools of arts, language schools, and stenographic schools. In addition, the draft bill classifies the network of school facilities consisting of nursery schools, school camp facilities, clubs and after-school activity centres, community centres, applied training centres, school student accommodation, psychological and education counselling, prevention, and intervention centres, special school facilities, special-purpose school facilities, and school facilities for further education of pedagogical employees.

Table IV.7: The standardised levels of education

Level of Education	**Code**	**Requirements to complete the level of education**
Pre-school training		Completion of the educational programme at nursery school or special nursery school
Primary education		Completion of the fifth year at primary school or a respective educational programme at special primary school
Lower secondary education	2A 2B 2C	- Completion of the 9th year of primary school, - Completion of the 4th year of 8-year grammar school, - Completion of the 4th year of 8-year conservatoire, - Completion of an educational course to supplement lower specialised education, - Completion of the educational programme in the final year of special primary school, - Completion of the 1st or 2nd year in pre-professional training classes at secondary specialised school
Primary specialised ed.	2C	Completion of the 1st year of secondary specialised school
Secondary specialised education	3C	Completion of 3-year vocational courses by the final exam at secondary vocational schools, including secondary vocational schools for students with visual impairment, aural impairment, and physical impairment (disabled persons).
Complete secondary general ed.	3A	Completion of educational programmes at grammar schools by the school-leaving examination, including grammar schools for students with visual impairment, aural impairment, and physical impairment (disabled persons).
Complete secondary specialised education	3A	Completion of 4-year or 5-year study courses, or further study courses at secondary specialised schools by the school-leaving examination taken in general and specialised subjects, including secondary specialised schools for students with visual impairment, aural impairment, and physical impairment (disabled persons).
Extended secondary specialised ed.	4A	Completion of a post-secondary qualification course not shorter than 2 years and specialised course not shorter than 1 year by the school-leaving examination in connection to required professional skills.
Extended specialised education	5B	The successful passing of a graduation exam and award of a leaving certificate as part of post-secondary specialised courses at secondary specialised schools, which are organised as internal (attended daily) courses opened for school leavers with specialised education completed by the school-leaving examination in related fields of study and last not less than 2 years. Extended specialised education is provided through educational programmes in two final years of study at conservatoires, as well as educational programmes at secondary specialised schools for students with visual impairment, aural impairment, and physical impairment (disabled persons).

The draft bill also defines some general terms and processes referring to education such as school attendance, admission to secondary schools, textbooks and teaching texts used, educational language, or the network of schools and school facilities. In addition, it separately regulates the education of exceptionally skilled and gifted children and children with special educational needs.

Compulsory school attendance

The draft bill holds that compulsory school attendance lasts 10 years and finishes with the school year in which a schoolchild is 16 years old, or 17 years old if the commencement of his/her school attendance was postponed or its performance was subsequently postponed. Nobody can be exempted from compulsory school attendance. Schoolchildren perform compulsory school attendance at primary school in a school district corresponding to their permanent or temporary residence. If they do so at a school outside this school district, consent is required from the headteacher of the school they are applying for.

Admission to secondary schools

A basic prerequisite for admission to secondary school studies is the fulfilment of requirements concerning the level of education attained. Consequently, a legal guardian acting on behalf of a schoolchild submits the only one application for enrolment in a secondary school, in which an alternative school can also be specified. The headteachers of secondary schools submit plans to founders specifying the number of classes to be opened in the following school year. After negotiations with social partners, founders decide on these plans by September 30th. After discussion at the pedagogical board of school and school board and with the founder' consent, the headteacher determines and publishes the numbers of students in vocational and study courses that can be admitted to first-year classes.

The Ministry of Education prescribes principal subjects to be tested at entrance exams, one of which is always Slovak Language and Literature, or the testing of special skills, abilities or talents needed to master certain study or vocational courses. Entrance exams at 8-year grammar schools include a psychological examination. In the case of religious and private schools, other principal subjects can be chosen at their founders' discretion. Schools with the teaching language of minorities supplement the principal subjects at entrance exams with their own teaching language.

Secondary school headteachers specify the form of entrance exams, their content and scope in compliance with the curricula and education standards of primary schools. Not later than 1 month before the date of the exams, they also determine and publish pass-fail exam criteria as well as other requirements for admission. The form of entrance exams for disabled students is adapted to take account of their impairment. With the consent of the pedagogical board of the school and school board, the headteacher can also set criteria for admitting applicants without taking the entrance exam or its part[31]. A decision on accepting a student without the entrance exam needs to be announced by the headteacher not later than 10 days before the entrance exam date. A possible second date of the entrance exam is determined by the headteacher after discussion at the pedagogical board of school and announced within 7 days from the day when the entrance exam took place.

On the other hand, the headteachers of secondary vocational schools can state, after discussion at the pedagogical board of school and school board, that the procedure of admission to vocational courses will include an entrance exam. The entrance exam is based on testing of knowledge and

[31] If the number of applicants exceeds the capacity of a study, vocational course or specialisation, not more than 50% of students per class can be admitted with the entrance exam.

skills, abilities, and competences needed for mastering selected vocational courses[32].

Dates of Entrance Exams

Entrance exams to test special skills, abilities, or talents take place in March or April. Other entrance exams for study and vocational courses at secondary schools take place in the first week of May on a day specified by law, for dancing courses at conservatoires in the third week of May, and at 8-year grammar schools in the first week of July.

If a student has failed an entrance exam, he/she is entitled to take another entrance exam at the same or another secondary school provided there are free capacities at these schools. The other entrance exam takes place in the second week of June on a day specified by law.

Based on the results of entrance exams, the headteacher of a secondary school decides on the admission of students. Supposing there are more students that have equally met the entrance exam criteria, disabled students and those with serious impairment will be given precedence over other students. The headteacher's decision also takes into consideration whether a student has successfully participated in or has won a students' competition in a subject related to the field of study. Consequently, the headteacher publishes the list of all accepted and non-accepted students in the order of points obtained during the admission procedure. The headteacher of a secondary vocational school decides on the admission of a student that should be trained for a person or legal entity after entering into the contract with this person.

The law entitles a respective founder to decide on an appeal submitted by the legal guardian of a student against the headteacher's decision within 15 days after its delivery. If the legal guardian has not submitted an appeal, or requested the application to be returned, nor applied for taking the entrance exam at the same school on the second date, the headteacher will send the application to the school stated as an alternative. If no alternative school is stated or such a school does not organise entrance exams, the application will be sent back to the primary school the student is attending.

A respective state administration authority in charge of education will ensure the completion of compulsory school attendance at a secondary school for students not admitted to any secondary school even after the second date of the entrance exam and those that have not applied for any secondary school on completion of the ninth form of primary school or special primary school and have not completed their compulsory school attendance. This will be done after consultations have been held with a student's legal guardian and the headteacher of the secondary school at which the student will complete the compulsory school attendance. The list of schools at which these students can complete their compulsory school attendance will be announced by the respective state administration after consultation with the headteachers of these secondary schools.

Textbooks

Textbooks and teaching texts for individual subjects are subject to approval by the MoE SR. Besides textbooks and teaching texts recommended by the MoE SR, teachers are allowed to use, at their own discretion, other appropriate sources of literature. Religious and private schools can use textbooks and teaching texts published in compliance with their curricula and approved by their founders, taking into account the opinion of the MoE SR. Textbooks and teaching texts for compulsory subjects and approved by

[32] If the headteacher of a vocation school decides that the entrance exam will take place, he is obliged to make their conditions public not later than one month before the first date of the entrance exam and he acts in the same manner as the headteachers of secondary specialised schools.

the MoE SR are lent to students free of charge. Likewise, teaching aids approved by the MoE SR are provided to schools and school facilities free of charge. Disabled students are entitled to use special textbooks and special didactical and supportive aids.

Educational and teaching language

The draft bill stipulates that the educational and teaching language at schools and school facilities is the state language of the Slovak Republic. Students belonging to national and ethnic minorities are granted the right to education in their own language[33] and the right to acquire the state language.

The members of national minorities are provided with education:

a) in schools and classes where the teaching language is the language of the national minority and the educational process is conducted in this language,
b) in schools and classes where the language of the national minority is taught as a school subject; other subjects are taught in the state language,
c) in schools under b) other subjects can also be taught in the minority language,
d) in school facilities where the educational language is that of a national minority and the education process is conducted in this language; in nursery schools with the minority language conversation in the state language is taught as well.

The educational and teaching language can also be a foreign language – i.e. a codified language of a foreign country. Exams are also administered in this language. Slovak Language and Literature must be taught in bilingual schools and classes in the state language.

The network of schools and school facilities

The network of schools and school facilities (hereinafter "the network") is a public list of schools and school facilities entitled to provide education and to receive financial subsidies from the state budget for the coverage of direct costs of the educational process. A school or school facility can be founded only after it has been incorporated into the network and closed only after its removal from the network maintained by the MoE SR. School incorporation proposals contain a school budget outline, the numbers of students and employees, an approved educational programme, and other essentials. Apart from these documents, they also need to contain an opinion expressed by a state self-governing body in charge of education or, if this body is not a founder, an opinion of the municipality and respective state administration authority in charge of education. The law only specifies the essentials an incorporation proposal has to meet, but it does not define criteria on the basis of which the ministry decides on accepting or refusing the proposal. It also states that changes in the network will be automatically be carried out by the ministry within a specified period, subject to the founder's petition. In the case that the founder carries out changes without their registration in the network, the draft bill entitles the ministry to set a fine upon the founder up to the amount of 100 000 SKK.

Removal proposals are submitted by the founder of a school or school facility or, if need be, a respective state administration authority in charge of education or the chief school inspector. The removal proposals need to contain all essentials specified by the law (reasons, the ways of providing education in the future, respective authorities' opinions). However, criteria on the basis of which the ministry takes the decision are again not specified.

[33] Schools with the teaching and educational language other than the state language are obliged to teach the Slovak language and literature and the conversation in the Slovak language.

Gifted children

The draft bill regulates the conditions of education for gifted children i.e. those achieving excellent results in education, sports, or arts. It defines conditions for moving gifted children up to higher forms and establishing schools or classes for gifted children with extended teaching of selected subjects, and sporting schools and classes.

The education of children with special educational needs

Special schools are classified by the Act as follows: primary schools for students with a particular type of impairment, special primary schools, secondary schools for students with a particular type of impairment, applied training schools, vocational schools, special schools at health-care facilities with the exception of special secondary schools, secondary vocational schools, applied training schools, special school facilities, and schools not providing one of the standardised levels of education for schoolchildren with impairment. **Special school facilities** are: nursery schools for students with a particular type of impairment, special nursery schools, diagnostic centres, and residential remedial education facilities.

In addition to special schools, the draft bill stipulates that special classes can be established in schools and school facilities in which disabled students are being educated. A decision on placing a disabled student in a special school or class is up to the headteacher of the school in which the disabled student is to be placed on the basis of a medical practitioner's, special pedagogue's, and psychologist's recommendations, and with the consent of the student's legal guardian, or on the basis of a request made by the legal guardian. The consent of the student's medical practitioner is required in case of placement in schools affiliated with health-care facilities. In case of placement in special classes, the legal guardian's consent is always required.

Educational programmes at special primary schools provide schoolchildren with primary education and lower secondary education. Depending on the extent of mastering respective educational standards, a mentally disabled student attending a vocational school can attain primary specialised education – vocational introductory and extended training. In addition, vocational schools can provide courses to attain lower secondary education and extended courses for mentally disabled students that have previously completed lower secondary education and primary specialised education, on completion of which these students can attain secondary specialised education.

Vocational schools admit mentally disabled students that have completed education at primary schools or special primary schools. Applied training schools are intended for mentally disabled students who have completed education at primary schools or special primary schools and are not able to study at vocational schools. The process of admission to vocational schools and applied training schools is similar to secondary schools. Besides the above schools, there are secondary schools for students with impairments providing an identical education as other secondary schools, taking into consideration the impact of their impairment. These are secondary schools for students with visual, aural, or physical impairment and secondary schools affiliated with remedial education facilities.

The draft bill introduced the term "*children, schoolchildren, and students from a socially or otherwise disadvantaged environment.*" This applies to family environments with a low social and economic status and endangered by pathological social phenomena, the children of foreigners, refugees, or refugee-status applicants. In general terms only, the law states "they have the right to education based on forms and methods matching their needs and special conditions allowing for such education." However, it does not introduce any specific measures to be taken, except organising state language courses for foreigners' children.

In the end, the draft bill deals with the rights of legal guardians, schoolchildren and students, and the rights and duties of pedagogical employees. However, these sections are largely in declaratory terms, as several terms used are not defined, nor is the mechanism of their implementation specified. For these reasons, they will not be dealt with in more detail here.

Analysis of the Draft Schools Act

The draft bill regulates the condition and content of the educational process, the tasks of subjects and institutions involved, and mechanisms and instruments to control the educational process. The draft bill itself is relatively extensive, as it covers the broad set of educational institutions and procedures, perhaps too detailed at times (for example stipulating that school documents can be made only in a document ink or printed on a laser printer).

The present network of schools and school facilities in Slovakia is extensive. Therefore, the economic conditions in a small, transforming economy should provide clear incentives for re-considering some of the existing solutions. For example, we can doubt the efficiency of the present triple psychological counselling network existing independently within 3 ministries (The Ministry of Labour, Social Affairs, and Family, the Ministry of Health, and the Ministry of Education). Also, secretarial schools seem to have been included in the network of state educational institutions on historical grounds only. These schools provide courses, often identical to commercial ones, for which students pay only part of their actual cost.

Above all, the draft bill newly defines 9 levels of education from pre-school training to extended specialised education. Schoolchildren attain primary education by the completion of the 5th year of primary school or special primary school, they can afterwards continue with their primary school study or apply for an 8-year grammar school. Thus, school leavers from 4-year and 8-year grammar schools will finish their studies at the same age. This gives rise to some questions related to the organisation of the first grade of primary school, for example whether the qualifications of teachers for forms 1-4 will be extended to cover the 5th form as well or whether the content of education will be changed accordingly, etc.

Furthermore, the draft reflects the process of decentralisation and the transfer of founding powers to self-governing authorities and breaks new ground for a gradual change in the content of education. This mostly concerns the creation of general educational programmes at the MoE SR level (or other ministries of the interior, defence, justice, etc. upon their agreement with the MoE SR in case of schools subordinated to these ministries) and their implementation into schools' own educational programmes.

An accountability model defining relations and powers among individual authorities in charge of the education process is not clearly defined by the draft Schools Act in some aspects. The powers of the MoE SR over the network of schools and school facilities are not sufficiently regulated and leave too much freedom for its own decision-making.

Likewise, as far as the powers of the headteacher[34] of a school or school facility are concerned, it is not clear to what authority the headteacher is accountable. Many of the headteacher's decisions can only be taken after consultation with the school board and pedagogical board, as their consent is required in some cases. On the other hand, their consent is not required for example for the approval of entrance exam criteria[35].

[34] The headteacher's status is to a large extent governed by the State Administration in Education and School Self-Governance Act.

[35] The analysis of the headteacher's status and powers are dealt with in more detail in section "Decentralisation and Education".

For some procedures, which are subject to the headteacher's decision according to the Act, it would be more appropriate to ensure that these procedures are automatic. For example, if parents file a protest against a student's final evaluation and require that the student should be tested again through a commission exam, such an exam should take place automatically, not subject to the headteacher's approval. It might also be worth considering that the exam should automatically take place at a different school. The headteacher also holds substantial powers with regard to the admission process. In the case that the number of applicants in a certain course exceeds the available capacity, up to 50% of them can be admitted without having to take the entrance exam, if the headteacher rules so. If demand does not exceed supply, this limitation does not apply. The headteacher also decides on the admission or non-admission of students to a secondary school. An admission board, set up by the headteacher to organise entrance exams and evaluate their results, only acts as an advisory body to the headteacher. When evaluating the applicants, not only the exactly specified criteria are applied, but also the headteacher is entitled to take into consideration students' participation in various competitions, without any details how it should be done. A significant positive aspect is the communication policy of schools in the admission process through publishing students' results, and letting students, parents, and primary school teachers look into students' written outputs from the entrance exam. The founder of the school is entitled to decide on appeals against the entrance exam results. This power is used unevenly by various founders and is difficult to monitor, thus creating room for corruption.

The process of admission to secondary schools is closely connected to the issue of efficiency. The admission process should place students to secondary schools of their preference, in accordance with their abilities and aptitude and school capacities available. The present form of the admission process differs from the above, ideal definition particularly in two aspects: the contents of entrance exams and lack of motivation for students to actually choose schools of their own preference.

The principal limitation for both students and parents is the possibility to submit only one application for enrolment in a secondary school. Since entrance exams at most schools (except for conservatoires and 8-year grammar schools) are held on the same day and the capacity of high-demand schools fills up on this day, it is naturally far more risky for students to apply for the most popular and highest quality schools. The risk of failure amongst strong competition, which they cannot estimate in advance, and a resulting consequence of having to take part in the second round of examinations only at those schools with free places available make them apply for schools of lower quality and less in demand by students. The present model motivates students to give up their chance of studying at schools of their preference if such schools are in high demand and instead choose schools with a higher probability of successful admission after the first round of entrance exams.

Secondary schools are highly autonomous in determining the content of entrance exams within principal subjects specified by the MoE SR as the obligatory constituents of entrance exams. Two sources of risk can be mentioned here: secondary schools do not always take into consideration the content of education at primary schools. As experience indicates, there is lack of communication between secondary and primary schools with regard to the determination of the content of education to be tested at entrance exams. The other risk is the content of tests, which are often based particularly on memorising facts.

A solution to this situation might be the introduction of a preliminary round of the entrance exams that would be held on the date of "talent" entrance exams at schools

where the number of applicants significantly (2 and more times) exceeds available capacities. In the preliminary round, the capacities at the most popular schools would most likely be exhausted, but at the same time, students taking entrance exams in the preliminary round would still have chance to sit for the first (standard) round of the entrance exams at alternative (second-choice) secondary schools.

According to the draft bill, compulsory school attendance lasts 10 years, so schoolchildren complete it at the age of 16, or 17 if their school attendance was postponed. At this age, they are not mature enough to enter the labour market; it is therefore desirable to motivate them to continue their studies. A problematic issue concerns those children that complete their compulsory school attendance at primary school, but without a successful completion of the ninth form, as that is a prerequisite to admission to any kind of secondary school. If they fail to do so, they are dismissed from the Slovak education system at the age of 16. Such situations may occur, for example, if a legal guardian refuses to give his/her consent to the placement of a child in a special school although the medical practitioner, special pedagogue, and psychologist have recommended it, or if such a child is refused by the special school headteacher due to insufficient capacity at the school.

Draft Bill on Higher Education

A new Higher Education Act was submitted to the National Council of the Slovak Republic in accordance with the Government Programme in 1998. The draft is based on "the Concept of Further Development of Higher Education in Slovakia for 21st Century" and proposes substantial changes to the higher education system in Slovakia. The most important changes are as follows:

- the transformation of state HEIs to public organisations that own their property,
- extending possibilities for multi-source funding,
- replacing the legal personality of faculties by a framework of guaranteed powers,
- the program and institutional diversification of HEIs,
- changes to HEI teachers' status, implementation of full-time positions for professors and associate professors, with staff members recruited through public competitions and a fixed term of employment,
- the detailing of the accreditation system,
- the introduction of tuition and study fees,
- the introduction of a new social support system for students.

The structure of higher education and its institutions

According to the new Higher Education Act, HEIs are divided as follows:

– public HEI – public state institutions,
– state HEIs (military, police),[36]
– private HEIs (formerly "non-state").[37]

Higher education in some fields of study[38] is provided through accredited study programmes[39] that are completed in three levels.

[36] State HEIs remain budgetary organisations. The powers of the respective central state authority over state HEIs are quite extensive. These schools do not charge tuition fees.

[37] Private HEIs are defined as legal entities located in the Slovak Republic that have been founded or established to perform tasks in research and education. Private HEIs can operate with the consent of the government granted on the basis of the MoE SR proposal.

[38] A field of study: a domain of knowledge that can be studied as part of higher education in one of its three degrees.

[39] A study programme: a set of educational activities (such as lectures, seminars, practical trainings, dissertation work, diploma work, etc. – study programme/course units) and a set of rules

Table IV.8: Higher education degrees

1st degree[40]	Bachelor's degree programmes (this degree is provided at all HEIs)
2nd degree	Master's degree programmes (Master of Science, Master of Arts)
3rd degree	Doctor's degree – doctoral programmes

In terms of their specialisation and scope of activities, HEIs are divided as follows:

- **universities**: providing study programmes for all three degrees with a significant share of 2nd and 3rd-degree programmes,
- **non-university HEIs** – so-called specialised higher education institutions providing mostly 1st-degree study programmes.[41]

The Act changes the present system of higher education through introducing a framework of the fields of study incorporating individual study courses. In the former Act, fields of study were specified in the statute of a higher educational institution[42], whereas the new Act states that the framework of the fields of study will be administered by the Ministry of Education as "a national standard list of all fields of study." The MoE SR also has the power to introduce a new field of study into the framework or make any other changes to the list – normally upon a HEI proposal subject to the Accreditation Board's acknowledgement.

A higher university institution can provide education only in the fields of study listed in the above-mentioned framework. Higher education in a certain field of study can be attained by attending an accredited study programme. A HEI's competence to organise a study programme is assessed by the Accreditation Board on the basis of the HEI's request. Upon the AB approval, the MoE SR grants the HEI the right to award degrees to its graduates in this field of study. HEIs are obliged to publish the list of study programmes in which they provide higher education. The new enactment should prevent HEIs from opening new study programmes without the prior consent of the Accreditation Board and without appropriate rights to administer state exams and awarding respective degrees.

HEI as a public institution

A public higher education institution (public HEI) is a legal entity, public institution that is founded and may only be closed by law. The HEI status has thus been changed from a budgetary organisation to a public non-profit organisation. Unlike the former legislation (HEIs only administered their property), the new Act defines that the property of public HEIs should come into their possession. It seeks to strengthen the economic independence of HEIs and the legislators suppose that HEIs will handle their property more efficiently and their management will be improved accordingly.

A public HEI is obliged to utilise its property to perform tasks related to educational, research, developmental, artistic, and other creative activities. Also, it can use its property to perform commercial activities as well as to provide social services for its students and employees. The state does not guarantee the obligations of public HEIs. Their management is supervised by the MoE SR.

As a consequence of the changing HEI status, the draft bill changes the powers of its self-governing bodies. The changes affect the composition of a HEI senate (*senatus academicus*) in which at least one third of

organised in such a way that a successful completion of the educational activities in compliance with the rules results in the attainment of the higher education level.

[40] The first two degrees of higher education can be joined into one in some study programmes.

[41] Among other things, the change in the HEI structure will increase the number of HEI graduates by making the 1st degree study programmes obligatory for all HEIs as well as by institutionalising non-university HEIs, which might produce almost twice as many graduates for the same period.

[42] The academic senate used to have the power to approve fields of study provided by a HEI, except doctoral courses, upon a faculty's proposal and Accreditation Board's statement.

representatives have to be students (formerly one fourth). The **HEI senate** has retained the power to approve a rector's proposal to establish (or remove) a faculty; it elects candidates to become the rector and proposes the removal of the rector (the rector does not have to be one of the professors or associate professors), comments on rector's proposals for the appointment and removal of prorectors (in the former Act, it used to approve the candidates), approves rector's proposal for the appointment and removal of the Scientific Board's members, approves the draft budget submitted by the rector and oversees the financial management of HEI's funds, and approves rector's proposals for the appointment of the Administrative Board members. The provision giving the senate only the right to comment on the establishment or removal of HEI constituents (except the faculty) has been subject to criticism as the final responsibility still remains with the rector. The senate approves the long-term development concept for the HEI, the annual report on its financing and activities, approves the internal regulations for the HEI on the basis of the rector's proposal and for the faculty based on the dean's proposal, and fulfils other tasks specified by law.

As stated in the draft bill, HEIs can be divided into faculties, other pedagogical, research, artistic, administrative and information departments (including an academic library), and special-purpose facilities. The constituents of a public HEI are founded by the rector after opinion has been expressed by the senate, with the exception of faculties that are subject to the senate's approval.

Faculties without legal personality

The former Higher Education Act originated soon after the breakdown of the communist regime, which resulted in adopting a highly decentralised system of HEI management. Faculties acted as legal entities (with the status of legal personality) and their relations towards their parent HEI were based on subsidiarity. The advocates of autonomous faculties claim that this system guaranteed a well-balanced relation between faculties and their parent HEIs. On the contrary, the legislators argue that the higher level of centralisation complies with European standards and helps to strengthen the inner integrity of the HEI. It allows for a greater mobility of students within individual faculties and an efficient utilisation of the credit system of study. According to the draft bill, faculties are no longer legal entities, i.e. they have lost their legal personality. They are placed among the other constituents of the HEI, although their status is different. The abolishment of legal personality is compensated by the granting of so-called **guaranteed powers of faculties**. For one thing, faculties are entitled to act on behalf of the HEI in matters falling under the self-governance of the HEI[43], for the other they have their own self-governing powers[44].

The academic senate of the faculty elects the dean (who does not have to be one of the professors or associate professors), comments on the dean's proposal for the appointment and removal of vice deans (formerly granting the approval), approves the draft of the faculty's budget submitted by the dean, and oversees the spending of faculty's funds, approves the long-term development concept for the faculty, the annual report on its financing and activities, discusses the drafts of study programmes

[43] For example opening new and conducting accredited study programmes, entering into, changing, and cancelling labour relations within the scope delegated by the rector, performing commercial activities within the scope and under conditions specified in the HEI statute, etc. (Section 22, Article 1).

[44] For example: the internal organisation of the faculty, determining the limits of admitted applicants in compliance with the statute, determining the number and structure of working positions in the faculty within the scope permitted by the HEI statute, disposing of funds allocated to the faculty by the HEI and other operational funds obtained by the faculty in another way, etc (Section 22, Article 2).

subject to the approval of the Scientific Board (it used to be the other way round), etc.

The credit system of study

The new Higher Education Act introduces a credit system of evaluation (the number of credits required for successful completion of a study programme must be indicated in the description of the programme). A functional credit system is a prerequisite to ensuring the mobility of students and extending the possibilities to customise their study programmes. It helps students create their own study plans in accordance with the study regulations, set their own pace of study and the order of completing individual course units while maintaining their sequence, and choose a teacher if there are more teachers for the same subject[45].

The status of HEI teachers – professors and associate professors

"The status of HEI teachers – professors and associate professors – is defined in a new way. The present system for obtaining educational and scientific degrees (professors and associate professors) remains in force. In addition, systemised positions for these HEI teachers will be created and filled through public competitions. The structure of these working positions will be determined by each HEI depending on its actual needs. The term of office for the posts of professors and associate professors cannot be longer than 5 years, and upon its expiration, a new public competition has to be held. These employees can be awarded tenure only after the third successful public competition[46]."

Quality assurance in higher education

The quality of educational, research, developmental, artistic and other creative activities performed by HEIs is overseen, judged, and independently evaluated by the Accreditation Board. It conducts a complex assessment of conditions in which these activities are being performed by individual HEIs and draws up recommendations for their improvement in the HEI's activities. The Accreditation Board *may* make its findings available to the public[47].

"On the basis the accreditation proceedings, the MoE SR is entitled to grant the right to award academic degrees and to administer the habilitation proceedings and appointment proceedings for professors. The significance of the Accreditation Board as a government advisory body is further strengthened by the introduction of several provisions governing its establishment, areas of operation, powers, and activities as listed in section 9 of the draft bill (it has so far been stated to a limited extent in the respective resolution of the government). There are new provisions concerning the correction of deficiencies in performing activities subject to accreditation, and the continuation of study programmes if the granted rights should be suspended or removed." [48]

The scope of the powers of the Ministry of Education in relation to HEIs

The draft bill on higher education specifies and changes the powers of the MoE SR over HEIs. With regard to HEI financing, the MoE SR allocates subsidies to HEIs from its section of the state budget, after the prior consultations with HEI representative bodies[49] (formerly the Board of Higher

[45] New rights of students include the possibility to express their opinions concerning the quality of education and teacher at least one a year through an anonymous questionnaire.

[46] From the explanatory report to the draft bill.

[47] Section 78 of the draft bill.

[48] From the explanatory report to the draft bill.

[49] The draft bill introduces a new term "representative bodies of higher education institutions" – made up of the Board of Higher

Education Institutions only), and supervises the financial management of HEIs. A newly implemented power is the imposition of restrictions on annual increase of internal students for whom the MoE SR allocated respective funds. This restriction, expressed as a percentage of all internal students at a given HEI, cannot be lower that 5%. The ministry can decide on the restriction only after a statement by the HEI representative bodies and only in legitimate cases[50].

As faculties have been deprived of their legal personality and the HEI status has changed, the ministry no longer has to declare its consent with the foundation, merger, division, or removal of a faculty. The rector is entitled to found a faculty with the consent of the public HEI senate after a statement by the Accreditation Board.

The new duties of the MoE SR include the elaboration, updating, and publishing of a long-term development concept for educational, research, developmental, artistic, and other creative activities of HEIs – i.e. the long-term intent of the ministry for the 5-year term. The ministry annually prepares and publishes a report on higher education in Slovakia, and discusses and assesses the long-term development concept of public and private higher education institutions in Slovakia.

In relation to private HEIs, the ministry submits to the government a proposal to grant the state approval for their operation.

The financing of HEIs

"The Act introduces a new management and financing model for public HEIs, with the aim of increasing their involvement in optimising their activities and searching for alternative sources of funds other than the state budget." [51]

Extending the possibilities of multiple-source financing

Furthermore, the legislators assume that state subsidies will constitute the primary source of HEI financing. As presented by the explanatory report to the Act, the share of extra-budgetary revenues in the overall funds should, however, increase from the present 10% average to 20% as a result of the increased economic autonomy and changed legal form. Other funds should come from tuition fees, study-related charges, further education fees, returns on property and commercial activities, returns on intellectual property, inherited assets, etc. The Act permits that the revenues can be the subsidies of municipalities or, if approved by administrative boards, bank loans.

Education Institutions, the Students' Board of HEIs, the Slovak Board of Rectors.

[50] From the explanatory report: "The restriction expressed as a percentage of all internal students cannot be smaller than 5%. This provision, common in developed countries, is necessary in order to maintain a sufficient level of HEI financing including students' social support guarantees."

[51] From the explanatory report to the draft bill.

Table IV.9: The allocation of subsidies for public HEIs.

Subsidies	Type and criteria for granting subsidies	The extent of subsidies	Balance[52]
For conducting accredited study programmes	The granting of subsidies depends on: – number of students – number of graduates – costs of study programmes provided – whether an HEI is of a university or non-university type – quality – other factors related to the provision of study programmes	The extent stated by the State Budget Act for the next year	If the balance is not cleared, the HEI can use it in the next year provided the terms of the subsidy contract has not been breached. The balance does not affect the granting of subsidies for the next year.
For research, developmental, and artistic activities	**General-purpose (non-targeted) direct support**	Methods for determining the volume of subsidies for all HEIs are governed by the Research and Development Act.	
	Targeted funds for solving research and development issues. Methods for the allocation of targeted funds are governed by the Research and Development Act.		
For HEI development	Determined on the basis of public competition in which HEIs submit their development programme projects to the ministry, taking into consideration the following criteria: – the quality of projects submitted – the long-term development concept of the ministry – the long-term development concept of the HEI		
For the social support of students	**Based on students' needs (social scholarships)**	HEIs have legal title to receive the subsidy	The balance is transferred to the next year and becomes part of the social support subsidy for the next year.
	Subsidies for optional social support payments	depending on available capacities of the state budget	

[52] There is a substantial change in this draft bill in comparison to the previous enactment: since the legal form of HEIs has changed from budgetary organisations to institutions with special economic status, HEIs do not return the balances to the state budgets and therefore do not decrease the base amount on the basis of which another subsidy will be determined (except social support subsidies) in the following year. Thus, the new draft bill allows HEIs to accumulate funds.

The draft bill assumes that multiple methods of supervision over funds spending will be used:

- Public HEI spending supervision through the MoE SR,
- Spending supervision through the senate of a faculty or HEI,
- Protection against purposeless and inefficient disposal of the property obtained from the state is ensured by means of a newly established body – the administrative board of a public HEI.

The administrative board of a public HEI

The administrative board's task is to protect public interests in HEI activities, mostly in connection with the utilisation of the property and funds provided by the state. The proposed administrative board should be made up of 13 members (6 appointed and removed by the minister of education, 6 nominated by the rector with the consent of the HEI academic senate, 1 nominated by the HEI academic senate). The administrative board approves the rector's legal acts concerning the disposal of property[53] and expresses its statements to matters specified by the Act (for example the draft of the public HEI budget).

The Act implies various models of financial relations between the state and public HEIs, state HEIs, and private HEIs.

The system of state budget subsidies allocated to public HEIs

Subsidies from the state budget shall be the primary source of HEI financing. These subsidies are provided through the budget section of the MoE SR (or the Ministry of Defence – military HEIs, the Ministry of Interior – police HEIs) after the prior statement of HEI representative bodies.

[53] The acquisition and transfer of immovable and movable assets above a given price limit, granting the right of refusal or right of using, and founding another legal person or depositing cash or non-cash investments to this legal entity or to other legal entities (Section 39, Article 1).

The financing of state HEIs

State HEIs are financed in accordance with the State Budget Act. No tuition fees are charged at these schools

The financing of private HEIs

Upon the statements expressed by HEI representative bodies (the Board of Higher Education Institutions, the Students' Board of HEIs, the Slovak Board of Rectors) and with the consent of the government, the ministry can allocate funds for private HEIs on the basis of their request for:

- accredited study programmes,
- research, developmental, or artistic activities,
- HEI development activities,
- social support subsidies for students – private HEIs have legal title to receive a certain portion of subsidies to cover students' needs.

The system of tuition fees and study-related charges

Tuition fees and study-related charges are the revenues of the HEI. They are determined on the basis of a base amount equal to 10% of average expenditure per internal student out of total expenditure allocated by the ministry for a public HEI (supposing that per-student expenditure is about 50 000 SKK per annum, the base amount is 5000 SKK).

1. Tuition

The following of the three proposed tuition-fee models has been asserted into the draft bill: internal students not exceeding the standard length of study do not pay any tuition. External students are charged the tuition, which cannot be lower than the base amount mentioned above or higher than its sevenfold. The amount of the tuition fee will be determined by government decree. Not less than 40% of tuition revenues (except for tuition fees paid by foreign students and

external doctoral students) are transferred into a scholarship fund.

2. Charges[54]

The draft bill indicates various types of charges that a public HEI is entitled to charge its students or applicants. Taking into consideration significant facts, the rector can reduce the amount of tuition, exempt it, or postpone its maturity.

Student's social support system

The draft bill implies direct and indirect social support. The direct form of social support is social scholarships and scholarships from internal funds.

The **social scholarship** is financed from the state budget. HEIs have legal title to this subsidy; every student has title to receive a social scholarship provided that specified conditions have been met. This scholarship can be granted to students attending 1st and 2nd degree study programmes during their first study at a HEI and for a period not exceeding the standard length of study for the given programme. Social scholarship criteria are the student's income and the income of people related to the student (specified by law), this amount is derived from the living wage.

Scholarships from internal funds are granted by HEIs to students particularly for an excellent observance of study requirements and outstanding achievements in the area of study, research, development, arts, or sports. It can be provided as a lump-sum grant or regular payments.

There are also indirect ways of social support including subsidising catering and boarding services provided by HEIs as far as their capacities permit. Similarly, HEIs can provide for students' accommodation and partially cover its costs (taking into consideration students' social situation and their study results). Furthermore, HEIs can provide a financial and organisational support for sporting and cultural activities and for students with some kind of impairment.

3. The provision of preferential loans to students

This applies to loans from the Student Loan Fund with subsidised interest rates and deferred re-payment. HEIs can also provide loans to students from their own scholarship funds.

Analysis

Before embarking on a more detailed analysis concerning the government draft bill, it is necessary to clarify the primary particularities of higher education and HEIs and, in relation to them, outline the main areas that the Higher Education Act should govern.

As we said in Chapter 2, education and particularly higher education differs in many aspects from other commercial or non-commercial activities. An important factor in education is a so-called double product: on the one hand students acquire a sum of knowledge, skills, work methods, and thinking processes during their studies, on the other hand, they are awarded a certificate confirming the level of education attained. If the certificate alone is sufficient to ensure that graduates are successful on the labour market, students are not likely to put stress on the quality of the content of education, which would make the educational process more demanding. Such a condition should not prevail in the long-term as the value of a low-quality degree would be prone to decline. In practice, however, this is not always true, due to information asymmetries, a long-term cycle, and the often monopolistic position of some HEIs.

[54] The draft bill extends the scope of charges HEIs are entitled to collect. In the former enactment, faculties were entitled to collect charges for the coverage of their costs, which has changed as they have been deprived of legal personality.

The information asymmetries have always been present if one of two parties involved does not have all relevant information about the other party. HEIs can stand as a good example, as only a few future students know or can know what exactly their study at HEI will be like. This contributes to the long-term position of the higher education cycle – normally, it takes 5 – 7 years from the moment a student decides to enrol in a HEI until the completion of his/her studies, which is a sufficiently long period for the present situation to change significantly. The long-term cycle affects other parties involved as well. It is likely to take several years before employers can find out that the quality of a degree awarded by a HEI has significantly changed and adjust their view of such a degree. Altogether, we have to consider the period of at least 10 years that passes from the moment the quality of some HEI changes till it has a considerable impact on decisions made by secondary school leavers on which HEI they apply for.

Another particularity is that the provision of education is largely perceived by its provider – the teacher – as a kind of undertaking. In other words, it is somewhat more than a mere job; it is to a large extent a mission. This relates to another fact – any system and any rules within this system have only a limited impact on what is actually going on in a lecture hall or a laboratory between pedagogues and students. The education and its quality largely depend on teacher's zest and will to provide students with the best of his knowledge. This is not to say that systems motivating schools and teachers to increase the quality are useless. Still, we have to bear in mind that their impact is mostly indirect.

With regard to these facts, we try to define key problems in the higher education in Slovakia as well as four most important areas that the Higher Education Act ought to deal with.

The first area is the lack of competition between HEIs, which can be attributed to several reasons. So far, HEIs have not been motivated to compete with each other and contest for students, mostly because of the present financing model, in which only a small portion of funds is derived from the number of students. As a legacy of the past, many fields of study are taught only at one or two HEIs in Slovakia. Moreover, if two HEIs do compete in some field, they are usually substantially distant from each other. With no tuition fees charged, students and their parents deciding on the choice of HEI take into consideration only the costs of catering, commuting, and accommodation, which considerably motivates them to choose a HEI in the closest proximity (if one exists).

Another hot issue is quality. Quality is the easiest to assure through competition. In the field of education, however, there are general as well as Slovak-specific problems that entail that competition alone does not suffice to assure the high quality. It is therefore necessary to create a system for the quality review and assurance in higher education. Unfortunately, this topic has soon been narrowed to cover mostly formal issues such as the presence of professors and associate professors and scientiometric criteria. Although both are undoubtedly important indicators, there are two factors lowering their value. First, it is the problem of transition – in some fields of study, the necessity to recognise degrees awarded during the communist era allowed some people to enter the higher education system, although their actual quality does not correspond with degrees they hold. Second, there is a systemic factor relating to deficiencies in the system. If the presence of professors should guarantee the quality of a field of study at least to some extent, then it is necessary to ensure their actual engagement in the given HEI. The absence of such a mechanism has resulted in the well-known phenomenon of "commuting professors"[55]. What is more, these

[55] HEI teachers that work for several HEIs at the same time.

instruments are not sufficient for the review of quality in education.

Another group of issues can be summarised under the umbrella term of "accountability" signifying to whom the school management is accountable and bears responsibility. In Slovakia, the present state of affairs is that HEIs are accountable mostly to their own pedagogical employees. Through their participation in the academic senate elections, they have a significant share in power. This system, as a basis for the higher education in Slovakia, has not been questioned so far, as it is based on historical grounds and the specific mission of HEIs, which will be discussed later. Still, the present system is deficient in several aspects. The electing of deans and rectors only from amongst professors and associate professors renders it impossible to create a professional group of HEI managers. Similarly, smaller faculties/HEIs often lack quality staff to take managerial positions at these schools. Even more importantly, the in-house elections for a relatively short 3-year term lead to the unwillingness of managerial staff to take measures that might be perceived as unpopular in the short term or going up against the interests of numerous groups of pedagogical employees. This is true even for the cases when such measures would be in favour of students and long-term development of the HEI.

Finally, we have to mention the most crucial factor for attaining the above goals – funds. In the present difficult situation, several issues need to be highlighted. First, it is the prevailing historical principle for financing most of the HEIs' expenses. A system can be defined as historical if it is based on the present, personal or financial state rather than on actual performance. The other problem is the so-called soft budgetary restrictions, which means that if an organisation goes insolvent, it is not actually sanctioned by management reshuffle, abolishment, or bankruptcy. This relaxes pressure upon the organisation to keep within the allocated budget as, if debts should be incurred, there is no threat that the above sanctions will actually be used. Another issue high on agenda – the payment or non-payment of tuition fees – is also connected with the issue of financing.

Competition as a fundamental quality assurance instrument

The easiest method of quality assurance is an efficient competition. Under normal circumstances, it brings about a highly efficient utilisation of funds and property. Such competition can exist on multiple levels.

The first level is what economists call the entry into and exit from the market i.e. the origination and termination of higher university institutions. The key determinants of competition in any area are the ease of emerging competition and the swiftness of termination in case of unsuccessful subjects.

The proposed draft bill continues with the diction of the former enactment and allows HEIs to originate and terminate only on the basis of the law. This puts substantial obstacles to the origination of public competition against the present HEIs, because new public HEIs will be permitted to originate only on the basis of a political decision. It would not be so much of a problem if the same methods of financing also applied to private HEIs, the foundation of which is governed in more liberal terms. However, these schools will not be entitled to receive performance subsidies, even if they are accredited. Similar barriers are present in the termination of an HEI. The preservation of substantial entry and exit barriers means a significant weakening of potential competition with existing HEIs, which might be manifested for example if a part of staff left their mother HEI and established a new HEI, be it private or public.[56]

[56] With such barriers present, it is more likely to experience a part of staff migrating to another existing HEI.

This issue is particularly significant in relation to another part of the reform that seeks to strengthen the integrity of universities (HEI) as the basic unit of the system. This will lead to the substantial weakening of competition between faculties within the same HEI, which has been present so far, particularly at big universities. Despite undisputable positives, the competition between HEIs can be generally regarded as the weakest spot of the proposed system.

Among positive aspects, we can mention the transition to a higher level of transparency in HEI financing, which is determined on a per-student basis, and an obligatory division of study into 3 phases, thus increasing its flexibility and promoting competition.

In addition to the competition between schools, we should not overlook the competition between pedagogues alone. The effect of the law in this area is undoubtedly positive as it introduces competition within schools in occupying the positions of professors and associate professors. This measure could considerably contribute to the quality of pedagogues in public HEIs, if accompanied by efficient instruments making sure that public competition committees are staffed with people with primary concern for quality. The members of these committees could be for example representatives of external institutions, foreign participants, and students' representatives. Unfortunately, the draft bill is not very concerned with this issue.

Other quality assurance instruments

The facts mentioned above, however, show that competition alone is not enough to ensure the quality of education either in general or particularly in prevailing Slovak conditions. What other mechanisms are proposed and required to achieve this objective?

First and foremost, the manner of granting accreditation for a certain field of study needs to be re-considered. The draft bill treats accreditation as a minimal threshold of personnel, material, technical, and information conditions under which a HEI can be allowed to enter the competitive environment. This approach complies with the concept of minimal entry barriers.

Multiple points of view can be employed when assessing proposals relating to this issue. Let us mention the four most important:

The first proposal seeks to ensure that the quality assurance system should assign powers only to people without any personal or institutional ties preventing them from an unbiased point of view. Such a system puts stress on the participation of domestic and foreign external examiners in state exams, for example, or the presence of foreign members in accreditation and evaluation boards or external members and students in commissions in charge of the positions of professors and associate professors. The draft bill only marginally addresses this issue, defining, for example, the membership of foreign participants in the Accreditation Board. We appreciate that the draft bill seeks to institutionalise the independence of the Accreditation Board by making its term of office fixed. In practice, a lot will depend on lower legal norms and members of the Accreditation Board alone.

Another aspect is the maximisation of provision of information to the public so that individuals and institutions could make their decisions based on the scope of information which is as extensive as possible. In this respect, the draft bill stays on track by implementing the publication of annual reports and long-term development concepts. It would be equally important to specify in more detail how the Accreditation Board outputs should be made public.

Third, the consequences of insufficient quality need to be clearly defined. With regard to this, the draft bill governs the Accreditation Board's powers and sanctions

if the Accreditation Board finds out that a HEI no longer meets conditions for the provision of education in a given field of study.

Fourth, the accreditation has to assess not only to what extent a HEI provides appropriate conditions for education, but also to what extent the HEI actually makes use of these conditions in the educational process for all groups of students. The easiest way to demonstrate the importance of this issue is to have a look at the quality of education provided at HEIs quite renowned for external or distant study students. The draft bill pays no attention to this issue, though.

In practice, the draft bill on higher education will make the functioning of the Accreditation Board slightly more complicated because of some increase in administrative load, excluding the faculties from the accreditation process. Furthermore, it has removed the MoE SR's duty to take into consideration the Accreditation Board's recommendations in financing of HEIs. [57]

Accountability and the relations of power

A system of relations in connection with HEIs is good only if it guarantees a clear division of powers amongst individual participants, and at the same time, it actually distributes these powers so that their mutual verification would be ensured and each participant would be assigned such powers as best suit his/her competences.

In this respect, many questions remain open, which is no surprise as hardly any law can actually determine the relations of power resulting from a framework of both formal and informal rules. In spite of this limitation, it would more appropriate to define the role of faculties more clearly for the draft bill removes the legal personality of faculties but retains several powers for them, which are otherwise characteristic of independent subjects.

Another question arises in connection with the meaningfulness of legally institutionalised professional associations, as the draft bill does not grant any real powers to them. On the other hand, it assigns a relatively extensive group of powers to the MoE SR, without properly balancing this system of powers. The MoE SR directly represents electors in the system, but still its legitimacy is only mediated through the parliament and the appointed member of the government. A solution could be a more precise definition of principles under which the ministry will exercise its powers (with regard to development programmes or long-term development concepts, for example).

As far as public HEIs are concerned, two changes can undoubtedly be appreciated. One of them prolongs the term of office for academic bodies to 4 years, which should be sufficient for making long-term decisions and liberalising the requirements for candidates to become rector or dean. The other change brings the establishment of an administrative board in public HEIs as a public, management supervision body.

Financing, management, and insolvency

The proposed system of financing can be evaluated positively. On the one hand, it transforms HEI financing into the allocation of block grants; on the other hand, the

[57] There is a real risk that Accreditation Board will become a mere administrator whose power to affect the condition of HEIs and related policies is limited and inefficient (for example, in case of a proposal to withdraw some rights from HEIs outside a regular 6-year interval). The draft bill introduces the accreditation for a study programme or a whole institution, but it non-systemically excludes a faculty, although it retains it in many other provisions. Due to this limitation, faculties with similar specialisations cannot undergo a real-time comparison (such as the accreditation of all faculties of medicine at one AB session). It has removed the MoE SR's duty to reflect the results of educational and scientific work evaluation in allocating funds for HEIs (a general provision on qualitative and quantitative aspects fails to define the actual role of Accreditation Board).

financing is divided into the performance, social, and development part so that it allows for a transparent financing of higher education. The system is output-oriented; perhaps some might argue about the number of graduates being a better criterion than the presently used number of students. However, due to insufficient quality assurance and little usage of internal supervision over exams and state exams, a financing system on the per-graduate basis would provide schools with improper incentives. Therefore, the per-student financing can be considered an acceptable substitute. However, a question arises as to what consequences this system will bring when used in an environment with the absence of an efficient quality assurance and accreditation system and low funds allocated for scientific activities in HEIs in comparison with the budget for educational activities and whether such a system will not lead to decline in the quality of so-called research universities in particular.

Apart from this positive aspect, there still remain several questions open.

We cannot avoid mentioning the non-entitlement of private schools to receive performance subsidies. Besides limitations on the establishment and division of private HEIs, this provision is a key problem preventing competition, particularly in areas where present HEIs hold dominant positions. Moreover, it has a significant corruption potential, as the minister and government will be entitled to decide on which private HEIs shall receive performance subsidies on the basis of a mechanism lacking any clear definition in the law.

In addition, this measure is somewhat beyond comprehension in the light of the political decision taken by the Slovak government guaranteeing financing on equal basis for both public and private primary and secondary schools. An argument against financing of private HEIs from public funds is that such financing makes the wealth segregation of students by quality more likely – those better off will receive both the public subsidy and what they "purchase" for tuition fees they paid, whereas the rest will benefit only from the "public" subsidy at a public HEI. Still, this argument is much stronger in case of primary and secondary schools where, however, the equivalent financing has already been adopted, so it is not easy to justify the different decision in case of HEIs.

The key question is that concerning an overall responsibility for management and the risk of insolvency. Public HEIs will be to some extent organisational hybrids, acting as public institutions, but with their obligations not guaranteed by the state. State property will be transferred to public HEIs, which will not be mere administrators of the property, unlike other public institutions, but actually come into possession of this property. Should they go insolvent, the law does not exclude these institutions from the force of standard mechanisms used in such a situation (distraint, bankruptcy), but the use of such instruments is not credible due to the high number of students and public form of these institutions.

In practice, if a HEI should become insolvent with the risk of closing down and selling off its property, political officials and state administration would not remain mere bystanders and would have take respective measures to solve such a situation. In case of a smaller HEI, they might agree to put it into liquidation and transfer its students to other HEIs, but this does not seem to be a realistic scenario in many cases. With bigger HEIs, such an approach can well be ruled out – hardly anyone can imagine the closure of Comenius University, Slovak Technical University, P.J. Šafárik University, or Matej Bel University. Public HEIs thus can and will hold thousands of students as their hostages to prevent such scenarios from ever happening.

Due to these reasons, public HEIs are largely not subject to strict budgetary

restrictions. This kind of restrictions means that organisations are aware of the necessity to manage their funds efficiently as they might face the risk of closure if they fall into deficit. Public HEIs, particularly the bigger ones, know and will also know in the future according to the new draft bill that they are not threatened with the risk of closure because the state will be obliged to cope with their poor financial situation.

Taking into consideration the above particularities, we find it necessary to introduce such instruments into the system as would minimise the probability of such consequences. These instruments can be applied both *ex ante* and *ex post*.

As far as *ex ante* instruments are concerned, the draft bill aims at using mechanisms related to the administrative board, which will have to grant its approval for certain types of acts, especially those bearing a high risk of insolvency if wrongfully/deliberately misused by the public HEI management. Another mechanism incorporated in the draft bill makes it obligatory to publish information on the management and development of a HEI, thus making HEIs subject to a broader public supervision.

On the other hand, the draft bill contains virtually no definition of *ex post* instruments – i.e. those handling the state of insolvency that has already originated – except for an unclear power of the MoE SR to force an insolvent school into receivership. Such a mechanism is necessary for the system alone, as it needs a legal framework for how to cope with such an unhealthy situation. At the same time, such a well-prepared instrument for handling insolvency can provide motivation for public HEIs to do their best to avoid such a situation and thus reduce strain on the state budget.

Tuition fees

The last issue, high on the political agenda though, is that of tuition fees. The Ministry of Education originally proposed three alternatives (with the second one eventually adopted) that can be summed up as follows:

a/ tuition fees obligatory only if the standard length of study is exceeded,
b/ tuition fees obligatory only if the standard length of study is exceeded and for external students,
c/ tuition fees obligatory for all students, differentiated income-based payments.

When deciding between the first and third option, the decision is largely political. The first alternative – virtually no tuition fees – primarily supports the middle class, which can afford to pay other costs of HEI study, but whose tax burden is lower. The third alternative would shift a part of this subsidy to lower-income classes and significantly reduce this subsidy for higher-income classes by the differentiation of payments. It would also widen the scope of granted scholarships.

The only reasonable ground for adopting the second alternative is the legitimisation of the present condition, otherwise we would have to perceive it as a negative step without any logical justification, providing schools with wrongful incentives, particularly if the state will still have to subsidy external students.

As far as students' motivation and competition support are concerned, the introduction of tuition can be positively apprehended. The most problematic issue concerns the governmental regulation of the level of tuition for individual fields of study, which eliminates HEIs' possibility to respond to students' demand, and generally does not add up for HEIs are fully autonomous in any other areas.

Conclusion

Key Challenges to Education Policy in Slovakia

In addition to describing the education system and policy in Slovakia in their present state, this publication also includes their analyses accompanied by a number of recommendations. This brief conclusion is not meant to repeat or detail what has already been said. To sum up the content of the publication in a few words, chapter 1 presents the analysis of principal external impacts influencing education. Chapters 2 and 3 contain the analysis of the present condition of the education system in both qualitative and quantitative terms. In chapter 4, we analyse the ongoing reforms in the education system. Whenever possible, we sought to outline problematic issues and propose recommendations and improvement measures. Therefore, this conclusion is to accentuate those challenges to education policy that we consider to be of particular importance.

Of course, this cannot be done without drawing comparison with official documents of the MoE SR and the government concerning the education reform – the Millennium project and the Concept of Further Development of Higher Education in Slovakia for 21st Century. The main focus of education reform in Slovakia has been the high selectivity, specialisation, and rigidity of the school system. Schoolchildren and students have to decide several times in their life which type of school they wish to study at. Such decisions are to a high extent irreversible, due to low mobility within the system and its substantial consequences resulting from an over-narrow specialisation of students from the very beginning of their study (particularly at secondary vocational/specialised schools and HEIs). The education system predominantly lays emphasis on passing a sum of knowledge as extensive as possible to a student within a given specialisation, and pays little attention to what we call key competence development (communication and personal skills, ability to think creatively and solve problems, literacy in modern information technology, civic society development) in the Millennium project. It is the Millennium project and the Concept of Further Development of Higher Education that have ambitions to change the present state of affairs and put emphasis on curriculum reform, without overlooking other important areas such as teachers' training reform, the reform of school-leaving exams and entrance exams for all types of schools, an overall accentuation of the content and quality of education, and a higher autonomy of schools.

In our opinion, there are two key issues in any reform, which are not fully depicted in the above reform documents.

The first one is **the necessity of selection principle**. While creating particular ministerial policies such as represented by the above documents and providing for their coordination and financing, it is hardly ever possible, so to say, to "let all dreams come true", not even if they are not directly contradictory, because financial, human, natural, and other sources are not inexhaustible. Much of the public policy process is therefore not about producing and advocating proposals, but rather about choosing between more generally acceptable proposals. Both documents mentioned above show some reluctance to specify measures and decisions, often painful, which are required in order to accomplish the conceptual intentions. The full satisfaction

of all parties concerned can hardly ever be achieved within public policy.

The other issue to mention is **the question of motivation and stimuli**. One of the particularities of the education system is that the provision of education is largely perceived by its provider – the teacher – as a vocation. In other words, it is more than a job; it is to a large extent a mission. This relates to another fact – any system and any rules within this system have only a limited impact on what is actually going on in a lecture hall or a laboratory between pedagogues and students. Education and its quality largely depend on teacher's enthusiasm and will to provide students with the best of their knowledge. This means that the success of any reform depends on the extent that it can motivate individuals to change their attitudes and doings. Therefore, it does not suffice to provide a greater autonomy for teachers, schools, and other parties. The key issue is whether these are motivated enough to make use of this greater autonomy to provide better education and how the condition can be changed if the contrary is true.

The following nine sections present what we consider the key challenges to the education policy. Their observance or non-observance will to a large extent predetermine whether any education reform will succeed or fail.

1. Paying more attention to the process of selecting students for secondary schools and HEIs as the primary requisite of a higher educational mobility

As mentioned above, the Slovak system of education is highly selective and specialised. Therefore, it is even more important to ensure that this selection, performed at the level of secondary schools and HEIs guarantees the trust of students and their parents and allows for, or at least maximises, the equality of opportunities in access to education[1]. The present system does not sufficiently prevent the risk of corruption and selects students mostly on the basis of their ability to parrot facts, without any deeper focus on analytical and adaptive skills. As a result, there is a lot of distrust in the selection system amongst the public, the system does not make the best of children's abilities, and a substantial replication of the present social structure occurs as children from advantaged environments find it the easiest to assert themselves in the present system of education.

In response to the above facts, it is necessary to change the process of selection of students for secondary schools and HEIs. The focus of entrance exams should move to testing properly selected pieces of knowledge, abilities, and analytical thinking skills. At the same time, the procedural regulation of entrance exams must be far stricter and their legal and institutional fundaments changed. Such changes can be a success only if the broader public – particularly parents – becomes involved.

2. Focus on making relevant information available to parents, students[2], teachers, founders, and other parties involved

A key principle of the Slovak education policy is the freedom of schoolchildren's/students'/parents' selection of an education and future career. They alone decide whether to apply for an 8-year grammar school at the age of 10, or for academic, specialised, or vocational secondary education at the age of 15 or decide whether or where to study for a higher education degree. A cornerstone of the Slovak education system will remain the above-average level of students' specialisation, particularly at secondary schools and HEIs. To ensure acceptable functioning of such a system, the key is making all information available to students,

[1] This underlying condition will also apply after any education reform in Slovakia.

[2] including HEI students

parents, teachers, founders, and other parties involved in the educational process. The access of individuals concerned to information is important in any system, but in systems where the consequences of decisions are irreversible, its importance must be emphasised even more.

The necessary information includes, in particular:

- information for students, parents, teachers, and school headteachers concerning the rights and duties of all parties involved in the educational process, particularly students' rights related to evaluation, entrance exams for all types of schools, and the selection of a school (transfers, etc.);
- information for students, parents, teachers, and school headteachers on labour market developments in a given micro-region, broader regional labour market as well as on the nationwide level (structured, dynamic and static employment/unemployment data,). These figures are not as important as direct guidelines, but as a basis for broader considerations;
- information for employers on actual and expected developments in the education system at both the regional and nationwide level;
- information for students, parents, teachers, and school headteachers on returns to education, both generally and for particular types of schools, trends in the competitiveness of the country, and advantages and disadvantages of individual approaches to education and the education system;
- information for students, parents, teachers, and school headteachers on the quality and outputs of the education system and concrete schools in particular in terms of success on the labour market, at entrance exams, or as compared to base data.

Fundamental information sources should include classical ones (in-school counsellors and career advisors, parent-teacher associations, annual publications for students and parents) as well as others whose information coverage can be even greater at present (mass media – nationwide and mainly local, public discussion forums, etc.)

3. Paying more attention to the quality and results of the educational process

The quality of the educational process and its results have only recently become hot issues in discussions concerning necessary changes to the education system. It has been initiated by certain empirical indications on the declining quality of our school system and by realising the absence of authoritative figures due to non-existence of objective measuring instruments. In this respect, a positive measure being prepared for implementation is the introduction of standardised school-leaving exams at secondary schools. Nevertheless, two risks need to be mentioned here:

- the risk of laying too much emphasis on standardised school-leaving exams,
- the risk of inappropriate content of such exams.

Standardised school-leaving exams should be just the first step in a series of measures targeted at drawing attention to the issues of quality and outputs of education and propagating information amongst all parties involved. Yet, if the focus on implementing the standardised exams should lead to neglecting other measures aimed at primary schools and HEIs, this important reform step might eventually bring only a little effect.

In order for standardised school-leaving exams to objectify the evaluation of students' capabilities of studying at a HEI and to certify the completion of appropriate secondary education, they have to test students' capabilities for studying at a HEI and relevant attributes of secondary education. So far, however, the standardised school-leaving exams have been limited to knowledge testing in individual subjects,

which might later result in returning to the tradition of encyclopaedic memorisation of facts if such exams should be fully implemented.

4. Creating incentives for adapting the education system to demographic changes

Since the birth rate began falling, schools at the lower level have been experiencing a constant decrease in the intake of students for more than 10 years, which is gradually moving towards higher forms and secondary schools and will hit HEIs in the next decade[3]. An aggregate decrease of the population year to 60% of the late 1970's state means that there are excessive capacities in many primary and secondary schools, which are likely to grow even more. The number of schools, classes, teaching and other staff has not decreased proportionally to the population decrease, or not at all in some cases. For these reasons, increasing per-student expenditure does not result in a better quality of education, manifested through better-equipped classrooms and schools, teaching aids, or higher salaries, but only in decreasing numbers of students per class and teacher and in preserving the existing network of schools and school facilities[4]. Although the decreasing number of students per class can be to some extent positive[5], foreign experience indicates that reduction of the number of classes has little influence upon the quality of education, from a certain size of classes even negligible. This strategy therefore seems to waste public funds, particularly if compared to alternative ways of using available per-student funds (for example, the reduction of schools and classes reflects to a greater extent the demographical trends and funds thus obtained can be invested in remaining schools or higher salaries).

With regard to the financing of primary and secondary education, the greatest challenge is not just to let the new law on their financing take effect from January 1, 2002, but gradually change it towards actual per-capita financing for primary and secondary education, which provides stimuli for the efficient functioning of all parties involved. Even though our support for a so-called flat-rate system (the same amount of money allocated per student) is not without reservations, it may come to be the only politically feasible way towards the financing of schools on equal terms and avoiding deformations[6].

We also recommend that incentives be provided for the rationalisation of the school network such as programmes allowing investments in joint schools and school facilities, school buses, etc. Neither should we neglect the provision of advisory services and recommendations to individual regions that will be responsible for the management of the school network.

5. Restructuring specialised/vocational education towards a higher efficiency and new content of education

In secondary education, most students attend secondary specialised schools and secondary vocational schools. Per-student costs of these schools are generally high, partly because of their specific characteristics, but also due to high fragmentation and number of study programmes resulting in a low ratio of students to teacher, class, and school. Specialisations of many of these schools do not match particular requirements of the

[3] Due to intentions to increase the share of HEI students in the given age category, this fact does not justify reducing HEI capacities in this case.

[4] In addition, this results in significant differences between individual regions that are observable at present, which will significantly not change even after the new law governing financing of primary and secondary schools and school facilities (Schools Financing Act) comes into force.

[5] Especially if it helps to eliminate teaching in shifts or excessive numbers of students in classes.

[6] In compliance with the World Bank standpoint, we recommend an important exception from the per-capita principle in case of socially disadvantaged environments.

labour market nor long-term needs for training students with a basic set of skills, knowledge, and competences necessary for adapting to a changing environment. The restructuring of specialised education is therefore one of the greatest challenges within the education system reform.

Changes that need to be taken in secondary specialised/vocational education can be divided into the following groups:

- changes mentioned elsewhere (modularity and mobility, promoting access to information, re-considering the extension of standard school attendance, consistent per-capita financing). These changes would significantly re-shape this area of education and are essential for its reform;
- In addition, it is necessary to focus on a curriculum reform significantly reducing the number of fields of study and restructuring their content. The content of the fields should cover a core of general knowledge interconnected with a certain range of theoretical and practical training related to a given field of study. The core should lay far more emphasis on basic skills (so called functional literacy), language competence and its actual mastery by students. Theoretical and practical training should concentrate more on general practical skills related to business, employment, and success on the labour market.

6. Reconsidering the extension of standard school attendance up to 13 years, with all students taking school-leaving examinations

At present, compulsory school attendance lasts 10 years, which means that normally every schoolchild has to pass at least one year of secondary education[7]. Some schoolchildren finish their education in this way (or even earlier) and another substantial group completes 3-year vocational courses without the school-leaving exam at vocational schools. Entering the labour market at the age of 16 – 18, school leavers are more likely to go through a long period of unemployment with all the accompanying negative impacts on their social and occupational prospects. The absence of the school-leaving exam prevents these people from studying at a specialised HEI or university, stigmatising these types of study at secondary vocational schools. These factors are of particular importance in the light of the fact that the majority of students at these schools are not being trained for a concrete employer.

Of course, it would be no use just to extend shorter courses, replacing final exams with school-leaving exams, and extending compulsory school attendance. Such one-shot steps would formally prolong the school age, but without any incentives for students and no actual results. Therefore, we advocate the extension of standard school attendance, not compulsory school attendance. It would be a serious intervention into the structure of the school system; such steps therefore need to be considered in the mid-term prospects. We regard the extension of compulsory school attendance as a stimulus for higher territorial units to gradually make the real school attendance longer for most students, for example by means of investments in educational facilities with longer school attendance and a social system reform motivating parents to "keep their children at school" for a longer time. At the same time, it is important to concentrate on that group of students whose school attendance is not ensured even at present.

7. Concentrating on the issue of education quality and segregation of Roma schoolchildren and other disadvantaged groups

From the point of view of the Roma minority and some other groups, the present education system in Slovakia shows a high degree of segregation. Decentralisation and

[7] We say normally, as children repeating a year of their study are a different case

financing of private, religious, and state schools on equal terms may unintentionally contribute to the segregation and limited access of disadvantaged and marginalized groups to education. As part of a global struggle with poverty and support for increasing people's level of education, attention needs to be paid to Roma pupils and other disadvantaged groups.

Research has shown that mainly Roma living in an integrated environment show a higher awareness of the meaning of education for success on the labour market as well as the willingness to make investments (not necessarily financial) in their children's education. Any programmes seeking to increase the level of education in the Roma minority should start with this subgroup, where successful results are likely to be achieved.

On the other hand, such changes require a highly resolute approach to be employed in the education environment. The strength of real and successful examples cannot be underestimated. Based on the Bulgarian experience, we recommend trying a model desegregation of schools in selected towns and regions. Also, there must be clearer legislation for handling unlawful discrimination of minorities within the education system and fight it even through financial stimuli (such as the reduction of state subsidies if discrimination has been proven, or making use of the new law's provisions on financing schools that allow to take into consideration whether children from disadvantaged environments attend a school when allocating funds for that school).

Based on our experience up to now, we can highlight the importance of pre-school education for the integration of segregated communities and especially for the full engagement of children from marginalized groups in the process of education. Insufficient attention has so far been paid to the importance of making necessary information available to children's parents (see point 2), which is indeed crucial in this case. The social system's role in (*de-)*forming pupils' and parents' motivations is crucial as well, but largely ignored so far.

8. Clear definition of responsibilities in the decentralised system of primary and secondary education.

Decentralisation gives rise to many issues concerning the education policy. Among other things, we wish to point out the key one – the issue of responsibilities. Relations between mayors and municipal authorities and the heads of regional and district offices and regional authorities, school boards, headteachers, students, and parents are very complicated, so they may disguise who is actually responsible for a particular school's results.

This general observation is of particular important as far as headteachers are concerned. The headmaster of a school has been and remains a powerful element – being in charge of personnel and financial management of the school and acting as a state administration body in other important areas.

On the other hand, it is not clear to whom the headmaster as the highest manager of the school will be accountable. The division of appointment and removal powers amongst school boards and regional self-governing authorities (municipal and regional) renders actual responsibilities ambiguous and creates room for the headmaster to misuse this condition and the need of agreement between both parties for decreasing his real responsibility. In addition, the process of school board election is not sufficiently regulated, and these elections are usually organised by headteachers themselves. There are several decisions that the headteacher can make only after consultations with the school board, pedagogical board, or a social partner, but the consequence of their non-agreement is not specified. Schools are founded and closed down by municipalities and higher

territorial units, but only the MoE SR can remove them from the school network, and the procedure for this is not defined either.
The problems mentioned above may seem trivial, yet we have to realise that primary and secondary schools are coming into a period in which a high number of autonomous players will begin to operate in this complex environment and the present hierarchy from the ministry to district offices will cease to be in force. Moreover, most of the relevant participants will act in a political environment and professional representatives in charge of education will be undergoing the process of transition from regional and district offices to self-governing authorities. This transition will include a huge amount of property so far administered by schools, school facilities, and state administration. In such an environment, any obscurities in relation to responsibilities will lead to many serious problems, as could be witnessed in the past.

9. Consistent implementation of the higher education reform

At the time of publishing this publication, the draft of the Higher Education Act is being discussed in the National Council of the Slovak Republic. In spite of several drawbacks pointed out in its analysis, the draft bill presents a significant step forward for the Slovak higher education, its students, and employees. Still, the draft bill can be perfected (or made worse) during negotiations in parliament. At present, the most negative outcome possible would be its rejection.

A consistent reform of higher education should significantly improve the condition in four key areas of higher education:

- competition between and within HEIs,
- the provision of quality education for all students (including external students),
- accountability issues, i.e. to whom HEI management is accountable and responsible,
- the transparency of HEI financing and its incentives.

We can conclude that the weakest point of the present reform is the question of higher education quality. On the other hand, the areas of financing and competition have experienced a significant advancement. In our opinion, the greatest challenge is whether the reform will actually come into force, as it is still uncertain whether at all it will be approved and implemented. If approved, the reform needs to be implemented consistently and illogical compromises should be rejected.

Table 1a: Primary indicators for the Slovak education system in 1990-2000: State schools

Education Indicators	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Pre-school education											
Schools	3408	3491	3482	3473	3333	3309	3311	3310	3307	3290	3241
Children	216336	188821	188502	183907	174044	161268	167465	168654	166852	161128	153456
Number of children per school	63,5	54,1	54,1	53,0	52,2	48,7	50,6	51,0	50,5	49,0	47,3
Full-time pedagogical staff	18620	17306	17218	15828	14604	14893	15323	15719	15876	15743	15157
Other pedagogical staff	3103	1168	662	44	5	6	4	4	4	4	4
Primary schools											
Schools	2356	2387	2397	2401	2394	2394	2401	2391	2389	2375	2350
Schoolchildren	720920	707032	681370	664884	650044	635135	619641	621065	622665	645384	625265
Classes	28364	28580	28289	27500	27173	27189	26971	27341	27790	28596	27925
Schoolchildren per school	306,0	296,2	284,3	276,9	271,5	265,3	258,1	259,8	260,6	271,7	266,1
Schoolchildren per class	25,4	24,7	24,1	24,2	23,9	23,4	23,0	22,7	22,4	22,6	22,4
Full-time pedagogical staff	37198	37256	38520	37368	37196	34575	37510	37852	38680	39173	38022
Part-time pedagogical staff	0	0	0	0	0	0	0	0	0	2326	2260
Other pedagogical staff	8359	7416	7142	5995	5566	5414	5490	5640	5714	5650	6927
Grammar schools											
Schools	130	135	143	149	150	150	151	152	155	156	157
Students	55482	57847	60437	63116	65112	67648	69406	69050	68494	64224	67487
Classes	1725	1815	1910	2008	2074	2152	2199	2207	2227	2171	2275
Students per school	426,8	428,5	422,6	423,6	434,1	451,0	459,6	454,3	441,9	411,7	429,9
Students per class	32,2	31,9	31,6	31,4	31,4	31,4	31,6	31,3	30,8	29,6	29,7
Students (external studies)	305	175	156	84	42	56	108	77	97	91	103
Classes (external studies)	15	n/a	8	1	1	3	5	17	5	5	8
Students per class (external st.)	20,3	n/a	19,5	84,0	42,0	18,7	21,6	4,5	19,4	18,2	12,9
Full-time pedagogical staff	3903	3798	4414	4121	4570	4789	4939	5005	5191	5173	4819
Part-time pedagogical staff	340	405	548	541	587	785	758	785	703	636	620
Secondary schools (SSS, SVS, conservatoires)											
Schools	466	551	606	622	660	647	644	634	651	663	672
Students	224584	223492	226056	231867	237925	242581	239433	225173	211075	185296	188590
Classes	8409	8471	8543	8495	8599	8700	8565	8167	7930	7354	7524
Students per school	481,9	405,6	373,0	372,8	360,5	374,9	371,8	355,2	324,2	279,5	280,6
Students per class	26,7	26,4	26,5	27,3	27,7	27,9	28,0	27,6	26,6	25,2	25,1
Students (external studies)	23357	16563	14542	15987	17757	16822	16720	15602	13639	9571	5950
Classes (external studies)	946	610	371	363	673	639	635	607	566	418	272
Students per class (external st.)	24,7	27,2	39,2	44,0	26,4	26,3	26,3	25,7	24,1	22,9	21,9
Full-time pedagogical staff	12123	11681	14160	20627	21432	14376	14617	14793	14353	14665	14284
Part-time pedagogical staff	1658	1796	2531	3267	3812	3364	3338	3240	2945	2651	2222
Other pedagogical staff	29062	19889	17881	10542	9877	9090	7114	6667	6477	6064	5865

Special schools											
Schools		416	418	411	415	407	395	401	386	378	374	370
Students		30323	29430	28508	29060	29737	29719	29518	28980	29612	30472	30583
Classes		2710	2871	2887	2952	3065	3139	3206	3198	3309	3398	3372
Students per school		72,9	70,4	69,4	70,0	73,1	75,2	73,6	75,1	78,3	81,5	82,7
Students per class		11,2	10,3	9,9	9,8	9,7	9,5	9,2	9,1	8,9	9,0	9,1
Full-time pedagogical staff		3199	3281	3575	3524	3676	3834	3892	3895	4121	4276	4191
Part-time pedagogical staff		0	0	0	0	0	0	0	0	0	128	137
Other pedagogical staff		1873	1757	1702	1615	1603	1617	1646	2248	2293	1644	1636
Special schools II.	(schools at diagnostic centres, medical and educational sanatoria, and remedial education facilities)											
Schools		43	71	52	44	34	32	30	27	34	33	37
Students		1219	1489	1309	1132	967	898	945	919	913	922	1004
Classes		118	117	123	105	113	112	111	111	125	120	128
Students per school		28,3	21,0	25,2	25,7	28,4	28,1	31,5	34,0	26,9	27,9	27,1
Students per class		10,3	12,7	10,6	10,8	8,6	8,0	8,5	8,3	7,3	7,7	7,8
Full-time pedagogical staff		150	143	148	144	152	138	136	136	121	123	127
Part-time pedagogical staff		0	0	0	0	0	0	0	0	0	0	0
Other pedagogical staff		2153	1680	2076	1852	1797	1886	1078	1129	1120	957	966
Primary schools of arts												
Schools		155	160	166	166	166	170	170	173	173	174	174
Students		77812	76667	77201	77589	82977	86214	86451	88654	90595	91569	91389
Students per school		502,0	479,2	465,1	467,4	499,9	507,1	508,5	512,5	523,7	526,3	525,2
Full-time pedagogical staff	n/a		2818	2990	2902	2936	3059	3156	3294	3353	3434	3452
Part-time pedagogical staff	n/a		649	680	557	654	728	738	730	775	748	713
Higher education institutions												
HEIs		13	13	14	14	14	14	14	18	18	18	18
Faculties		50	52	59	62	63	67	69	80	83	86	86
Students (internal studies)		52669	52430	55564	58843	66900	72525	78045	82432	85742	88192	90446
Students (external studies)		9434	7307	7281	8351	8279	10457	13323	18040	23590	29240	44129
Students per HEI		4777,2	4595,2	4488,9	4799,6	5369,9	5927,3	6526,3	5581,8	6074,0	6524,0	7476,4
Full-time pedagogical staff		7818	7873	8103	7769	7781	7959	8455	8783	8948	9049	8919
Part-time pedagogical staff		1770	1076	1248	623	979	1109	1105	1407	1974	2085	2431

Source: A summary of the Statistical Year-book for the Slovak education system, 1990 - 2000, Institute of Information & Prognoses on Education, and author's own calculations

Note: Other pedagogical employees include applied training instructors, medical workers and psychologists in special schools and other institutions (e.g. diagnostic centres, remedial education facilities), tutors and assistant tutors in nursery schools, primary schools, special schools, secondary vocational schools, and other institutions.

Table 1b: Primary indicators for the Slovak education system in 1990-2000: Religious and private schools

Education Indicators	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Pre-school education											
Schools	0	0	0	1	10	13	21	22	25	20	22
Children	0	0	0	65	392	429	689	646	652	690	776
Number of children per school	0	0	0	65,0	39,2	33,0	32,8	29,4	26,1	34,5	35,3
Full-time pedagogical staff	0	0	0	6	35	40	59	61	59	64	72
Primary schools											
Schools	2	28	75	82	88	91	92	91	95	96	97
Schoolchildren	767	9384	22749	25305	25806	25947	25261	24876	25212	26322	25701
Classes	26	362	918	1018	1056	1096	1088	1091	1128	1177	1168
Schoolchildren per school	383,5	335,1	303,3	308,6	293,3	285,1	274,6	273,4	265,4	274,2	265,0
Schoolchildren per class	29,5	25,9	24,8	24,9	24,4	23,7	23,2	22,8	22,4	22,4	22,0
Full-time pedagogical staff	n/a	556	1347	1506	1617	1649	1703	1705	1802	1777	1723
Part-time pedagogical staff	n/a	0	0	0	0	0	0	0	0	190	169
Other pedagogical staff	n/a	114	227	233	227	231	234	236	240	241	237
Grammar schools											
Schools	2	12	22	26	33	40	45	46	50	53	55
Students	162	1325	3085	4888	6960	8732	9970	11066	12175	12438	13128
Classes	6	46	104	161	232	293	339	376	419	438	466
Students per school	81,0	110,4	140,2	188,0	210,9	218,3	221,6	240,6	243,5	234,7	238,7
Students per class	27,0	28,8	29,7	30,4	30,0	29,8	29,4	29,4	29,1	28,4	28,2
Students (external studies)	n/a	n/a	n/a	0	0	0	539	732	1272	1607	1429
Classes (external studies)	n/a	n/a	n/a	0	0	0	17	24	37	44	42
Students per class (external st.)	n/a	n/a	n/a	n/a	n/a	n/a	31,705882	30,5	34,378378	36,522727	34,02381
Full-time pedagogical staff	n/a	77	245	323	503	668	756	844	951	992	1058
Part-time pedagogical staff	n/a	112	171	193	269	273	313	382	308	364	381
Secondary schools (SSS, SVS, conservatoires)											
Schools	n/a	9	24	18	37	41	45	44	42	46	47
Students	n/a	770	2487	1813	5370	6311	8394	8895	7717	6768	6426
Classes	n/a	37	100	72	217	271	355	377	334	305	299
Students per school	n/a	85,6	103,6	100,7	145,1	153,9	186,5	202,2	183,7	147,1	136,7
Students per class	n/a	20,8	24,9	25,2	24,7	23,3	23,6	23,6	23,1	22,2	21,5
Schools (external studies)	n/a	0	24	6	0	5	0	1	1	3	5
Students (external studies)	n/a	71	511	447	639	1093	1459	1559	1229	1199	1691
Classes (external studies)	n/a	2	21	19	30	46	66	61	56	66	77
Students per class (external st.)	n/a	35,5	24,3	23,5	21,3	23,8	22,1	25,6	21,9	18,2	22,0
Full-time pedagogical staff	n/a	26	112	134	299	369	507	550	511	517	538
Part-time pedagogical staff	n/a	218	362	236	352	458	519	518	492	469	486
Other pedagogical staff	n/a	n/a	6	5	6	9	20	188	84	109	128
Primary schools of arts											

Schools	n/a	4	3	5	11	11	12	16	19	20	20
Students	n/a	220	425	874	1883	2292	2426	3101	3856	3991	3891
Students per school	n/a	55,0	141,7	174,8	171,2	208,4	202,2	193,8	202,9	199,6	194,6
Full-time pedagogical staff	n/a	5	4	14	31	40	40	46	63	64	74
Part-time pedagogical staff	n/a	8	10	19	43	42	57	67	88	108	129
Special schools											
Schools	0	1	2	3	3	3	5	6	6	7	7
Students	0	88	151	160	167	165	202	242	227	264	284
Classes	0	11	18	20	20	23	26	31	34	39	40
Students per school	0	88,0	75,5	53,3	55,7	55,0	40,4	40,3	37,8	37,7	40,6
Students per class	0	8,0	8,4	8,0	8,4	7,2	7,8	7,8	6,7	6,8	7,1
Full-time pedagogical staff	0	0	22	23	24	28	33	38	48	61	50
Part-time pedagogical staff	0	0	0	0	0	0	0	0	0	0	2
Other pedagogical staff	0	0	35	39	49	70	54	60	64	63	66
Special schools II.	(schools at diagnostic centres, medical and educational sanatoria, and remedial education facilities)										
Schools	0	0	0	0	1	3	3	2	0	0	0
Students	0	0	0	0	30	97	88	48	0	0	0
Classes	0	0	0	0	1	10	10	6	0	0	0
Students per school	0	0	0	0	30,0	32,3	29,3	24,0	0	0	0
Students per class	0	0	0	0	30	9,7	8,8	8	0	0	0
Full-time pedagogical staff	0	0	0	0	0	0	4	9	0	0	0
Part-time pedagogical staff	0	0	0	0	0	0	0	0	0	0	0
Other pedagogical staff	0	0	0	17	65	122	145	77	40	45	50

Source: A summary of the Statistical Year-book for the Slovak education system, 1990 - 2000, Institute of Information & Prognoses on Education, and author's own calculations

Note: 2 private HEIs with 3 faculties and 817 students were established in 2000

Table 2: Public expenditure for education as a share of GDP and general government expenditure, 1990 - 2000

	Indicators		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
[1]	GDP (billion SKK) [a)]		257,7	319,7	332,3	369,1	440,5	516,8	575,7	653,9	717,4	779,3	887,2
[2]	General government (consolidated expenditure including net loans)[b)]		n/a	n/a	n/a	185,7	212,2	246,6	282,0	309,2	313,93	347,5	356,5
[3]	State budget: expenditure (billion SKK) [a)]		129,5	133,5	141,1	191,1	180,0	189,1	213,8	244,5	222,9	231,5	241,1
	Financial indicators for education in Slovakia												
[4]	Total public expenditure for education (billion SK) [c) d)]		14,15	17,61	19,60	19,24	19,35	27,46	27,84	32,52	33,59	35,81	38,27
[5]	State budget (the MoE SR section) (billion SKK) a) d)		14,15	17,61	19,60	19,17	18,98	25,71	25,76	30,37	31,54	33,62	36,75
[6]	Current expenditure (billion SKK) a)		13,45	16,49	18,36	17,89	17,81	24,11	24,23	28,04	29,79	31,94	34,98
[7]	Capital expenditure (billion SKK) a)		0,7	1,12	1,24	1,28	1,17	1,6	1,53	2,33	1,75	1,68	1,77
	Education budget as a percentage of GDP and general government expenditure												
[8]	Total public expenditure for education as % of GDP	[4]/[1]	5,49	5,51	5,90	5,21	4,39	5,31	4,84	4,97	4,68	4,59	4,31
[9]	State budget: the MoE SR section as % of GDP	[5]/[1]	5,1	5,51	5,9	5,2	4,38	5,05	4,55	4,71	4,46	4,39	4,14
[10]	Total public expenditure for education as % of total state budget expenditure	[4]/[2]	n/a	n/a	n/a	10,36	9,12	11,14	9,87	10,52	10,70	10,30	10,73
[11]	State budget (the MoE SR section) as % of total state budget expenditure	[5]/]3]	10,96	13,18	13,89	10,04	10,7	13,8	12,25	12,6	14,1	14,7	15,243
[12]	Current expenditure for education as % of general government expenditure	[6]/[2]	n/a	n/a	n/a	9,63	8,39	9,78	8,59	9,07	9,49	9,19	9,81
[13]	Capital expenditure for education as % of total public expenditure for education	[7]/[4]	4,95	6,36	6,33	6,65	6,05	5,83	5,50	7,16	5,21	4,69	4,63
	Education expenditure in constant prices (1995=100)												
[14]	State budget (the MoE SR section) in constant prices	[5]/[16]	n/a	29,74	30,10	23,89	20,86	25,71	24,35	27,05	26,32	25,38	24,76
[15]	Total public expenditure for education in constant prices	[4]/[16]	n/a	29,74	30,10	23,98	21,26	27,46	26,31	28,97	28,04	27,03	25,79
[16]	CPI (1995=100)		n/a	59,219	65,111	80,242	91,0024	100	105,809	112,27	119,79	132,5	148,4

a. Source: Institute of Information & Prognoses on Education

b. Source: The Ministry of Finance SR

c. Public expenditure for education is made up of: state budget expenditure (the MoE SR section), education expenditure of municipalities since 1993, expenditure of other ministries since 1995(The Ministry of Health – planned budget, other non-MoE SR ministries involved – actual expenditure) since 1995. Data for these ministries before 1995 and municipalities before 1993 are not available.

d. To determine net public expenditure for education and net state budget expenditure for education, it is necessary to subtract the revenues of educational institutions, which are revenues of the state budget and cannot be spent within the school system. This calculation was not carried out in order to ensure other calculations were performed with the whole of the state budget (the MoE SR chapter) and its current and capital expenditure.