

Education in Hungary 2010

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Gábor Halász

1. Educational policy in the first decade of the 21st century

1.1. Drives and limitations of the changes

Among the external factors affecting the development of public education in Hungary the two most important ones to be highlighted were the country's accession to the European Union and the subsequent appearance of funds available for educational development. This, together with the PISA studies conducted by the OECD since 2000, has given grounds to a multitude of reform initiatives and measures, similarly to other countries. The most crucial national processes included changes in government and growth cycles. At the beginning of the period covered in this report the governing power was held by the political power designated as conservative national right wing. Between 2002 and 2010 the socialist-liberal coalition was the ruling power; however, the alliance of the two political forces was not accompanied by continuity or political stability. The liberals dominated education until the middle of the decade. After a relatively short growth period until the mid-2000s the scope of movement of state education policy was curbed by the financial crisis that erupted in 2008 leading to drastic cuts in public spending and resulting in austerity measures in education as well. Previously commenced or intended reforms were met with strong opposition and despite the advent of new EU sources of funding for development often basic services had to be limited in the absence of adequate funding. The dynamics of change showed frequent and hectic movements. The only exception was the last part of the first decade, when changes slowed down due partly to resistance to changes and a general tiredness of reforms, and partly to increasingly difficult governance in the wake of mounting social conflicts. The *direction* of changes was all along characterised by modernisation efforts: ensuring quality, effectiveness, equity and equal opportunities remained stable education policy priorities; on the other hand, various modifications were also implemented in the interest of the inevitable alignment of development goals with EU goals, as a result of budgetary constraints, and in the wake of the changes in education policy makers and of the dynamics of the interaction between educational stakeholders.

Since the 1990s *market mechanisms* have played an important role in Hungarian public education processes. In the reported period the role of the market weakened in some areas and increased in others. In the early years of the decade students and their families had almost unlimited freedom to choose from among the available schools, but the role of competition diminished because of measures to ensure equal

opportunities and eliminate segregation and also as a result of school mergers. Conversely, the role of the market continued to increase in textbook and educational materials supply, educational services and in-service training of teachers, where EU resources generated a massive increase in demand resulting in the emergence and effective operation of many new private service providers. At the same time the state also grew to become a significant direct provider due to central development programmes financed from EU facilities. In vocational training and adult education the development of the educational market gained a new momentum and public education institutions found several points of entry. Parallel with the expansion of market mechanisms the need for standards to guarantee quality also increased. The first decade of the 21st century was the period of expansion and strengthening of the learning industry.

1.2. Education policy processes and stakeholders

Lifelong learning became a prevailing integrative principle in education policy in the first decade. It also alleviated the isolation of education from other sectors, helped to ease rigid lines separating the various subsystems of education, and affected newly entering stakeholders of public education policy. The role of local governments operating schools strengthened further: declining demography and scarcity of the budget induced local governments to take a multitude of steps to rationalise networks and save on costs – steps to which school operators received precious little guidance from state policy. The problems of the period, still increasing to date, are related to the efficiency of carrying out municipal functions, and to the relationship between the state and local governments. After the 2010 parliamentary and local elections the national government and the overwhelming majority of local governments have been controlled by the same political power holding a big majority in Parliament, a fact that has enabled the government to expand the scope of its powers to an unprecedented extent. The radical restructuring of government including the integration of the so far autonomous ministries of education, finance and employment into larger ministerial organisations transformed the field of force of government control of education.

Some elements of strategic coordination appeared at the level of government programmes, as well as in plans steering the involvement of EU funds (Human Resource Development Operational Programme of the National Development Plan, Social Renewal Operational Programme of the New Hungary Development Plan), and some in other strategic documents (the government's strategy on lifelong learning). They provide a more or less coherent strategic guidance without, however, forming the basis of institutional processes that could have guaranteed that strategic goals were observed in day-to-day government work. In public education there was no overarching government strategy that could have oriented state policy as a whole. Instead, a multitude of loosely connected documents were generated, which had some bearing on government practices but did not entail an institutional mechanism capable of supervising their implementation in an operative fashion. The educational

administration's medium-term strategy should be highlighted from among the strategic documents, attempting to connect post-2004 EU funds with the internal development needs of Hungarian public education in its wider socio-economic context. Other documents to be mentioned include the strategic action plans on the application of information and telecommunications technology in education or the promotion of foreign language teaching, both of which also involved support from the state budget. On the other hand, the strategies on equal opportunities, quality assessment in public education or the implementation of the National Core Curriculum never reached the stage of formal political acceptance.

Several attempts were made during the investigated period to strengthen or institutionalise public dialogue and consultation. Two of them deserve special mention. The first is the creation of the Round Table for Education and Children's Opportunities. Consisting dominantly of experts, the Round Table was established upon the request of the prime minister and was in operation for two years. Its task was to widen the social and professional dialogue on public education, and to develop a comprehensive public education strategy laid out in the Green Paper for the Renewal of Hungarian Public Education published in 2008. The Committee of Wise Men was a group of experts formed upon the initiative of the second President of the Republic of Hungary in 2008. The Committee also created a strategic document titled Wings and Weights and offered it for public debate. However, the impact of these consultation forums remained rather limited. The dialogue with representatives of the world of work was also scant as employers' interest was still mainly focused on the narrower vocational education and training. By the end of the decade employers' influence increased, due partly to the dissatisfaction of some economic agents with the output of vocational training. By the end of the decade chambers acquired a particularly strong influence in the field of vocational education and training. They almost entirely controlled some elements of VET, and gained unprecedented influence in determining secondary level VET supply at regional coordination forums (Regional Development and Training Committees).

1.3. Reforms and missed changes

While the period gave rise to major reforms that resulted in deep changes in Hungarian public education, in other areas even the most basic changes were missing. Perceiving the "tiredness of reforms" of educational professionals and a need for stability on the part of both teachers and the population, the government made a conscious effort to slow down educational reforms in the second half of the decade, after 2006. The transformation with the greatest impact in the decade was probably the one related to the regulatory system of public education. The reform of the National Core Curriculum, the radical revamping of the system of secondary school leaving examination (matriculation), and the expansion of efficient skills development methods across the school system along with programmes for the integrated education of children with different abilities and social backgrounds triggered an educational renewal process at schools that is probably irreversible.

Quality assurance and effectiveness related processes are inseparable from those directly affecting the contents of education and the organisation of learning. Two of them should be mentioned specifically. One is the performance assessment involving every student of certain grades in all schools. Because the tests are designed to measure general skills and abilities rather than those related to a specific school subjects, it is called competency assessment. The National Assessment of Basic Competencies continuously developed over the decade: new elements were added, its reliability was significantly improved, and its impact on educational processes in the school gained momentum. The other process was the development of institutional level quality assurance mechanisms. In 2002 a compulsory Institutional Quality Management Programme (IQMP) was introduced in every school. Both these developments took place and were introduced around the turn of the millennium, and they belong to the components of public education which received continuous support despite the political changes, even if the intensity of support was not always the same. The resulting change did not address an important problem area: the qualitative external evaluation of schools. This function is only rudimentary in the Hungarian education system and is undertaken partly by school operators themselves, and partly, in a very limited way, by the Education Authority, an entity directly supervised by the educational administration. The new government formed after the 2010 parliamentary elections promised major changes in this area, *inter alia*. It envisioned launching the development of a new public education supervision and support system in the context of a priority development programme, which could also create the possibility of regular external qualitative evaluation of schools.

In addition to the above, some other areas should be highlighted where significant developments led to hundreds of schools changing their previous methods of organising learning. In terms of their social and school impact, as well as the amount of resources involved, the most important are undoubtedly the integration measures and programmes targeted at students with special educational needs and socially disadvantaged student populations. The first ten years of the 21st century can be described as the decade of fight against segregation in public education, or the decade of integration. It was characterised by spectacular successes and failures. On the one hand, schools emerged that implemented a whole range of educational innovations and thus became capable of successful integration; on the other hand, other schools that were not capable of doing so survived and their ranks increased. Integrative development programmes aimed at integration promoted the integration of not only marginalised social groups, particularly the Roma, but also that of SEN students. In the course of the decade special attention was paid to the application of modern ITC tools in the schools and their integration in day-to-day teaching. By the end of the 2010s, Sulinet (School Net) Digital Knowledge Base created and developed from Hungarian and European resources had more than one million educational contents available for teachers to download and use in the classroom.

Besides these significant changes there were four closely related areas where the necessary transformations did not start for different reasons. The first is demographic

decline. Similarly to previous years, state policy closed an eye to this challenge in the 2010s as well. The continued demographic decline would necessitate serious structural adjustments – however, in the investigated period no state strategy was proposed that would have addressed this issue. Handling the problem was left entirely to the school operator local governments, which had to find answers in the framework of an educational structural model that was increasingly impossible to maintain. The second, related issue where no changes were implemented is that of cost effectiveness and sustainability. As a result of the stabilisation programmes introduced in 2006 the real value of state subsidy extended to school operators had been dropping even before the financial crisis hit, and operators had no reserves to compensate for the loss. However, state policy did not have a strategy to help providers adjust to scarcer funding. The third and perhaps most delicate issue is school structure. In the investigated period this issue remained the taboo it had become over the preceding decade despite the fact that international comparison clearly revealed that the vertical structure of the Hungarian school system not only differed from the international mainstream but also made the organisation of education more expensive, while it probably had a negative impact on learning performance. The fourth problem area where no change of merit took place is the teaching career and the employment of teachers. Before the 2002 parliamentary elections the ruling government planned to stabilise the classical public service model of the teaching career, at the same time, reckoning with a great deal of flexibility (for example, allowing for 50% differentiation). After the change of government this initiative was never implemented. Subsequent government policy communicated the need for more flexible wages and employment regulations, and the implementation of certain human resource management solutions in education (such as, for instance, performance assessment and performance related remuneration). These attempts, however, were fragmentary. One reason for the absence of real changes in this area is probably the fact that the government tried to bring about changes through legal means rather than by developing structural processes and management. Another reason is related to what has been mentioned above: as efficient labour force management did not become a priority in educational policy, the available resources did not provide a scope of movement that would have given room for compensation reflecting quality work or excellence.

In addition to the above, mention should be made of the problems that appear in public education but point far beyond it. These problems are mainly related to the rift in society, the increase of poverty, in particular child poverty, and, generally, to poor social integration and cohesion. These problems existed before the global financial and economic crisis that broke out in 2008, but the crisis magnified them. The failure of social and economic integration of the Roma minority is a particularly soaring problem in public education, primarily in regions where there is a concentration of Roma population living in poverty, often in extreme poverty, and the proportion of Roma children is particularly high.

1.4. The balance of the decade

The overall balance of the decade shows that the advent of unprecedented amounts of funds available for development only generated modest improvement, which the majority of society did not perceive. Nevertheless, the decade brought many educational innovations which greatly modernised Hungarian public education. Hundreds of schools upgraded their teaching culture and embraced modern, student-centred approaches. The technical conditions for the application of ITC technology were created in almost every school, and some schools started to integrate ITC in teaching. The difficulties of educational reforms conspicuous in a number of countries such as poor implementation competence and poor management of developmental processes were particularly strong in Hungary. Some of the modernisation interventions were too quick and relied too heavily on legal force – in other words, they did not focus adequately on the development of the human side and use this as a basis to roll out reforms, and thus triggered negative effects. Added to this was the lack of preparation for efficient strategic and operative management of EU schemes, in particular the weakness of evaluation of the contents of programmes, and poor feedback from the evaluation experience.

Table 1.1. EU reference data related to education and Hungary's benchmarks set as strategic goals for 2010 and 2020, Hungary and EU, 2000 and 2009 (%)

Indicator	Hungary		EU average		EU benchmarks		
	2000	2009	2000	2009	2010	2020	
Participation in early childhood education (4 years – start of comp. primary education)	89.9	95.2 ⁰⁸	85.6	92.3 ⁰⁸	95		
Low achievers (data: PISA)	Reading	22.7	17.6	21.3	20.0	17.0	15.0
	Math	21.2 ⁰⁶	22.3	24.0 ⁰⁶	22.2	15.0	
	Science	15.0 ⁰⁶	14.1	20.3 ⁰⁶	17.7	15.0	
Early school leavers (age 18–24, %)	13.9	11.2 ^b	17.6	14.4	10.0	10.0	
Upper secondary attainment (age 20–24, %)	83.5	84.0 ^b	76.6	78.6	85.0		
Graduates in mathematics, science and technology	Increase since 2000	–	18.9 ⁰⁸	–	38.1 ⁰⁸	+15	
	% of female graduates	22.6	25.7 ⁰⁸	30.7	32.6 ⁰⁸	“to be improved”	
Higher education attainment, age 30–34, %	14.8	23.9	22.4	32.3	40.0		
Adult lifelong learning participation (age 25–64) (in the four weeks preceding the survey)	4.5 ⁰³	2.7	8.5 ⁰³	9.3 ^p	12.5	15.0	
Public spending on education (a percentage of the GDP)	4.42	5.2 ⁰⁷	4.88	4.96 ⁰⁷			

Source: Progress towards the Common European Objectives in Education and Training, European Commission, 2011
 Notes: 01 = 2001, 03 = 2003, 06 = 2006, 07 = 2007, 08 = 2008, b = break in series, p = provisional value. Blank cells: no European benchmark determined for the period.

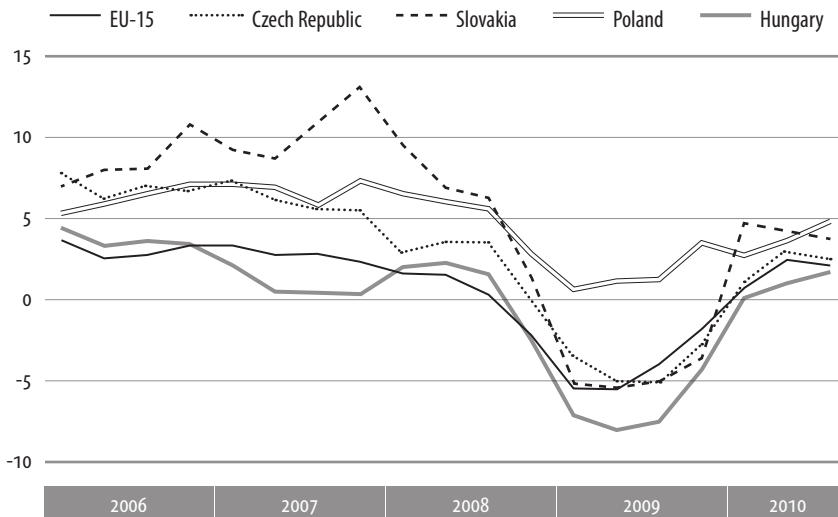
2. The socio-economic environment of education

2.1. Macroeconomic processes and growth problems

Hungary has a dual and highly open economy characterised by a narrow domestic market. At one end of the scale there are multinational companies and their related activities with very high contribution to the GDP and export. At the other end there are the domestic small and medium size enterprises, whose contribution is the exact opposite. Consequently the Hungarian economic problems are inseparable from the wider global context and processes.

The gross domestic product (GDP) started picking up in the mid-1990s. Much lower in nominal terms than the EU average growth but of a much higher rate, the GDP growth came to a halt in 2007. The global economic crisis erupting in the autumn of 2008 already found Hungary in the state of recession. The 2009 economic performance in the EU dropped over 4 percentage points on average; by contrast, the decline of the Hungarian GDP was 6.7%. The gap between the Hungarian and the EU economy did not close due to the pre-crisis stagnation, but at least it did not widen either.

Figure 2.1. Quarterly GDP growth in the EU 15 and in four CEE member states, 2006–2010 (volume index, %)



Source: Eurostat online database, based on "namq_gdp_k" table, Medgyesi 2011

The slowdown of the Hungarian economy was the combined result of lagging investment and problems related to the state budget. Until 2006 the most significant change in the structure of the budget was the increase in social security and welfare expenditure. The political decisions taken in 2002 (50% wage increase in the public sector, introduction of the 13th month pension) resulted in a massive increase in per capita real income and boosted households' consumption, while the GDP growth was much slower. This, together with the high level of indebtedness led to a critically high, 9.3%, deficit by 2006. In 2006-2007 major fiscal adjustments took place: public spending was reduced from 52% to 48.8% of the GDP, yet there was only a minor modification to the structure of spending. However, this proved insufficient, and following the advent of the global crisis in 2008 Hungary was forced to appeal to international institutions for bailout. The government put together another austerity package in 2009 proposing a freeze on public sector and welfare expenditure on the one hand, and economic policy measures including tax cuts on the other hand. These measures put a halt to soaring budget deficit, but at the same time no serious package to boost the economy was introduced.

The main obstacle in the way of sustainable growth is rooted in the structural problems of the Hungarian economy. To date the economy has not been geared to production with high added value and to services. There are not enough large – mainly foreign – enterprises that are capable of achieving this, mainly because of the shortage of capital, in the absence of an appropriate choice of Hungarian suppliers against competitive external supply. Another factor barring economic performance is that the difference between the productivity of foreign-owned and Hungarian-owned companies is very substantial, the biggest in the region. According to the figures of the Central Statistical Office (CSO), in 2009 Hungary spent 1.2% of the GDP on R&D, which is crucial with a view to competitiveness, only 0.3% more than in 2005. Compared to the average 2% of the EU 27, this is a low rate and even worse in nominal terms. Of the entire R&D spending 57.1% was contributed by businesses, 20.9% by higher education, 20.1% by research institutes. A quarter of the Hungarian companies are innovative, which ranks us 23rd in the EU. One in five SME in the EU is engaged in some kind of innovation. In Hungary, this rate is one in ten.

2.2. Labour market and employment trends

A long-term critical problem of the Hungarian society and economy is the extremely low presence of the active population in the labour market. This is a barrier to economic growth and leads to the impoverishment and marginalisation of wide strata of society and entire micro-regions. Expansion of employment has been a political priority for decades, yet the hundreds of billions spent on employment policy year after year have not borne fruit. While there was only one year in the period between 1997 and 2006 when employment did not grow, the rate of growth never exceeded 4%. Expansion of employment was hindered by the low level of investments and high payroll related burdens. On the other hand, some of the elements of the social welfare system did not help either, for example disability benefit, and early retirement.

Moreover, some features of the child benefit system were likewise not conducive to employment. Another characteristic feature of the Hungarian economic system is that the 100 largest, overwhelmingly multinational companies contributing one-third of the GDP and most of the export only employs 320 thousand people. Given the current structure, significant expansion of employment would only be possible by improving the employment capacities of the less competitive domestic small and medium size enterprises.

Table 2.1. Employment and unemployment among the age group 15–64 in some EU member states by gender, 2009 (%)

Country	Employment rate			Unemployment rate		
	Male	Female	Total	Male	Female	Total
Bulgaria	66.9	58.3	62.6	7.1	6.7	6.9
Czech Republic	73.8	56.7	65.4	5.9	7.8	6.8
Hungary	61.1	49.9	55.4	10.3	9.8	10.1
Poland	66.1	62.8	69.3	7.9	8.8	8.3
Romania	65.2	52.0	58.6	8.0	6.2	7.2
Slovakia	67.6	52.8	60.2	11.4	12.9	12.1
Slovenia	71.0	63.8	67.5	6.1	5.9	6.0
EU 15 average	71.9	59.0	65.9	9.2	9.1	9.1
EU 27 average	70.7	58.6	64.6	9.1	8.9	9.0

Source: Fazekas–Molnár, 2010: pp 323

Regional differences in employment are also significant: in 2009 10–13% more of the 15–64-year-old population worked in Central Hungary and Western Transdanubia than in Northern Hungary and in the Northern Great Hungarian Plain. Hardly changed over the decade under investigation, the regional differences seem to have stubbornly resisted any policy to alleviate geographical disparity and any support available for this purpose from EU structural funds.

2.3. Employment and educational attainment

The rate of higher education graduates increased by 50% over the first decade, and the rate of those who finished only primary school dropped to two-thirds. There was only a minor decrease in the proportion of holders of skilled workers and those with secondary school leaving examination (matriculation) within the active workforce. Hungary's critical employment situation is contributed mainly by the extremely low rate of employment of people with eight grades of primary school or less. Graduates stand 75–85% chance to find a job; those who have no upper secondary attainment have less than 30% chance. The employment of graduates is almost up to the international average; those with upper secondary education qualification lag 8–10% behind, and worse still, those with lower educational attainment fall more than 20% short of the average and 30–40% behind their employment rate in some countries.

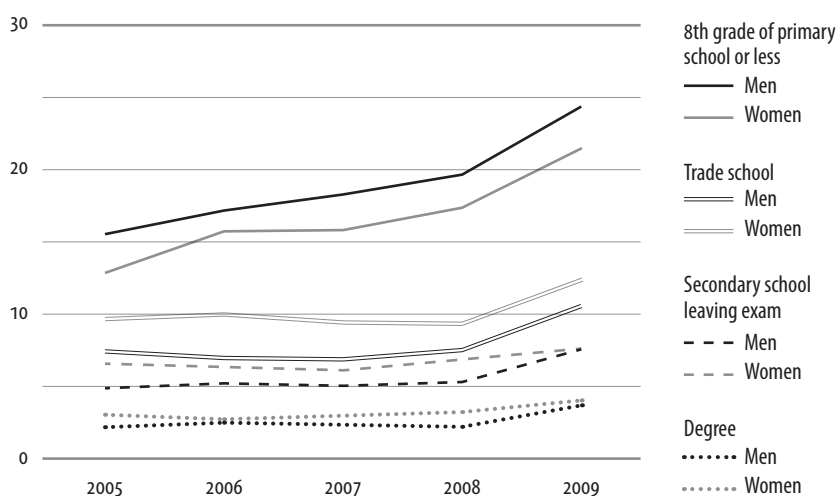
Table 2.2. Employment rate by educational attainment and gender of the 15-74-year-old population, 2001–2009 (%)

Year	8th grade of primary school or less		Vocational school, trade school		Secondary school leaving examination		College, university	
	Male	Female	Male	Female	Male	Female	Male	Female
2001	33.0	26.1	77.6	60.8	67.3	59.2	87.4	77.8
2002	32.0	26.0	77.6	60.4	67.1	58.6	85.8	77.9
2003	32.4	25.3	76.5	59.7	67.8	59.5	86.4	78.3
2004	31.0	25.0	75.7	58.8	67.3	58.1	87.1	78.1
2005	31.6	25.1	74.7	57.6	66.9	57.9	86.9	78.9
2006	31.5	24.5	75.2	58.2	67.5	57.5	85.7	77.6
2007	31.6	24.0	74.6	57.8	67.5	57.2	85.9	75.4
2008	31.3	23.9	72.6	55.5	66.5	56.4	84.7	75.5
2009	29.0	23.0	69.9	54.3	65.1	54.9	83.1	74.4

Source: Fazekas–Molnár, 2010: pp 278-279

As a result of the crisis the number of employed dropped by an average of 4% in 2008–2009. While between 2006–2009 the employment rate of male graduates dropped by 2.6%, the rate of those who passed the secondary school leaving examination dropped by 2.4% and the employment rate of those with no more than primary educational attainment “only” dropped by 2.5%, the same figure for males with skilled worker qualification was down by 5.3%. Unemployment rates by educational attainment clearly indicate the lower value attached to lower educational attainment in the labour market.

Figure 2.2. Unemployment rate among the age group 15–74 by educational attainment and gender, 2005–2009 (%)



Source: Fazekas–Molnár, 2010: pp 281-282

2.4. Training and the labour market

Opinions greatly differ regarding the nature and particularly the extent of supply and demand tensions in the labour market, the reason being differing approaches or interests. On the one hand, some economic stakeholders, mainly the chambers, urge the expansion of the volume of vocational training and cutting down on the number of students in higher education, a line embraced by the current educational policy and administration. On the other hand, graduates' long-term higher employment rates and wages indicate that the labour market has a different attitude to the output of the various levels of education. Higher unemployment and greater insecurity of employment of skilled workers, coupled with significantly lower income compared to groups with higher educational attainment do not make these careers attractive. Based on labour market data, shortage areas seem to show a different picture than the one indicated by some of the stakeholders. There is an oversupply of law graduates and an undersupply of science graduates, therefore the numbers of students admitted to law schools have been cut for years, and the numbers enrolled in science programmes have been raised. At the same time, according to the latest reports by the graduates' career tracking system (Diplomás) law graduates find jobs sooner, in larger numbers and for significantly higher wages than young science graduates.

In VET the institution of "shortage trades" has been set up; the relevant decisions are made at a regional level, by regional development and training boards, which are dominated by economic stakeholders. Persons choosing a job where a skilled workforce is in short supply receive a bursary. However, as there are large numbers of unemployed in the shortage trades and many skilled workers hold unskilled jobs, it is questionable why these trades are considered shortage trades at all. An additional problem is that the wages offered in "shortage trades" are often so low that they don't even attract the unemployed; or demand is poor because of working conditions or the form of employment agreement. Only about a third of the skilled workers acquiring qualifications in shortage trades work in their chosen trade eight months after the qualifying examination; the rest continue their studies or leave their career of choice, and many of them can't find jobs at all.

2.5. Wages, income and consumption

The real wage per wage earner exceeded the GDP growth up until 2005, mainly because of the 2002 across-the-board wage increase in the public sector. However, the trend reversed, and in 2007 real wages were 4.6 percentage points lower year-on-year. In the years following the 2008 crisis real wages shrank less than the gross national product, but the per capita consumption of households dropped as much as the GNP, 6.6%. In 2009 the average per capita monthly income of households was 7% less in real terms than two years earlier.

Indicators expressing the degree and nature of differences in income are important markers of social inequalities. The ratio of the average income received by the 10%

of the population with the highest income (top decile) to that received by the 10% of the population with the lowest income (bottom decile) is particularly significant. In 2009 this indicator was 7.2, i.e. the income earned by the top income decile of the population was 7.2 more than the income earned by the bottom income decile of the population. The Gini coefficient, which measures the concentration of incomes decreased between 2005 and 2007 as a result of earlier government policies and mainly of the 2006 shift of income from the upper middle classes to the lower middle classes.

Table 2.3. Inequality of income distribution in the European Union member states, 2008
(%, without measurement unit)

Country	Gini (%)	Poverty rate (%)	S80/S20 index
Slovenia	23.4	12.3	3.4
Slovakia	23.7	10.9	3.4
Sweden	24.0	12.2	3.5
Czech Republic	24.7	9.0	3.4
Denmark	25.1	11.8	3.6
Hungary	25.2	12.4	3.6
Austria	26.2	12.4	3.7
Finland	26.4	13.6	3.8
Malta	26.9	14.6	4.0
Belgium	27.5	14.7	4.1
Netherlands	27.6	10.5	4.0
Luxembourg	27.7	13.4	4.1
Cyprus	28.0	16.2	4.1
France	29.2	12.7	4.3
Ireland	29.9	15.5	4.4
Germany	30.2	15.2	4.8
Estonia	30.9	19.5	5.0
Italy	31.0	18.7	5.1
Spain	31.3	19.6	5.4
Poland	32.0	16.9	5.1
Greece	33.4	20.1	5.9
United Kingdom	33.9	18.7	5.6
Lithuania	34.0	20.0	5.9
Portugal	35.8	18.5	6.1
Bulgaria	35.9	21.4	6.5
Romania	36.0	23.4	7.0
Latvia	37.7	25.6	7.3
EU 27 average	30.7	16.5	5.0

Source: Based on Eurostat online database, "ilc_d11", "ilc_d12", "ilc_li02" tables, Medgyesi, 2011

Notes: The Gini coefficient is expressed in %. Poverty rate: the rate of population with disposable income below the poverty threshold. (Poverty threshold: 60% of the national median equivalised disposable income). S80/S20: the ratio of the top quintile to the bottom quintile of income.

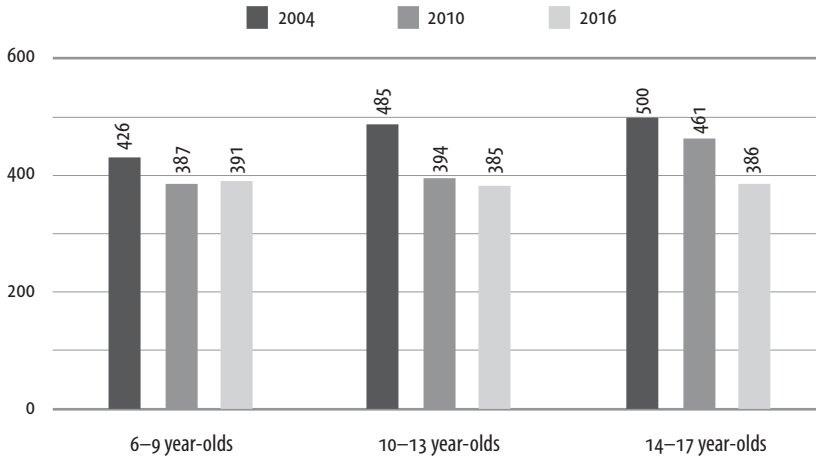
This was followed by a slight increase in 2009 over the 2007 figure. Inequalities of income widened primarily as a result of an increase in the rate of people living in poverty and in the aggravation of the depths of poverty. In 2009 almost 4% of the Hungarian population could be considered poor.

Between 2007 and 2009 the trends in the age groups at the two ends of the scale rose more sharply: the risk of poverty among the 0–4-year-olds continued to increase, while the same lessened among the 65+ population. Poverty rate of the youngest age group was 1.5 times the average, and that of the oldest age group was a quarter to a third. Today the age groups most at risk of poverty are children and young people; more than one in five children are poor. As child poverty is closely related to parents' unemployment, and given that barely 30% of the adult Roma population are employed, poverty among Roma children is considerably higher than among the non-Roma. Another important dimension of inequality is place of residence. The smaller the village where one lives, the greater the likelihood of poverty. Currently in Hungary the prime factor increasing the risk of poverty is the unemployment and/or inactivity of the head of household. In most countries child poverty indicators tend to be higher than the overall poverty rate of the population. Although child poverty rate in Hungary is around the EU average of 20%, the relative at-risk-of-poverty rate is the second highest in the EU 27.

2.6. Demographic trends

The population of Hungary has been steadily declining for the past 30 years and dropped below ten million by the end of 2010. The number of live births has been volatile over the past decades. Within two generations the number of newborns dropped to less than half and has not exceeded 100 thousand for years. The total fertility rate of women in Hungary, i.e. the mean number of children that would be born alive to a woman during her lifetime is 1.3 – far below required replacement level fertility rate of 2.1. It also falls short of the EU average of 1.6 and was the lowest among the member states in 2008. Life expectancy at birth and mortality rates of Hungarian men and women are also unfavourable in international comparison. In our dwindling and ageing society the size of school age population has also declined steadily over the years. The downward trend will soon bottom out in the primary school age groups; at the same time, the number of students in secondary education is expected to drop drastically, by one-sixth, in the next few years. Due to these demographic changes far less educational capacities will be needed, though the extent of reduction in demand will have regional differences.

Figure 2.3. Size of three generations in 2004 and 2010, and estimated size in 2016 (thousand)



Source: Demográfiai évkönyv (Demographic yearbook) 2009, 2010 and Report . . . , 2006

2.7. Educational attainment of the population

Educational attainment indicators have steadily improved. In 1990 the rate of those with no higher than primary school attainment was 32% and the rate of graduates from tertiary education was 8%. In 2005 the same figures were 28% and 14%. The rapid expansion of upper secondary and higher education of the 1990s resulted in considerably higher educational attainment in the younger generations compared to the older ones, and this has important ramifications in the labour market. In international comparison, the educational attainment of the Hungarian 25–64 age group is low, i.e. the rate of those who have not finished trade school nor have they passed the secondary school leaving examination (matriculation) is much higher than in the Visegrád countries but not too negative compared to the majority of developed countries. Another significant difference is that while the rate of university and college graduates is roughly the same as that of the post-communist CEE countries, it falls far behind the rates in countries that are more competitive than Hungary. Participation in lifelong learning is backward by international standards. In 2007 only 9% of the Hungarian population of 25–64 years was involved in formal and/or non-formal training compared to the EU average of 37.4%. Similarly to the great majority of countries, participation in lifelong learning of groups that have higher educational attainment and are better integrated into the labour market is well above the average in Hungary: more than twice as many graduates continue their studies than holders of secondary school qualifications in Hungary; but even in the degree holders group there is a huge gap between the European and the Hungarian average.

Table 2.4. Highest educational attainment of the population of 25–64 years in the OECD countries, 2008 (%)

Country	Below upper secondary (maximum primary school)	Upper secondary (skilled worker certificate, secondary school qualification)	Tertiary education diploma
Australia	30	34	36
Austria	17	66	18
Belgium	30	37	33
Czech Republic	9	76	14
Denmark	23	45	32
United Kingdom	13	54	33
Estonia	12	54	34
Finland	19	45	35
France	30	43	28
Greece	36	40	23
Netherlands	27	41	32
Ireland	31	36	34
Canada	13	38	49
Poland	13	68	20
Luxemburg	26	47	28
Hungary	21	60	18
Mexico	67	17	16
Germany	14	60	25
Italy	46	40	14
Portugal	72	14	14
Spain	48	22	29
Switzerland	11	55	33
Sweden	15	53	32
Slovakia	10	75	15
Slovenia	18	60	23
Turkey	70	18	12
USA	11	48	41
EU 19 average	28	47	25
OECD average	29	44	28

Source: Education at a Glance, 2010: p 34

2.8. Ambitions of students

In 2009 only 10–15% of the age group 10–16 years aspire at qualifications below the secondary school leaving examination. The rate of those who are aiming at secondary school leaving examination or, beyond that, technician's qualification is 31–33%. Graduation from higher education is contemplated by 54–57% of students. As students advance in age the proportion of those aiming below the leaving examination gradually decreases, and the rate of those aspiring at graduation from tertiary education increases. The young tend to be ambitious in terms of their schooling; early school leaving and low educational attainment do not reflect plans and intent; rather they are a consequence of micro-level family, school and individual personality development processes ending in failure. Students' plans to continue education and the educational attainment of the mother are indicative of students' mobility aspirations. This information corresponds to the well-known phenomenon that better educated parents will have better educated children; it also highlights the fact that children themselves also have higher aspirations. Approximately 40% of the children whose mother completed less than 8 grades contemplate at least secondary school qualification (matriculation), and 8–10% want to acquire a degree. Children of mothers who completed 8 grades are more ambitious: 40–47% wants to acquire secondary school qualification (matriculation, technician's qualification), and one-fifth want to continue in higher education. Turning the question around reveals even more definite plans: only 1–1.3% of the students whose mothers has a degree don't think they would not go as far as the secondary school leaving examination (matriculation); 5–6% are not aiming higher than secondary school qualifications, and 92–93% aspire at a higher educational degree, and in the latter group, one in four or five contemplate a PhD. More than 40% of the children whose mothers are skilled workers or have trade school qualifications are aiming to step one step up the ladder of intergenerational mobility and almost the same numbers are aspiring two steps higher, i.e. they intend to achieve two levels above their parents' educational attainment.

2.9. Changing families, changing society

Based on the 2005 micro-census, 81.4% of the Hungarian population lives in households consisting of family members. Almost 70% of households consist of families, and over 30% are single-member households or households consisting of unrelated persons. The average number of children per family barely changed since 1990: the number per 100 families was 107 in 1990 and 105 in 2005; however, the number of children under 15 dropped from 70 to 54. In married couple-based families (married couple or civil partners) the number of children below 15 years of age per 100 families dropped from 68 to 56, and the same in single-parent families declined from 77 to 47. The downward trend in the number of children is also influenced by the fact that women tend to shift having children to a later age: in 1990 children born to women older than 30 contributed 20% to total births; in 2009 their contribution was 50%. On the other hand, there a growing number of children are born out of wedlock: their rate was highest in 2009, when 40.8% of all children were born out

of wedlock. The 2009 drop in the total number of births was entirely caused by the decline in the number of children born to married couples. The share of married couples in the total number of children born was 67.4% in 1980 and 45.7% in 2010; conversely, 32.3% of children were born to single parents in 2009 as opposed to 17.7% in 1980. Along with the decline in the number of marriages, divorce has continued to increase, a trend which has been high for decades. In 2009 the number of divorces per 100 marriages was 64 as opposed to 56 in 2001.

The mortality rate of middle-aged men in Hungary is higher compared to developed and neighbouring countries. Low health indicators relative to our level of development, growing lack of social norms and anomie are highlighted by the prevalence of risk behaviours such as alcoholism and suicide. Here, too, the most vulnerable groups are the disadvantaged, the Roma, particularly men. Timeline examinations reveal that the situation of the least educated is becoming increasingly hopeless. While in the 1990s the difference between the life expectancy of men in the highest and the lowest educational attainment groups was 8.9 years on the average, by 2006 the difference soared to 16.5 years. Less than half of the men under 30 with the lowest educational attainment is expected to live to 65 years of age (Kopp, 2008).

According to the 2007 EU quality of life survey (EQLF), people in Hungary are less satisfied and happy than elsewhere. While only five countries have unhappier people than the Hungarians, satisfaction and happiness are farthest from each other in the case of Hungary, which indicates a certain mental potential: we may be dissatisfied, yet we are capable of happiness. Hungarians tend to be more dissatisfied with their living conditions than would be expected by the European trend based on the average GNP per-capita. The same survey shows Hungarians to be the most pessimistic in international comparison, underscoring the extremely low level of human capital, and its main component, trust in others.

The findings of the 2009 World Values Survey reveals that Hungarians want to see the role of the state as more important, and that of the market as less important. Hungary ranks 4th among 26 countries that would like to see the state exercise tighter control over companies. We are among the countries where the fewest people support market-based health services and education. Yet we trust civil society more than the state, although we are at the end of the line in terms of trusting both. The survey reveals poor networking, and little action for the common weal. Only 10% of Hungarians are active in NGOs as opposed to 40% in Western European countries and over 80% in the Nordic countries. We want to be rich; only the Romanians have a similarly strong desire in this respect. Hungarians see higher income as the greatest advantage of entrepreneurship, and rank relative independence much lower. A very small proportion of Hungarians consider tax evasion and illegal access to social benefits morally unacceptable: only three out of 28 countries have a lower rate of people not tolerating such practices.

3. Public education administration

3.1. Main features of the administration of Hungarian public education

The administration of Hungarian public education follows a decentralised model integrated into the system of public administration. Emerged approximately two decades ago, the model's key features have not changed.

- Administrative and decision-making responsibilities are shared by a number of actors; responsibilities are distributed horizontally and vertically.
- Vertically, responsibility is shared among four levels: national, regional, local, and institutional level. The *regional* category includes three levels: regions, the counties and micro-regions, each having different administrative functions and institutional systems.
- The administration of public education is overseen at local and county levels by political bodies that were set up following local government elections. The counties' weak administrative competences created after the political changeover are expected to strengthen after 2010, albeit not in the form of local government organisations but rather as deconcentrated state organisations.
- Competences related to local administration are exercised by a large number of local governments, fairly heterogeneous in their size and socio-economic situation. They have a fairly broad scope of responsibility, and its content does not depend on the size, population number and/or other socio-economic features of the village or town concerned.
- Educational institutions too have wide-ranging administrative competences primarily in terms of issues of contents and methodology.
- Within the national level of education administration, horizontal functions are shared between the sector's main authority and other ministries.
- Due to the system of shared responsibilities, there are broad opportunities for the civil sector and the economy to participate. This shows varying levels of development at the different levels of administration and works well in very few areas.

3.2. Central administration

In the period 2006-2010 central administration of education was performed by the Ministry of Education and Culture. The integrated Ministry of National Resources created after the 2010 elections is responsible for the administration of other areas besides public and higher education, including health, social welfare, family and youth affairs, culture and sports. The state minister responsible for education is at the helm of public and higher education administration. The head of the Ministry for National Economy is responsible for vocational education and training and continuing education in general. Within the scope of his or her responsibility for equal treatment and social cohesion the head of the Ministry of Public Administration and Justice is responsible for equal opportunities for children and specifically equal opportunities in education for disadvantaged children, particularly the Roma. Following the guidance of the minister for national economy, the minister controls regional training centres on the basis of companies' direct training demands. The head of the Ministry of National Development is responsible for development policy; s/he coordinates the involvement of Hungarian and EU funds and monitors the impact of measures proposed to implement development policy programmes. The minister of the interior is responsible for urban development and planning, and for local governments. Created in 2006, the Education Authority is a central administration organisation undertaking, *inter alia*, public and higher education related policy and administrative tasks. In the period 2006–2010 direct control tools including legislation and institution development were given priority. Legislation addressed five main areas: improving efficiency, modernisation of contents, quality assurance, public education provision, and equal opportunities.

Central education administration is faced with the combined effects of a fragmented institutional system, unfavourable demographic trends, and dwindling resources resulting from cuts imposed by the convergence programme. Efforts were made to offset these impacts by improving efficiency. Steps in this direction included the re-classification of schools with low student counts in grades 7–8 as member schools, clarification of the concept of 'class', changing the formula for per-capita subsidy to task indicators based subsidy from 2007, increasing the compulsory class load of teachers and the introduction of the regulation of the so-called two-month teaching time frame, which drastically cut overtime hours. Updating content is served by the regulation of skills development classes in grades 5–6 and the inclusion of competences in the National Core Curriculum. It was also in this period that the National Assessment of Basic Competencies was expanded to grades 6, 8 and 10, with mandatory publication of the results on the Ministry's website. The student ID system introduced at the assessments allowed institutions to analyse the performance of individual students. Schools performing below the minimum had to draw up an action plan to promote development. If the results showed no improvement in the third year after this initial assessment the operator had to develop an action plan, to be approved by the Education Authority. Between 2007 and 2009 operators and schools could also apply annually for funds for the upgrading of underperform-

ing schools and to carry out quality assurance tasks. To improve institutional quality assurance, from 2007 institutional quality control programmes (IMIP by their Hungarian acronym) had to include the criteria and procedure for the performance assessment of management and teachers, then from 2009, of the entire teaching and non-teaching staff. The employer had to take performance assessment into consideration in its decisions. New regulations of equal opportunity mandated that local governments should complete their public education action plans to include equal opportunity measures, and equal opportunities has been made one of the horizontal requirements in applications for Hungarian or international funds. Schools were required to designate a mandatory geographical area of admission.

3.3. Programmes in the context of the NDP and the NHDP

In the period between 2004 and 2007 programmes concerning public education were mainly central programmes implemented in the context of the Human Resource Development Operational Programme of the National Development Plan (NDP HRDOP). The biggest project was the development of the so-called competence-based educational packages. In 2007-2013 programming period, the New Hungary Development Plan (NHDP) opened access to schemes with a combined value of EUR 26.2 billion including 15% national contribution. The NHDP determined six priorities. Priority 3 is Social Renewal, which also encompasses educational development. Several of the operational programmes includes goals related to public education development: the SROP (Social Renewal Operational Programme) envisions updating contents and methodologies, the SIOP (Social Infrastructure Operational Programme) is aimed at developing educational infrastructure, the ROP (Regional Operational Programme) invites infrastructure development projects to upgrade the physical infrastructure of education in the seven Hungarian statistical regions. The goal of SROP's Priority 3 is to enhance the effectiveness and efficiency of public education, and to improve access to high-quality education – in harmony with the strategy and goals of lifelong learning.

Expansion of the competency packages developed in the context of HRDOP to the whole of public education in the 2007-2009 planning period under Priority 3 of SROP took off with a considerable delay. Some of the problems that arose in the HRDOP planning period were also repeated during the design and implementation of SROP. Lack of seamless coordination between the branch ministries and the Managing Authority, frequent changes in the action plan and the terms of reference of calls together with the resulting delays and uncoordinated launch of closely related projects, as well as lags in the coordination of central development necessary for introducing programmes at the institutional level presented significant risks. After the 2010 change of government development of the new government structure and institutional restructuring slowed the implementation of SROP Priority 3 projects and disrupted the continuity of processes. Coordination of public education development serving EU and Hungarian priority goals was ensured by two "flagship" programmes: Intelligent School and Public Education of the 21st Century.

A key central development project was New Knowledge, developed in 2008 by the Ministry of Education and Culture. The programme's priority goals included early development for children of disadvantaged and poor families, and eradicating segregation through the promotion of integration and special programmes for gifted and talented students. In the latter area in 2008 Parliament passed a decision to launch the Hungarian Talent Programme.

3.3. Regional level education administration

The government in power until the spring of 2010 made efforts to strengthen regional administration in two areas. One was the regional-level planning of public education development, and the other was vocational education and training tasks, including the expansion of the scope of competence of Regional Development and Training Committees (RFKB by their Hungarian acronym). Both measures served the need for the planning and efficient use of EU funds. Initiated by the Ministry of Education, regional educational strategies were developed in 2006 with the participation of the Educational Authority. This almost completed the vertical system of public education planning, albeit the intra- and inter-sectoral connection between the various levels remained weak. Nevertheless the regional public education development plans thus prepared were used, to a differing extent by regions, as starting points for planning the regional OPs of the NHDP.

The RFKBs had the following competences in organising VET in their respective regions:

- Determination of the direction of development of school-based VET;
- Participation in school-based and non-school-based VET, and in the harmonisation of public education and higher education VET programmes;
- Determination of the direction of development of VET and enrolment rates in the region;
- Participation in launching and administering calls of development projects and tenders;
- Participation in the operation of a career tracking system;
- Taking steps with the local governments in their region to establish VET organisation associations.

Created in 1998, the regions' main bodies for decision making regarding development remained the Regional Development Councils until the end of the first decade, with a high proportion of government stakeholders. The Councils set up regional de-

velopment agencies whose main function was to manage calls of tenders and projects under various schemes.

The new government that took office in 2010 decided to strengthen the counties. As a result regional level education administration is wound up, and regional tasks are transferred to the education administration bodies of county government offices. County government offices are the legal successors of the respective county administrative offices operating at the county seats and oversee the legality of local governments' operation. In the field of education, they examine the compliance of education-related decisions of municipalities as public education operators. Since 2011 earlier regional public education forums have been replaced by county (Budapest) public education forums with the following tasks: drawing up the county's public education development strategy in support of the county government office acting in its sphere of public educational competence; coordination of measures, programmes and support schemes concerning the county; contribution to the efficient use of the county's financial resources available for the development of public education.

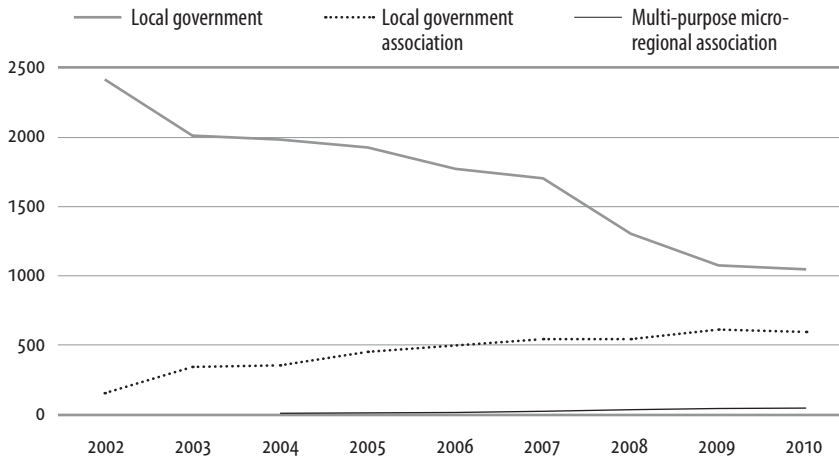
Efforts of the government in office between 2006-2010 were aimed at strengthening the micro-regional level. Multi-purpose micro-regional associations (TKTs) were mushrooming: their number rose from 73 in 2004 to 162 in 2007, penetrating all of the micro-regions of the time. This dynamic development was nurtured by the government's financial incentive policy. In 2007 additional per-capita support allocated to institutions operated by TKTs was on the average 20% while no such support was extended to schools operated by municipalities. An important aim of creating micro-regions was to strengthen the cooperation between regional stakeholders. In public education the main manifestations of cooperation were sports and school subject competitions, in-service training, teachers' teams, organisation of travelling teachers' networks, joint preparation of projects, and career advice and orientation; however, there were few instances of cooperation supporting regional management and coordination. Strong vested interests made it likely that masses of institutions would be passed to TKTs for operation but it never happened.

3.5. Local level

After an initial drop the number of local governments in Hungary slightly increased between 2000 and 2009. Transformation of the municipal operation of institutions has been expedited since 2006. As a result, the number of municipalities only operating member schools has soared, and of those operating at least eight/grade schools has dropped drastically. The 2006 amendment of the Public Education Act mentioned above reinforced this trend. Municipalities dropping out as independent school operators was typical in villages with less than a thousand inhabitants. The number of local governments operating schools has greatly declined; the number of associations operating educational institutions has increased all over the country,

with the exception of the smallest villages, and boosted by the legislative environment and a policy of financial incentives, multi-purpose micro-regional associations have emerged.

Figure 3.1. Number of local governments operating municipal educational institutions, 2002–2010



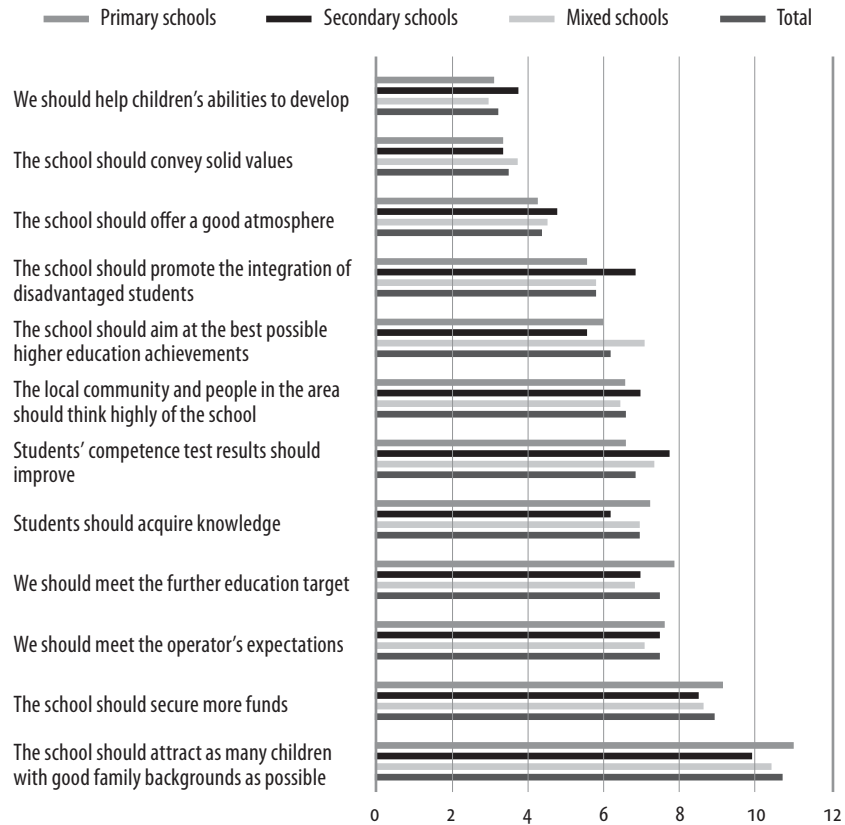
Source: Data provided by Educatio Kft., 2010

In the wake of the 2006 amendment of the Public Education Act all local governments had to supplement their public education action plans with measures ensuring equal opportunity to students. Local governments participating in TKTs were not required to draw up their own plans if the TKT's action plan included all the mandatory contents for all of the municipalities. Professionalism was promoted by the requirement to seek the county government's opinion on the micro-regional plan. The Public Education Act provides for local governments to control the institutions they operate in respect of finances, efficiency and compliance, and oversee the effectiveness of pedagogical work through the implementation of tasks determined in the quality control programme. The practical use of operators' assessment of institutions was minimal, due to a lack of not only financial and human resources but also professional experience. In 2009 the minister of education and culture passed a decree providing funds from the state budget to support school operators' functions. Funds were available on an application basis. The decree set out the conditions for supporting institutional quality assurance, assessment, evaluation and supervision, determined the mechanism of application and decision on awarding support from the performance motivation fund, as well as the detailed rules of disbursement, accounting and auditing. Public education institutions were left with the new task of not only evaluating the implementation of their quality control programme but also taking into account the result of nationwide measurements in the process, and they had to determine the steps that would promote the approximation of institutional goals and operation.

3.6. Institutional level

In the 2006-2010 period the legal framework of institution-level control, and in particular the distribution of competences and tasks among stakeholders continued to be characterised by teaching corps with strong powers, heads with broad duties but lesser powers in comparison, and the resulting need for constant internal coordination and consultation. For managers of public education institutions, the period was again marked by the challenges of adaptation to changing legislation, the need to rationalise finances because of growing scarcity of funds, and tasks related to new European schemes. Besides restructuring, applications and management of the emerging school network the increasingly complex tasks facing heads of public education institutions called for the development of management skills.

Figure 3.2. Ranking of goals considered important for their own institution by heads of primary schools, secondary schools, and mixed schools, 2009 (average of values scored from 1 to 12)



Source: Institutional data provision, 2009 (N=962)

The following question was asked: "Please rank the following goals according to how important they are for your member institution or unit. Put the most important goal on top of the list."

According to a survey conducted in 2009, principals consider education-related goals to be the most important for their school. These preferences likely reflect professional expectations and/or a state considered ideal by principals. There are minor differences in the ranking of goals by school types, which is related to the function of the level of school: for instance, principals of secondary schools consider preparation for further education and conveying knowledge more important than heads of primary schools. The goal of taking into consideration local society's opinion about the school was ranked at the top of mid-field by secondary school principals and lower by other heads, which indicates secondary schools' more direct local integration but also their reliance on the local community in terms of student intake.

The National Assessment of Basic Competencies can also be a potential tool of institution-level control. According to the above survey most of the heads used the result of the competencies assessment but less than 40% went beyond using the centrally communicated results for some purpose. Approximately 15% of secondary school heads and almost 20% of primary school heads use the software available for a deeper analysis of results. In 10% of secondary schools and 16% of primary schools the principals break down the findings of the competencies assessment for each student.

Modifications of the main strategic documents: the pedagogical and institutional quality control brought new tasks in institutional planning in the period between 2006 and 2010. In accordance with the new National General Curriculum schools had to renew their pedagogical programmes by 31 December 2007. A research on pedagogical programmes found that while curricula and curricular requirements were continuously expanded until 2009 because of changing legal regulations, schools and operators not always kept up with the changes. Less than half (46.8%) of the documents complied with the relevant statutory provisions. The introduction of non-subject related skills development classes in grades 5 and 6 resulted in significant changes in the contents and organisation of education, which had to be coordinated with pedagogical goals. According to a survey conducted in 2010 this coordination was concluded in half (50.3%) of the primary schools but only 18.2% on the 8-grade grammar schools. In 2006 the institutional quality control programme was expanded by the rules and criteria of assessment of teachers' and heads' performance, which, from 2009, were extended to the entire staff after the amendment of the relevant laws. The survey quoted above reveals that although the institutions modified the documents, in some places performance assessment was not, or only partially, introduced.

3.7. The institutional system of educational services and support

In the first decade of the 21st century the system of educational services struggled with unsolved problems which affected the need for services as well as the quality of services. Mandatory education support services determined in the Public Education Act are the duty of county governments provided either through their own institutions or through contracted service providers. Changes in the public education sys-

tem, its tasks and financing had the following impacts on the specialised educational support services over the first decade:

Besides the mandatory specialised education support services provided for in the Public Education Act and operated by county governments a growing number of non-profit and for-profit providers appeared in this field, and the presence of educational institutions also offering such services became stronger and their scope of activities wider.

Funds available for the provision and/or use of specialised education support services changed over the decade, as did the rules of financing. From 2005 no state funds were available for operators, institutions or providers in general for specialised education support services. The last of the allocations available for this purpose was the so-called per-capita in-service training support with a budget dwindling from year to year, and entirely phased out in 2010. Simultaneously, the county network of service providers was shrinking, and in some areas of the country the scope of even the freely available services narrowed drastically. Specialised education support services (including in-service continuing training, mentoring and consultancy) were only available for institutions whose operators possessed resources for buying such services: primarily in the capital and cities with county status, or operators whose projects had been awarded support under the earlier HRDOP, then later SROP schemes. As in accordance with the terms of reference of the calls support under these OPs was generally granted to innovative institutions and operators capable of development, the assumption seems logical that the institutions most in need of support were less likely to access specialised education support services.

Demands for new services arose mainly in the course of involving EU development funds. Methodology and other in-service training programmes, mentoring and process-related consulting services developed to support the introduction and application of competence-based packages were collected in a so-called service basket created for the professional implementation of projects. As a result of support extended to educational SROP projects in 2009–2010 a massive demand emerged for municipal and market-based in-service training and consultancy in the service basket.

At the end of the decade the idea emerged again to set up a state operated county-level organisation with the dual task of professional supervision, and provision of specialised education support services. The legal regulations related to the contents of specialised education support services and the providing organisations changed for the first time since 1998 in 2010. The amendment of the ministerial decree specified the areas of national specialised education support services and their content, and designated the Hungarian Institute for Educational Research and Development (OFI) to organise them. Under the new regulations national specialised education support services must be organised if a service cannot be efficiently provided as part of local government services and/or in cases where the service promotes educational administration tasks. There is an overlap between several components of these ser-

vice types and groups of local government activities, yet the legal regulations do not provide for a clear division of tasks between the two organisations.

3.8. Educational research, development and innovation; knowledge management

The system and functioning of educational research, development and innovation (RD&I) play an indirect but prominent role in education administration. Over the past decade educational research, development and innovation was not integrated into educational policy making, state administration's educational RD&I activities has been haphazard. Hungarian educational R&D has been struggling with the lack of appropriate organisational background and structural problems. Instability of organisation and funding and frequent restructuring did not promote efficient RD&I in education. RD&I activities are deployed predominantly by background institutions of public administration created for the purpose, as well as at university departments, and are supplemented by smaller organisations (or educational support service providers) also active in research. Educational research is represented by the Educational science research is represented by the Board of Education of the Hungarian Academy of Sciences, but the Board is not a coordinative body. There is little information about educational RD&I; what elements are available do not constitute a transparent whole, and there is no uniform educational research and development database. Hungarian educational RD&I is hampered by the insufficiency of and sometimes inadequate quality of human resources. Hungary has yet to wait for the emergence of knowledge brokerage agencies that have proved efficient in other countries. Currently the knowledge generated by Hungarian educational researcher groups is largely isolated, and knowledge transfer or sharing among the groups do not work adequately.

Since Hungary's EU accession, development policy relied heavily on the structural funds, which had a strong impact on funding the educational RD&I system. The intent to involve as much of the funds as possible and the requirement of co-financing left no central budget resources for the independent financing of educational RD&I. State funds earlier available for applied educational research petered out by the end of the decade, and the only remaining funding source for R&D was the Vocational Education and Training Fund. Thus by the end of the first decade of the 21st century the main sources of funding of educational research were the EU structural funds and the Hungarian Scientific Research Fund (OTKA). However, the amounts available for educational research from the structural funds is fragmented and impossible to track as they are not specifically designated in the major development projects: these amounts are available specifically for development and not for research. Projects of R&D background institutions are funded primarily from EU sources. The regulations related to the use of EU funds, in particular ex-post financing, caused lack of funds in many cases.

3.7. Civil society, partnership and consultation

Professional and non-governmental organisations with nationwide activity in public education that get themselves registered with the ministry responsible for education acquire the right to consultation and can also participate in determining the composition of certain consultative bodies. In February 2002 the official list of the Ministry of Education contained 172 organisations registered in the field of public education; their numbers grew to 202 by March 2006. The growth trend halted in the second half of the decade, in fact, the number of such organisations on the list of the Ministry of National Resources in December 2010 was back to 176. Three-quarters of the nationwide organisations operate or are seated in Budapest. This shows that non-Budapest professional organisations which otherwise have the potential for nationwide advocacy in their own areas find it hard to gain strength. The ministry responsible for education set up a fund available through application to support the operation of professional organisation and NGOs. Applicants must be nationwide organisations registered with the ministry and must have a professional programme that promotes their basic activity. In 2009, 67 organisations were awarded operating support.

In 2010 a research project addressed nationwide professional and advocacy organisations' perception of the activity and problems of consultative and reconciliation forums and their role in educational administration. Representatives of the respondent organisations underscored the contradictory role of consensus forming and consultative boards. Several think there are too many consultative boards, and in the case of VET, their members are too numerous. The dysfunctions of dialogue is highlighted by the fact that the government side often does not supply ministry materials sufficiently in advance so that other board members have enough time to prepare, or calls for an opinion on government documents which have already been adopted. On the other hand, the passivity of NGOs is marked by the fact that the topics and materials presented at board meetings are mostly put forward by the government side. It also happens that some of the members delegated to serve on the boards do not have the necessary professional experience and do not attend the board meetings or send substitutes. Despite all this, the respondents consider the existing institutions of social dialogue important on the whole.

4. Financing public education

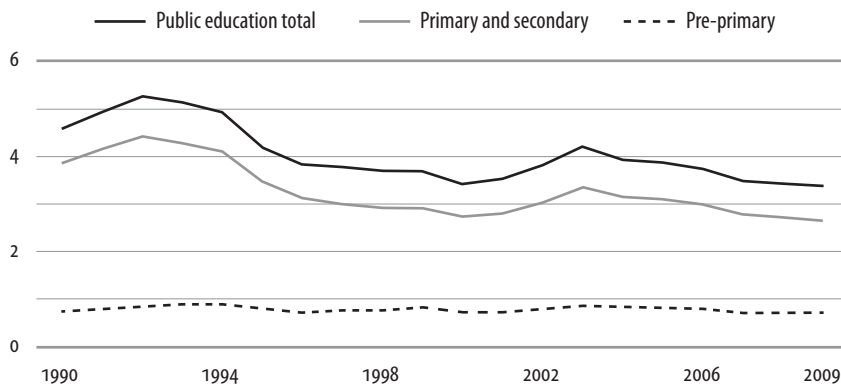
No fundamental change took place in the financing of public education in the first decade of the 21st century. However, the rules of allocations from the state budget to school operator local governments were modified between 2006 and 2010. The government tried to create an incentive system that had a more direct influence on the numbers of teachers employed and student-teacher rates than before. Moreover, the government made greater efforts to promote school operating associations based on professional and budgetary considerations. In the reported period there were greater changes in the structure of expenditure.

4.1. Public education expenditure

It is impossible to get an accurate picture of the magnitude or precise breakdown of public education expenditure in Hungary today. Statistics only include the data of state or local government operated educational institutions that are reported in the state budget as educational expenditure. This is misleading in several respects. On the one hand, state and municipal institutions involve funds from multiple sources, which means not all of their expenses are covered from public or municipal resources. On the other hand, statistical data exclude support extended from budgetary resources to institutions other than those operated by the State or local governments. Thus, the main source of data, i.e. the state budget may show educational expenditure from the central budget greater than they really are, while at the same time it does not reckon with support extended to the non-public side. Drawing the real picture is made more difficult by the fact that the data included in statistical publications are based on the financial statements of state and local government operated educational institutions, which provide information on the amounts of expenses of the given institutions and not the amount of budgetary allocations received. Consequently, an approximate picture appropriate for temporal comparison can only be given of the public (state and local government) sector of public education. In the period 2005-2009 state and municipal spending on public education no matter what indicator is applied. The 2009 spending relative to the GDP was half a percentage point less than in 2005.

In the same period the number of grade school students dropped by more than 85 thousand as a result of the continued demographic decline. Compared to the 2001/02 school year the decrease was 180 thousand and almost 400 thousand over a twenty-year period (from the 1990/91 to the 2009/10 school year). The decline in the proportion of educational expenditure and the slowing of the increase in spend-

Figure 4.1. State and local government spending relative to the GDP by levels of public education, 1990–2009 (%)



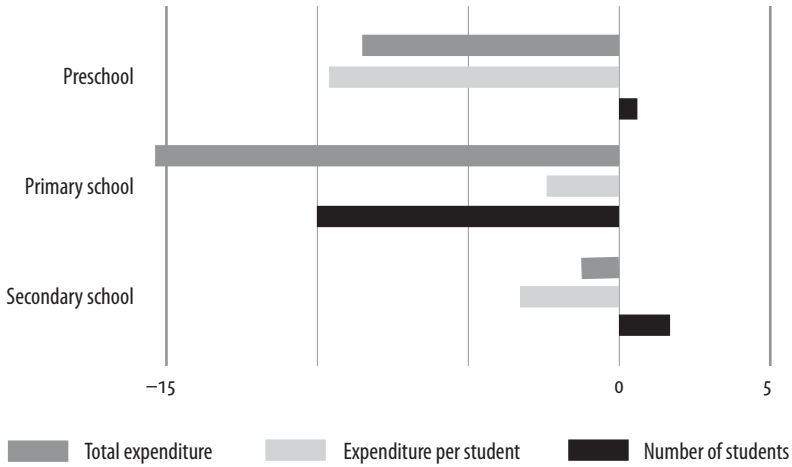
Source: Calculations by Tamás Híves using MoE statistical information based on the Educational Yearbook, 2001/2002–2009/10. Calculations of earlier years by Júlia Varga based on the financial statements of local government and state budget institutions and laws on the implementation of the state budget.

ing is partly related to the fact that fewer children had to be provided for. Comparing the changes in total educational spending and per-student spending at 2005 prices and student numbers at the various levels in the period 2005 to 2009, it is conspicuous that in pre-schools and secondary educational institutions spending, and thus per-student spending shrank while student numbers largely stagnated. Conversely, in primary schools total expenditure declined to a lesser extent than the number of students, therefore per-student spending (calculated at the same prices) shrank at a slower rate than total expenditure.

Expenditure comprises two main components: capital expenditure and current expenditure. Their rates differ at the various levels of education. In state and municipal pre-schools the contribution of capital expenditure to total expenditure more than doubled between 2005 and 2009, but even in 2009 it still only contributed 3.6% to total pre-school spending. The contribution of capital expenditure to total expenditure in primary schools grew by a half percentage point but dropped almost by half, below 4%, in secondary education. In 2009 primary schools contributed approximately 40% to current expenditures of public education, pre-schools contributed about one-fifth, the contribution of vocational secondary schools to current expenditures was 9%, and that of grammar schools and trade schools was about 7-8% each. The contribution to current expenditures of services not directly related to educational activities and ancillary services provided by educational institutions (day care, home room, school meals, travel, dormitories) was 14% in 2009. The breakdown by level of education barely changed between 2005 and 2009.

The bulk of current expenditure is contributed by payroll costs. In the public and municipal education sector the proportion of wages and contributions within current expenditures was 72% in 2009. The contribution of material expenditures was

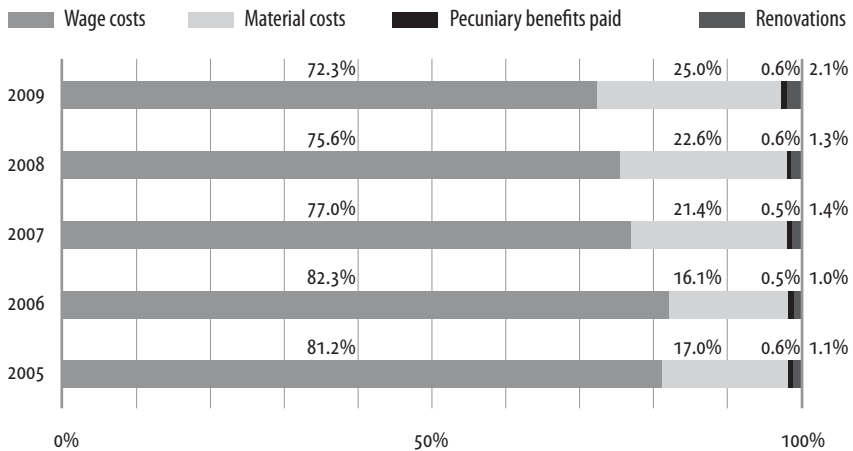
Figure 4.2. Changes in total public educational spending, per-student spending and student headcounts, 2005-2009, at comparative (2005) prices, by levels of public education (%)



Source: MoE statistical information based on in the Educational Yearbook 2005/2006–2009/2010

23%. There was a considerable shift in the structure of current spending between 2005 and 2009. Wage costs were over 10 percentage points down, and the contribution of material costs increased. As the shift is the result of increasing expenditures, it is not the case that educational institutions used more funds to cover material costs but rather they saved on wages. This saving is mainly attributed to dropping teacher and other staff headcounts, and also to the fact that in 2009 the government did away with public employees’ 13th month wage.

Figure 4.3. Breakdown of current expenditure in state and local government public education institutions, 2005–2009 (%)

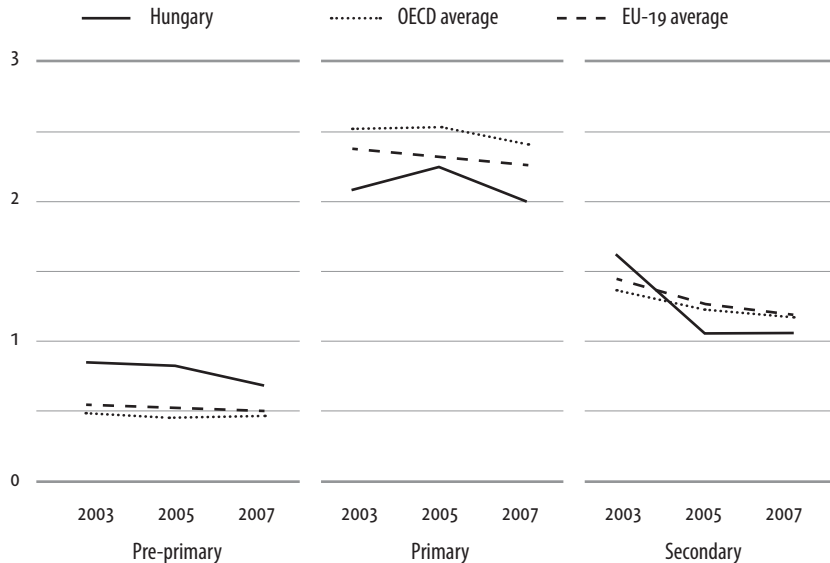


Source: MoE statistical information based on in the Educational Yearbook 2005/2006–2009/2010

4.2. Hungarian public education expenditures in international comparison

In 2007, the last year from which international comparative data are available, Hungary spent somewhat more on pre-school (ISCED 0) education, and spent less on primary (ISCED 1 and ISCED 2) and (upper) secondary (ISCED 3) education relative to the GDP than the EU or the OECD average. The situation at pre-school and primary level did not change since the early 2000s: earlier comparisons showed a similar picture. However, in the early 2000s upper secondary education spending relative to the GDP was greater than the EU or the OECD average, then started to decline from 2005. We spend more from our wealth on secondary education than the EU or the OECD countries' average.

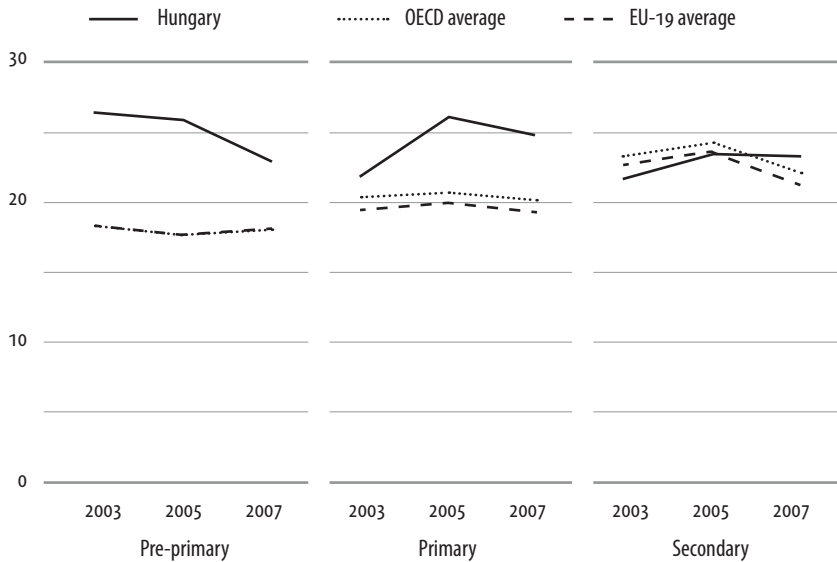
Figure 4.4. Public education spending relative to per capita GDP by levels of education in Hungary, the OECD countries and the EU 19, 2003, 2005 and 2007 (%)



Source: Education at a Glance, 2006, 2008 and 2010 data

At pre-school and primary school level, per student spending relative to per capita GDP Hungary scores higher than the OECD average despite lower total spending relative to the GDP and the past year' shrinking of public educational expenditures. Considering our wealth, we still spends more on pre-school children and lower and upper grade primary school students than the EU or OECD countries on the average. The same, however, does not apply to secondary school students: in 2003 Hungary's per student spending at secondary level was higher than the EU or OECD average but by 2005 we fell behind and this trend continued in 2007 as well.

Figure 4.5. Per student spending relative to per capita GDo by levels of education in Hungary, the OECD countries and the EU 19, 2003, 2005 and 2007 (%)



Source: Education at a Glance, 2006, 2008 and 2010 data

International comparison of current educational expenditures and spending on educational investment reveals that Hungary spends less on education related investments: we are ranked in the lowest tier of the EU member states regarding primary and secondary educational investments. This indicator also falls far short of the OECD average: 3.5% as opposed to 7.8% in primary education, and 5.4% as opposed to 7.4% at secondary level. There are great differences between countries regarding the proportion of public education expenditure used for financing non-direct educational goals but ancillary services (school meals, day care, home room, travel and dormitories). In Hungary, the contribution of spending on ancillary services to total expenditure is rather high in international comparison. In Europe, only the United Kingdom, France and Slovakia spends proportionally more on such purposes. The Hungarian indicator is high mainly because of day care provided by schools.

In 2007 the Hungarian rate of payroll expenses among current educational expenditures was around the EU and OECD average at ISCED 1 as well as ISCED 2 and 3 levels. Per student teachers' wage costs relative to the GDP per capita were a half percentage point higher at primary level (ISCED 1) than the OECD average. However, in lower secondary education (ISCED 2) Hungary is one percentage point, and in upper secondary education (ISCED 3), three percentage points behind. In some European countries, for example in Finland, Norway and Poland in lower secondary education, and in the United Kingdom and France in upper secondary education, wage costs per student are even smaller than in Hungary, although in these countries teachers are far better paid than their Hungarian counterparts. Analysis of the

payroll costs differences between countries highlights that specific payroll costs per student to the GDP are a half percentage point higher in Hungary at primary level (ISCED 1) compared to the OECD average. Thus, the per student wage costs somewhat above the OECD average is caused primarily by the fact that at the lower level (ISCED 1) Hungary employs more teachers relative to the number of students than the OECD average. In lower and upper secondary education (ISCED 2 and ISCED 3) the difference compared to the OECD average, i.e. lower per student spending on wages relative to the GDP compared to the OECD average, is mainly explained by the fact that in Hungary teachers' wages are lower.

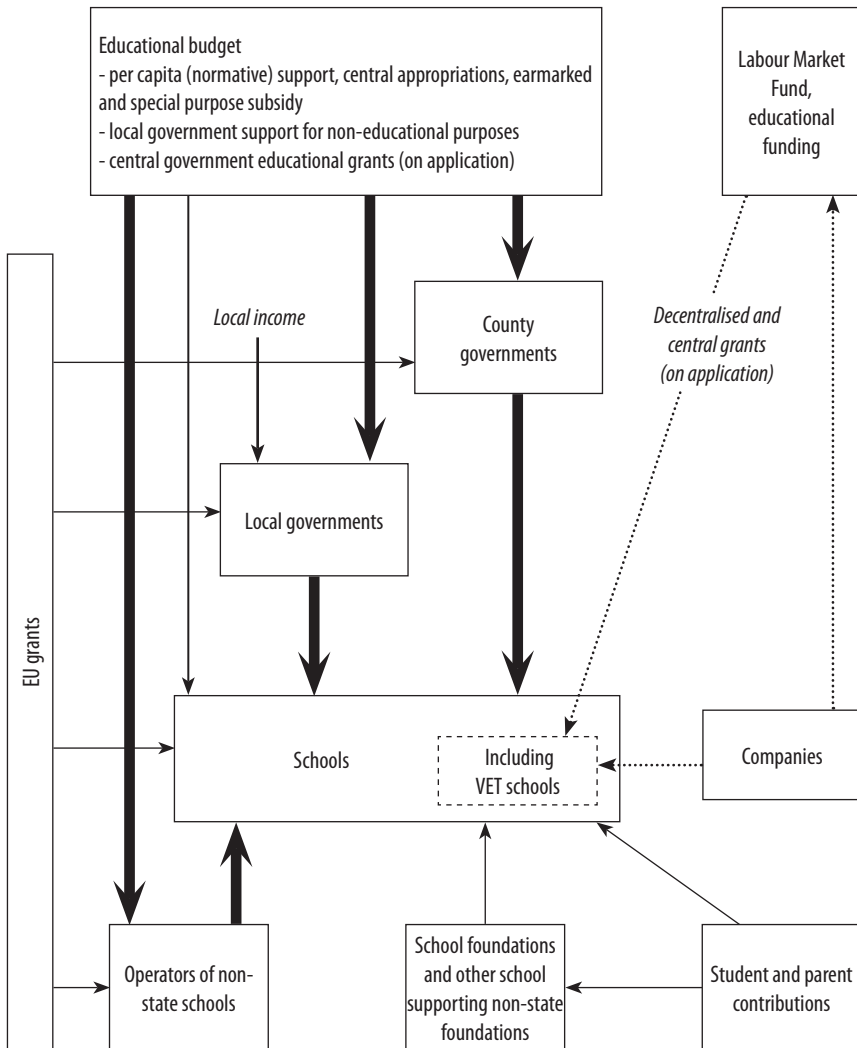
4.3. Public education financing system

There were no major changes in the system of financing public education in the period investigated. Financing takes place in the framework of an essentially two-tier system: most grants from the central budget to school operators, who include the costs related to their schools in their respective budgets. Resources outside the state budget fall into four categories. The first includes major European development support available for Hungarian public education since 2004. Some of the funds are directly available to schools on an application basis, another portion is awarded to operators submitting projects. The second category comprises funds provided by companies to VET schools in addition to payments into the Labour Market Fund. The third category includes funds that are supposedly involved by non-state school operators in addition to the per capita normative state subsidy, although there are no cumulative data available regarding the magnitude of these funds. Finally, the fourth category comprises spending by the families of students, which takes various forms.

4.4. Central budgetary resources

In the period between 2006 and 2010 the basic per capita support known as the normative support of public education dropped significantly, by an average of 20%. The reason is two-fold: on the one hand, the statutory numbers of students per class set out in the Public Education Act were raised; on the other hand, a new formula of financing was introduced in 2007. The educational allocations to local governments from the central budget essentially stagnated in nominal terms between 2003 and 2009. However, the impact decline in the per capita support, exacerbated by dwindling student numbers, was on the whole offset by an increase in supplementary support. Nevertheless, in the reported period local governments' educational expenditures grew faster than central grants. Consequently, after 2004 only about 50% of local governments' current educational expenditures was covered by central educational grants. On the other hand, it is to be noted that over and above the State's educational allocations a significant portion of other resources also come from central subsidies. The greatest portion of local government income are contributed by such subsidies. Apart from support extended directly for educational purposes non-service related central subsidies (for instance shared taxes, compensatory subsidies) also have a major bearing on local government budgets. Therefore it is difficult to

Figure 4.6. The system of public education financing in Hungary



assess, purely on the basis of the rate of educational support to expenditures, whether operating schools in a greater burden in the municipal budget than earlier, and if so, to what extent.

The biggest change in the normative support system was the revamping of the basic normative support. Since September 2007 the amount of the basic normative support due to school operators has been calculated by a formula, and only supplementary normative grants have survived as direct per capita grants. The formula basically relies on a hypothetical demand for teachers, which follows student counts

and is not related to any characteristics of the local educational system, similarly to the previous support mechanism. The novel feature is that the subsidy is not just based on a per capita normative amount determined in an ad hoc fashion but there is an explicit connection with the regulation of the number of students' and teachers' lessons, and the class size. This has several important consequences. First of all, regulatory changes have a direct impact on the amount of subsidy and consequently to the finances of municipalities. Secondly, the connection of regulation and financing makes it clear for local governments how big classes and teaching staff and how many contact hours the state is prepared to finance. Thirdly, the formula can serve as a pattern for local governments to follow when they develop their local budget planning and school financing practices. It is conceivable that some local governments will use this sample as a starting point in their local budget bargains with schools. Fourthly, the formula is an opportunity to create a subsidy system where the amount of subsidy can be calculated with relative accuracy in the long term as opposed to the earlier practice of specific normative support, with the amount determined annually in an ad hoc fashion in the Budget Act. At the same time the amount of basic subsidy continues is still determined in an arbitrary fashion and may change from year to year. The amount of subsidy does not always coincide with the actual payroll expenses, because in cases where the operator launches smaller sized classes or breaks up a class into two groups or if students receive more contact hours or teachers teach less than their required minimum, the resulting additional expenses will not be covered from central allocations. Similarly, if education is organised in accordance with the parameters of the Public Education Act but the composition of the teaching corps differs from the usual, for instance teachers' age tends to be higher, wage expenses will be likewise higher than average because of public employees' wage scale, and this excess is not covered by the subsidy. Moreover, the smaller an operator's school or school network, the greater the differences can be, as in the case of a small school the parameters of even one or two teachers will have a significant influence on the average.

In the second half of the decade the number of titles of normative allocations was greatly reduced; this simplified the system, which earlier contained special normative titles for each programme type. The number of titles was around 60 in 2004–2005 and was reduced to approximately 40 in 2009–2010. The number of titles for fixed purpose and supplementary support also decreased; at the same time, new grants related to the functioning of multi-purpose micro- and regional and operators' associations were introduced in 2005. In 2007 and 2008 this category titles as well as grant amounts were expanded. On the whole, the total budget provisioned for this purpose was doubled by 2009 and stayed at this level also in 2010.

4.5. EU support

Over the past decade EU development schemes have constituted important sources of financing in public education. At current prices this means HUF 37-48 billion annually, depending on whether the use of funds awarded is projected over a period of

seven, eight or nine years. Comparing this amount to the average aggregate budget of HUF 800–900 billion of state operated schools that was typical over the past five years, European support is approximately 4–5%. For the vast majority of funds awarded, the supported goals include infrastructure development, VET support, and wider-sense educational developments. There are three important differences in terms of the goals of the NDP and the NHDP. Firstly, the rate of infrastructure support has doubled, mainly because of the support envisioned in the context of the regional operational programmes. Secondly, in the first development plan support directly promoting equal opportunity featured prominently, whereas in the NHDP equal opportunities is one of the horizontal categories across all operational programmes, thus its direct share has diminished. Thirdly, the proportion of other goals has increased, due to the horizontal categories and the less limited nature of decentralised (regional) planning.

Table 4.1. Amount and breakdown of grants awarded for public educational purposes in the context of NDP and NHDP schemes between 2004 and December 2010t (HUF m and %)

Support goal	NDP (2004–2006)		NHDP (2007–2010)	
	budget (HUF m)	%	budget (HUF m)	%
Equal opportunities, integration	7,282.7	10.6	6,843.5	2.5
Infrastructure	16,644.7	24.3	148,579.3	55.3
Educational content, pedagogy	20,495.6	29.9	45,180.2	16.8
VET	22,410.3	32.8	49,893.5	18.5
Other	1,655.7	2.4	18,708.5	6.9
Including:				
Tanoda programmes	1,155.7	1.7	1,273.6	0.5
Most disadvantaged micro-regions			4,541.1	1.7
Migrant students			24.3	0.0
Minority education			238.3	0.1
Classroom and extra-curricular sessions			3,321.7	1.2
Gifted and talented programmes			3,048.1	1.1
Teacher training	499.9	0.7	6,261.4	2.3
Total support awarded	68,488.9	100.0	269,205.0	100.0
Including: OPs	16,644.7	24.3	125,737.1	46.7

Source: Website of the NDA (<http://www.nfu.hu/content/58>) and data provided by ESF Social Services Non/profit Ltd., data collected by Tamás Kerényi

4.6. Inequalities in school spending

The financing of Hungarian public education is characterised by considerable inequalities. One of the most important, and also most sensitive manifestations in terms of equity is inequalities in per student spending, which is closely related to the finances of the operator local governments. Looking at the differences in educational expenditure in the quintiles of per capita local tax income in the period between 1998–2008, the degree of differences in educational expenditure remained

unchanged in cities after 2005, and the gap widened in the case of villages in the worst financial position. In terms of school expenditures, the difference between the richest and the poorest quintiles was approximately 20 percentage points in urban areas, and over 10 percentage points in rural areas at the end of the period.

Differences related to the budgetary situation of local governments are not only conspicuous in school spending but can also be detected in the results of the 2006–2008 competencies assessment. In villages with higher local tax income students' average test results were better at the end of grade 8; the difference between the top and bottom quintile of villages was approximately 40 performance points. The same correlation can be detected in cities even if the effect of students' family parameters (provided in the background questionnaire to the tests) and the main characteristics of the locality, such as size, are screened out. In this way the difference would be about 20 points – a very substantial difference, one-fifth of the total spread. The difference among villages is smaller and not so readily identifiable. While it cannot be concluded with certainty from the analyses so far that the difference in test results is rooted in school spending and the finances of local governments, there is a likelihood that budgetary constraints of municipalities also have an impact on the quality of education.

5. The education system and the progress of students

5.1. Compulsory education, progress and the structure of the education system

In most European countries, children enter compulsory education at the age of five or six, normally at the time when they start elementary school. In Hungary, children at the age of five are obliged to attend preschool for a year before they start primary school. In most countries, the period of compulsory education lasts for nine or ten years, normally until the age of 15 or 16. In Hungary – pursuant to the Act on Public Education – children who reached an adequate state of development start compulsory education at the age of six or, at the latest, of eight, and finish it at the age of 18 (for SEN students, at the age of 20). In 1996, Parliament adopted a decision on the modification of the end of compulsory education and thus extended the original age limit (16 years) by two years. The first generation of children for whom education was compulsory until the age of 18 reached the age of 16 (the former age limit of compulsory education) in 2008. The project titled School Career Research gives an exact estimation that by the last year when the age limit of compulsory education was 16, 1-2% of the 16-year-old students, 3-4% of the 17-year-old students and 6-7% of 18 year-old-students had already left the system. It was obvious that compulsory education until the age of 18 is not without problems; however, education policy did not put the issue of support of longer compulsory education on its agenda. Nor did it take into consideration the alternative ways of complying with the requirements of compulsory education, such as part-time training in one or two days a week that can be pursued by workers as well. Faced with the problem for the first time in 2008, schools and their operators have no efficient tools to manage it. As a rule – and because of the lack of proper conditions – schools do not even make attempts to develop those students who attend school regularly but lack motivation due to previous failures at school or due to a lack of attractive prospects in life. Schools make the efforts specified by legislation simply to comply with the provisions therein and to make students attend school. A survey of November 2009 shows that most directors felt that the modification of the age limit of compulsory education was a wrong decision. Only 23% of directors of vocational schools supported the decision, while for special vocational schools this rate was 58%.

The Act on Public Education defines the major periods of education in the education system, the system of requirements for educational work and the system of examina-

tions within public education. The amendment of 2003 specified the extension of the basic period (grades 5 and 6, the first two grades of ISCED 2) and, as of September 2008 and September 2009, stipulated the introduction of 25% and 40% skills development classes in grades 5 and 6 respectively. The Government that took office in 2010, allowed a maximum 50%. Legislation defined stricter conditions for repetition in the first three grades of primary schools (grades 1-3 of ISCED 1), supported efforts for the inclusion of disadvantaged students, especially of the Roma, and introduced written verbal assessment instead of numerical grades in semesters 1-7 of ISCED 1. The Government set up in 2010, however, re-introduced the opportunity of repetition in all grades and restricted the use of written verbal assessment to the first three semesters of ISCED 1.

As of the 1990s, legislation on admission to schools made it possible for parents to choose a school and for primary schools to admit students outside of their school districts if after the admission of children in the district there were free places available. To counteract exclusion at schools and to promote equal opportunities, legislation restricted these opportunities. District schools are still obliged to admit students who reside in their districts; however, if there are more available places, schools need to prioritise students with multiple disadvantages. If any free places remain after that, the decision is made with a drawing. This regulation obliges school operators to create bordering districts of admission in a way that the rates of the number of students with multiple disadvantages and the number of students admissible do not differ by more than 25%.

At the secondary level (ISCED 3), the operator may select a vocational school or a secondary school as an institute with compulsory admission: such institutes may reject the admission of a student only on the basis of lack of places. Institutes of secondary education other than selected schools admit students in a way defined by legislation. In 2007, the input point of secondary education was modified by legislation. For the grade 9 (first grade of ISCED 3), schools are no longer entitled to organise a written entrance examination of their own; the legislation stipulates that decision on admission is made on the basis of the student's achievement in primary school (ISCED 1 and 2) and / or of the results of the written central examination and, in certain cases, of an additional oral examination. Pursuant to new legislation, grammar schools with 6 or 8 grades are not allowed to organise an oral entrance examination, and the results of the central written entrance examination are taken into consideration only if the number of students seeking admission and that of those that can be admitted is at least 1.5 times higher (averaged over three years). As a result, the number of students participating in a unified, competence-based written entrance examination grew for 6- and 8-grade grammar schools as well as for institutions that offer education from grade 9 onwards.

The 2009 amendment of the Act on Public Education provided for the launch of early vocational education. Thus a new form of education was introduced to the system of vocational school education: students leaving primary school may acquire qualifica-

tion in three years, in grades that offer vocational education exclusively. The objective of this new form of education is to organise vocational education in a practice-based way. Such grades were launched in September 2010 for the first time, for qualifications defined by the National Register of Vocational Qualifications (OKJ by its Hungarian acronym). Many think that the results of the introduction of early vocational education in grades 9 and 10 were rather disappointing; growth in the dropout rate seems to confirm this opinion.

5.2. The horizontal and vertical changes of the education system

In the period from 2001 to 2009, the number of full-time primary-school students (ISCED 1 and 2) decreased by 18%. The pace of decrease slowed down in the second half of the decade: the number of students admitted to primary school has not changed since 2006. The declining number of children results in problems related to capacity utilisation, which, in turn, leads to sharp competition, the merge of institutions and closures of institutions of primary education. The number of students pursuing secondary studies grew by more than 5.5% in the period from school year 2001/02 to school year 2009/10. The pace of this growth changed over these 10 years: in the period between school years 2006/07 and 2009/10, it slowed down. The distribution of students in various institutions of secondary education was relatively stable. The rate of students in three-year vocational (or trade) schools did not change between 2001 and 2009; that of grammar schools increased to a small degree, while vocational secondary schools experienced a minor decrease. A major change was that the number of students of specialised vocational schools grew by 51%.

The vertical restructurisation of the education system was partly a consequence of changes in legislation and partly of the combined effect of unplanned and unpredictable processes of the last 20 years (demographic changes, systems of interests based on the per-capita funding system, the loss of the financial background of skilled worker training, deals made at the local level, etc.). The majority of spontaneous processes are rooted in the efforts of the institutions that tried to maintain the number of students in spite of the decreasing number of children. As a result of the changes, the range of education was extended and became diverse, vertically and horizontally alike. As a result of extension downwards and upwards, the vertical changes at the secondary level brought the lengthening of several education programmes, which, in turn, contributed to students staying in the system for a longer period of time and, thus, counteracted the effects of demographic decline. Most of the vertical movements had slowed down or stopped by the 2000s, while – since the middle of the first decade of the 2000s – the secondary schools involved have been entitled to organise grades for language preparation and thus extended their education period by one year. Almost half of the grammar schools (48.6%) and more than one-third of vocational secondary schools (36.7%) undertook the organisation of such grades. In school year 2008/09 17,129 persons pursued studies in language preparation grades; if compared to the data of the two previous school years, this is a slow decline.

Table 5.1. Major data on institutions of public education, 2001-2009

Institution	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of institutions (full-time)									
Preschools	3,522	3,540	3,507	3,405	3 294	3,223	2,750	2,562	2,498
Primary schools	3,423	3,421	3,375	3,293	3,141	3,064	2,520	2,375	2,322
Specialised vocational schools	116	119	127	126	131	137	137	140	141
Vocational schools	469	478	466	475	496	507	489	451	452
Grammar schools	577	602	604	614	620	627	618	621	623
Vocational secondary schools	798	798	795	794	797	807	765	704	684
Number of students, 1000 persons (full-time)									
Preschools	342.3	331.7	327.5	326.0	326.6	327.6	324.0	325.7	328.5
Primary schools	944.2	930.4	909.8	887.8	859.3	828.9	809.2	788.6	773.7
Specialised vocational schools	6.6	7.2	8.1	8.4	8.8	9.6	9.8	9.8	10.0
Vocational schools	124.0	123.3	123.5	123.4	122.2	119.6	123.2	123.9	128.7
Grammar schools	182.3	186.5	190.4	193.4	197.2	200.3	200.0	203.6	201.2
Vocational secondary schools	238.6	239.8	247.6	245.3	244.0	243.1	242.0	236.5	242.0
Total	1838.0	1818.9	1807.0	1784.2	1758.1	1729.2	1708.1	1688.1	1684.1
Secondary level, total	544.8	549.6	561.5	562.1	563.4	563.0	565.2	564.0	571.9
Number of teachers (persons)									
Preschools	32,327	31,550	31,392	30,704	30,531	30,550	29,920	29,860	30,007
Primary schools	90,294	89,035	89,784	87,116	85,469	83,606	78,073	75,606	74,241
Specialised vocational schools	801	880	1,069	1,113	1,239	1,379	1,374	1,414	1,499
Vocational schools	7,982	8,425	8,647	8,577	8,938	8,947	8,942	8,706	8,824
Grammar schools	16,845	17,128	17,675	17,816	18,213	19,284	18,687	18,436	18,363
Vocational secondary schools	19,450	19,955	20,804	20,756	20,871	21,254	20,187	19,452	19,772

Source: Education Statistics of the Ministry of Education; Statistical digest of the Ministry of Education, Statistical Yearbook of Education 2009/2010

Another vertical change in secondary education affected grades 9 and 10 of institutions of vocational education after the introduction of NCC. The period of basic education was lengthened; students started vocational education after the age of 16. Consequently, the education period of vocational schools was lengthened by one year. Due to the modification of OKJ and to the fact that the majority of qualifications are based on the secondary school final examination, education at vocational secondary schools was also by 1-3 years (depending on qualification). For the acquisition of a qualification, prerequisites are defined. Persons who did not finish primary school may acquire only 40 qualifications out of the 800 recognised by state, while some professions require at least secondary school qualification. The education system offers three types of education in vocational schools as corrective opportunities. The first type is a corrective programme of one or two years (10-20 months) where successful students acquire primary school qualification and they may start vocational training in any profession that requires primary school qualification. The second type is a reintegration education programme that serves as a basis for vocational education launched within the framework of Vocational School Development

Programme (SZFP by its Hungarian acronym). It ends with a competence test and entitles successful students to enter vocational education of defined professions that require primary school qualification. The third option is an education in preparatory grades organised within the framework of the Start Programme; the majority of successful students continue their studies in grade 9 of vocational schools. In school year 2009/10, more than 2,000 students participated in these programmes. Those who leave the education system with a low level of education or without a qualification may enter adult education as a corrective opportunity where they can acquire primary school qualification or secondary school qualification. The system of primary-school adult education and the number of participants is undergoing a continuous decline: in school year 2009/10, no more than 2,035 persons pursued studies in such programmes. By contrast, the number of students of adult education organised at the secondary level in the form of evening or correspondence programmes grew until 2004. Since then, it has been declining; still, students' number in school year 2009/10 was still considerably high: 127,630.

5.3. The structural reforms of vocational education

The main structural reform of the decade took place in vocational education, which exercised effects on the institutional system as a whole and as well as on the qualifications acquired. The issue of the new OKJ marked the beginning of an innovation process that affected the operation of the vocational education system as a whole. With the support of the European Social Fund, the reform of the register of qualifications based on modules and competences (2004-2006) contributed to the personalisation of students' careers in education and to the opportunity to plan a flexible professional career. It was introduced in school-based vocational education from 2008 onwards, progressively. The new OKJ has a reformed structure: the number of qualifications has been reduced considerably, to 424, while – as a consequence of the module system – the register contains partial qualifications and alternatives, and shows the way qualifications are based on each other. Due to the modular structure, the various education programmes and sectors are interoperable with regard to content, as the structure affects all actors of vocational education: secondary education, tertiary education and adult education alike. The new OKJ reformed the examination system as well. The system consists of requirement modules of competences required for a given qualification. There is no reliable information available as to whether this new education form fulfilled the hopes placed in it or not; however, in 2008-2009 the National Institute of Vocational and Adult Education examined the implementation and success of OKJ. According to those questioned, the principal problem was the lack of experience. As a rule, employers had a positive attitude towards the new system.

By 2000, the institutional system of vocational education had become highly fragmented. As a result, the number of institutions and parallel education programmes has grown to a great degree, while – in many cases – the number of students was less than 200. To concentrate such institutions 16 Regional Integrated Vocational

Training Centre (TISZK by its Hungarian acronym) were established. Since 2007, the management of vocational education has been applying coercive means to make institutions to cooperate and undergo a centralisation process: as of 2008 an institution receives resources for the development of vocational training if it has at least 1,500 students and accepts the recommendations of the Regional Development and Training Committee (RFKB by its Hungarian acronym). Supported by the SROP and SIOP of the New Hungary Development Plan, 85 TISZKs had been created by 2010 that cover almost the whole vertical range of school-based vocational education. The first 16 TISZKs are of a similar structure, while those organised from 2007 onwards are based on divergent models. The size of the centres also differs a lot. There are 14 TISZKs where the number of students is less than 2,000, while 5% of them operate with more than 10,000 students each. The centres differ with regard to the number of institutions as well: to cite two extreme examples, there is a centre of two institutions, while another one consists of 30.

The new institutional system that has evolved in the last ten years due to efforts for centralisation raises many questions. For numerous institutions, the need to cooperate resulted in formal, superficial cooperation directed at acquiring funds. Large institutions are in a better position to represent their own interests, which is an advantage over the small ones. The clarification of profile-related issues is not in the interest of the institutions; they intend to keep their infrastructure, staff and positions intact. Last but not least, another major issue is sustainability. According to the original concept, the sustainability of TISZKs may be maintained through connecting them to labour market education, corporate education and adult education. However, so far experience has shown that TISZKs have not succeeded in embedding in the local and regional education system.

5.4. Education for national minorities and private education

In Hungary, six large national minorities (Croatian, German, Romanian, Serbian, Slovak and Slovene) and some very small national minorities (Greek, Ruthenian, etc.) participate in education for minorities. In the period from 2005 to 2010, the system was relatively stable, the number of students entering into such education per year and per level did not change considerably. The ratio of students pursuing their studies at all the three levels is a total 1.7%. Preschool (ISCED 0) and secondary school education (ISCED 3) are characterised by stagnating numbers, while in primary-school education there is a decline of 4%.

In Hungary, all institutions that are not public institutions (not operated by local governments) are private institutions supported by the state. Such institutions fall into two categories: church institutions and private institutions. Church institutions receive additional per capita support defined by legislation whose amount is equivalent to the average rate of support given by local governments to institutions in the public sector. Private institutions operated by foundations, private persons, associations, for-profit organisations, etc. are entitled to additional support if they have con-

cluded a public education agreement with a local government and thus participate in the performance of the local government's tasks.

In 2009, the rate of church and private institutions exceeded 20%, while the number of children attending preschool and full-time students in these sectors was over 11%. Time series data show that the growth of these two sectors has been uninterrupted in the recent years. Nevertheless, in spite of this growth, the sector of church and public education institutions is still small; the number of their students is slightly less than 10% of the total number of students. The 2010 amendment of the Act on Public Education may bring a change in the distribution of church (an public) institutions, as it will make it easier for local governments to hand over institutions to churches for operation. Obviously, the effects of the measures is not perceptible yet; however, it is probably that this amendment will make more local governments to give up loss-making schools or schools they do not want to operate for other reasons. In 2009, 363 institutions were operated by churches (6.7% of all institutions). The rate of full-time students (6.3%) is slightly lower than that. The majority of public education institutions operated by churches are grammar schools, and one-third of the students attend grammar schools. More than half (52.3%) of grammar school students attend schools whose structure has been reformed.

In 2009, 736 institutions were operating in the private sector (17.3 % of the total number of institutions). The rate of full-time students is much lower, about 5.3%. Private schools receive only per-capita support from the central budget. This is one of the reasons why such institutions do not offer education free of charge; the amount of the contribution varies to a great degree. As a result, the rate of disadvantaged students or students with multiple disadvantages is lower in the private sector. The structure of education at private institutions also differs from that of the public ones. The rate of lower-level education (preschool [ISCED 0], primary school [ISCED 1,2]) is very low; within secondary education, private schools operate mainly in the field of vocational education. Another characteristic feature is that a large number of students participate in basic-level education in arts. The importance of vocational education is underlined by the fact that in 2009 60% of full-time students attended vocational schools or vocational secondary schools.

5.5. Pre-primary education (ISCED 0)

Pre-primary education is offered to children who have reached the age of three. It has two functions: on the one hand, it provides daycare and, on the other hand – as a part of the public education system – it prepares children for the entrance into primary school (ISCED 1). The Act on Public Education stipulates that for children of the age of five, pre-primary education is obligatory in four hours per day. If compared to that of other countries, access to pre-primary education in Hungary is very good: in 2009, almost 90% of children of the age of 3-6 attended preschools. The start of the period of compulsory schooling is defined not only by the age of the child but also by his or her state of development. If a child reached a state of development that is ad-

equate for entry to primary school, the period of compulsory schooling starts in the calendar year in which he or she reaches six years of age. A child may participate in pre-primary education until the last day of the education year when he or she reaches seven years of age. As a consequence of flexible enrolment, older children also attend preschools, and the number of those who participate in pre-primary education for four or five years (from the age of 3 to the age of 7-8) has grown. In recent years, the institutional system of preschools has undergone merges of institutions and, thus, has changed considerably. The number of institutions declined, while the number of organisational units did not undergo major changes. Overall, the number of places and the number of children participating in pre-primary education grew by 3.2% and by 0.3%, respectively. The number of children per group and per teacher stagnated.

Table 5.2. Detailed data on pre-primary education, 2006/07–2009/10

Name	2006/07	2007/08	2008/09	2009/10
Institutions (pieces)	3,223	2,750	2,562	2,498
Organisational units (pieces)	4,524	4,386	4,355	4,366
Children participating in pre-primary education (persons)	327,644	323,958	325,677	328,545
girls (persons)	158,111	156,201	156,979	157,305
Children participating in SEN education (persons)	1,484	1,374	1,408	1,429
Teachers (persons)	30,550	29,920	29,860	30,007
Number of teams	14,560	14,248	14,298	14,640
same-age	6,809	6,358	6,072	7,240
of varying age	7,751	7,890	8,226	7,400
Number of groups broken down by number of children				
Groups of less than 10 children	372	358	349	417
Groups of 11-20 children	3,472	3,221	3,233	3,709
Groups of 21-25 children	6,909	6,761	6,492	7,190
Groups of 26-30 children	3,490	3,635	3,926	2,984
Groups of 31-35 children	294	255	275	309
Groups of 36 or more children	23	18	24	31
Places	351,825	349,514	354,267	363,024
Use of capacity (%)	93.1	92.7	91.9	90.5
Group rooms	15,023	14,754	14,767	14,861
Number of children per group	22.5	22.7	22.8	22.8
Number of children per teacher	10.7	10.8	10.9	10.9
Children participating in pre-primary education in 4 hours per day	13,362	18,464	15,314	12,382
Children catered for	319,987	315,943	318,665	321,599
Rate of children catered for (%)	97.7	97.5	97.8	97.9

Source: Statistical Digest of the Ministry of Education, Statistical Yearbook of Education, Volumes 2006/2007, 2007/2008, 2008/2009, 2009/2010

Access to pre-primary education differs greatly from region to region. While 88.6% of the children spent three or more years in pre-primary education, there are some regions where demand exceeds the number of places. Data show that the rate of chil-

dren attending preschools is the lowest in those regions where, most probably, the greatest is the need for the extension of the service.

5.6. Primary education (ISCED 1-2)

The number of children attending primary school has been declining since 1987. In school years 2009/2010, it was only 66.3% of that in school year 1990/1991, which obviously affects changes of the number of institutions, their average size and the number of employed teachers. In the period between school year 2006/07 and 2009/10, the number of children decreased by 6.7%, the number of organisational units by 6.9%, the number of classes by 9.8% and the number of teachers by 11.2%. The institutional network was reduced partly through school closures or school mergers. The number of independently operating institutions declined considerably, while the number of member schools operating under the institutions grew. In the period between school years 2001/02 and 2009/10, the average number of students per school declined from 248 to 236, while in the period between school years 2006/07 and 2009/10, the average number of students per class, per teacher and per school hardly changed.

Table 5.3. Basic data on primary education* (full-time) in 1960/61, 1970/71, 1980/81, 1985/86, and from 2000/01 to 2009/10

School year	Organisational		Full-time			
	units	Students	teachers	Classes	Classrooms	First graders
1960/61	6,395	1,408,535	58,672	47,717	31,033	234,888
1970/71	5,602	1,144,070	65,892	44,877	33,052	144,424
1980/81	3,799	1,197,777	80,701	47,721	37,724	176,536
1990/91	3,723	1,166,076	96,791	52,675	49,842	129,920
1995/96	4,006	987,561	93,035	49,178	51,892	130,230
2000/01**	3,875	957,850	89,750	47,845	43,500	122,580
2001/02	3,852	944,244	90,294	47,865	43,195	117,648
2002/03	3,793	930,386	89,035	46,723	42,603	117,184
2003/04	3,748	909,769	89,784	46,006	42,051	108,447
2004/05	3,690	887,785	87,116	45,057	41,581	104,757
2005/06	3,614	859,315	85,469	43,649	40,980	101,157
2006/07	3,591	828,943	83,606	42,433	40,513	99,025
2007/08	3,418	809,160	78,073	40,048	38,784	101,447
2008/09	3,363	788,639	75,606	38,949	37,952	99,871
2009/10	3,343	773,706	74,241	38,262	37,463	99,270

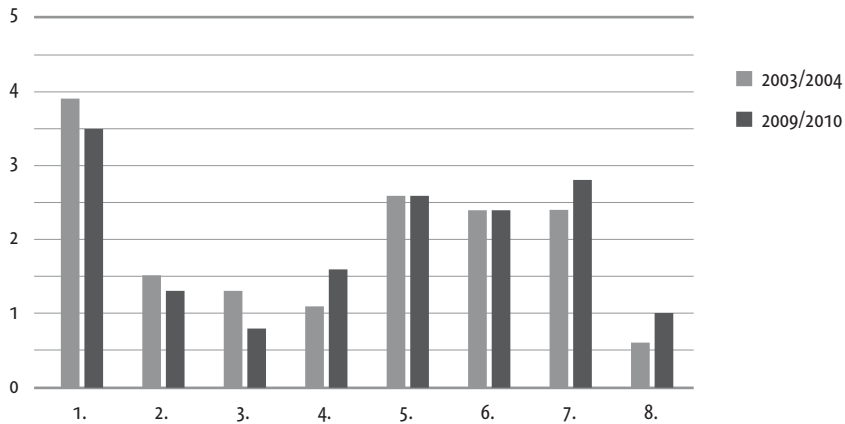
Source: Statistical digest of the Ministry of Education, Statistical Yearbook of Education 2009/2010

* Including SNE education. The numbers of students and first graders are those of full-time programmes; the numbers of teachers, classes and classrooms include full-time and adult education (data are available broken down according to organisational unit types). Until 1999/00: data on classrooms and specialised classrooms are indicated together, from 2000/01 onwards, the data refer to classrooms only.

** Data on school year 2000/01 are estimated data.

As a consequence of flexible enrolment, the majority of children who enter primary schools are seven-year old. Normally, later enrolment is a practice followed in the developed counties and in Budapest. Those children who are eight years old or older and study on the first grade of the primary school (ISCED 1) are most probably students with problems – the fact that this is a more frequent phenomenon in underprivileged regions underlines this assumption. Repetition rate for children in primary education is a stable 2-3%. As a rule, the number of repetitions grows at the beginning of phases that mark major changes, that is, in grades 1 and 5 (the first grades of ISCED 1 and 2). As of 2005, legislation restricted the opportunity of repetition for grades 1-3 of primary school (the first three grades of ISCED 1). However, the number of repeaters declined only to a small degree in the first three grades and started to rise in grade 4. This is most probably due to the fact that schools did use the tool of repetition during the period of restriction, albeit postponed it to grade 4 (the last grade of ISCED 1).

Figure 5.1. The rate of repeaters per grade in 2003/04 and 2009/10 (%)



Source: Data bases of education statistics of the Ministry of Education

Most students choose education programmes that are concluded by a secondary school leaving examination; in 2009/10, 70% of them decided to participate in such programmes. The majority of students apply for admission to three schools; most of them are admitted to the school elected as the first option. In 2000 and 2007, the ratio of students admitted to schools they had chosen as the first option was 64% and 74.6%, respectively. As reflected by data on application for admission, general education has gained popularity; 2007 was the first year when there were more students applying for admission to grammar schools than those applying to vocational secondary schools. In 2007, 36.6% of the applicants were admitted to grammar schools, while 39% and 24.4% of them were admitted to vocational secondary schools and vocational schools, respectively. Not all applicants were admitted to grammar schools, while for programmes that offered (among others) vocational education the number of applicants was lower than the places available. By contrast, in the sectors of cater-

ing and tourism an opposite trend is discernible. Applications and students' chances for admission are influenced by the students' place of residence. Inhabitants of urbanised municipalities tend to be more motivated to acquire higher qualifications, the levels of urbanisation and qualifications are in direct proportion: in the capital, the majority (more than 50% of students) seek admission and are admitted to grammar schools, while the rate of applications to vocational schools is less than 10% and the rate of student admitted is above 10%. Small villages are characterised by an opposite trend: in 2007, 30.5% sought admission to grammar schools (28.2% were admitted), while 29.3% applied for admission to vocational schools (32.3% were admitted).

5.7. Secondary education (ISCED 3)

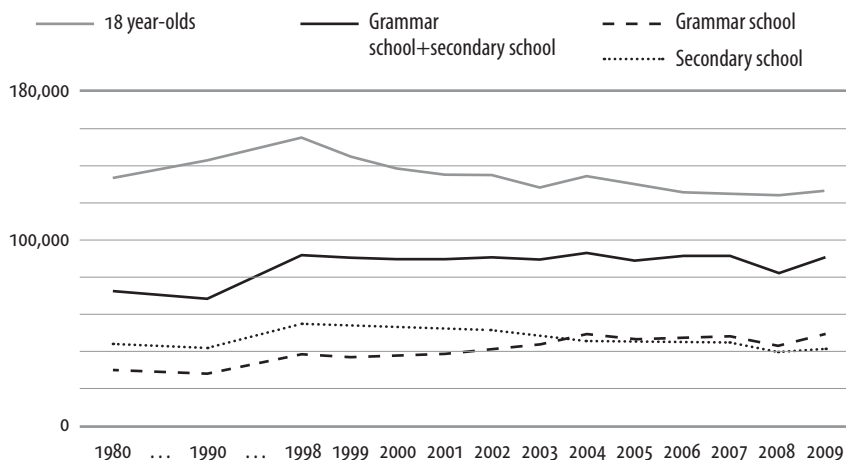
While the term 'secondary education' generally covers education organised in grades 9-12 (ISCED 3) of public education, at the beginning of the 1990s admission to grammar school programmes was made possible on lower grades as well, for students of 10-12 years of age. In 2000, the rate of students under the age of 14 participating in the admission procedure was 14%; in 2007, it was only 8.4%. The ratio of students of six- and eight-grade classes to the total number of grammar school students was 15.3% in 2001/2002 and 13.1% in 2009/2010. The decade is characterised by a shift towards general education that is reflected by data on schooling, and by the number of institutions and organisational units. While the number of institutions of vocational education declined, the number of organisational units and students of special vocational schools steadily rose.

The composition of students pursuing their studies at the secondary level underwent some changes. The rate of girls attending grammar schools did not change considerably, while for vocational secondary schools and vocational schools it declined to a small degree. The major change was that in the period between school years 2001/2002 and 2008/2009 the rate of disadvantaged students rose for all programme types: in grammar schools, from 4% to 7%; in vocational secondary schools, from 6% to 12%; in vocational schools, from 15% to 26%. A consequence of the decline of the number of school-age children was that those institutions and sectors that formerly had tried to select from among applicants did not have such opportunities any longer, and, thus, more and more disadvantaged children were admitted to secondary education.

In the reporting period, data on repetition reflect minor but trend-like changes in certain secondary programmes. In grammar schools, the rate of repeaters has always been very low (slightly more than 1%), and continued to decline in the period from 2001 to 2008. Between 2001 and 2004, the rate of repeaters grew among students of vocational grammar schools; however, in the period between 2004 and 2008, it declined and reached the level of 2001. For vocational schools, the rate of repeaters steadily grew. From 2001/02 to 2008/09 the average rate grew from 5.2 to 6.7%. In school year 2001/2002, 9th graders, more than one-tenth (12%) of the students were repeaters, while in 2008/2009 their rate was 16%.

The number of students acquiring a secondary school-leaving certificate has not changed considerably since the mid-1990s. After 2000, the number of students who acquired secondary school leaving certificate in grammar schools started to increase slowly and reached a level above 40,000 persons. In 2003, the number of students who acquired secondary school leaving certificate in vocational secondary schools decreased to under 50,000 persons. Thus, since 2004, the number of students of the former category has exceeded that of the latter. Most students with a secondary school leaving certificate decide to pursue further studies; the two secondary school types still differ greatly in this respect. In 2010, an average 66% of students with a secondary school leaving certificate applied for admission into institutions of tertiary education (88% in grammar schools and 48% in vocational secondary schools). The vast majority of those taking the secondary school leaving examination studied in full-time programmes; their rate was 87-84% between 2004 and 2008. (The decline of the rate of students with a secondary school leaving certificate between 2007 and 2008 is related to the launch of language preparation grades, as such students acquire a secondary school leaving certificate a year later.) The rate of students who passed the secondary school leaving examination successfully has been favourable for a long period. In 2008, it was 95% (for full-time students, 96.6%). In 2005, the option of the advanced level secondary school leaving examination was introduced. Only a small number of students decide to take this examination as most institutions of tertiary education do not require it. In the period between 2005 and 2009, the rate of students who passed the advanced level secondary school leaving examination at least in one subject declined from 54% to 38% (full-time, grammar schools) and from 12% to 9% (vocational secondary schools).

Figure 5.2. Changes of the numbers of 18-year-olds and students acquiring a secondary school leaving certificate (full-time and adult education) between 1980 and 2009 (persons)



Source: Central Statistical Office, Statistical Yearbook of Education 1999/00–2009/10

5.8. Halls of residence

Halls of residence are intended, on the one hand, to offer the opportunity for schooling (and, thus, for learning) to those students who have not such facilities in the settlements they live in (as a rule, small settlements) or in whose homes the conditions required for studying are not given or, on the other hand, to make schools offering education for a small number of students (special vocational education, arts, etc.) available for students in all regions of the country. This is underlined by the fact that recent surveys show that in the halls of residence the ratio of disadvantaged students is above 40%. In the last 10 years, the network of halls of residence has been characterised by a relative stability. The decline of the number of institutions stopped; the number of students hardly changed; the ratio of students and teachers is practically constant. There was no major change in accommodation indicators either.

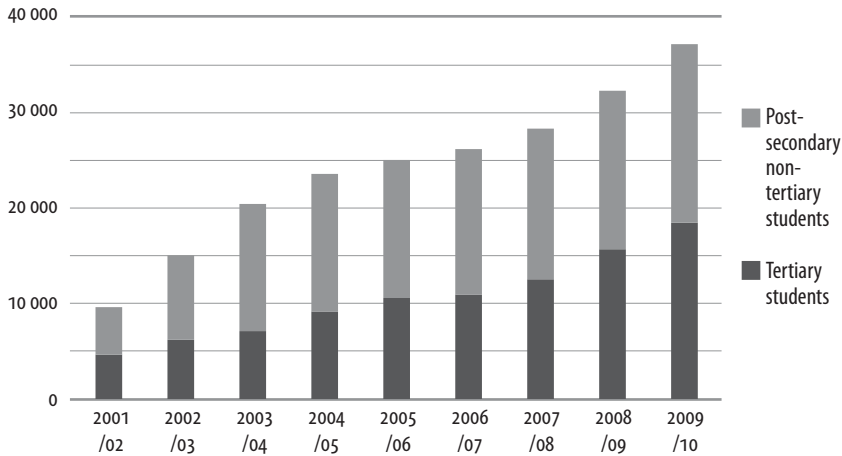
In school year 2009/2010, there were 456 halls of residence, out of which 83.2% were operated by the state. The network offered services for more than 70,000 students and employed 3,218 teachers. The vast majority of institutions (71.6%) are not independent. As for the composition of students, a major indicator is that the rates of students of vocational secondary schools and of vocational schools is 49% and 20%, respectively. The rate of grammar school students was 24.2%, of primary school students, 3.7%, and of others (students pursuing studies in vocational training after the acquisition of the secondary school leaving certificate or in post-secondary non-tertiary education), 3%.

The National Public Foundation for Halls of Residence (NKKA by its Hungarian acronym) published a call for proposals to guide development activities and offered funds for the elimination of the deficiencies of basic infrastructure. To help disadvantaged students, several major programmes were launched that are related (among others) to halls of residence and involve sufficient per-capita support. (Arany János Programme for Halls of Residence, Arany János Programme for Vocational Schools). The development of the institutional system is still hindered by the decrease of funds (almost by 10% in nominal value) and a lack of interest on the part of the operators. An operator is reluctant to finance professional development programmes in halls of residence that accommodate children who do not reside in its district. The operation of halls of residence is made difficult by the fact that 53% of the buildings were not constructed for such purposes and 89% need renovation (out of which 21% need total reconstruction to become able to perform its functions).

5.9. Post-secondary non-tertiary level of education (ISCED 4)

While the government and institutions of education make great efforts to popularise this form of education every year, the number of applicants is still far below the expected. 2009 was the first year when the available capacity was fully exploited – the background for this development was the introduction of a parallel structure of financing. So far, the majority of students participating in post-secondary non-tertiary

Figure 5.3. The number of students participating in post-secondary non-tertiary education, broken down by legal status 2001/02–2009/10 (persons)



Source: Statistical Yearbook of Education

level of education were those young persons who were not admitted to tertiary education at the first attempt. However, the reforms of the structure of tertiary education and the Bologna process exercised a very favourable influence on post-secondary non-tertiary education, as after the introduction of the two-level education, the state offered the opportunity of parallel financing to students: those pursuing BSc studies may participate in post-secondary non-tertiary level of education at the same time. As a consequence of this measure, the target group of post-secondary non-tertiary education may change substantially: so far, the majority of students have been those who were not admitted to tertiary education, while from now on students with experiences in tertiary education may also decide to study in such programmes.

The duration of post-secondary non-tertiary education is four semesters; it may be organised as a full-time programme, with at least 300 class hours. Alternatively, it may be organised as a part-time programme (as an evening course or a correspondence course with minimum 30% and maximum 50% of the class hours of full-time training) or as a distant learning course. Post-secondary non-tertiary education operates in a credit system: during the four semesters, 120 credit points may be accumulated, out of which at least 30 credit points (maximum 60 credit points) will be given automatically if the student pursues studies on a programme of tertiary education type A (ISCED 5A) related to the same area of education. Only institutions of tertiary education are entitled to the accreditation of a programme of post-secondary non-tertiary education; however, education may be conducted by an institute of secondary education as well if it concludes a cooperation agreement with the institution of tertiary education that accredited the programme. In school year 2009/10, 18,511 students participated in post-secondary non-tertiary education at 93 faculties of 29 institutions of tertiary education, while 18,619 students did so in 130 institutions of

secondary education. Data reflect that the two institutional systems are of equal importance. According to the new OKJ, 74 qualifications may be acquired at 26 degree programmes within the framework of tertiary education (this number includes the streaming of degree programmes as well).

5.10. Pursuing further studies in institutions of tertiary education

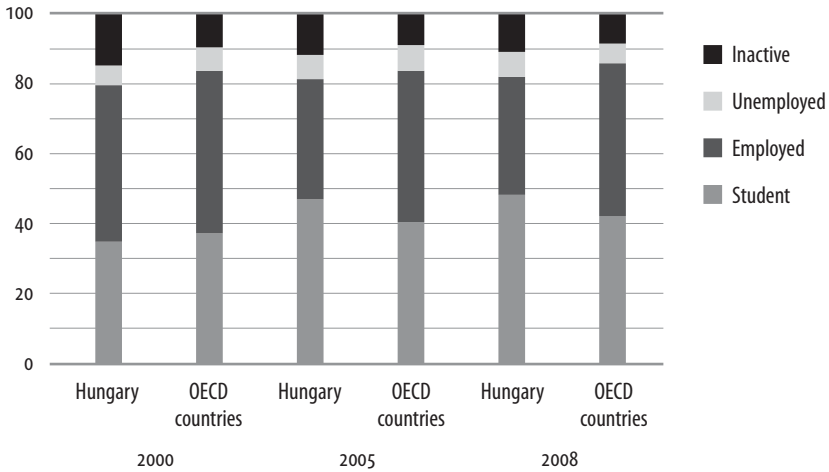
In the last 10 years, trends of application for admission to institutions of tertiary education have been shaped by two processes: the expansion of tertiary education and the reforms of the education structure. Between 2000 and 2008, approximately 40,000-50,000 students – who acquired a secondary school leaving certificate in the given year – applied for admission to institutions of tertiary education. This amounts to half or two-thirds of the total number of students studying at grade 12 (last grade of ISCED 3). The number of students applying for admission to tertiary education reached a peak in 2004, with more than 50,000 students, almost 70% of students of grade 12. In the reporting period, the rate of those admitted was about 40% of students at grade 12 and 60-70% of those applying for admission. With regard to the number of students applying for admission to tertiary education, one of the reasons for the decline was the decreasing number of persons leaving public education. In addition, there are other, more significant factors: fewer people older than those acquiring a secondary school leaving examination submitted an application, and the structure of education was reformed. The introduction of the Bologna system reduced the rate of applicants who already have a degree or are students of another institution, as less and less institutions launched complementary undergraduate programmes or postgraduate programmes. By 2009, this trend had stopped and the number of applicants started to rise again: again, this is related to the introduction of the Bologna system since, as a rule, more students applied for admission to tertiary B type education (ISCED 5B) or post-secondary non-tertiary education (ISCED 4) programmes. For the most popular degree programmes, the trends have not changed considerably in the last four years. The majority of students applying for admission to full-time programmes select degree programmes in the fields of economics, engineering, humanities or social science.

5.11. Transition from education to the labour market

In Hungary, due to the growing popularity of tertiary education, students leave the education system and enter the labour market at a later age, and more and more of them participate in another education programme. In 2000, 35% of young persons of the age of 20-24 years pursued studies; in 2005 and 2008, this rate was 40% and 48%, respectively. In 2000, the Hungarian rate was under the OECD average; in 2005, it was the same, while in 2008 it was considerably higher. This process affects employment data as well. In Hungary, the employment rate is very low (55.3%), which puts Hungary at the bottom of the list of European countries. The employment rate is the lowest for the young (under the age of 29) and the elderly (above the age of 55). In 2000, the employment rate of young persons of the age of 20-24 was 24%, while in

2005 and 2008 was 35% and 33%, respectively. The growth of the rate of students obviously resulted in a decline of the number of those employed; a positive feature is that the number of inactive persons also declined between 2005 and 2008, making it likely that these young persons entered the education system. At the same time, the unemployment rate did not change in the period from 2005 to 2008.

Figure 5.4. The rates of students, employed, unemployed and inactive persons of the age of 20-24 years in Hungary and in the OECD countries in 2000, 2005 and 2008 (%)



Source: Education at a Glance, 2003; 2007; 2010

A nationwide career research of postgraduates in Hungary of 2010 (DPR) concluded that 41% of students graduating in 2007 were employed at the time they obtained their degree. This high rate is due to the fact that students attending evening training or correspondence training programmes were also questioned. For students who graduated from a full-time degree programme, the rate was 16%. The majority found their first employment very soon, within an average 3.6 months; only 3.1% of those questioned failed to enter into the labour market in three years after graduation. The result of the research did not confirm fears related to the 'massification' of tertiary education. This applies to underemployment as well: 14.1% of those questioned said that their jobs are not related to their qualifications in any way. The DPR research analysed employment rates broken down by fields of education. Employment rates are favourable in the fields of medicine and health care, as well as of law and public administration. The rates are average in the fields of economics, engineering and information technologies, changeable in pedagogy and low in the fields of agriculture, humanities, social sciences and natural sciences. The survey highlighted that the majority of young persons with a degree plan to pursue further studies. 38% of students who had graduated in 2007 had another degree in 2010 or had started another degree programme by then. Most of these students had degrees in the field of humanities, economics, law and public administration, natural sciences and social sciences. The research also covered the degree holders' plans related to further education. Data

show that 35% of students who graduated in 2007 are considering further studies. Most of them plan postgraduate specialist training (11.3%), tertiary B type education (ISCED 5B) (10%) or post-secondary non-tertiary level of education (ISCED 4) (9.8%) (Szemerszki, 2010).

Career research is conducted with the participation of students who leave the system of vocational education; this type of research, however, is a recent development and is not based on a solid methodology. The Institute for Economic and Enterprise Research of Hungarian Chamber of Commerce and Industry has been conducting career research since 2008. This research covers the whole country yet exclusively those qualification types that are prioritised by the Regional Development and Training Committees. The survey was prepared eight months after graduation. The results show that the labour market status of skilled workers has deteriorated in the last two years: the unemployment rate of skilled workers who finished their studies in 2008 was 29%; in 2009, it was 36%. A large number of persons decide to work in jobs not related to his or her profession. Researchers point out that the chance for those with vocational school qualification to find employment in their profession is very low, 51%.

The Hungarian Institute for Educational Research and Development performed a career research with the participation of persons who had graduated three years before. According to the flash report of the national representative survey of groups of trades, in the three years under survey three-fourths of the young people entered the labour market yet only 60% had a job at the time of being questioned. During these three years, 42% of them were unemployed; however, at the time of being questioned, only 13% were jobless. Many of them (43%) are pursuing studies at the moment (some do so while working). These data show career starters are in an unstable situation and are trying to find employment, and that their status changes rapidly (active, inactive-jobless, student). The labour market is not open, and the institutions and enterprises of labour recruitment do not operate adequately – this is reflected by the fact that the majority of those questioned found employment in an informal way, mostly with the assistance of their friends or parents.

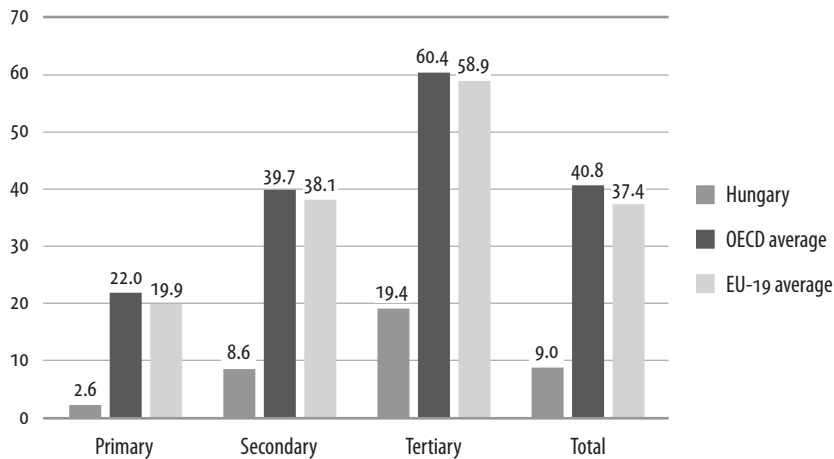
The Hungarian Institute for Educational Research and Development also conducted a career survey of students who finished post-secondary non-tertiary education in 2008-2009. The results show that the majority of the students decided to enter post-secondary non-tertiary education due to their failure to enter an institution of tertiary education and afterwards intend to pursue further tertiary studies. Nevertheless, there is a group of persons who do not intend to acquire a degree. They choose their trade consciously, that is, qualifications with a favourable employment rate. The third group is characterised by heterogeneity: it is made up of persons who have already entered tertiary education. It includes those who drop out, pursue parallel studies at a BSc/BA degree course (ISCED 5A/5B) or have a degree but think that the qualification acquired in post-secondary non-tertiary education contributes to their chances in the labour market. In addition, the survey highlighted that the

majority of the young people have more than one qualification, as they think that diversity and the acquisition of more than one qualification influence their status favourably. Another reason is that students may participate in education free of charge even if they acquire more than one qualifications. For instance, it is a result – among others – of parallel financing that the potential of post-secondary non-tertiary education is exploited, as students of BSc/BA degree programmes may participate in post-secondary non-tertiary education simultaneously.

5.12. Adult education

In Hungary, the rate of persons participating in life-long learning remains far below that of other European countries and the OECD states. The survey of the European Statistical Office conducted in 2005-2007 covered school-based and non school-based education alike. Results put Hungary to the bottom of the list of EU member states, as only 9% of adults participated in training in the 12 months preceding the time of being questioned. This is about one-fourth of the European average (the average rate of EU 27 is 35%) and one-eighth of the Nordic states at the top of the list (Sweden: 73%). The reason for this very low rate is not related to participation in non-formal education, since only 7.2% of the most active age group of Hungarian population (people aged 25-34) participated in such education, while the European average is 19.8%. Sex and qualification also influence participation in such education, in Europe and in Hungary alike. The data broken down by the sex of participants show that in Hungary – in contrast to Europe – the rate of female students exceed that of male students. Comparative international data on qualifications show that in Hungary the rate of degree holders who participate in non-formal education is lower than that of other developed countries. For degree holders, this rate is one-third of the average of OECD and EU states; however, for persons with primary qualification the ratio is one-eighth.

Figure 5.5. Participation of persons aged 25-64 in formal and/or non-formal education, broken down by qualifications, 2007 (%)



Source: Education at a Glance, 2010. Based on Table A5.1.b of OECD

According to the data of the Adult Education Survey of 2008, only 2.5% of adult persons (aged 25-64) take part in school-based education in Hungary. This is the second worst rate in Europe. The European average is 6%, while the indicators of the Nordic countries (Sweden, Norway) are much more favourable (16%). For formal education, the trends characteristic of non-formal education are discernible: women, the youngest age group, the economically active and persons with higher qualifications are overrepresented. In Hungary, life-long learning lasts until the age of 35; in older age groups, the rate of people participating in education falls sharply.

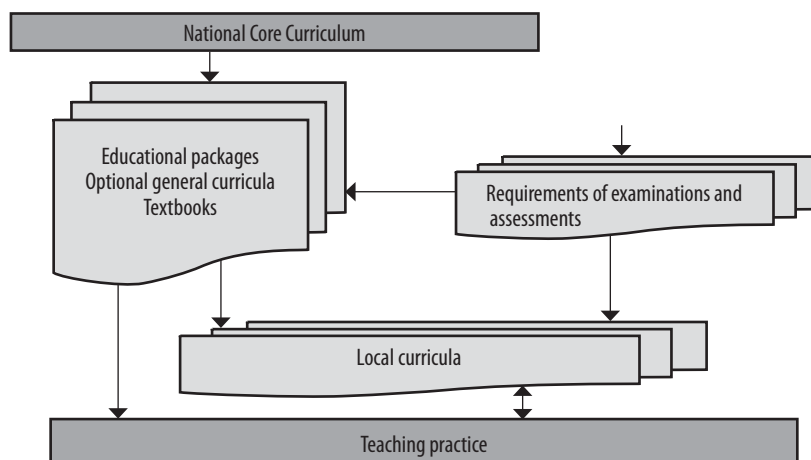
To define the reasons for these depressing results, the Central Statistical Office gathered data on non-formal education within the framework of a survey on labour force in 2009. The new data reflect some positive developments: in 2009, 9.9% of the adult population had taken part in non-formal education in the 12 months preceding the time of being questioned. With regard to sex and qualification, the trends reflected by the previous survey remained: the participation rate of women and highly qualified persons is higher. The Central Statistical Office also examined the effects of economic activity, place of residence and age on training. It was established that participation rate declines with age: 13% of the youngest age group (aged 25-34) take part in such education, while for the oldest age group (aged 55-64) it is only 4.5%. The level of a person's economic activity also results in great differences: the participation rate of economically active persons is 14%, while for the inactive it is 1.3%. Surveys show that in the Hungarian population a large group of uneducated persons is recreated again and again.

6. The contents of teaching and learning

6.1. System and changes of contents regulation

Since 2000, Hungarian regulation on contents has been characterised by efforts to strike a balance of elements of regulation on output and input and by the introduction of a three-level regulation on curricula (National Core Curriculum, optional general curricula, local curricula). Due to its strategic nature and function to orientate, the National Core Curriculum sets a direction for developers of the second level of regulation on content: developers of frame curricula and education programme packages, authors and editors of textbooks and the developers of national-level tools of measurement and assessment. At the third level of regulation on contents (that of local school curricula), schools may compile their local curricula in three ways: (1) the school applies a compiled general curriculum; (2) the school adapts and uses various curricula, educational programmes and programme packages while compiling its own local curriculum; (3) the school prepares a local curriculum of its own. Regardless if a school adopts a curriculum or prepares its own curricula, it will take into consideration the requirements of public examinations.

Figure 6.1. The system of contents regulation



Source: Authors of the present Chapter (based on Vass 2003)

The revision of the National Core Curriculum (NCC, introduced in 1999 and modified in 2003) started in conformity with the 2006 Amendment of the Act on Public Education. During the pedagogically oriented revision, the Core Curriculum was revised on the basis of the following points: (1) the definition of key competences and their harmony with the EU framework of key competences; (2) the introduction of the competence of orientation in everyday financial issues, (3) value centeredness of prioritised development tasks, the modification of and greater emphasis on certain development tasks (active citizenship, learning, preparation for adult roles). The new NCC confirmed the strategic nature of the core curriculum while maintaining its development function. The Government Decree of 2007 that stipulated the issue of the NCC defined a new system of regulation of content. It did not modify the previously defined phasing in of NCC-2003 (starting on 1 September 2004 in the first grade of ISCED 1), but added that – if necessary – institutions of public education are obliged to introduce the modifications specified by the core curriculum of 2007 into their pedagogical programme by 31 December 2007.

The 2003 Amendment of the Act on Public Education established the basis of the general curriculum accreditation procedure. The content of general curricula, the rule and procedures of submission for approval, and the rights and obligations of participants of the accreditation procedure are stipulated by further legislation. The general curricula define the system of subjects, the obligatory number of class hours for each subject, the structure of the material and its division among the grades, and the output requirements of the final grade of a given stage, making references to the special fields of culture and subjects in vocational schools and vocational secondary schools. Since 2007, the accreditation of general curricula has been administered by the Education Authority, within the framework of an administrative procedure. The General curriculum Committee, the National Public Education Council and the National Council for Public Education Policy participate in the preparation of the approval of general curricula. The amendment made it possible to submit ‘partial general curricula’ for given contents, for relatively small curriculum units or phases of education; as a result of the central programme package development of HRDOP, 28 partial general curricula have been submitted. The programme packages of education and pedagogy were created on the second level of regulation on contents in 2003, when the sectoral administration committed itself to the establishment of instruments that support a competence-based process of learning and teaching. The results of the development launched in 2004 and funded by the ESF were tested in practice in 2005 in 120 institutions of public education. In 2006, 361 institutions – submitters of successful proposals of HRDOP – undertook the introduction and propagation of competence-based procedures and contents. The teachers who participated in the development attended a preparatory professional and technical course to be able to adapt the programme packages.

The Hungarian Institute for Educational Research and Development (OFI by its Hungarian acronym) examined the implementation of programme packages of competence development in the 316 schools that participate in HRDOP. During the

survey, data were collected with document analysis, interviews and questionnaires; directors, teachers and students were asked to give their opinion on the introduction and effects of programme packages. As the survey results show, implementation was seriously hindered by short deadlines and by the fact that the programme packages received by the schools were expensive and arrived late. According to the answers given by directors, three years after the introduction, only one-fifth of the schools continue to use the original teaching aids (albeit the obligation for maintenance expires in 2013) and only 40% of them use such aids only partially, as a supplement to other textbooks. In one-fourth of the institutions, teachers teach 'in conformity with the competence development approach' but do not apply the original programme packages. With regard to pedagogical modernity, directors found the programme packages satisfactory – they think that the most positive effects of the programme packages were the development of teachers' general knowledge of methodology function, cooperation with the teaching staff and the changes of approach, which was confirmed by the answers given by teachers. As reflected by the survey, the most severe problems were weak commitment on the part of the teaching staff, excessive workload, the short deadline and the lack of preliminary consultations. Teachers expected that students' motivation will be stronger and the intensity of their level of activity will grow. Teachers – while acknowledging numerous result of the programme package – did not experience a major improvement of general school performance. They also criticised the implementation process. Students had a positive opinion of the programme packages, liked the teaching aids, were happy to work in teams, found the classes more interesting than before, and the methods and tasks motivated them more efficiently.

Schools were obliged to revise and compile their pedagogical programme and local curricula in a phasing-in system defined by school type in the period from 2004 to 2010 and in conformity with the institutional implementation schedule of NCC 2003. Working with a representative sample of 8- or 6-grade grammar schools, the OFI examined the process and results of the institutional implementation of the National Core Curriculum. Of all the schools, 62.1% defined key competences and integrated them in their curricula (the rate is 63.6% for primary schools, only 52.2% for grammar schools and 48.8% for schools for national minorities). Taking into consideration of the implementation of NAT 2007, it is to be noted that more than half of the schools (51.6%) apply some general curriculum or adapted versions of such curricula. A considerable number of schools (17.4%) prepared their local curriculum on the basis of several general curricula; however, only a few institutions decided to operate exclusively on the basis of local curricula prepared by themselves. This means that general curricula play a decisive role in the formulation of the content of the local curricula of schools. With regard to the pedagogical programmes under survey, it is to be noted that 53.7% of the local curricula of all schools are in full compliance with criteria defined by legislation and with professional requirements, while the rest (36.3%) do not comply with the regulation adequately or content is missing in certain fields.

6.2. The role of output measurement and assessment in contents regulation

An increasingly significant element of Hungarian contents regulation are the examination requirements defined for end points of public education and – to a considerable degree – measurement requirements defined for prioritised end points of pedagogical phases. The new secondary school leaving examination, the new OKJ professional examination and the National Assessment of Basic Competencies play an increasingly important role in quality assurance and system integration. None of these teaching aids are intended to contribute directly to the processes of teaching and learning, yet the transparent requirements, the competence-focussed tasks and – last, but not least – the highly operationalised and detailed assessment guides of the two school-leaving examinations improve not only teachers' assessment competence but also the full range of teachers' general culture of pedagogy.

Students may choose from a wide range of subjects for the secondary school leaving examination. At the medium level, Hungarian language and literature, mathematics, history and a foreign language (to be selected from 25 languages or Hungarian as a foreign language) are obligatory subjects. As for the optional subject, grammar school students have the opportunity to select from 87 subjects, while for vocational secondary school students – due to the basic vocational examination subjects – even more options are available. The range also includes examination subjects developed and submitted for accreditation by the individual institutions – partly for objectives related to reputation and partly for the purpose of placing proper emphasis on subjects that represent the specific profiles of schools. At advanced level, students may choose from approximately 50 examination subjects. After the new National Register of Vocational Qualifications was issued, in the period from 2007 to 2009, the development of examinations and the publication of competence-focussed, module based requirements for qualifications and for examinations started. The scale of this work is vividly illustrated by the fact that there are almost 450 qualifications and – due to alternatives, or streaming, i.e. qualifications building on other qualifications, and partial qualifications – approximately 2000 output points. The reference framework of competence assessment describes those specific competences whose presence is to be assessed. As a rule, to complete reading comprehension and mathematical tasks students are required to understand facts and correlations in everyday texts, to solve mathematical problems and to be able to use mathematical tools. These tasks are related to more than one subjects, and their objective is to make students use their theoretical knowledge in various situations and practice mathematical operations.

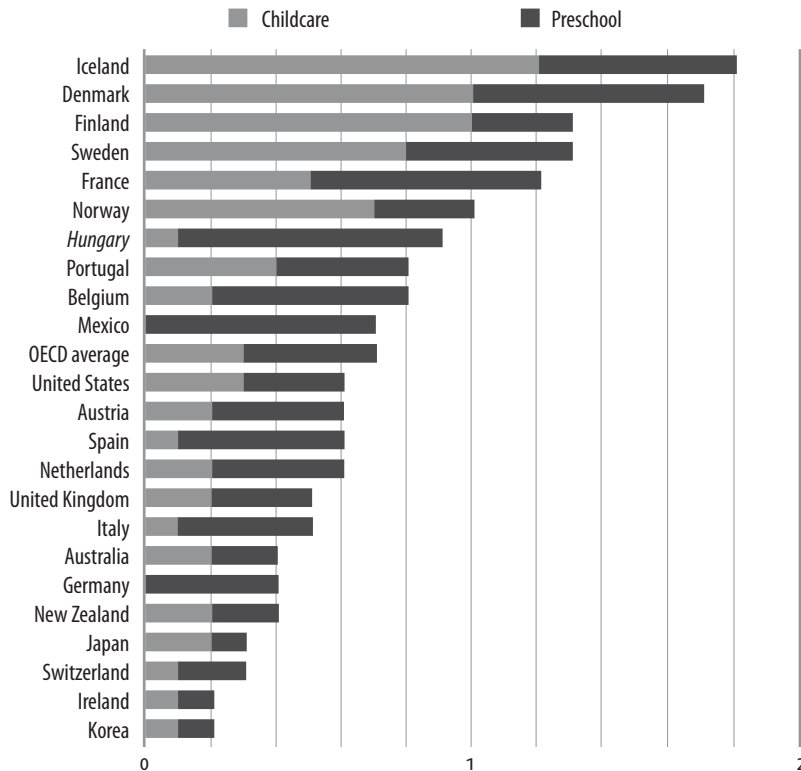
6.3. Changes in contents in preschool education (ISCED 0)

The responsibility of care for young children belongs to two areas which – since the government change in 2010 – have fallen under the supervision of the Ministry of National Resources (NEFMI by its Hungarian acronym). The institutional daycare provided for children of 0-3 years of age – which falls into the scope of basic social

and child welfare service – is supervised by the State Secretariat for Social, Family and Youth Affairs; while the institutional education of children of 3-6 years of age – that is, preschool education, which is a part of public education – is managed by the State Secretariat for Education.

In conformity with the benchmark accepted by the European Council, by 2010 at least 90% of non-school age children above the age of 3 should receive formal childcare service; the minimum rate is 33% for children under the age of 3. With regard to the age group above 3 years, eight countries have a rate above 90% and three countries – including Hungary – have a rate close to 90%, while almost one-third of the member state failed to reach 70%. As for the age group of 0-3 years, five countries performed better than the target rate (33%); however, the majority are lagging far behind: in eight countries, only 10% or less children of this age group have access to formal childcare. Hungary is in the latter category: in 2006, the rate of children attending crèches was no more than 8.5%. Hungary spends 0.9% of its GDP for preschool education, which is the seventh highest rate among those of the 24 OECD countries.

Figure 6.2. Expenditure on childcare and preschool education in OECD countries (as a percentage of GDP), 2003



Source: The child care transition, 2008

countries. However, less than one-tenth of this amount is allocated for childcare in crèches. A probable reason for this low allocation rate is that in Hungary mothers have the option to stay at home until the child reaches 3 years of age and receive an allowance which is either fixed-rate or proportional to the mother's salary.

However, the majority of mothers do not have options: albeit crèches are free of charge, in many cases there are no available places for years and the penetration of crèches varies significantly by regions and by settlement types. Hungary has more than 3,000 settlements, out of which 264 have crèches. There are several villages that lack public transport connection to settlements where crèches operate. To handle the problem of the low number of crèche places and the total lack of childcare in small settlements (where many children face multiple disadvantages), preschools with surplus capacity started to launch crèche groups in 2004 in a spontaneous way – obviously, with the knowledge of the operators – yet ignoring existing legislation. Recognizing the reasonability of this grass-root initiative, the Ministry of Education and Culture – provided that certain strict conditions of quality assurance are met – made it possible for some institutions to admit children who reached two years of age into institutions for children of 3-6 years of age. The legislation allows that in settlements with less than 10,000 inhabitants where the low number of children renders it impossible to operate separate crèche and preschool groups, institutions that perform the education tasks of a preschool and a crèche may operate. Nevertheless, to maintain the integrity of these two homogenous institution types (crèche and preschool), legislation specifies that each settlement is allowed to operate only one joint group of children. To guide the work of such unified preschool institutions with regard to content and methodology, a professional recommendation was compiled at the request of the two responsible ministries.

The minimum conditions of childcare and education in crèches and the detailed aspects of professional work are specified by the National Master Programme for Education and Care at Crèches. The Programme emphasizes contribution to the emotional education and the socialisation of young children, assisting their cognitive processes and the improvement of their independent activity and creativity. In its content and structure, the new document falls in line with the National Master Programme for Preschool Education; consequently, it would be possible to provide a single-phase contents regulation for the education of young children and, thus, to contribute to the development of children of 0-6 years of age along unified principles.

The 2006 Amendment of the Act on Public Education stipulated that the responsible minister is obliged to assess the implementation of the Master Programme for Preschool Education on a regular basis, but at least every five years. In 2008, a questionnaire survey was conducted: preschool directors were questioned about the strengths and weaknesses of the Master Programme and about their opinion on the modification of the Master Programme, and they were asked to give proposals on principles and on certain fields of education. Two-thirds of the directors – while recognizing the values of the previous Master Programme, such as focus on education,

the diversity of personality development and the emphasis on the role of play – requested a revision of the Master Programme. They also asked for the declaration of the joint responsibility of preschools and parents, and – with regard to educational tasks – for an increased emphasis on tolerance, environmental awareness and competence development. The Government adopted the amended Master Programme in 2009, pursuant to which preschools were obliged to compile their new educational programmes by 1 September 2010.

The educational work of preschools was contributed to by recommendations on the learning process and skills development aids (cards) that were prepared within the framework of HRDOP as development areas of individual programme packages for preschools (play, traditions, literature, the active understanding of the world around us [mathematics, environment], mother tongue, language, visual education, movement, drama). A prioritised SROP project is the establishment of a model for a network of preschools. The establishment of a daycare system that is independent of the institutional system of education for young children, based on an English model (Sure Start Children's Centres) is intended to improve access to preschool education. The target group of the project constitutes of families with children of 0-5 years of age who live in underprivileged settlements and have limited access or have no access to good-quality services. Sure Start Children's Centres offer support to children in severe poverty at the earliest possible age so that their abilities may emerge in an optimal way and the foundations for their successful school performance may be laid. In 2009, 36 Children's Centres started to operate; by 2013, another 120 may open.

6.4. School-based adult education

Non-school age young persons and adults with low educational attainment or early school leaving may acquire basic and/or secondary level qualification (ISCED 1-3) in the public education system, within the framework of school-based adult education. As a rule, this type of education is offered in the form of part-time (evening or correspondence) programmes. A pillar of the contents regulation of school-based adult education constitutes of the general curricula published in 2001 whose subject structure and contents – in conformity with the requirements of NCC – make it possible for adult students to study foreign languages and informatics, that is, subjects of key importance with regard to their chances in the labour market. In 2005, the secondary school leaving examination unified the output requirements of secondary schools regardless of education programme types and schedules, and, thus, made the secondary school leaving examination which concludes evening and correspondence programmes equivalent to the qualification that may be acquired in full-time programmes. As a rule, teachers at evening programmes are the same who teach in full-time programmes. The vast majority of teachers who teach adults are not skilled in adult education; a targeted in-service training programme has not evolved yet. There are no available teaching aids that fit adult education in terms of methodology; therefore, adult students use textbooks written for full-time students albeit such books support individual learning at home only to a limited degree. Another draw-

back is that – besides full-time, evening and correspondence programmes – there are no significantly flexible programmes that would enhance the popularity of formal adult education.

6.5. Basic arts education

In Hungary, the ratio of art subjects to annual class hours is higher than in most OECD countries. For the younger age group, the rate is 14% (12% in the OECD countries), while for children of 12-14 years of age, it is 10% (9% in the OECD countries). However, in grades 5-8 of primary school (ISCED 2) and in secondary schools (ISCED 3), the actual rate of arts classes often does not equal to the minimum rate defined by NCC. Institutions of basic arts education form a part of the public education system; nevertheless, studies pursued there do not qualify as a part of compulsory schooling. Some schools are independent institutions with this single task (schools of basic arts education, music schools, arts schools), while some of them are parts of other units of the schools system that perform other educational tasks. Presently, arts education is offered by 728 institutes (by 2,644 organizational units).

As a part of a fast expansion, the number of students of basic arts education reached its peak in school year 2004/2005 (336,000 persons). After that, the number of those who used such services declined considerably. The sharpest decline took place in school year 2006/2007 (57,000 persons). Out of the four branches of art (music, dance, fine arts and applied arts, theatre and puppetry), dance suffered the greatest decline: by 25,000 persons in the same year. Until 2010 the decline of the number of students was considerable in all branches of arts (between 20% and 35%). This was due to the introduction of fees in school year 2005/06, the reduction of per-capita support and the establishment of a strict qualification system for arts schools. The latter means that with regard to per-capita support those institutes of basic arts education are prioritised that have a qualification or pre-qualification defined by the ministerial decree on the quality assurance and quality development of public education.

6.6. The education of children with special educational needs

In Hungary, efficient legislative requirements guarantee that children who need early assistance in early development or special education that conforms their disabilities have access to adequate care at all levels of public education, regardless whether - as necessitated by their demands and needs - they participate in integrated education or attend special institutions or programmes of SEN education. The Act on Public Education specifies those diagnosed disabilities and permanent disorders that serve as a basis for the establishment of eligibility for special education. The establishment of special educational needs (SEN) falls into the scope of responsibility of expert committees. To avoid irreversible categorisation, after the acceptance of a demand for special education, expert committees are obliged to reconsider the decision one

year after a child is declared eligible for SEN education, then every two years until the child reaches 12 years of age, and, after that, every three years.

The 2000s were characterised by two discernible trends: the ratio of children/students participating in integrated education to those attending special SEN institutions was continuously rising: from 23% (in 2001/02) to 58% (in 2009/10). This trend may partially be attributed to the decline of children's number, the institutions' need for additional per-capita support, the growth of the number and the improvement of the skills of experts who assist with integrated education, the commitment of education policy that is free from any party bias and the public support that continued right until the end of the decade. Another reason is that the number of such students is low at the input and output points of the system; however, their number in primary schools is high.

Table 6.1. Changes of the number and rate of SEN children/students participating in SNE programmes and in integrated education (SEN; formerly referred to as 'disabled'), 2001/02, 2005/06–2009/10 (persons)

		2001/02	2005/06	2006/07	2007/08	2008/09	2009/10
Preschool (ISCED 0)	SEN children (number)	4,249	5,327	5,324	4,660	4,917	5,027
	Integrated (persons)	2,888	3,896	3,840	3,286	3,509	3,820
	Integrated (%)	68	73	72	71	71	76
Primary school (ISCED 1 and 2)	SEN students (number)	46,575	60,651	61,585	57,931	52,945	52,572
	Integrated (persons)	8,263	29,930	33,277	32,719	30,128	31,762
	Integrated (%)	18	49	54	56	57	60
Trade school	SEN students (number)	619	2,188	2,699	3,631	4,196	5,252
	Integrated (persons)	619	1,841	2,582	3,412	3,971	5,057
	Integrated (%)	100	84	96	94	95	96
Grammar school (ISCED 3)	SEN students (number)	351	777	1,071	1,156	1,487	1,769
	Integrated (persons)	100	572	858	955	1,355	1,635
	Integrated (%)	28	74	80	87	91	92
Vocational secondary school (ISCED 3)	SEN students (number)	425	954	1,333	1,731	2,172	2,652
	Integrated (persons)	389	943	1,324	1,669	2,141	2,652
	Integrated (%)	92	98	99	96	99	100
Specialised trade school	SEN students (number)	6,594	8,797	9,563	9,773	9,785	9,968
Total	SEN students/children (number)	58,813	78,694	81,575	78,775	75,502	77,240
	Integrated (persons)	12,259	37,182	41,881	42,041	41,104	44,926
	Integrated (%)	23	47	52	53	54	58

Source: Calculated by Irén Vágó and Tamás Híves on the basis of the data of the Statistical digest of the Ministry of Education and the Statistical Yearbooks of Education

The rate of SEN children in preschools has been stagnating for years now at 1.5%. At the same time, if compared to the rate of primary school children (ISCED 1 and 2) eligible for SEN education – although international comparison is problematic due to differences in definition –, the latter is higher (6.8%), while in secondary educa-

tion (ISCED 3) it is 3.4%. The primary reason for this decline is the fact that SEN children reach the age when the compulsory education ends before acquiring secondary qualification and, thus, enter the labour market with practically no chances. The level of integration varies greatly by pedagogical phases and by educational programmes. Secondary education, however, is characterised by total division: while 51% of those SEN children who manage to enter secondary education are admitted to special vocational schools, a programme that is totally segregated, 92%-100% of vocational school students and secondary school students pursue further studies in institutions offering mainstream education. With regard to the education of SEN children participating in integrated or separated education and of children with mild mental disabilities, the work of primary schools and preparatory vocational schools is assisted by central framework programmes issued by the minister. To a certain degree, different rules apply to compliance with requirements on study and examination in the cases of SEN students.

6.7. Education of national and ethnic minorities

The laws in force ensure wide-ranging educational rights in public education from pre-primary school to secondary school in the area of national and ethnic minority education. National and ethnic minority languages can be taught in the following forms: (1) mother tongue education (the language of the education is a minority language), (2) bilingual education (minority language and literature and 3 more subjects taught in the minority language, making up a total of at least 50% of lessons), (3) traditional minority language teaching (teaching of minority language and literature from grade 1, 2 lessons per week), (4) extended minority language teaching (minority language and literature and 3 more subjects taught in the minority language, making up a total of at least 35% of lessons), (5) Roma minority education (option 1: no minority language teaching, only ethnic studies and 2 lessons of minority cultural activities per week; option 2: Roma language teaching as part of the traditional minority language teaching scheme), (6) complementary minority education (traditional language teaching programme made up of separately organized compulsory classes outside of the main lesson plan).

The content of minority education is regulated by the Guidelines for the Pre-school Instruction of National and Ethnic Minorities and the School Education of National and Ethnic Minorities; the following educational tasks need to be included in the pedagogical programme of such schools and implemented. The teaching of ethnic studies is compulsory in all grades, and the teaching of minority languages is compulsory almost everywhere in varied formats. The frequency of the various forms of minority language teaching, apart from parent and student demands, is greatly affected by the fact that due to strict curricular requirements, few institutions can launch intensive language teaching programmes. In education where all subjects are taught in the minority language and in bilingual education, the chronic shortage of minority language textbooks causes a constant problem. The requirements for pre-primary schools are more relaxed, therefore they can start programmes with relative ease; therefore, the

frequency of the forms of minority language education there reflects the state of minority languages in Hungary better. Education in the mother tongue is most widespread among Serbs, bilingual education is most widespread among Germans and Romanians, playful language teaching is most widespread among the Croats and Slovaks and is at 100% among the Slovene community. In the 2000s, minority teacher training has been able to provide a sufficient number of pre-primary school teachers, primary school teachers and minority mother tongue language teachers, but with the Bologna transition, the situation changed by the end of the decade. The number of students in ethnic minority teacher programmes fell to less than half. If the situation does not change, a severe teacher shortage is expected within a few years.

6.8. Teaching and learning foreign languages

The goal of the Világ-Nyelv language teaching strategy approved in 2003 and the tools for its implementation did not change significantly in the second half of the decade; the emphasis was on the implementation of developments and innovations. The linguistic preparatory training was introduced in academic year 2004/05, after the 2003 amendment of the Act on Public Education. The goal of the training is to allow one classful of students per secondary school and grade (as of 2010, any number of students depending on demand) to intensively develop their foreign language and IT competencies. One of the primary goals of the linguistic preparatory training is to improve the access of disadvantaged students to language classes – as their parents cannot afford extracurricular language classes. Courses of this type can be organized in any language (including minority languages) with the school operator's permission, if the grammar school or vocational secondary school undertakes to: 1) prepare students for an advanced level secondary school leaving examination; 2) devote at least 40% of the weekly compulsory classes that make up the preparatory course (at least 11 hours) to foreign language courses, and at least 25% of the remaining time (at least 4.13 hours) to IT courses and the remaining 10-11 hours to ability development.

A comprehensive impact study on the first year of linguistic preparatory trainings that started in 2004 shows that this type of training is delivering significant results, but it has not been very successful at promoting equal opportunities.

The study showed that students took more secondary school leaving examinations (among grammar school students, the number of those who took the secondary school leaving examination in two languages doubled, but the results were well below expectations among vocational secondary school students) and more students took successful foreign language examinations, but expectations of acquiring higher-level linguistic competences were only partly fulfilled. At the medium level, they performed significantly better than other students, and a lot more of them took the advanced level tests, but their average results at the advanced level tests were poorer than those of their peers who study languages in a more traditional manner. As a result of strong admission selection, the proportion of students with poor family backgrounds was half the general ratio in the first three years of linguistic preparatory training courses.

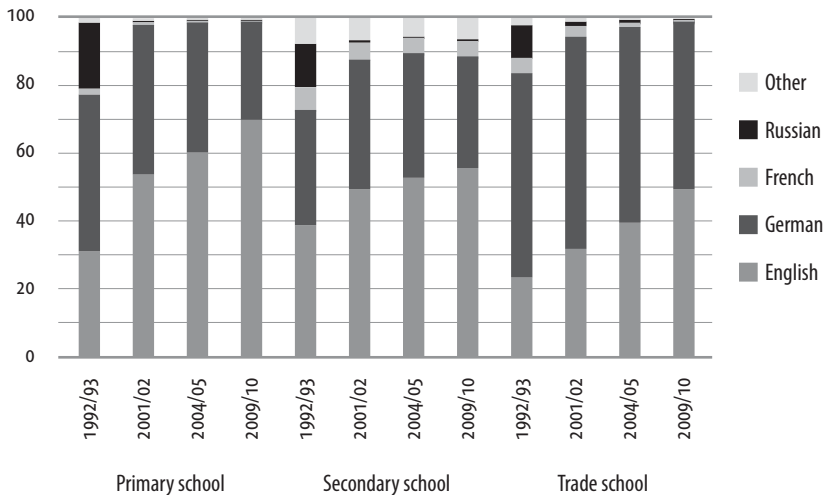
It is also an important result that, as a result of feedback from the competency-based medium and advanced level secondary school leaving examination requirements based on the Common European Framework of Reference for Languages of the Council of Europe into educational processes and methods, secondary schools now teach languages in a more modern manner. Now at last, secondary schools offer their students foreign language certificates that can be used outside of the school itself, and which can replace a state language examination certificate in some circumstances.

No statistical data is collected in Hungary on playful foreign language teaching before school age. These classes, generally given by language teachers (much like other extracurricular classes in pre-primary school) attracted sharp criticism by the end of the decade. In a survey carried out in January 2009 on the review of the Basic National Programme of Kindergarten Education, 45% of the close to 1000 heads of pre-primary school cited the regulation of extracurricular classes (foreign language classes) as important or extremely important. The 2009 amendment of the Basic National Programme of Kindergarten Education banned the organization of extracurricular classes in the time allotted to teaching, but such courses can still take place during the opening hours of the institution, after the time allotted to teaching, in the afternoon, and the head of the institution can rent out the institution's free rooms for courses. The institution and the teachers are not responsible for such courses as they are not part of the local teaching programme.

After the introduction of normative financing based on student groups, the reduction in funding from local governments and the economic crisis, the expansion of language teaching that started at the time of the fall of Communism ended at almost all levels and types of education. After peaking in 2008/09 at 70.7%, the number of students learning a foreign language in primary school fell back to the 2000 level (65.2%) in 2009/10. There are two main reasons why the number of language learners fell by fifty thousand in a single academic year: demographic change caused a reduction of 13,000, and the reduction of early (grades 1–3) language teaching caused a much larger drop of 37,000, as it is not compulsory to provide language classes to students in the first years of primary school, and cutting such classes can help reduce costs. Despite a mild increase in student numbers, the number of students learning a foreign language fell in all secondary school types. The growth of the number of language learners in trade schools – which has been one of the engines of language teaching growth since the introduction of the National Core Curriculum – stopped. The most significant positive development in secondary school language teaching in the last few years has been the dynamic growth of the class numbers of vocational secondary school language teaching. The most challenging aspect of the unified secondary school leaving examinations (covering both grammar schools and vocational secondary schools) for vocational secondary schools is perhaps the preparation of students for the compulsory language examination; the institutions responded by drastically increasing the number of foreign language classes. It is true, however, that the students of vocational secondary schools can still only learn one language.

Two processes that are crucial with regard to the quality of language teaching slowed down without breaking off completely: the large-scale reduction of the number of unqualified teachers and the normalization of the number of students per teacher. The shortage of quality teachers essentially ended by the middle of the first decade of the new millennium; between the middle and the end of the decade, the proportion of unqualified teachers among teachers of English and German, the most sought-after languages, fell from 3.7 and 3.5% to 2.4 and 1.8%, respectively. The student/teacher ratio did not worsen despite the fact that the number of teachers fell in all languages due to the decreasing student numbers and language preferences. The most drastic reduction took place among German teachers (loss of 21%, 1800 teachers) and French teachers (14% reduction). The student/teacher ratio varies between 73 (English) and 16 (Russian), with German at 62, which still makes it possible to teach languages in most schools in small groups, dividing up classes. As there is no compulsory foreign language, schools offer a broad choice of languages (close to 20 in total), with English teaching becoming even more dominant in all school types since the start of the new millennium. The hegemony of English is clearest in primary schools. The various languages are much more evenly matched in secondary schools. The number of students who are studying a language in basic lesson numbers fell drastically everywhere, to 10–15% for English and German and 2–3% for less popular languages. Since the introduction of the unified secondary school leaving examinations, the advantage of grammar school students is only demonstrable in high-lesson-number, intensive language learning formats, such as bilingual programmes and linguistic preparatory years.

Figure 6.3. Proportions of full-time students learning various foreign languages in primary, secondary and trade schools, 1992/93, 2001/02, 2004/05, 2009/10 (%)

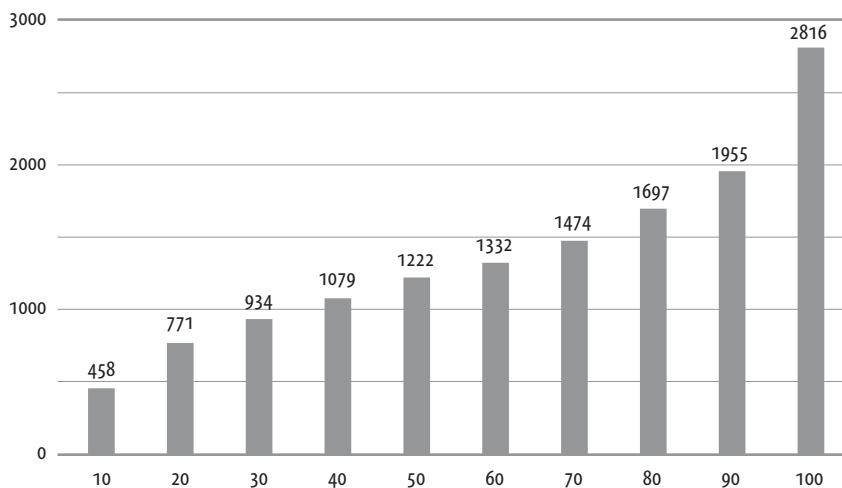


Source: Ministry of Education statistics, Education Yearbooks

The review of individual language learning paths shed light on important problems with regard to quality, efficiency and equal opportunities in language teaching. Hungary devotes significant resources to language teaching even compared to other countries, but, while students spend an average of 10 academic years learning one language, there are great inefficiencies.

One of the most serious problems is that the language skills acquired in primary school are not fully exploited due to the problems surrounding the coupling of primary and secondary education. Two-thirds of students restart language learning at the secondary level from scratch, or from beginner level. Every sixth student switches languages in the course of their language learning path, most often when entering secondary education. It has become evident that the inefficiencies that are threatening the effectiveness of language teaching in the short and longer term can only be significantly reduced through more in-depth local and regional planning and coordination. International statistics have demonstrated for years that Hungary devotes significant resources to language teaching. With an average of 1,300 language classes, generally devoted to learning a single language at ISCED 1 and 2 levels, Hungary is far (50-60%) ahead of other European countries (except for the multilingual Belgium, Luxembourg and Malta) (Key Data on Teaching ..., 2008). In secondary education, 30% of classes are language classes, putting Hungary behind Luxembourg in the statistics, and Hungary leads the rankings in the weekly frequency of language homework. There is no unified regulation on the starting and ending time of language teaching, standard, intensive and even more intensive courses coexist, and many students are temporarily or permanently exempted from language learning, contributing to one of the main characteristics of language teaching in Hungary:

Figure 6.4. Distribution of student in deciles of total number of classes in grades 1–12 by average number of foreign language classes (%)

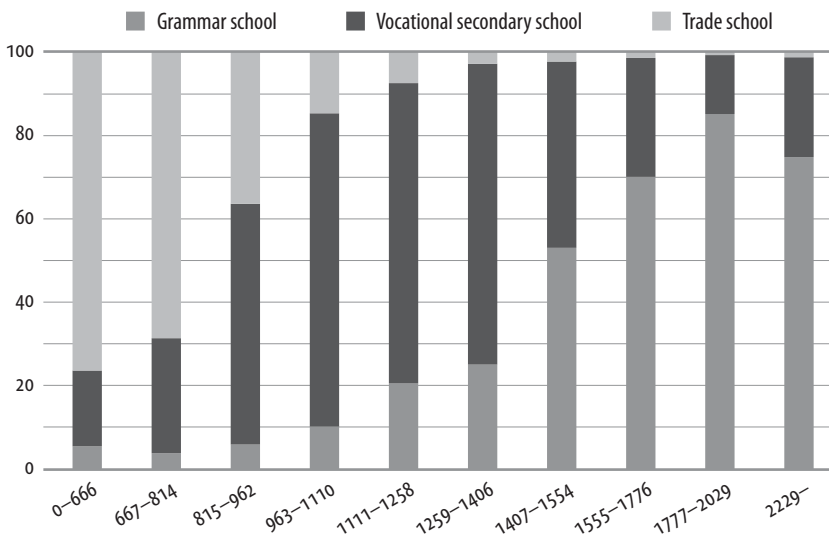


Source: Vágó, 2007

the very uneven distribution of resources among students. Using the difference in resources devoted to the top tenth and the bottom tenth as an indicator of inequalities, we find that the best-served 10% gets more than five times more language classes than the bottom 10%.

The differences between school types in terms of the number of language classes are significant as well: grammar school students receive an average of 1,363 classes in a foreign language (with an additional 400 classes spent on studying a second foreign language), with vocational secondary school students studying a foreign language in 1,240 free classes at school – twice as much as students in much richer countries. Trade school students, however, learn languages with almost 10% lower class numbers (711) than even the compulsory minimum of 770. The lower-than-required average class numbers are due to the fact that the proportion of students exempted from language learning is highest in trade schools (7%). Although the cause for the exceptions is most usually dyslexia, some social groups are more affected by exclusion from language learning than others – irrespective of school type.

Figure 6.5. Distribution of student in deciles of total number of foreign language classes in grades 1–12 by secondary school programmes (%)



Source: Vágó, 2007

6.9. Digital culture in public education

The Government that was in office between 2006 and 2009 viewed the issue of the information society not as a comprehensive framework for modernization, but as an infrastructure issue. The Ministry of National Development of the new Government that took office in 2010 published in December 2010 the mid-term (2010–2014) strategic document entitled Digital Renewal Action Plan, which is closely connected to

and relies on the EU 2020 action plan and digital agenda. In a departure from previous attitudes, digital culture – including associated concepts such as information technology and media knowledge, digital skills and media competencies – is now represented in EU and Hungarian strategic documents not only in the context of education and training, but also in the context of determining the role of the public sector, business entities and possibly civil society, taking into account equal opportunities as well. Hungary's medium-term ICT action plan defines goals to be achieved based among other things on the differences in infrastructure availability and the now permanent digital divide. The document is especially critical of the work of the school system: „The level of ICT education in primary and secondary education is low, and the education is not application-oriented; it does not provide the proficiency necessary for using ICT tools in everyday life and in business. The main goal set for 2012 by the action plan is improving the digital skills of the population and businesses through educational programmes, aiming for an optimal harmony of state-run and state-financed initiatives and bottom up initiatives organized at the local level or by civil society. The related tasks of public and higher education and the associated action plans of the New Széchenyi Plan – which will provide much of the financing – are not described in the strategic document of the ministry responsible for education, but that of the Ministry of National Development.

The IT equipment purchases completed in public education in the last 5–6 years were largely funded by the EU. The measure ‚Developing the infrastructure of kindergartens and primary education institutions’ financed ICT investments as part of the Regional Operational Programme. The goals of the other measure also funded by the EU as part of the Social Integration Operational Programme, ‚Efficient IT infrastructure in the service of central educational systems’, are as follows: a) setting up the infrastructure for the development works in various areas within the SROP (public education, equal opportunities, higher education), and improving the infrastructure of b) systems serving central administration (the Information System of Public Education, public education admission tests, secondary school leaving examinations, student IDs, Higher Education Information System, higher education admission tests etc.) and c) Sulinet Digital Knowledge Base. The Hungarian state has been providing access to funding for IT developments in public education institutions since 2005 (IT normative support). The legal framework was provided by the Budget Act of each year and the annual decree issued by the minister responsible for education. The ministerial decrees contained some changes each year (requirements attached to the various categories in which funding is awarded, the detailed rules and structure of the group of beneficiaries, factors affecting the amount of funding a single institution can request, budgets etc.) and therefore institution operators and school principals do not simply need to fulfil administrative requirements (procuring declarations and certifications, meeting deadlines etc.), but they also need to keep track of rule changes as well. The amount of money distributed in this scheme fell by 20% – more than one billion HUF – between 2009 and 2010. Based on the monitoring report on the use of funds in 2007 (although this covered administrative, operational and library software) some conclusions can be drawn regarding the ten-

dering process. General criticisms from school principals extended to the following issues: a) convoluted technical implementation of requesting, b) short time available for purchases and c) difficulty in replacing the funding lost due to the reduction of the normative support.

Table 6.2. Computer and Internet usage data by institution type between 2003/04 and 2009/10

Institution type	Initial computer stock	Computers with Internet access out of total	Students who use a computer	Teachers who use the Internet for education	Teachers with IT qualifications and knowledge	Computers/ total no. of students
Pre-primary school						
2003/2004	2,421	596	6,398	151	1,139	135.3
2005/2006	3,713	1,290	17,810	494	2,772	88.0
2007/2008	4,880	2,454	16,338	639	3,110	66.4
2009/2010	6,916	4,223	16,799	1,033	3,913	47.5
Primary school						
2003/2004	58,991	28,446	498,135	9,716	22,038	15.4
2005/2006	70,328	51,535	515,046	15,691	29,958	9.6
2007/2008	83,874	69,191	533,557	20,836	32,365	7.8
2009/2010	98,961	86,045	543,061	25,167	32,876	7.8
Trade school						
2003/2004	12,976	9,242	89,075	1,660	1,775	9.5
2005/2006	15,957	12,734	95,283	2,208	2,407	7.7
2007/2008	18,819	16,366	98,772	2,771	2,692	6.5
2009/2010	24,368	21,511	110,116	3,169	2,958	5.3
Special trade school						
2003/2004	1,089	566	4,559	123	188	7.5
2005/2006	1,557	1,037	6,441	221	342	5.6
2007/2008	1,833	1,387	6,092	319	399	5.3
2009/2010	2,332	2,009	7,496	444	434	4.3
Grammar school						
2003/2004	21,819	18,712	162,194	4,408	5,548	8.7
2005/2006	26,143	23,678	182,088	7,332	7,068	7.5
2007/2008	31,057	29,139	191,315	8,542	7,483	6.4
2009/2010	38,274	35,895	193,005	9,600	8,024	5.3
Vocational secondary school						
2003/2004	52,491	40,842	236,139	5,854	6,635	4.7
2005/2006	61,335	52,377	241,511	8,156	8,341	4.0
2007/2008	65,501	57,390	236,990	9,202	8,701	3.7
2009/2010	75,600	68,424	246,123	9,522	8,750	3.2

Source: Calculations by Tamás Híves based on the 2003/04, 2005/06, 2007/2008 and 2009/2010 education statistics databases of the Ministry of Education.

The results of ROP, SIOP and SROP investments and developments are clearly reflected by national educational statistics. In pre-primary schools, there are on average 1.5 computers per organizational unit, and 61% of them have Internet access. Both of these figures show that some institutions are not equipped for digital connectivity. The computer park of primary education grew 1.7 times between 2003/04 and 2009/10, and 48% of school computers had Internet access in 2003/04, compared to 87% in 2009/10. The number of primary school students per computer was halved. Among secondary education institutions, hardware availability improved the most in special trade schools (3.5 times) and it improved the least in vocational secondary schools, which had been the best equipped in this regard at the outset. The differences between training programmes in the ratio of computers with an Internet connection were significantly reduced between 2003/04 and 2009/10; this indicator was between 87% and 94% by the end of the decade.

In 2009, the Institute for Education Research and Development used a survey to examine computer and Internet use trends among 9th grade students in primary and secondary education. The results confirm that families with children try to provide computers and Internet access at home, but it is also clear that – as in many other areas – grammar school students are doing better than vocational secondary school students, who in turn are doing better than trade school students, reflecting the financial means of parents (the families of more than twice as many trade school students as grammar school students were eligible for child-care benefits when the child was in 8th grade).

Table 6.3. Distribution of 9th grade students' responses regarding computer availability at home and the source of their IT knowledge by school type, 2009

Question	Vocational secondary		
	Grammar school	school	Trade school
Does the student have a desktop computer at home? (%)	92.2	90.4	74.7
Does the student have a laptop computer at home? (%)	36.9	26.9	16.8
Does the student have Internet access at home? (%)	91.9	85.2	61.0
Does the student have a printer at home? (%)	75.0	65.1	40.4
At what age did the student start to use a computer? (Average)	9.2	9.5	10.2
In which grade did the student start learning IT? (Average)	4.8	4.8	4.9
To what extent does the material taught at school match the student's IT knowledge? (Average)*	1.9	1.9	1.9
What % of the student's IT knowledge is from classes at school?	41.6	39.0	36.0
What % of the student's IT knowledge did they learn from family members or friends?	24.8	26.3	30.0
What % of the student's IT knowledge is self-taught?	33.6	34.7	34.0
Did the parents receive child-care benefits for the child when the child was in 8th grade? (%)	17.9	24.5	41.3

Source: Secondary education entrants... , 2009

* Possible answers: 1= too low level; 2= appropriate level; 3= too high level.

The survey also wished to find out if teachers use ICT tools in other classes apart from IT classes and whether they like them. The results show that teachers generally use projectors – i.e. they use ICT tools for illustration. Students' answers show that the use of modern technology in itself does not transform classes; ICT tools do not automatically make the learning environment innovative and efficient. 27% of ninth-grade students reported using digital study materials (including interactive whiteboards) in the previous 7 school days.

A 2009 research evaluated 461 electronic study materials made by five different textbook publishers in terms of pedagogical value, usability, content and aesthetics. According to the research report, the supply is even across grades, with slight bumps in richness at entry points (grades 1, 5 and 9), but the range of supply varies more across disciplines. The amount of material made for the disciplines Man in nature (30%) and Hungarian language and literature (23%) is very high, with the smallest selection available in Arts (4%), IT (2%) and living foreign languages (1%). In general, the study materials are suited to the age group they are targeted at, but methodologically, they tend not to support problem solving, the development of thinking skills and cooperative learning; they generally promote frontal teaching. In terms of format and aesthetics, the material on natural sciences tends to be richer and more attractive than the material on the humanities.

6.10. The infrastructure of education

The state of the property and equipment stock of Hungarian public education is well illustrated by the fact that in a 2009 survey among the general public, when asked about what aspects of education the state should spend more money on, out of the 9 possible answers, 41% of respondents put the renovation of schools and classrooms in the top 3, and 45% voted for equipping schools with modern technology. According to a survey carried out for a ministry in 2007, 85% of school buildings is in need of renovation. In the counties and Budapest districts in the worst situation, more than one third of schools use emergency classrooms (national average: 28%), and the condition 55% of toilets, bathrooms and shower rooms and 50% of electric equipments and networks is considered appropriate, while Internet penetration is at 92% and 91% of schools have a computer room and the condition of furniture – the physical environment of daily learning – is appropriate in only 49% of institutions.

The school building development programmes financed from the European Union's structural funds served the goal of improving the infrastructure situation. Between 2004 and 2007, the number of gymnasium halls and buildings increased in primary educational institutions by 54% and 47%, respectively. In the programme announced in September 2007, pre-primary schools and schools were renovated (e.g. heating system upgrades, lighting renovation, gymnasium upgrades). Due to the 500% oversubscription, the Government raised the budget by 40% by reallocating funds. In 2008, applications from 253 beneficiaries were approved, covering 500 locations and more than 500 settlements. The Ministry of Local Government decided to improve

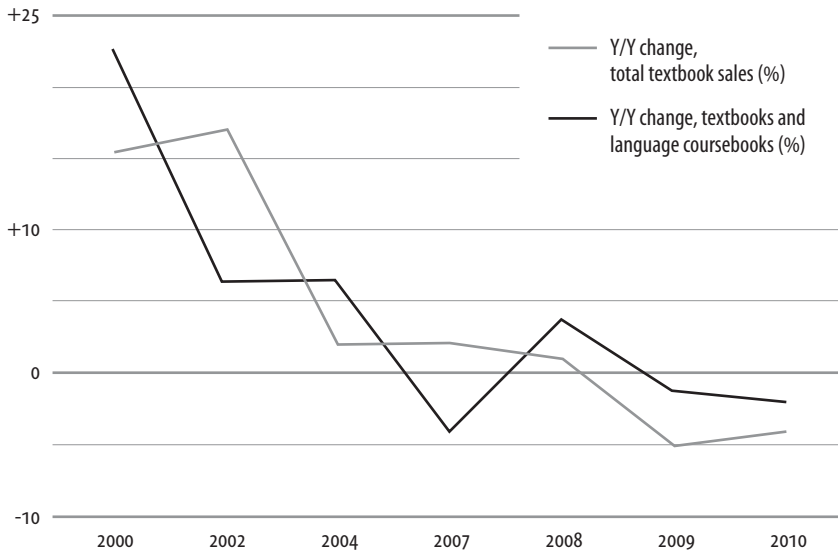
the material conditions in 146 schools located in small towns and villages, awarding on average 14 million HUF to each. 62 renovated school buildings opened in 2009, and a further 300 renovations will be completed by 2013. The Government announced the Szemünk Fénye Programme for the energy efficiency of educational institutions as part of the Environment and Energy Operational Programme, aimed at helping the operators of public education institutions that receive Government funding improve their energy use. Between May 2008 and August 2011, the lighting and heating systems of 124 public education institutions are/were modernized.

6.11. Textbooks, the textbook market

The 2001 Act on the Rules of the Textbook Market was amended in 2007, and the 2004 Decree on textbook certification, textbook support and the supply of textbooks to schools was amended several times, most recently in 2010. Due to the changes in the legislative environment, all actors have to abide by ever stricter and ever more detailed rules. In accordance with the 2007 amendment, students can only learn from books listed in an official list, and public funding can only be spent on purchasing books from this list. Schools have to spend at least 25% of the textbook funding they receive on „purchasing textbooks, recommended and compulsory reading material, study material on electronic information media and textbooks printed in small numbers”, with the books remaining in the school’s ownership and made available to students who are entitled to free textbooks via loans. The textbook supply and ordering process is managed electronically by schools in accordance with an algorithm and deadlines mandated by law. The Educational Authority operates the Textbook Database Management System, which provides various types of search features (by subject, grade, publisher etc.) on the publications on the current textbook list prior to ordering. The official textbook list published on the website of the Educational Authority in order to help with textbook ordering contains 3712 books to be used in public education in academic year 2011/12 (3686 books and 26 digital publications that are not available online) and 856 books to be used in vocational education. Thus, the official list does not contain non-traditional assets in the numbers one might expect based on the quantity of content available on the Internet. Apart from traditional general knowledge textbooks, the list includes 303 competency-based programme packages developed with EU funding. The normative support of 10,000 HUF/eligible child (12,000 as of 2011) can only be used by local governments, as was the case with the complementary so-called general textbook contribution of 1000 HUF/child provided up to academic year 2010/11.

The textbook and language book market grew by 23% between 1999 and 2000; this dynamic growth stopped in 2002, and, even though there was an upturn in 2008 after the 2007 low point, further contraction is expected by the end of the decade. The cause of these changes is in all likelihood the change of legal regulations on one hand, and the economic crisis on the other.

Figure 6.6. Changes in book sales in Hungary, and in particular changes in public education textbooks between 2000 and 2010 (retail prices, previous year = 100%)



Source: Website of the Hungarian Publishers' and Booksellers' Association

However, the new regulation of the textbook approval process – according to 2006–2009 data – did not reduce the number of submissions or that of approvals. In the period under review, contrary to expectations, market mechanisms (the change of the balance of supply and demand) did not reduce prices: between 2005 and 2009, the average price of purchased textbooks increased by 68% in grades 1-4, 72% in grades 5-8 and 71% in secondary education. At the same time, the upper limit for textbook purchases for each book type defined by technical parameters – set each year by the minister responsible for education – rose much less, by 12% on average.

7. The world of schools

7.1. The world of school management and institutions

In the reporting period, the objectives related to the development of the schools' way of operation continued to play an important role. A part of the in-service teacher trainings supported by the European Union confirmed that the success of schools depends very much on a partner-centred way of operation, the quality of school marketing and the competencies of the management. A survey conducted with the participation of school directors in 2009 showed that heads of institutions are convinced that the competitiveness of an institution is contributed to by three simultaneous activities. The first category of activity entails the reinforcement of the internal control of teachers' professional activity, the improvement of the efficiency of classes and teachers' knowledge of methodology, and the prevention of the deterioration of students' performance. The second category is that of the improvement of the communication of the institution, with special emphasis on the quality and efficiency of communication with parents and of the internal communication between professionals. Participation in innovation (whether with the purpose of development inspired by Hungarian or international actors) falls into the third category. Some expectations towards the heads of institutions are closely related to the internationalisation of the education policy. The head of institutions regard enhanced participation in international projects and networks based on the exchange of information and knowledge as a new opportunity. For this, within the hierarchy of the institutions a special status is given to those persons who lead projects related to external calls for proposals that are important in terms of the reputation of the institution and, as a rule, are of a definite duration. At the same time, the role of deputy directors who directly assist the work of directors has gained importance in the last ten years, as – due to changes in the economic and social environment of schools – the activity of directors shifted towards the tasks of a manager.

The role of class heads that has been in existence for a long time is particularly exposed to the transformation process of the profession. Their duties are still not clarified, and there are more and more expectations towards class heads while the conditions required for the performance of their tasks had hardly changed. More than half of the teachers (57%) undertake the duties of a class head besides teaching. In addition to giving special class head classes, they work an average 3-3.5 hour per week to perform their duties as class heads. Their workload, however, varies greatly: 10% of them spend more than ten hours per week with such duties. A vast majority of direc-

tors asked within the framework of a school survey conducted by the Hungarian Institute for Educational Research and Development in 2009 said that administrative work related to the a given class (95%) and keeping contact with specialised teachers (84%) obviously fall within class heads' scope of responsibility. With regard to pedagogical tasks, the directors pointed out that class heads have the most responsibility in the field of community building, dealing with students' proposals and maintaining contact with external partners, with special emphasis on parents. Class heads are offered help with their traditional tasks by experts who assist pedagogical work; however – as highlighted by two-thirds of the directors – class heads continue to perform tasks related to career choice and to the organization of free-time activities. In 81% of schools, class heads have one less obligatory class hour so that they can carry out their extra tasks; however, 15% of the institutions make such reduction. Nevertheless, almost every school pays a small amount of class heads' allowance supplement.

7.2. The general feeling among teachers and the professional atmosphere at schools

Presently, the profession of teachers is undergoing a change. A part of the effects that result in such changes are due to the transformation of the students' and their parents' attitude to school, of their general behaviour and of the norms of communication; in addition, the demands defined by education policy in the period under analysis also lead to such changes. In many cases, schools are under an increased workload due to the extension of teachers' competencies, the inclusive education of students with multiple disadvantages and students with special educational needs, the focus on the measurement of schools' performance, the guidance given to schools by experts, the growing importance of inter-institutional cooperation and the tasks related to reorganisation.

The change affects teachers' everyday activity as well: their profession is more and more defined by extended demands. At the same time, teachers have the impression that the trust placed in their profession by the education management and society is diminishing. The results of international surveys draw attention to the fact that teachers are dissatisfied and – as an obvious result – undermotivated. The TALIS survey of OECD concluded that Hungarian teachers' satisfaction with their job and their perception of the efficiency of their works puts them at the bottom of an international list. A characteristic risk of teachers' career is professional burnout. In Hungary, this is a field that is not researched in its entirety; nevertheless, correlations defined so far show that the major factors that prevent burnout are peer help, recognition, support by colleagues and management and, finally, the stability of the network of relations. Another important finding is that the risk of burnout does not increase in direct proportion to the time spent in the profession; on the contrary, it decreases by time. Therefore, the rate of those at risk is higher in the younger generation and lower in the older generation of teachers.

The general feeling of teachers is strongly influenced by working conditions, as they spent the majority of their work time at the school. Fifty-four percent of the teachers think that the number of computers available for them is adequate, while 44% say that access to computers at school is not satisfactory. The majority of them find the size and the lighting of the classrooms satisfactory; still, it is a problem that only one-fifth of them can use a room for recreation at the school. The development projects funded by the European Union offer numerous professional in-service training for teachers. According to the survey, directors state that more than three-fourths of teachers participated in training on methodology, while two-thirds of them attended training on their specialised subjects. The rate of participants of trainings on pedagogical measurement and assessment, on manager training, information technology and foreign languages was approximately one-third; for personal development trainings, the rate was one-fourth. Teachers from certain institutions that participated in the implementation of development projects complained about the large number of training programmes and, occasionally, about the ill-defined focus of such training. In other cases, problems occurred as a result of a discrepancy between the type of the in-service training programme and the available training programmes.

7.3. Contact with the parents

The establishment of school districts as stipulated by the 2006 amendment of the Act on Public Education affected 204 settlements and approximately 170,000 persons in Hungary. On 92 settlements, schools were closed. As a consequence of the declining number of children, further reorganization and closures of institutions may be expected. As a result of school mergers, grades 1-4 and 5-8 of primary schools (ISCED 1 and 2) often operate in different settlements, which causes problems for numerous families. The selection of a secondary school shows a more complex picture. As a rule, parents with low educational attainments prefer schools that are closer to their place of residence and offer qualifications which may be acquired in a short time and are useful on the labour market. When choosing institutions of education, parents with higher education attainments tend to prioritize opportunities for further studies in tertiary education, the quality of teachers' work, the reputation of schools, good atmosphere and a favourable composition of students. Two qualitative surveys called attention to the fact that parents with lower educational attainment tend to participate to a smaller degree in the decision on their children's' further studies at the secondary level (ISCED 3).

The web-based forms of keeping contact have an ever growing importance in the communication between schools and parents. Experience shows that the density of information flow in itself strengthens the relations between families and schools. A survey – conducted with the participation of parents of students who attend 'second chance' type schools that are exposed to the risk of dropout – shows that parents appreciate it very much if teachers can be contacted on the phone at any time, are open to personal meetings and inform parents regularly about facts related to the child's life at school (that is, not only facts about grades).

7.4. The world of students

In the reporting period, special emphasis was laid on students' healthy lifestyle and 'everyday physical exercise'. Childhood obesity is an increasingly serious public health problem. As shown by reports on students' health, the rate of overweight children is increasing in all age groups: in the last ten years it has tripled. On the basis of the body mass index it may be established that 6-23% of boys of 3-18 years of age and 7-24% of girls of the same age group are obese. The national food policy action plan discussed in 2010 set the objectives to extend knowledge on children's healthy diet, to control the range of food and drink offered by vending machines at school and to reformulate the School Milk Programme, School Fruit Programme and the food used in public catering. The number of malnourished children also rose steadily. Between 1997 and 2007, their rate multiplied by four in certain age groups. Data of a representative survey performed in Budapest show that malnutrition is affected by sex and age; the rate is between 5.1%-7.2%. Obesity is partly due to the fact that the rate of persons who regularly do sports is low. The minimum daily amount of exercise required for a healthy lifestyle (low-intensity exercise for 60 minutes per day) declines by age. Twenty-eight percent of boys in grade 5 (the first grade of ISCED 2) get an adequate amount of exercise regularly; however, in grade 11 (the third grade of ISCED 3) this rate is only 15% for boys and 5% for girls. Hungarian teenagers are the least active in the region: the intensity of their activity is the lowest in the Central and Eastern European region with respect to all extracurricular activities.

A survey on the substance use habits (drugs, alcohol, etc.) of young persons highlights that in 2007 there were no major differences with regard to the consequences of substance use compared to previous years. It was the consumption of alcohol that caused most problems: 35% of students in grades 8-10 (the last grade of ISCED 2 and the first two grades of ISCED 3) had had a conflict related to the consumption of alcohol in the year preceding the survey. A much lower rate (8%) of students reported that they had already used illegal substances. The rate of involvement in drug abuse is the highest in the capital (31%); the rates of county seats, towns and villages are much lower than that. Thus it may be established that the rate of drug consumption and the size of a settlement are directly proportional. Data on frequency show that for students questioned alcohol consumption and smoking are the most dangerous types of deviation: 35% and 28% students of the age of 15-19 smoke and drink alcohol on a regular basis, respectively.

The Internet is a medium widely used by students. This is mainly due to the fact that a very large number of students have access to the Internet at home (for instance, in 2009 83% of 9th-graders had Internet access). A survey conducted with the participation of teenagers shows that two-thirds of them have a personal profile on an Internet-based social networking site. Albeit most people use the Internet as consumers, for the purpose of entertainment, more and more of them take part in the creation of content in some form. 17% of the young people of the age of 14-19 write a blog, and during the weekend spend 22% of their time reading blogs. Seventeen

percent of them have already uploaded a video made by themselves to a file sharing community site. Conventional media continue to play an important role. Although the importance of the influence of television declined with the use of online tools, it remained a factor that shape children's opinions and way of thinking. Until the end of secondary school, an average Hungarian young person spends 15,000 hours in front of the television and 12,000 hours at school.

An analysis of free-time activities of young persons at the age of 14-21 highlighted a correlation between the place of residence and free-time activities. Free-time activities that are centred around peers and consumption are characteristic of people living in big towns and county seats, while activities aimed at gaining intellectual or artistic experience or activities centred around techno devices – that is, spending the majority of free time in front of the computer, on the Internet – are characteristic of persons living in villages or small towns. An important aspect of active participation in public life is membership in a civil organization. Less than one-sixth (15%) of the young people are member of an organization. The most popular organizations are sports associations, sports clubs and church organizations.

7.5. Aggression and the atmosphere of schools

Society's awareness of aggression at schools has increased a lot in the recent years. According to an analysis of the data of research on aggression broken down by school types, schools that offer education that is concluded with a secondary school leaving examination face considerably less problems than primary schools and vocational schools do. In primary education (ISCED 1 and 2), the majority of the problems are related to maintaining discipline, while in vocational education (...) serious breaches of discipline are frequent. Schools in East Hungary are the ones that are exposed to this problem to the greatest degree. At schools, verbal and social aggression is much more widespread than physical abuse. A survey highlights that almost two-thirds of students may be regarded as aggressive due to shouting or cursing, one-third of them due to humiliation and one-fourth of them due to acts that can be considered as exclusion. Eighteen percent of them committed acts of physical aggression, such as jostling, hitting or kicking. Research established that a favourable school atmosphere contributes to the dissuasion and prevention of the manifestations of aggression. With this regard, it seems to be a positive development that – as established by ISRSD-2 research on the latent deviancy of 7th-9th graders (the last two grades of ISCED 2 and the first grade of ISCED 1) – schools where students find an adequate community may prove to be more efficient in the education of students with a relatively disadvantaged social background (and thus more liable to deviancy and low performance) and in preventing the dropout of such students.

Aggression in school have a negative influence on teachers' work and general feeling of teachers. According to TALIS, an international research on teachers, in Hungary a very high rate of teachers (77%) think that vulgar speech and cursing hinders teachers' work seriously (the average rate for all countries involved in the survey is

37%). The rate of teachers complaining about disruptive behaviour at class is also high (70%; the average for all countries is 58%). In Hungary, 35% of teachers think that intimidation among students constitutes a serious problem (the average international rate is 33%). Problems with discipline are closely related to the composition of students in a given school. Surveys show that in institutions where the rate of disadvantaged students is high, the inadequate functioning of conventional school hierarchy seems to be unfavourable with regard to the achievement of the institutions' goals. The situation is especially problematic in vocational schools where students do not have and do not intend to acquire those competences that are prerequisites of the life as a student and as a member of a community. Some parents whose children attend such schools demand stronger and authoritarian action on the part of the teachers. In grammar schools, measures taken to maintain discipline are less strict and are based on verbal tools; in vocational secondary schools, the majority of teachers make entries in the school report books, while in vocational schools most teachers order students to leave the classroom, discuss the issue with the parents and only a low rate of them apply tools of maintaining discipline related to the student's achievement at school.

Another serious problem is unjustified absence from school or avoidance of school; central education management has started to pay attention to it, as in Hungary in 10 years almost 40,000 young people (approximately the total population of a small town) fail to finish primary school (ISCED 1 and 2). Therefore, the government makes attempts to oblige school-age students to attend school by law. In August 2010, the government replaced family allowance with education and schooling allowance, which means that in duly justified cases schooling allowance may be suspended.

A special case of compliance with the requirement of compulsory schooling is that of private students, when a school-age student is exempted from attending school regularly as long as he or she meets educational requirements (normally certified by an examination). According to the statistics of the Ministry, there were 5632 private students in 2008. The Educational Authority's report on private students highlights that a high rate of those children who were given private student status at the request of their parents are disadvantaged children (48%) and children with multiple disadvantages (35%). The majority of them attend a much lower grade than the one which would be adequate for their age. In the schools under survey, more than 30% of 8th-grader private students (last grade of ISCED 2) were 18 years old, while 70% 5th-graders (first grade of ISCED 2) were 15 years old or older. Within the category of private students, there is a subcategory of children whose extracurricular activity makes it impossible for them to attend school on a daily basis: child actors and top-level sportsmen often decide to pursue their studies as private students. Young persons who are subjected to disciplinary proceedings and are about to undergo disciplinary sanctions due to behaviour also become private students. Cases of child protection service highlight that teachers frequently recommend the opportunity of becoming a private student as a last resort. According to the data of the research entitled 'Impact Assessment of the Inclusive Education Policy', the rate of private stu-

dents is four times higher among Roma students than among non-Roma students: in 2010, the rates were 1.5% and 0.4%, respectively. The research establishes that in the last six years the rate of private students grew among the Roma children even though the previous government adopted stricter rules on the acquisition of private student status.

7.6. Teaching and learning

In recent years, the support of the use of information and communication technology at schools has been a prioritised objective of national development plans. The national projects of content and infrastructure development have been ongoing for years now (PublicNet Programme, Sulinet Digital Database [SDT], Sulinet). However, the intensity of the use of IT devices at classes has not changed considerably, although more than 90% of children enjoy classes where IT devices are used more than conventional classes. The lower level of the use of ICT is due to reasons related to infrastructure, learning organisation and pedagogy as well as to the fact that for teachers the preparation for and leading of classes supported with ICT entails considerable extra work. A survey on the ICT background of learning of 9th-graders (first grade of ISCED 3) emphasises that the web pages created for students by SDT and Sulinet are partially successful in the cyberspace. Eighty percent of students use Wikipedia or other online encyclopaedias and 52% think that these pages are useful for the learning process; for SDT contents, these rates are 43% and 17%, respectively.

Research shows that the learning organisation activity of schools is currently undergoing gradual but major changes. Thirty-eight percent of the institutions apply the project method for several subjects; 31% of them for one subject. Fifteen percent of the institutions teach several integrated subjects; 22% do so with regard to one subject. As for the time structure of teaching, the vast majority of institutions give 45-minute classes, and only a few percent organise teaching in classes shorter or longer than that.

As reflected by a survey done with the participation of school directors in 2009, among the target group specific programmes organised by primary schools the review of the material in groups as an extracurricular activity is the most popular form (88%); and programmes aimed at the inclusive education of student with special education needs are also frequent (84%). Almost three-fourths of the institutions reported that they offer programmes aimed at individual development and tutorials for gifted and talented children. Seventeen percent of the institutions launched programmes for Roma students; 14% offered such programmes for students belonging to a national minority.

Besides obligatory classes, curricular or extra-curricular special classes are also important. Parents say that such special classes are mostly related to sports (30%). The second most popular category of special classes is that of foreign language classes: 18% of the students participate in such activities. With regard to other subjects,

children of the 14% of the parents attend special classes where material is being reviewed. Thirteen percent take part in special music classes and 9% attend – formerly popular – IT classes. Special classes of foreign languages (67%) and music (62%) entail extra costs. For sports classes, 50% of the participants pay a fee; for preparation classes for admission examinations and for the review of the material 31% and 28% pay, respectively.

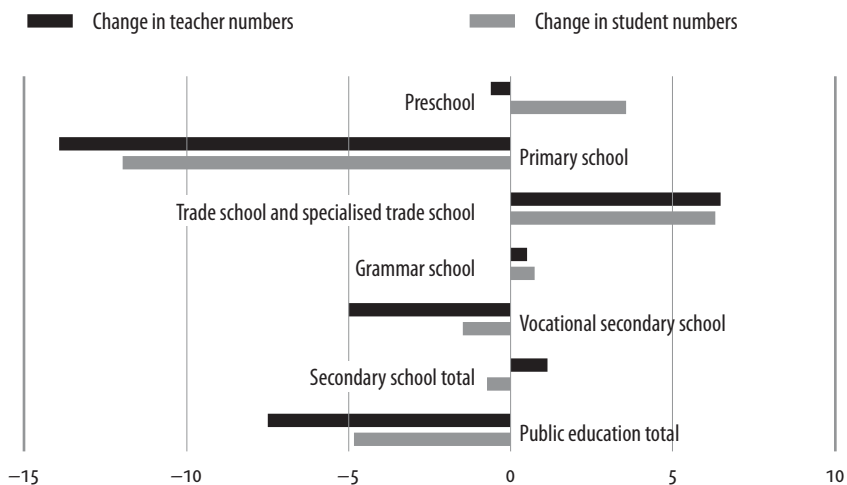
8. Teachers

The Hungarian and international research results of the last decade have clearly proven that, among the factors education policy has the power to influence, the performance of students in school is most affected by the quality of teachers' work. Therefore, in order to improve the performance of students and the quality of education in general, schools need to attract and retain a workforce made up of skilled, well-prepared teachers.

8.1. Teacher numbers

There are more teachers per student in Hungarian public education than the EU or OECD average. This is still the case despite the fact that in recent years, the system started to adapt to the fall in the number of students caused by demographic change. In recent years, the number of school-age children kept falling: between 2005/06 and 2010/11, the number of primary school pupils fell by more than 100 thousand (12%), while the number of secondary school students remained largely unchanged and the number of children in pre-primary schools increased by 3.5%. In contrast with previous trends, teacher numbers fell in the lower levels of public education

Figure 8.1. Changes in the number of teachers and students between 2005/06 and 2010/11 (2005/06=100%)



Source: Education Yearbook 2005/06 and Statistical report on the preliminary data from the data collection at the start of academic year 2010/2011, NEFMI

in the period under examination as well; the reduction was 14% in primary schools and 0.6% in kindergartens. The number of teachers working in secondary education was largely unchanged. Overall, the number of teachers working in public education fell faster than that of students in the last five years. In 2010/11, 152,883 teachers worked in all public education institutions; 7.5 percent less than in the 2005/06 academic year.

Despite the reduction of the number of teachers, there are fewer children per teacher in Hungarian pre-primary schools and both the lower and upper grades of primary schools than the OECD or EU 19 average. At the level of secondary education, the proportion of teachers and students approximately matches the EU19 average.

Table 8.1. The number of students per teacher in Hungary by ISCED level as compared to OECD and EU19 averages, 2005 and 2008 (students)

ISCED level	2005			2008		
	OECD	EU 19	Hungary	OECD	EU19	Hungary
Pre-primary school education (ISCED 0)	15.3	14.0	10.7	14.4	13.2	10.9
Grades 1-4 of primary school (ISCED 1)	16.7	14.9	10.6	16.4	14.6	10.6
Grades 5-8 of primary school (ISCED 2)	13.7	11.9	10.4	13.7	11.5	10.8
Secondary education (ISCED 3)	13.0	11.8	12.2	13.5	12.0	12.3

Source: Education at a Glance 2007, table D.2.2 and Education at a Glance 2010, table D.2.2.

Apart from the differences in the teacher number proportions at the various levels, Hungarian public education employs more teachers overall than the EU or OECD average. In 2007, the number of teachers per 1000 children was almost 10 higher in Hungarian primary and secondary schools than the EU19 average, and 16 more than the OECD average. The need for a high number of teachers in Hungarian public education is not a result of smaller classes, but a combination of several factors: the number of classes, teachers' compulsory teaching hours, the distribution of people employed as teachers in terms of job descriptions, the number of persons employed to assist teaching and the resulting division of teacher's time between teaching and other tasks. The combined percentage of teachers doing tasks other than schoolroom teaching (daycare teachers etc.) is therefore quite high at 14%.

Table 8.2.: Average class sizes in Hungarian primary schools as compared to OECD and EU19 averages, 2005 and 2008 (students)

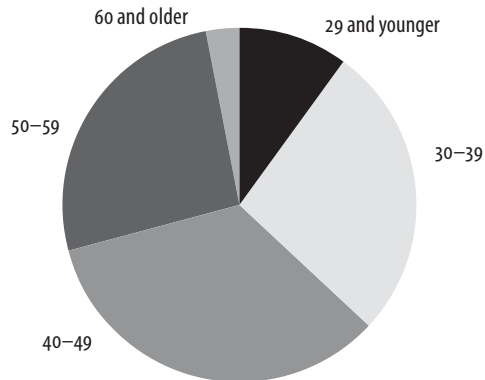
Education level	2005			2008		
	OECD	EU19	Hungary	OECD	EU19	Hungary
Grades 1-4 of primary school (ISCED 1)	21.0	20.2	20.0	21.6	19.9	21.2
Grades 5-8 of primary school (ISCED 2)	24.1	22.8	21.4	23.9	22.2	22.6

Source: Education at a Glance 2007, table D.2.1 and Education at a Glance 2010, table D.2.1.

8.2. Teachers

In all of public education, the proportion of female teachers is 83%, and this figure has been largely unchanged in the last 5 years. This puts Hungary among the group of countries in Europe with the lowest proportion of male teachers in public education. Pre-primary school education employs women almost exclusively, but the proportion of women is close to 90% in primary schools as well, with most male teachers being employed in vocational schools. The male-female balance of teachers has an impact on teacher employment statistics as well; in primary and secondary schools – mainly due to childbirth – more than 7% of teachers are away from the school long-term, while the same ratio is 4 to 6% in other educational programmes. Due to the age distribution of teachers, demand for teachers in public education is expected to suddenly increase within 5-10 years despite demographic processes and the continuing reduction in student numbers.

Figure 8.2. Age group distribution of Hungarian teachers in public education, 2008/09 (%)



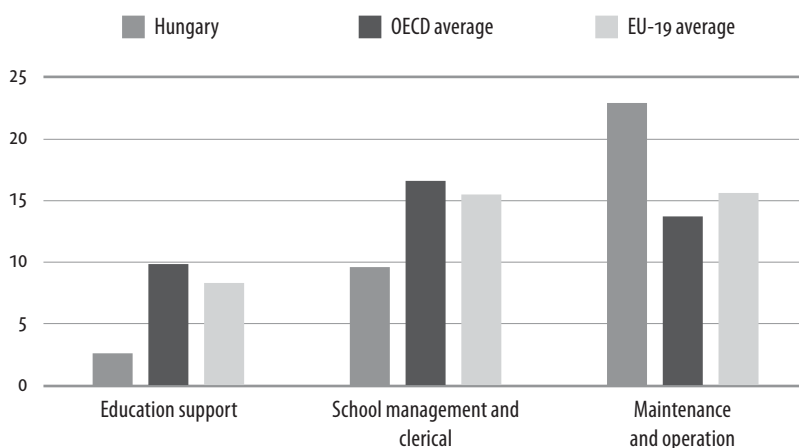
Source: Calculations by Júlia Varga based on data from OKM KIRSTAT data collections

Despite the fact that Hungarian public education employs a relatively high number of teachers, there is a relative shortage of good teachers in some fields. The proportion of teachers teaching specialised subjects without qualification in the subject is significant. The 2008 OECD teacher research (TALIS) confirmed that schools suffer from a shortage of quality teachers. A third or half of ISCED 2 teachers work in schools where, according to the principal, the lack of good teachers is getting in the way of education. At the time of data collection, this ratio was 22% in Hungary, which points at a teacher shortage that is lower than the international average, but is not insignificant. The shortage of quality teachers disproportionately affects schools that teach students from a disadvantaged family background. In the quarter of schools with the highest proportion of disadvantaged students (65% on average) 10% of all specialised subjects were taught by teachers who lacked the relevant spe-

cialised qualification. In these schools, 15% of physics teachers and 14% of language teachers lacked the relevant degree.

It is a general opinion regarding the workload of Hungarian teachers that, on top of teaching, they have to handle more administrative, organisational and other non-teaching tasks than their colleagues who work in countries where there are more students per teacher. International comparisons support this view. Hungarian primary and secondary schools employ much fewer people for pedagogical assistance and school management and administration per student than the EU19 and OECD average. At the same time, significantly more people work in Hungarian schools in positions that are related to the maintenance and operation of institutions and student catering.

Figure 8.3. The number of non-teacher employees per 1000 students in Hungarian primary and secondary education as compared to OECD and EU19 averages, 2007 (people)



Source: Education at a Glance, 2009. Made using data from Table D.2.4.a.

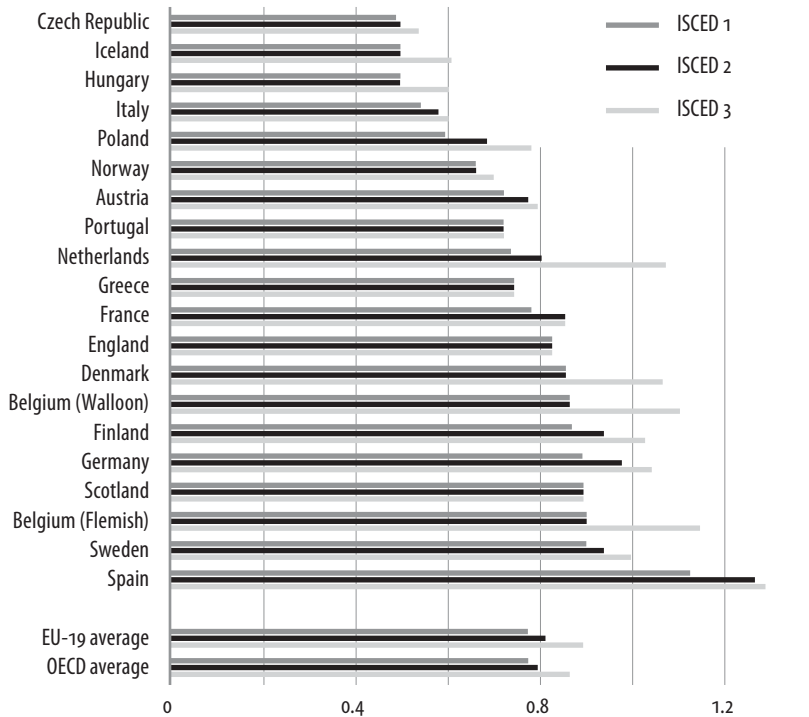
8.3. Employment and wages

In recent years, the percentage of teachers employed with open-ended and fixed-term work contracts increased, while the percentage of those employed through other arrangements (e.g. lecturer) fell; however, these changes were limited in extent. At the same time, significant changes took place in the employment of retired teachers and thus non-part-time teachers. From 2006 on, several limitations to working as a pensioner were introduced by several legislative amendments. In 2005, more than 10% of teachers working in public education institutions were part-time or full-time pensioners; by 2009, their ratio fell to less than 4%. In grammar schools, the proportion of part-time or full-time pensioners fell from more than 15% to 6%, in vocational education institutions, it fell from 16% to 6%. In part, schools replaced pensioners with part-time teachers. Previously, there were hardly any part-time teachers who were

not pensioners (less than 1%), but by 2009, this ratio was 9% in grammar schools and 6% in primary and vocational schools.

Due to the raise of the wages of public service employees, teacher's wages increased significantly, and the average wage of pre-primary school and primary school employees reached 70% of the average wage of those with a higher education degree, with the wage of people working in secondary education reaching 80%. In 2009, the average wage of Hungarian primary school teachers was under 60% of the wage of non-teachers with a higher education degree, and the average wage of secondary school teachers was only 68% of the average wage of those with a higher education degree. Those who decide to become teachers with either a BA or an MA degree make less money already in the first year than their peers of the same age with the same degree who work in other fields. This gap then keeps growing in the first 15 years of their career, as wages in education, which are already lower at the outset, grow slower than in other fields that require a higher education degree. It is characteristic of teaching careers in Hungary that the wage gap is larger for teachers with an MA degree than for those with a BA degree. The situation of Hungarian teachers is

Figure 8.4. Wages of teachers with 15 years of experience at ISCED 1, 2 and 3 levels as compared to the wages of 25–64-year-olds with a higher education degree in Hungary, in the EU19 and the average of OECD countries in 2008 (%)



Source: Education at a Glance, 2010. Made using data from D.3.1.

poor in the international comparison. On average in the EU19, the wage of teachers with 15 years of experience who teach in grades 1-4 of primary school (ISCED 1) is 77% of the wage of 25–64-year-old higher education graduates in the same country, while the same ratio is 50% in Hungary; the EU19 average is 81% in grades 5-8 of primary school (ISCED 2, 50% in Hungary), and 89% in secondary education (ISCED 3, 60% in Hungary).

In most European countries, the difference between the lowest and the highest base wages for teachers is lower than in Hungary. Apart from the level of guaranteed wages, the time it takes to reach the highest wage category is also a determining factor in the salary situation of teachers. If progress is fast, then teachers' income can be higher over the entire career even if the wage differences are relatively low, making teaching careers more attractive. Among European countries, the number of years it takes to reach the highest guaranteed wage bracket is highest in Hungary (40).

8.4. Teacher workloads, workforce management

The number of teachers' annual compulsory teaching hours is below the EU19 and OECD averages; it is the lowest in grades 1–4 of primary school (ISCED 1) and in grades 5-8 of primary school (ISCED 2) and in secondary education (ISCED 3) it is in the lower third in the international comparison. However, according to the detailed time balance surveys filled in by teachers, their total weekly working hours match the international average. Primary and secondary school teachers work 51 hours a week on average. In-class activities make up 40% of the total workload, with preparation for classes, administrative tasks and other non-teaching tasks making up 20% each. There are significant discrepancies in the number of classes held by teachers – which partially determine non-teaching task workloads as well. There are many overworked teachers, and a significant number of teachers with lower-than-ideal workloads. 5% of teachers work fewer than 35 hours a week, while 17% work 60 hours or more. The differences are greatest between the teachers of different schools. The main cause of the differences is that the teaching workload of active teachers is significantly above the average. In institutions struggling with a teacher shortage, most overtime is handled by a few teachers with great experience or an ability to handle large workloads. Administrative work and other auxiliary tasks that do not require a high level of professional expertise are considered especially burdensome. The lack of support staff aiding teachers' work is a significant problem for one in three teachers. The overwhelming majority of principals believe that it is not possible to eliminate uneven workloads in schools even in the long run. They believe that the problem could be solved by appropriately rewarding best-performing teachers, compensating them for their extra work.

Teacher shortages affect Hungarian public education as well: every fourth school has unfilled vacancies despite the fact that half of the affected principals have advertised all their vacant positions. The other half manages the staff shortage with overtime, without even advertising positions. In almost half (44%) of vocational schools, the

management has been unable to fill all vacancies for subjects in which teachers' skills are marketable outside of education. At the same time, very few schools use lecturers. Recent school mergers should in principle allow for a more efficient use of the workforce, but in three-quarters of the institutions that operate more than one teaching site, teachers only work at one of the schools. In this regard, school mergers were only a formal, administrative measure; the staff itself was not merged and the affected schools continue to operate as independent organisations.

8.5. Teaching quality and assessment

Almost all Hungarian schools have gone through external evaluation, and almost all teachers have been evaluated in some manner, while 13% of teachers and 30% of schools in TALIS countries have not been evaluated. However, evaluations in Hungary tend to be carried out within the school. External evaluations are rare, and are usually limited to the evaluation of the results of student competency surveys (PISA, National Assessment of Basic Competencies). Due to this, there is a risk that poorly performing schools may not receive external support for improving the quality of their work. The most widely used method for the evaluation of teachers' work is the

Table 8.3. Frequency of factors taken into consideration as very important in teacher assessment among ISCED 2 teachers; Hungary and average of TALIS survey countries, 2008 (%)

Assessment factor	TALIS average	Hungary
Teaching in a multicultural setting	45	52
Retention and pass rates of students	56	57
Teaching of students with special learning needs	57	66
Extra-curricular activities with students	62	73
Professional development undertaken	65	55
Student test scores	65	55
Other student learning outcomes	68	71
Feedback from parents	69	73
Innovative teaching practices	71	70
Student feedback on the teaching they receive	73	67
Direct appraisal of classroom teaching	74	80
How well they work with the principal and their colleagues	78	76
Knowledge and understanding of instructional practices in their main subject field(s)	78	89
Student discipline and behaviour	78	82
Classroom management	80	82
Knowledge and understanding of their main subject field(s)	80	90
Relations with students	85	80

Source: *Creating Effective Teaching...*, 2009, based on Table 5.4.

Question asked: "To what extent do you think the following were taken into consideration in the assessment of your work or in the feedback you received?" The table shows totals for criteria considered with "high" or "moderate" importance.

direct evaluation of classes. Almost 3/4 of teachers say the class visits weigh heavily in the assessment of their work. The overwhelming majority of teachers believe that their knowledge of their subject, their class management practices and their technical methodology weigh heavily in the assessment of their work.

Overall, teachers' attitude to assessment is positive. The opinion of the large majority is that assessments were fair and equitable and significantly helped them in their later work, and helped them become more satisfied with their working conditions. In keeping with international practice, teacher assessments in Hungary have little effect on teacher wages and financial bonuses. In the countries of the TALIS survey², only 10% of teachers reported that the assessment of their work had a major impact on their wage or other financial benefits. Most principals reported that they have little control over teacher pay and essentially no way to adjust wages to teacher performance. Teacher assessments also have little impact on professional advancement and career paths.

8.6. Teacher training

The Bologna system, introduced in 2006, brought major changes to Hungarian teacher training. From then on, pre-primary school teacher, primary school teacher, special educational needs teacher and conductor training became part of undergraduate education – i.e. the changes were minimal – but no new students were accepted to traditional single-cycle teacher training. In teacher training, the first cycle only covers the specialised knowledge of the subject in question, providing identical courses to all students. Specialised teacher training, including pedagogical, psychological, and specialised methodological training, takes place in the second cycle of the multi-cycle training system, in master level training. New master (MA, MSc) teacher degrees require the completion of a pedagogy & psychology study block of at least 40 credit points and a half-year school teaching practice worth 30 credit points following the four semesters (on top of the BA or BSc studies.) This development of the structure and content of training is analogous to the developments of teacher training in the European Union in the last ten years. New and positive elements of the reformed teacher training system include simplicity, transparency, interoperability and teaching practice in the fifth semester of master training at external public education institutions (partner schools) which is designed to prepare students not only for teaching their subjects, but also for the work in a school as a whole.

Sixteen state universities, ten colleges, two universities and three colleges run by churches and two private institutions train teachers in Hungary, with a high level of autonomy, without regular external assessment or other external control mechanisms. The number of applicants for undergraduate teacher training (pre-primary school teacher, primary school teacher, conductor and special educational needs teacher training) fell between 2005 and 2008, but it increased in the last two years. The number of students participating in pre-primary schoolteacher training was essentially unchanged in recent years, but the number of students in primary school

teacher training fell due to the reduction of the admission quotas. As a result of the switch to the Bologna system in 2006, no new students were accepted to teacher training colleges and traditional university-level teacher training.

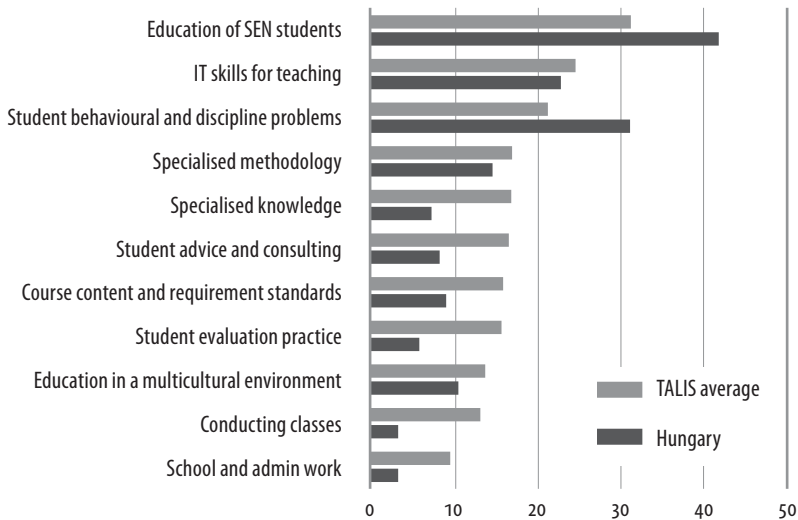
The system of moving teacher training to the second (master) tier is now vigorously argued, with arguments put both for and against it. Opponents of the two-tier system claim that after the introduction of the new system, even fewer talented and successful students choose to pursue teacher training at the MA level after the undergraduate course. Many of those who intended to become teachers after their secondary school-leaving examination decide to enter the labour market after their BA course without continuing their education at a higher level, and some students change their mind during the bachelor course and continue their studies at the MA level in some other, non-teaching programme. Thus, two-tier teacher training increases the already existing negative selection in this area, and in some (natural sciences) programmes, the low number of applicants threatens to cause serious teacher shortages in the near future. Supporters of the Bologna system of teacher training argue that moving the time of entry into teacher training to the master level – to a higher age level – ensures that only those who are really dedicated to teaching apply for and participate in teacher training. They argue that there were many students in the previous traditional university-level teacher training who already knew that they did not wish to become teachers when they applied, or soon after starting their studies.

8.7. In-service teacher training, professional development

The regulatory framework of in-service teacher training changed little in the last four years, but the financial background was transformed. As of 2010, normative funding was abolished almost completely, and in-service training can only be financed from funds won on tenders, serving tender goals. This brought significant changes to the practice of in-service trainings and affects the possibilities and directions of in-service teacher training. A long-standing central requirement of the 1997 law that covers in-service teacher training – that teachers whose qualifications and type of position do not change must participate in a specialised renewal training of at least 120 hours every seven years – was significantly softened by the 2009 amendment through the concession that if a teacher's participation is hindered by the lack of financial support, then no penalty can be applied. As a result of the change, the regulation of the completion of in-service training changed significantly as of 31 July 2009. Completion methods now include options without course fees or with low fees. Part of the required 120 hours can be completed through self-training, the completion of auxiliary educational tasks or teaching in-service training, and activities related to SROP bids can also be accepted. The in-service training obligation can also be completed by participating in a maximum of 30 hours of non-accredited trainings no shorter than five hours each (possibly up to six 5-hour courses) and by participating in professional consultancy organised at the request of the public education institution for its teachers, provided that the analysis and assessment is undertaken with the involvement of the teachers involved.

In the opinion of those involved in training (teachers, institution management, operators and trainers), the current in-service teacher training system is not without problems. It is a serious problem that after the abolition of normative support, the professional development of teachers can only be financed from targeted tender funds. Such in-service trainings are limited to the topics that are related to the project or programme in question, and therefore may not cover the full range of professional development needs that arise in the school in question. Teachers and principals miss the training courses that could respond to locally arising specialised knowledge deficits and problems. At the same time, they support with their active participation the acquiring of innovative knowledge in the following areas at the institutional level: organisation of teaching, teaching methodology and organisational development. From the point of view of the human resources development of schools, it is unfortunate that profit-oriented in-service training institutions and companies draw up their course selection based on SROP tenders, and therefore certain in-service training modules that are necessary for improving the effectiveness and efficiency of education are neither offered nor requested.

Figure 8.5. Percentage of teachers with in-service training needs deemed justified but not fulfilled, by subject area; Hungary and average of TALIS countries, 2008 (%)



Source: *Creating Effective Teaching...*, 2009

Three areas can be identified where teachers feel that more in-service training is needed to enhance their professional development. a) teaching of students with special educational needs, b) computer skills necessary for teaching and c) behaviour and discipline problems with students. In Hungary, participation in the various research projects is much lower than the international average. Participation in in-service training programmes was high, and some teachers indicated their interest in more training: four out of ten Hungarian teachers reported that they needed to participate

in in-service training on certain particular areas to ensure their professional development. In the international comparison, this is somewhat below the average, but it is a significant percentage regardless. At the same time, the data shows no discernible connection between the rate of participation and the rate of unsatisfied in-service training needs in each country. There is significant demand for yet more in-service training in countries with high participation rates, and teachers do not tend to have more unsatisfied demand for more training in countries with low participation. Thus, in-service training demand points to problems of quality, not quantity.

9. Quality and effectiveness of public education

9.1. Tools of public education quality policy

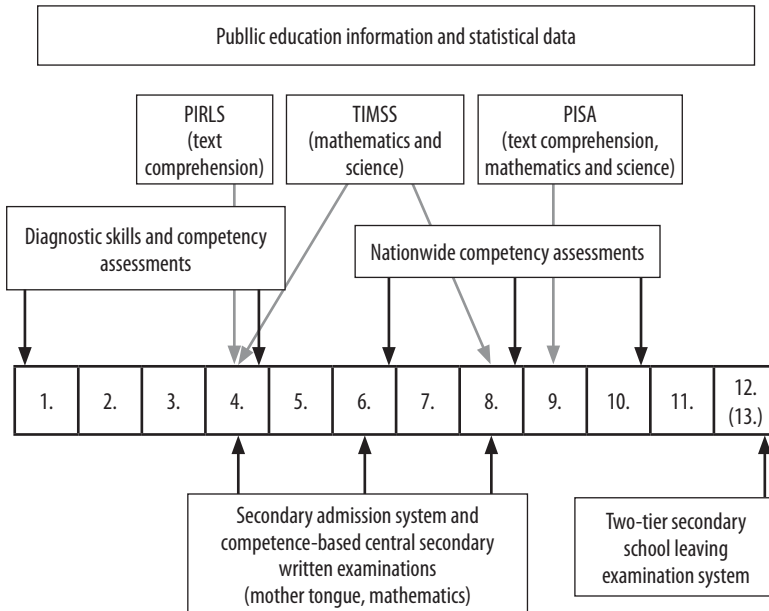
The Hungarian quality assessment system is complex, involving many tools. It also separates clearly the responsibilities of the various management levels. One weakness of the system is that no topics and criteria were defined for the external evaluation of institutions, and that control and assessment tasks are not clearly separated. The practice of institutional self-assessment and the regular assessment of the work of managers and teachers working in educational institutions is not yet widespread, and the legality control and financial control systems also need further improvement. The independent assessment processes of the public education system are as follows: a) development and operation of the examination system that forms a part of output regulation; b) the evaluation of student knowledge in the domestic and international context; c) the assessment of institutions, which is mainly implemented through quality assurance programmes (IMIP) instead of focusing on school operators and accountability; d) teacher assessment, in the context of the plannability of teaching careers and the professional career options of teachers; e) the assessment of educational and in-service training programmes, generally as part of accreditation procedures based on technical criteria.

The Hungarian quality policy system considers developmental assessment to be an exercise that has the potential to improve the quality and efficiency of public education. Most elements of the system are determined by law. Among some other major changes that took place between 2006 and 2010, the 2006 amendment of the Act on Public Education stated that assessments have to cover the testing of the development of the basic skills of all students in grades 4, 6, 8 and 10 in their mother tongue and mathematics each year, and that the overall, institution-level assessment results must be published. The law requires institutions that fail to reach the statutory institutional performance minimum in the National Assessment of Basic Competencies (70–100 institutions out of 3500) to draw up a development plan. Local governments that operate schools have significant assessment powers. In the context of operator control, they have to check the effectiveness of the work of the institutions at least once every four years. Operators approve the quality management programmes of institutions, which need to be coordinated with the quality management programme of the local government. The areas and tools of operator assessment are well delineated, and the regulations establish exact responsibilities and procedures

as well. In the course of implementation, most interpretation problems stem from the difficulty of separating technical controls from assessment. Local governments can use numerous resources in the assessment of the technical work of public education institutions, such as external expert assessments and testing, institutional reports based on self-assessment and the opinions of the school board, but experience shows that they only have schools' reports to rely on. Although the results of nationwide testing and assessment need to be taken into account in the course of the local, institution-level implementation of the quality management system, operator controls tend to be limited in practice to the control of the legality of operation and especially the review of required documentation.

The quality development system focuses on educational institutions. Schools need to operate internal mechanisms aimed at learning development that make it possible to continuously improve quality. Institutions have a wide range of tools for improving results at their disposal. Apart from direct tools (such as the application of the conclusions of external assessments, self-assessment by institutions and teacher assessments), they also have indirect tools at their disposal: they can influence results through the local curriculum and pedagogical programme, their admittance policy, organisational development, mutual learning, in-service teacher training and teacher incentives and establishing cooperation within and outside the institution.

Figure 9.1. The public education information system



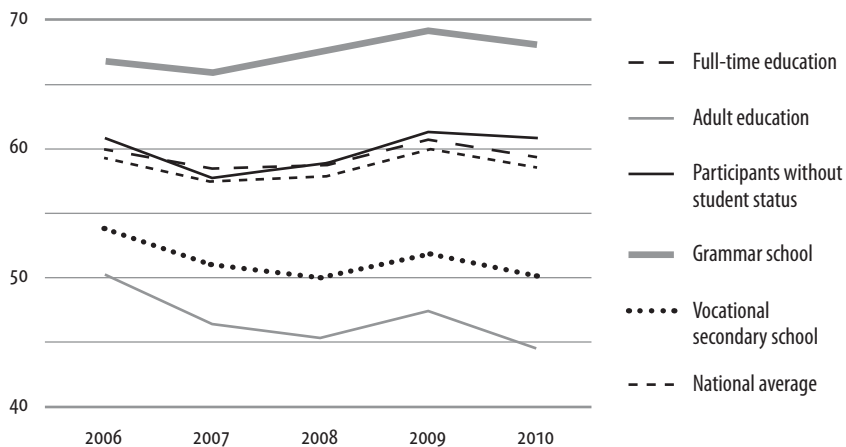
Source: Educational Authority

The goal of the Hungarian public education information system is to provide an overview of the whole of public education and provide data and information to education professionals, the general public and decisionmakers at all levels on the quality and effectiveness of education.

9.2. The system of secondary school leaving examinations

The reform of secondary school leaving examinations has been a decade-long process in Hungarian education policy. The main goals of the examination reform include content regulation (modernisation), achieved through output requirements, output regulation aimed at managing the heterogeneity of secondary school students through the unified nature and unified standards of the secondary school leaving examination, introducing a visa for higher education through two-tier examinations and the strengthening of standardised elements through the central control of tasks and evaluation. The new secondary school leaving examination system has been working reliably since its 2005 introduction. The difference between the requirements at medium and advanced levels is large enough to cover the diverging performance of the students of varying educational backgrounds who are taking the secondary school leaving examination in Hungary. Overall, the results of the secondary school leaving examination showed little fluctuation between 2006 and 2010. The national average score (58.6% in 2010) varied less than 2.5 percentage points over five years.

Figure 9.2. Results of medium level secondary school leaving examinations by course types and school types between 2006 and 2010 (%)



Source: Educational Authority

From the end of the 1980s, the number of students continuing their studies up to the secondary school leaving examination started to increase. In 1990, more than twice as many people acquired a secondary school leaving certificate as in 1960, and ten thousand more than ten years before. This figure grew by another 19 thousand

by 2000, despite the fact that the number of children aged between 15 and 19 fell by 45 thousand in the same period. Of the two school types that offer secondary school leaving examinations, the number of students taking the examination in grammar schools increased, and the number of students doing so in secondary vocational schools decreased. The increase is partly due to the fact that from 2006, the National Qualifications Register (OKJ) started to require secondary school leaving certificate as a precondition for more and more qualifications.

As part of the reform of the Hungarian secondary school leaving examination, the advanced level examination was designed to avoid the potentially negative social impacts of the expansion of secondary and higher education. However, as higher education did not differentiate between the examination levels at the time of the reform, the students taking the examination could not be expected to do so, either. On the other hand – as the overwhelming majority of students taking the advanced level secondary school leaving examination apply to a higher education institution – the proportion of those with advanced level certificates is higher among higher education applicants than in the overall population. This shows that the advanced level examination is aimed at aiding entry into higher education. The proportion of students taking an advanced level secondary school leaving examination varies widely between school types: in full-time grammar schools, a lot more students take an advanced examination in at least one subject than in secondary vocational schools. Students taking advanced level examinations regularly score higher than those taking the medium level examinations. There was a significant correlation between taking an advanced level secondary school leaving examination and being admitted to a higher education institution in every studied year, especially among those whose first choice was a full-time course. There is a noticeable downward trend, though. The experience of recent years shows that the extra points awarded for advanced level examinations are only needed by candidates in a very limited number of higher education institutions; therefore, students presumably weigh up the extra work that the advanced level examination undoubtedly requires against the extent to which it may improve their chances of being accepted by a higher education institution.

Qualitative research carried out in 2006–07 on the new secondary school leaving examination system confirmed that examination requirements are effective tools for regulating the content taught in public education, and have a direct impact on schoolroom work. The research demonstrated the existence of a “chain effect”. The new examination had a significant effect on the pedagogical programmes of schools, study organisation procedures, the organisation of student groups, schoolroom teaching and learning methods, the content taught, schoolroom assessment procedures and the criteria applied when choosing teaching aids.

9.3. Parts of the national assessment system

The national assessment system comprises three assessments: the Diagnostic Development Assessment System (DIFER), the National Skill and Ability Assessment and the National Assessment of Basic Competencies. The Diagnostic Development Assessment System is a non-compulsory measurement tool that primary school teachers can request to assess the basic competencies necessary for development at school among first-grade students. The use of DIFER is required by ministerial decree. According to the legislation, each teacher has to decide at the start of the first grade school year which students to assess, and they also have to carry out the assessments later on. Teachers evaluate the results using central software, which generates an individual ability profile for each student. Thus, the target audience of DIFER is made up of primary school teachers exclusively. The system provides them with a unified, standardised assessment tool that helps them assess their students based on a set of criteria, helping determine what development steps need to be taken with each student already at the start of school. DIFER assessments are carried out on approximately 30% of students. DIFER assessments are most often followed by differentiated study organisation, the drawing up of a personalised development plan and personalised progression authorisation.

The National Skill and Ability Assessment has been part of the national assessment system since 2006. It uses a diagnostic measurement to assess the development of the student as compared to the baseline of their age with regard to certain basic skills (writing, reading, arithmetic, logical skills) at the end of the fourth grade. The primary objective is to inform teachers about the level of development of certain skills in order to draw up specialised development directions and methods. The assessment is compulsory for all students, but as the objective is diagnosing their individual development, the Educational Authority only processes the data from a 200-school representative sample as part of a central analysis in order to identify national trends.

The National Assessment of Basic Competencies is an annual assessment system that covers almost all 6th, 8th and 10th grade students in Hungary. Its content is regulated by legislation, including the areas to be measured and the type and ratio of tasks. A guidebook describing schools' tasks and procedures is published in order to standardise the assessment. Quality control staff ensures that the assessment is carried out appropriately. As of academic year 2007/08, test booklets and background data questionnaires are identified using a label bearing the student's individual assessment ID to make sure that the documents can be identified. This ID can only be generated by the institution the student is studying at, using the online software application developed and operated by Educational Authority. The ID serves multiple purposes. On the one hand, students and their parents can use the ID to view the student's results after the publication of the data. On the other hand, it makes it possible to carry out individual longitudinal studies on the results, making it possible to analyse pedagogical added value by comparing data from the 6th, 8th and 10th grade assessments from the 2009/10 academic year onwards. The encoding of the

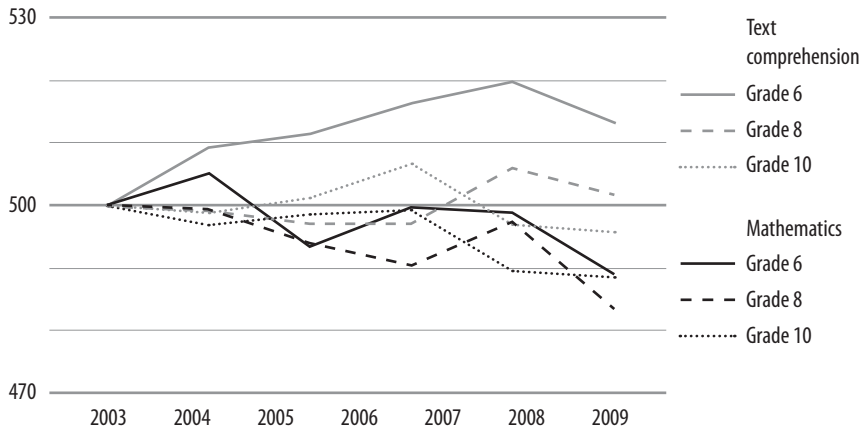
test material is carried out centrally, under the control of the relevant department of the Educational Authority, in accordance with strict quality assurance rules. After data entry, data cleansing and statistical data processing, the Educational Authority published the results in February the year after the data collection. The Educational Authority prepares several types of reports from the results. The National Report contains summarised results and is primarily intended to provide information on the education system to educational policy-makers and education researchers. Operator, Institution and Site Reports (FIT reports) contain summarised results and several types of graphs and tables. The basic report type is the Site Report, which summarises results by grade and course type. Apart from data on concrete institutions, reports present national, territorial and training type averages to serve as a baseline. All three reports are public: they can be downloaded from the website of the Educational Authority after entering the institution's name or identifier. The Student Report contains the competency scores of individual students and their scores in each task, and indicate how their performance compares to national, school and class averages. Apart from the reports, institutions can also process their own results using the FIT analysis programme – which provides access to the all assessment data on all their students – and prepare further analyses. Within the FIT software, the school can also access the scores of its students achieved in institutions they studied in previously; thus, a secondary school can access their 9th grade students' scores from 8th grade in primary school.

9.4. Results of the National Assessment of Basic Competencies

The National Assessment of Basic Competencies is primarily focused on school-level analyses, but its databases also provide valuable information on the whole of the Hungarian education system. The national average results of the competency assessments showed some fluctuation between 2003 and 2009, without any clear trends in text comprehension or mathematics. This suggests that the variation in results is largely due to statistical variation. Taking into account the results of international assessments, the conclusion is that the average performance of Hungarian students improved somewhat in text comprehension and stagnated or deteriorated somewhat in mathematics.

The results of the competency assessments and other assessments indicate that there are great differences between Hungarian schools in terms of performance. Already at grades 6 and 8, the differences between schools are responsible for 25–30% of the difference between the performance of students, even though at this age more than 90% of students still go to a primary school and only 4% of students go to an 8-year grammar school and 5% go to a 6-year grammar school. In secondary education, with the appearance of different education types and the performance-based separation of students, this difference increases to 45–47%. Thus, already at the primary school stage, but especially in secondary education, school choice and entry are important factors that determine children's educational success and their subsequent career.

Figure 9.3. Average results of the National Assessment of Basic Competencies, text comprehension and mathematics, 6th, 8th and 10th grade, 2003–2009 (competency scores)

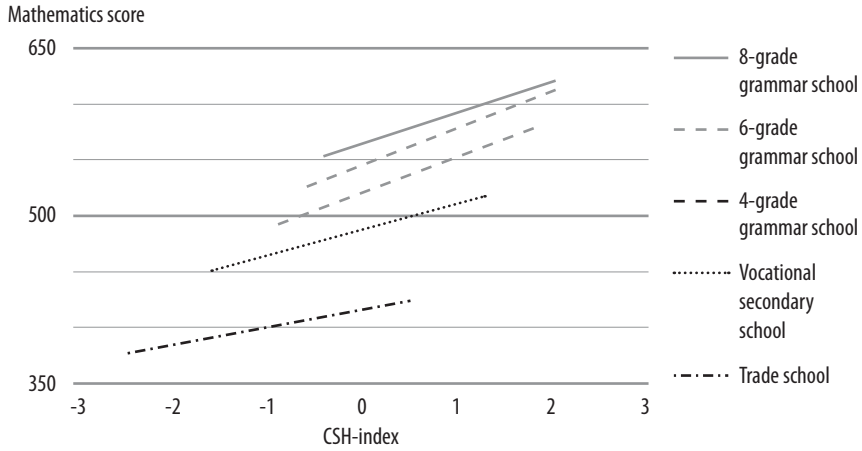


Source: OKM 2009 National..., 2010

In Hungary, the children's family background and their performance at school correlate strongly; this explains 22–27% of performance differences, and this effect does not decrease at higher grades. A mutual reinforcement is likely: children coming from different social groups already arrive at school with differing baseline skills; due to geographical differences, free school choice and the differing ability of parents to enforce their interests, there are great differences between schools already in first grade in terms of the level of development of the skills necessary for performing well at school. This difference is not reduced by the end of primary education, where children of differing school performance levels – and, as performance at school strongly depends on social, economic and cultural background, children from different social backgrounds – are separated even more, contributing to reinforcing social differences by the end of secondary school. However, the differences between secondary education types are only partly explained by family background differences, as students choose the type of secondary school they go to based primarily on their own performance (although the family background can also play a role in the choice). There are great differences between the various institution types both in terms of student' performance and their family background. Naturally, this does not mean that the quality of education provided in the different institution types differs this greatly. Performance differences are almost certainly primarily due to differing school choice habits and baseline performance levels.

The close correlation of students' socio-economic background and performance is also the cause of the territorial differences. When it comes to performance differences between students from different microregions, 45% of the difference in mathematics results and more than 70% of the difference in text comprehension results is explained by the difference between the average family background indices of

Figure 9.4. Correlation of the family background index and scores at the 10th grade mathematics scores on the National Assessment of Basic Competencies by type of secondary school, 2009

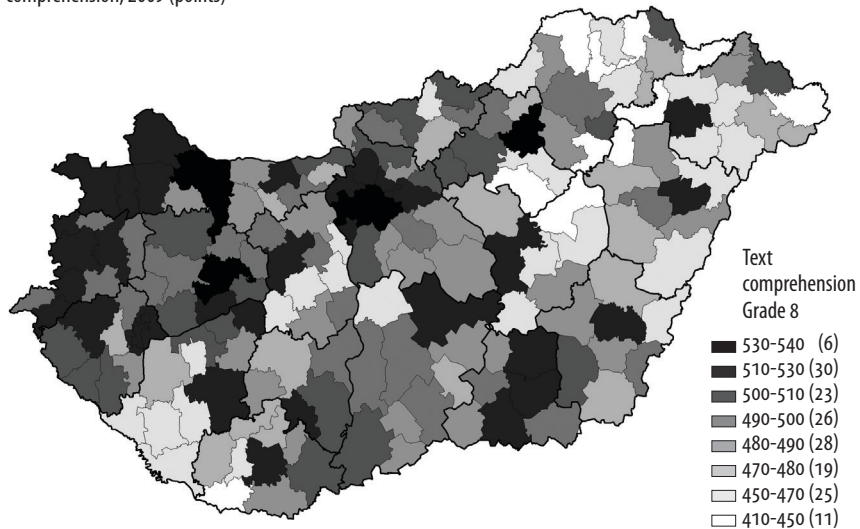


Source: OKM 2009 National. . . , 2010

Note: The family background index of 90% of each student group falls between the X coordinates of the endpoints of the straight lines.

students. The analysis of the average 8th-grade text comprehension results shows a very pronounced trend: Western Transdanubia and county capitals excel, while North-east Hungary and Southern Transdanubia lag behind, tracking their level of economic development.

Map 9.1. Average results of the National Assessment of Basic Competencies by microregion, 8th grade, text comprehension, 2009 (points)



Source: OKM 2009 National. . . , 2010

9.5. Hungarian results in the international context

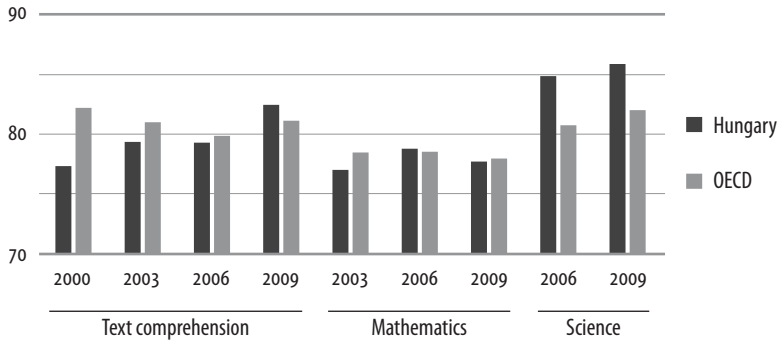
Two of the 6 benchmarks set for 2010 by the European Union have been achieved in Hungary: the 20% reduction of underperformance in reading comprehension and the 15% increase in the number of mathematics, science and technology graduates. In two other benchmarks, the target figure was not achieved, but Hungary performed better than the EU average in 2009. One of these is the 2010 target of a 85% ratio of those who have completed upper secondary education, a benchmark that has already been mentioned in this document. Here, the EU average is 78.6%, while Hungary reached 84%. The other is the percentage of early school leavers in the 18–24 age group; the target for 2010 was 10%, and Hungary reached 11.2%, while the EU average was much higher at 14.4%. In one benchmark, however, Hungary is lagging behind severely: in the participation of adults in lifelong learning.

Hungary has been participating in PISA since 2000. Contrasting with traditional good performance in TIMSS and PIRLS, PISA has tended to produce weaker scores for Hungary, at or below the international average. In the 2009 PISA round, however, Hungary's text comprehension results, which had been below average, improved to average level. The average reading comprehension score of Hungarian students improved by 14 points between 2000 and 2009. It should be noted that this was partly due to the numerical reduction of the average results of OECD countries as a result of the weaker performance of countries that joined after 2000 (the average scores of countries that have been members longer and have participated in several rounds of assessments did not change significantly). Hungary's average scores achieved in the assessments carried out to date are virtually unchanged. However, due to the factors mentioned in the context of text comprehension results, Hungary's mathematics score 'improved' from below average to average level in 2009. According to PISA results, the Hungarian education system is in the middle third among OECD countries. Apart from the average results, the distribution of students between the proficiency levels defined by PISA is also an important indicator. In order to study this, PISA pays special attention to proficiency levels 2 and 5 in all three areas. Level 2 is the minimum level required for the student to be able to use their skills for acquiring new knowledge on their own. Students that reach level 5 (or 6) are excelling in the area in question. In Hungary, the percentage of students who reached at least level 2 in text comprehension reached and slightly exceeded the average of OECD countries by 2009. The percentage of students who reached proficiency level 2 matched the OECD average in mathematics and exceeded it by about 5% in science. At the same time, the percentage of those who reached proficiency level 5 is lower in all three assessment areas than the average of OECD countries.

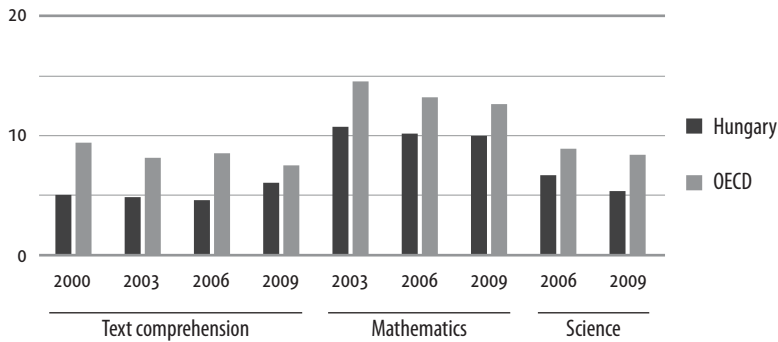
Research and analysis on the improvement of the PISA text comprehension results has not yet been carried out. At the same time, numerous measures were taken in the last decade that could have contributed to the improvement of the results: the reform of the secondary school leaving examination, the introduction of competency assessments, the development and distribution of competency-based programme packag-

Figure 9.5. Percentage of students who reached at least proficiency level 2 and 5 respectively, in text comprehension, mathematics and science, Hungary and OECD average, 2000, 2003, 2006 and 2009 (%)

Achievers of level 2 or higher



Achievers of level 5 or higher



Source: PISA 2000, 2003, 2006 and 2009 databases

es, the integration programmes, teacher competency development and the approach of defining text comprehension as a skill that needs to be developed in the context of every subject and even in higher grades.

The results of IEA assessments consistently paint a positive picture of the effectiveness of the Hungarian educational system. Hungarian students achieved above-average results in mathematics and science in every cycle of the TIMSS assessments. Generally, Hungary places towards the top of the middle third of participating countries in 4th and 8th grade mathematics and 4th grade science assessments, while Hungarian students traditionally excel in the 8th grade science assessment. 4th grade students perform close to the elite in science, and only four Far East countries achieved significantly better results in this area than Hungarian 8th grade students. In PIRLS assessments, Hungarian students demonstrated good text comprehension skills: in the latest, 2006 round, the only European countries to achieve significantly

better results than Hungary were Russia and Luxembourg. The average text comprehension score of 4th grade Hungarian students in 2006 was 551 points, significantly better than the 2001 PIRLS score (average score: 543), in concert with the improvement of PISA text comprehension scores. 4th grade students perform well as compared to their international peers not only in terms of average scores; the various text comprehension proficiency levels are achieved by very high numbers of Hungarian children, with only 3% failing to meet the criteria for the low proficiency level.

The appropriate interpretation of the differences between PISA and TIMSS data and PISA and PIRLS data requires taking into consideration the fact that the three assessments use different grounds for comparison. In PISA, the international average is the average of the participating OECD countries, i.e. the average of the most developed countries in the world economy, while in TIMSS and PIRLS, results are compared to the average score of countries that participated in the first round of assessment (in 1995 and 2001, respectively). This latter group includes several countries that are less developed than OECD members and does not include several OECD members; therefore, the differences between participating countries explain in part the discrepancies in Hungarian results. Taking into consideration only the countries that participate both in PIRLS and PISA, Hungary is performing above the average in both assessments. An examination of the average scores of countries that participate both in TIMSS and PISA reveals that TIMSS paints a more positive picture of the Hungarian education system. The difference is due in part to the fact that TIMSS uses more traditional, more textbook-like problems, and in part to the fact that the 8th grade is especially important for Hungarian students, as this is the time when they are preparing for secondary education admission tests, and therefore most of them try to do their best in this year. PISA assessments are carried out among 15-year-olds, most of whom are in 9th or 10th grade and have no examinations of this type to prepare for – secondary school leaving examinations are in the distant future at this stage.

9.6. Background factors, socio-cultural indicators

The National Assessment of Basic Competencies also demonstrated that family background has a major impact on student performance. International research also shows that the best predictor of the performance of Hungarian students in text comprehension, mathematics and science testing is their parents' level of education. This is the most important factor affecting student performance in other countries as well, but Hungary is special in that this phenomenon is even more pronounced in this country than elsewhere. In countries that scored high in the 2007 TIMSS, for instance, the competency gap between children of parents with higher education degrees and those with primary school education only is in the 42–104 point range, while the same indicator is 129 points in mathematics and 112 in science, compared to 67 and 79 points in another country from the same region, Slovenia. In Hungary, differences in parents' educational qualifications are generally accompanied by significant socio-economic differences. Therefore, the performance of Hungarian stu-

dents correlates strongly with all other background indicators that also depend on the financial situation of the family, such as computer and Internet availability at home. As a result of the early appearance of differences between student competencies, students studying in Hungarian schools with a higher proportion of disadvantaged students are at a greater disadvantage than in many other countries. As a direct result – due in part to early school choice – there is strong selectivity in secondary schools. In an ideal school, students' ability spectrum more or less exactly follows that of society at large. However, this is not the case in Hungarian schools. In Hungarian schools, the social background of parents tends to be rather similar, and the same applies to the abilities of students. Therefore, school choices contribute to conserving the stratification of society, reducing the contribution of schooling to social mobility. At the same time, the selection mechanism also fails to raise the number of students going to an "elite school" to a high level, as the PISA assessment results show that the proportion of high performers is lower in Hungary than in other countries with similar characteristics.

10. Inequalities in education and special educational needs

10.1. The legal and regulatory framework of inequalities in education in the context of the education policies of the last decade

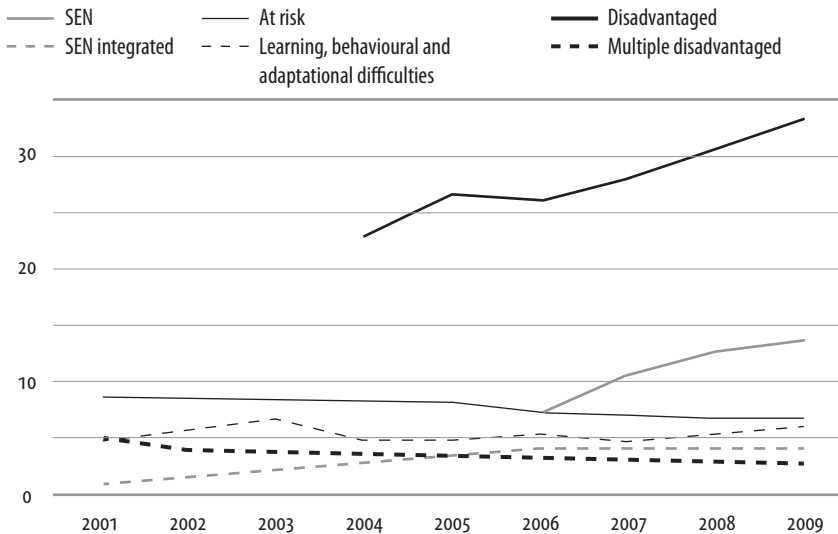
In the decade following 2000, education policy focused intensely on managing social inequalities. They tried to reduce or at least compensate for inequalities at the time of entry primarily through legal and regulatory measures, while also trying to improve the situation of disadvantaged students within the process of education. The Act on Public Education makes it possible to provide direct assistance to students who need support. It defines the concepts of disadvantaged student, multiple disadvantaged student, students with special educational needs (SEN) and students struggling with severe adaptive, learning or behavioural difficulties and also covers students who are at risk. Categorisation is done partly within the public education system, and partly by other institutions. Categorizing children as disadvantaged is the task of the notary, and is primarily based on the family's income and social situation. The category of multiple disadvantaged students is smaller than that of disadvantaged students; it includes children whose parents have low educational qualifications (no higher than primary school), and children are considered to be multiple disadvantaged based on the decision of their pre-primary school or school. However, for data protection reasons, institutions can only rely on the information provided by the parents themselves. In accordance with the Act on Child Protection and Custody Administration, determining at risk status, that is, determining whether circumstances exist which impede or hinder the physical, intellectual, emotional or moral development of the child is primarily the task of the Child Welfare Service based on notifications from any of a number of different organisations, in cooperation with the school's child welfare specialist.

The Act on Public Education establishes two groups within that of children and students who are entitled to special care: children and students with special educational needs on the one hand, and children and students struggling with learning or behavioural difficulties. Physical, organoleptic, mental or lalopathic disabilities are assessed by national and county-level expert committees. Committees prepare an expert opinion on the children whose cases they review, based on which they make proposals on the pre-primary school or school the child should go to and the special requirements their education needs to meet. Expert committees can make proposals not only to place a particular child in a special class, but also to place them back in an integrative, majority class. In accordance with the Act on Equal Opportunities, par-

ents of children with special educational needs also have a say regarding the choice of educational institution for their children.

According to 2009 data, the largest group among those that need support is that of the disadvantaged, comprising of approximately one third of students. Their percentage grew steadily, which on the one hand indicates a progressive deterioration of the social situation of the population, and on the other, it shows that this categorisation is becoming less and less suitable for providing support for the disadvantaged: from positive discrimination, it could turn into negative discrimination. The ratio of the multiple disadvantaged is also increasing, in parallel with that of the disadvantaged. This may be taken as an indication that the children of parents with low educational qualifications are becoming socially disadvantaged families. The percentage of students with special educational needs was 6–7% in the last decade, and, as a result of the Government's goal of integration, more and more of them are now studying in an integrated fashion in majority schools. After some minor see-sawing in the middle of the decade, the number of students struggling with adaptive, learning or behavioural difficulties stagnated, then started to slowly grow.

Figure 10.1. Percentage of primary school students with special characteristics belonging to groups defined by law, 2001–2009 (%)



Source: Education Statistics Yearbook, 2009/10

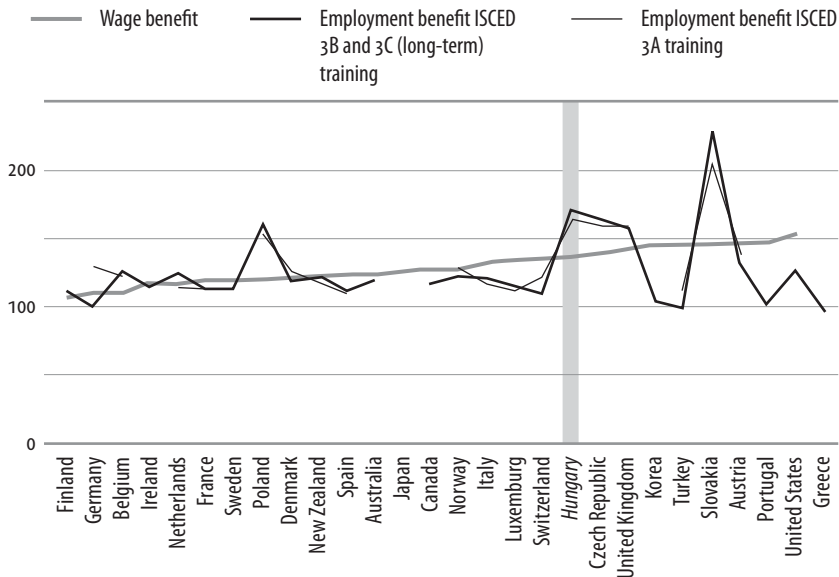
Despite the fact that the criteria and procedures for classification are fixed, some reservation regarding the precision of the data is justified. The statistics do not contain information on ethnicity, but sociological research shows that the Roma are greatly overrepresented among multiple disadvantaged students and that most of them live

outside of the capital, in smaller towns, often concentrated in particular areas, and increasingly segregated.

10.2. Indicators of inequalities in education

The results of the 2009 PISA assessment showed improvement in the area of reading comprehension for the first time, and indicated that the improvement of the performance of 15-year-old Hungarian students is due to the improved performance of the weakest students; those who are in danger of falling behind and dropping out of school. The impact of the differences between schools is still among the highest internationally, and these differences are due in large part to the fact that the social, economic and cultural characteristics of students tend to be homogeneous within each school and differ greatly between schools. The 2006 PIRLS results also showed improvements compared to 2001. The improved results are due in large part to the performance of students with better family backgrounds, but Hungarian students with not very good family backgrounds also performed better than those from other countries. Data from TIMSS 2007 showed that among fourth-grade students, the number of those performing at the lowest level in mathematics is higher in Hungary than in other countries with similar average results. However, this does not hold true for the science results of eighth-grade students, which indicates that there

Figure 10.2. Employment benefits deriving from upper secondary school qualifications* in OECD countries, 2008 (%)



Source: Calculations by Zoltán Györgyi based on Education at a Glance, 2010.

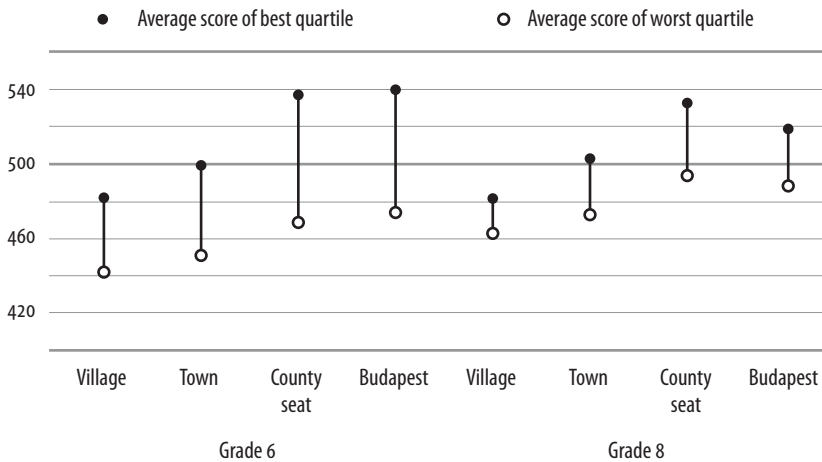
* Extra employment and wage (%) compared to employment ratio and wages of those who have not acquired secondary education qualifications.

is no exceptionally large social divide behind the good results. Social background is measured based on parents' educational qualifications in TIMSS. This indicates that the difference between the performance of children of the highest and lowest educational qualifications is very high in both areas and both grades.

One of the numerical targets of the EU 2020 strategy is the reduction of those who have not completed upper secondary education. In this regard, Hungary is in the middle of the field of EU and OECD member countries. In Hungary, the high compulsory schooling age limit that coincides with the age of finishing secondary studies (18 years) has an impact on the number of students who finish their secondary education, but the employment benefits – among the highest both in terms of employment and wages – provide an even stronger incentive.

The data from the 2009 National Assessment of Basic Competencies confirms that mathematics and text comprehension performance improves with increasing town size. The differences between county capitals and the national capital are minimal when it comes to the best performing students, and are somewhat greater when it comes to poor performers. Other towns and villages lag further behind the capital and the county capitals. Central Hungary, Central Transdanubia and Western Hungary, Central Transdanubia produced the best results, with the weakest results coming from the Northern Plains and Northern Hungary – areas with the highest percentage of Roma population. At the microregion level, it is clear that regions and counties are not homogeneous, and the performance of some microregions differs quite significantly from the average of the region or the county. Regions with high average results are ahead of other regions primarily because their worst performing microregions are

Figure 10.3. Average mathematics scores in 6th and 8th grade of primary school by settlement type as a function of the composition of the student population of the school site, 2009

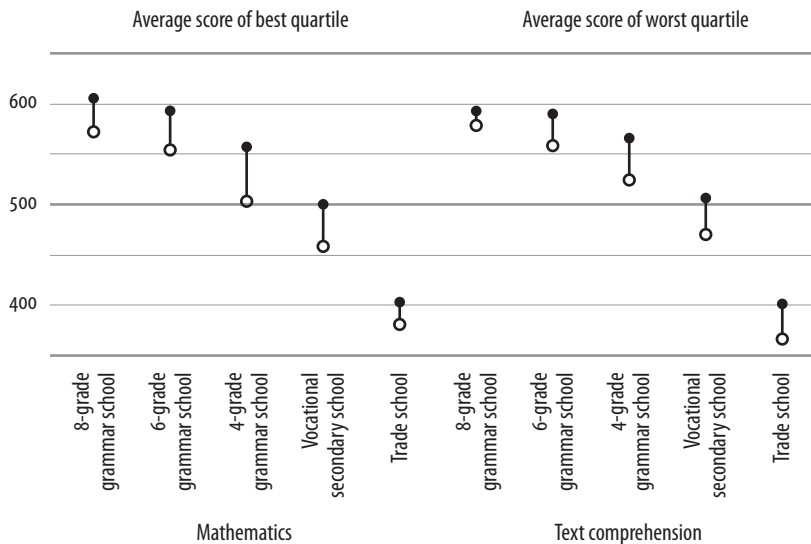


Source: National Assessment of Basic Competencies, 2009

doing a lot better than the worst performing microregions of the low-scoring regions, while the best performing microregions of the various regions achieve very similar scores.

According to the 2009 competency assessment, the best results in mathematics and text comprehension come from students studying in 6-year and 8-year grammar schools, with the students studying in 4-year grammar schools placing slightly behind them. Compared to these school types, vocational secondary schools and especially vocational schools lag very far behind. This indicates that secondary-level programmes are selective in terms of performance, which creates training types that differ significantly from each other, but can be very homogeneous internally. For instance, the difference between the best and worst 25% of 8-year grammar school students in text comprehension is only 23 points, while the same figure in the 4-year schools with the weakest selection potential is almost three times higher at 65 points.

Figure 10.4. Average mathematics and text comprehension scores in 10th grade by training programme as a function of the composition of the student population of the school site, 2009



Source: National Assessment of Basic Competencies, 2009

Although secondary school leaving examinations taken at both grammar schools and vocational secondary schools allow students to continue their studies at the tertiary level, and over the last decade, the material taught in vocational secondary schools has come significantly closer to the content of grammar school education, the role of grammar schools as schools preparing students for higher education still increased in the 2000s: the ratio of students entering higher education coming from a grammar school increased by 10 percentage points. The differences between boys and girls are noticeable both in terms of their performance at school and their path

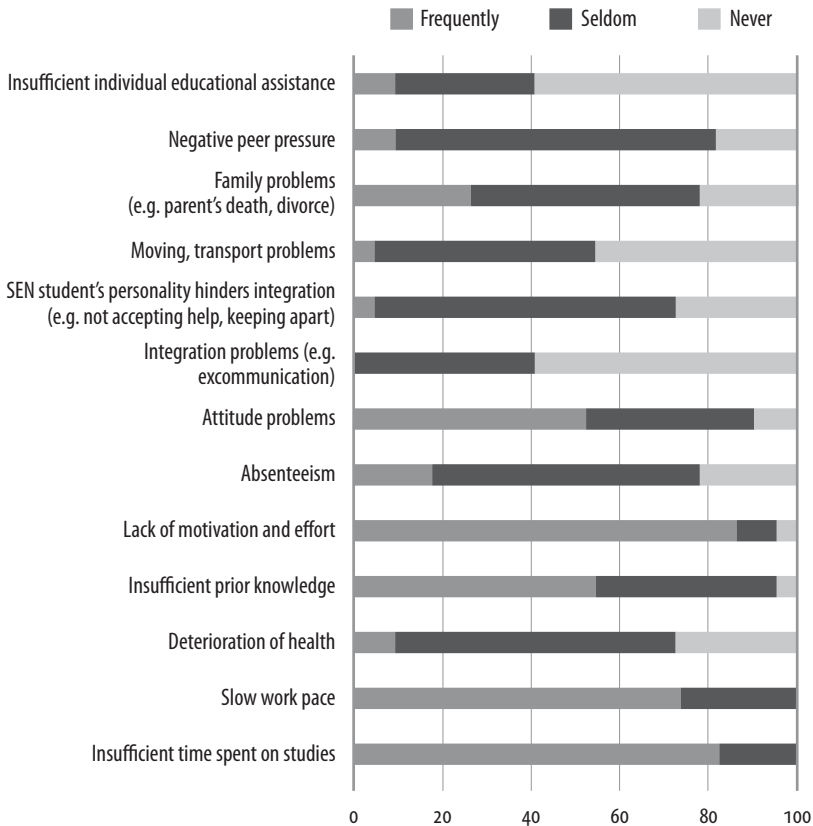
in education. The competency assessment, just like PISA and PIRLS, indicates that girls perform better in text comprehension, while boys perform better in mathematics, and the differences that are already present in 6th grade are even greater in 10th grade. When it comes to secondary education, the same trend has been in place for decades: girls tend to go to grammar schools, while boys tend to go to vocational secondary schools. These trends stayed in place during the expansion of secondary education in the 1990s, but the difference between the educational strategies of the sexes was reduced somewhat. The proportion of girls is also higher in higher education, although boys are proportionally more successful at the admission tests.

10.3. Determination and correction of special educational needs

In academic year 2007/08, the operation of the expert committees that certify students as having special educational needs was changed. The changes were made because the number of students classified as having special educational needs was increasing continuously, and the fact that percentages differed between counties suggested that the bases upon which committees made their decisions were not uniform. As a result of this measure, the percentage of children in this category was reduced from 1.6% to 1.4% in academic year 2008/09 in almost all pre-primary, primary and secondary education. The new rules had an impact on the entire process of determining special educational needs status, and the expert committees became more careful about their work. As a result of this latter change, pre-primary schools now do not have SEN children apart from overage children aged 7 or 8 – however, this practice leads to the danger that a significant group of children with problems may not receive the early development they need.

The experiences of heads of institution regarding the integrated education of students with special educational needs make it clear what measures are needed to make this approach successful not only in the integrated pedagogical system but in all integrative schools. Many in-service trainings were carried out with the aim of preparing teachers for integrated education. 11 accredited training packages were prepared, connected to various elements of the integrated pedagogical system, close to 9000 teachers participated in the more than 800 programmes and 17,485 certificates were awarded. This shows that a comprehensive development was undertaken in this area. The in-service training and consultancy promises the creation of a mentoring network and a multiplier effect.

Figure 10.5. Causes of lack of success among students with special educational needs who are in integrated education as a % of mentions by school principals, 2010



Source: Kópataki–Mayer, 2010

Question asked: "In your opinion, what causes played a role in the lack of success of students with special educational needs at your school, and with what frequency?"

10.4. Characteristics of the inequalities affecting the Roma population

As ethnicity is not registered in any records database, data can only be collected from sociological surveys or programmes and support schemes designed to support the Roma. However, both of these sources can only provide approximate data at best. The system of self-classification applied in the census produces significantly lower figures than the real number of Roma, and thus it cannot provide reliable data on their geographical distribution, either. One research-based estimate reckons that there are significant differences in the number of Roma in different regions, and between different settlement types within the same region. Another study points out that in the period around 2010, there were close to 100 settlements that can be

characterised as ghettos, and ghetto-like microregions are now becoming a reality. School segregation intensified between 2004 and 2007 as well, but this is due not only to demographical reasons and migration, but also the phenomenon called public education migration, namely the tendency of non-Roma parents to move their children to a different school.

Table 10.1. Estimated proportion of Roma students in 8th grade, 2006 (%)

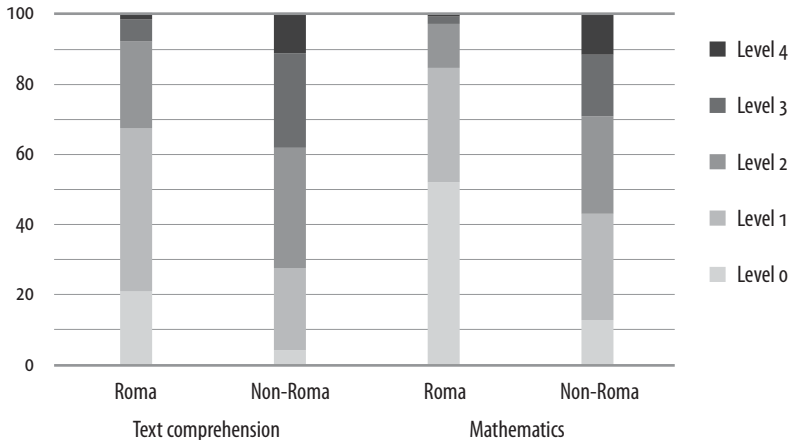
Region	Budapest	County capital	Other city	Village	Total (average)
Central Hungary	3.8	–	2.8	3.4	3.4
Western Transdanubia	–	4.0	4.0	5.9	4.8
Central Transdanubia	–	3.0	6.1	4.2	4.7
Southern Transdanubia	–	6.1	14.7	20.6	15.7
Northern Hungary	–	12.8	18.8	26.5	22.0
Northern Plains	–	1.4	10.4	17.3	11.3
Southern Plains	–	2.5	6.2	4.7	5.0
Total (average)	3.8	4.6	8.5	13.4	9.1

Source: Kertesi–Kézdi, 2009

The 2006 competency assessment gives a comprehensive overview of the performance of Roma children at school. It shows that Roma students performed poorly in both text comprehension and mathematics: one-fifth failed to reach the lowest qualified level in text comprehension, and more than half failed to do so in mathematics. The research shows that the educational aspirations of Roma parents for their children are lower than those of the non-Roma, but vocational qualifications are now generally expected among the Roma community as well, and almost half of the Roma consider a higher level of educational qualification essential, and are willing to assume the related costs. The number of secondary school applications reflects these ambitions; however, the ratio of rejection at the school or programme of first choice is 8 to 10% higher among the Roma than the non-Roma. Rejection only means moving to a lower-level training programme in a small portion of cases; most of those who applied to secondary school programmes were accepted to a secondary school. The differences between the application and acceptance trends among Roma and non-Roma students are greatest when it comes to grammar schools. 8% of Roma applicants are accepted to a grammar school, compared to 28% of non-Roma applicants. There is a rather significant difference between the Roma and non-Roma population in how their place of residence affects school choices: among the non-Roma, the type of settlement they live in has an effect on the level of interest in secondary education, but there is virtually no such trend among the Roma: only those who live in Budapest tend to choose to go to secondary schools – and grammar schools, in particular – in somewhat higher numbers. The differing educational paths of the Roma and the non-Roma are a reflection of differing strategies, and also lead to differing chances in the labour market. Still, the greatest difference is in the realisation of plans: 12% of Roma students participating in secondary education drop out of school within the first year and a half after starting school, while the drop-out rate of

the non-Roma is negligible. The research shows that there is no connection between the competency level achieved in 8th grade and school leaving among the Roma – absences correlate with school leaving much more strongly.

Figure 10.6. Distribution between competency levels of 8th grade Roma and non-Roma students in the 2006 competency assessment (%)



Source: Kertesi–Kézdi, 2009

10.5. Changes and measures in education policy

In the new millennium, Hungarian education policy primarily intended to assist those in need within the education system, making use of its established structures and procedures. The groups to be supported were defined and the students who enter the education system with a disadvantage and are at risk of performing poorly or dropping out of school were listed in a statistical register. Both the above described programmes and the below discussed financing priorities reinforced the preventive and supportive nature of action for the disadvantaged. Apart from comprehensive development programmes, the Government tried to bring about changes and help disadvantaged students become more successful at school through changing the operational conditions of education, developing content and motivating individual students.

The Human Resources Development Operational Programme (HRD OP) of the National Development Plan specifically emphasised the support of the Roma and disadvantaged regions. The 2004 public education development strategy – created before the New Hungary Development Plan – set the reduction of inequalities in education as a goal, specifically aiming at the reduction of early segregation, increased pre-primary education, the development of the network of vocational schools and the promotion of school integration and differentiating pedagogical methods. The Government programme on Roma integration is mainly built around adding an ethnic focus

to measures that form a part of preexisting programmes and actions aimed at the integration of disadvantaged groups, with two new elements: support provided to Roma students in higher education and increasing the number of pre-primary school teachers who speak a Roma language. Accordingly, the Social Renewal Operational Programme (SROP) of the 2007–2013 New Hungary Development Plan places special emphasis on the fight against the segregation of disadvantaged students and Roma students especially, and on preventing early school leaving and helping early school leavers return to the school system. Within the framework of the New Hungary Development Plan, all school operators who applied for educational investment/development funds had to prepare and implement public education equal opportunities assessments and action plans.

The National Programme Against Child Poverty (2006) was the first document discussing the problems related to poverty and exclusion with a complex approach, which laid the foundation for strategic planning across various branches of government. The National Strategy “Making Things Better for Our Children” was approved by Parliament in May 2007. Its goal is to drastically reduce child poverty within a generation, improve the chances of those who come from a disadvantaged background, promoting the creation and implementation of complex local programmes aimed at improving the situation of children and their families in the most disadvantaged microregions, and laying the technical and methodological foundations of the Sure Start Programme and spreading it around the country. The implementation of the National Strategy is assisted and monitored by the Evaluation Committee set up by the Government. As part of one of the SROP actions, the implementation of the Give Kids a Chance programme and the nationwide launch of the Sure Start Programme, aimed at early intervention and based on unified criteria, started in 2009. The programme intends to prevent social exclusion by supporting early (0-5 years) development and with the active participation of the family and the wider environment. The programmes are implemented in disadvantaged microregions where there are also microregion-level complex child poverty programmes in place, and the location is usually Children’s Houses.

The amendments of the Act on Public Education provide preference to multiple disadvantaged children at pre-primary school and school admission tests, and provide them various catch-up programmes at school. The Act contains special considerations for students with special educational needs with regard to the length and content of education, the size of the student groups and the conditions of examinations. The legislative amendments aimed at reducing school failures focused on reducing repeated years, introducing compulsory textual evaluation at grades 1–4 of primary school and the extension of measures aimed at strengthening basic competencies to grades 5 and 6. In order to allow those who left the education system with a failure or incomplete qualifications to achieve educational qualifications, those who did not finish primary school were given an opportunity to enter vocational education after a 10-month or 20-month catch-up programme. Two years later, after another amendment, the range of people covered by catch-up programmes was expanded: the 16-

year age limit was lowered by one year and the programmes were opened up for those who completed primary school but did not wish to complete 9th and 10th grade.

The problems of disadvantaged primary school students are complex and their resolution requires the coordinated work of various organisations, but for a long time, the only support provided by education policy was purely financial, in the form of complementary normative funding. Part of the funding was intended to directly improve the educational situation of students in need, and another part was used towards supporting the education of those living in small villages – which indirectly also supported the disadvantaged. The direct support provided to various different student target groups was used to cover the costs of the special programmes set up for them. Due to the awarding criteria, the complementary financial support also affects the content of the education itself. This applies especially to students with special educational needs, in whose case the Act on Public Education sets out special conditions for both separate SEN education and integrated education (i.e. education in classrooms shared with other students). Integrative preparation here means the integrated education of disadvantaged students in accordance with the programme approved by decree, aimed at teaching socially disadvantaged students and students who are lagging behind in development together with all other students. The Government first introduced integration in primary schools, with pre-primary schools joining the programme in 2005 and secondary schools in 2008. The complementary funding provided to schools in small villages is designed to reduce the disadvantages of those who live in small villages and of disadvantaged students (whose proportion is high in such places), irrespective of whether the funding is contributing to the higher operating costs of smaller schools or (up to 2008) to the studies of children in another town.

The Vocational School Development Programme was aimed at improving the content of the education provided to disadvantaged students. The first phase (SZFP I) started in 2003, and the second phase (SZFP II) started in 2006 – and stopped in 2009. Considering the composition of the population of vocational school students, the SZFP in itself already contributed to equal opportunities, and component C was specifically designed to help those with low educational qualifications in catching up. No impact study on SZFP I was carried out; the results were studied in 2008 largely based on the self-assessment of programme participants. According to the results, the programme achieved the planned sub-objectives with good efficiency, and participants believed that it contributed to reducing early school leaving; however, it is impossible to determine if the three-year development activity will enable vocational schools to help more students finish their studies successfully.

In the decade following the turn of the millennium, educational policy tried to promote the progress of disadvantaged students in the education system with various bursary and mentoring programmes. The Útravaló programme, a bursary programme for disadvantaged students, started in 2005, enabling disadvantaged public education students and their teachers who are willing to mentor them to apply for

support. The programme, although it has no ethnic aspects, supports many Roma students due to their disadvantaged situation. One of the weaknesses of the programme is that the most needy, those with the most serious problems, do not receive support. The programme has little impact on those living in small villages. The programme is often characterised by a focus on formal completion, and its effectiveness is questionable, as it does not appear to be more effective than the Roma bursary programme in terms of learning outcomes or the percentage of students who continue their studies at a higher level. The number of Roma bursary recipients was rising – except for the last year, when the number of those receiving support was drastically reduced for budgetary reasons – which means that more and more students reached the educational achievements that are the preconditions for receiving the bursary. One of the weak points of the programme is the way Roma ethnicity is proven by applicants, which in some cases provides opportunities for abuse. Among those in vocational training, the bursary is tied to labour market considerations: only those can receive the bursary who are learning a profession where demand is outstripping supply. The Arany János Talent Support Programme, in place since 1999, is aimed at preparing disadvantaged students and students from disadvantaged settlements for higher education by placing them in high-quality secondary schools and providing them with student housing. One characteristic of the programme is that it does not simply provide the educational qualifications that are generally considered to be the required minimum, but takes students to a higher level.

On top of the above mentioned measures, numerous local initiatives were also supported through the operational programmes of the national development plans. These individual projects are at various stages of networking and hence institutionalisation, and are related to education to varying degrees. “Tanoda” learning centres are out-of-school organisations designed to help multiple disadvantaged primary and secondary school students – often specifically Roma students – integrate better into society and do better at school. As a recognition of their operation, tanodas are now included in the Act on Public Education, but normative financing has not yet been provided to them. The KID programme is designed to lead school leavers back into the school system, relying on and coordinating the actions of the institutions and organisations operating in various parts of the social security system. The Dobbantó programme helps 15–23-year-olds with learning and behaviour problems learn a trade by preparing them for vocational school. The Training as Part of Employment scheme provided work and training at public education institutions to Roma youths who had completed at least 8 grades of primary school, which allowed participants to acquire a secondary school leaving examination certificate and vocational qualifications in three to four years. The free adult training programme One Step Ahead is aimed at allowing people with vocational qualifications and people without vocational qualifications to go one level higher in education. The Government is financing the above initiatives – and numerous others – but only as pilot projects or on an ad hoc basis; therefore, due to the unpredictability of tendering, their continued operation is uncertain. These multiple isolated attempts, successful as they were, did not make up a unified system.

10.5. Segregation vs integration

Various Hungarian research projects have shown that segregation at school, i.e. the separation of students coming from differing family backgrounds, starts early, and disadvantaged students are often separated from the rest in an almost ghetto-like manner. The amendment of the Act on Public Education, designed to reduce segregation by regulating the drawing up of school districts and the acceptance of out-of-district students, shows that there is a need for serious changes in the education system. Local governments that operate more than one school are required by the amendment to set up school districts in such a way that multiple disadvantaged students are represented in every school in approximately the same proportion as their proportion in the settlement (the divergence cannot be more than 15% in either direction), and they are also required to give multiple disadvantaged applicants priority over out-of-district applicants. Measures were taken with the same ultimate aim to promote the early start of pre-primary education for multiple disadvantaged children from the age of 3, by ensuring that they are accepted by the pre-primary school and providing financial support to the family for starting pre-primary school.

It is difficult to collect data on the results of the measures taken to reduce the segregation of multiple disadvantaged students at school. Mass school restructurings and mergers make it especially difficult to identify trends. As disadvantaged students are often concentrated in small towns and villages, the structural changes in the school system that took place in the second half of the decade affected them as well. Education managers preferred the operation of schools by school operator associations or multi-purpose microregion associations in this period (cf. the complementary normative support given until 2007 for commuting students and school operator associations). However, the system of normative support incentives was not always coherent. The spreading of integration was hindered by loopholes like the free operation of private schools and the possibility of giving local government support to private schools, or the spreading of six- and eight-year grammar schools. Local education managers found loopholes by reclassifying schools with many Roma students as ethnic minority schools or starting new training programmes that were not attractive to the Roma population in schools that were at risk of becoming Roma-majority schools. Closing these loopholes would not fully resolve the problem of integrated education, because there is currently no solution for reducing the school segregation caused by residential segregation. The only way to significantly change the situation would be to close schools in small towns and villages and set up larger, central schools, but the 2006–2008 education policy, which intervened in school structure significantly more vigorously than before, still only managed to achieve superficial changes. Deeper integration measures taken at the classroom level rarely met the demands and ideas of groups with a strong ability to enforce their interests, so their implementation ran into difficulties. There are successful programmes, ones that helped improve the results of disadvantaged students and all other students as well, while also contributing to reducing the deficit of disadvantaged students.

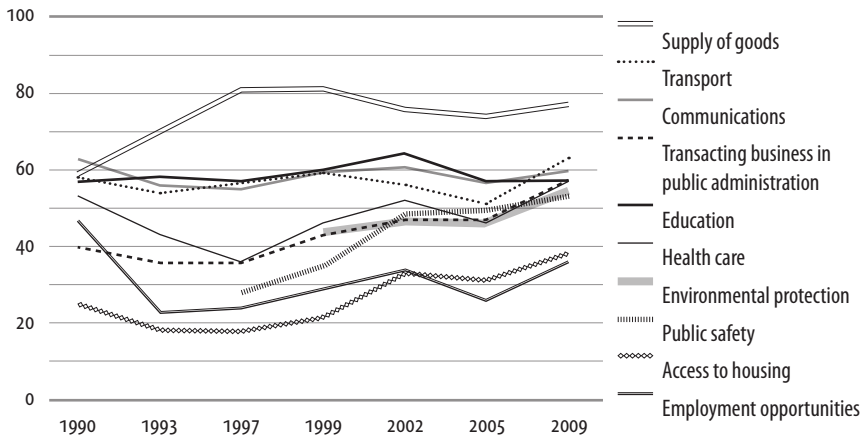
There are numerous positive developments with regard to the programmes aimed at reducing segregation: several larger cities have closed “ghetto schools” that taught a large proportion of children with multiple disadvantages. Experience shows that a local government can carry out such structural changes successfully if – apart from being sufficiently firm and consistent – it complements the measures with a serious pedagogical development programme which offers value to all layers of society, and if education policy instruments are complemented by other measures, such as social policy and education policy action. However, this requires funding, and therefore not every local government and school can undertake such programmes.

11. The public perception of education

11.1. Education and spending

Opinion polls reveal a deterioration in public mood related to education in the first decade of the 2000s. In the survey conducted at the time of the 2002 change of government the only public service respondents were more satisfied with than education was the supply of goods. This changed by the end of the decade. While satisfaction indicators improved to a greater or lesser extent in most areas, they deteriorated in the case of education.

Figure 11.1. Satisfaction of the Hungarian adult population with various public services, 1990–2009 (on a hundred-grade scale)



Source: Opinion polls about education between 1990 and 2009

Question asked: "I will list a few areas from our everyday lives. Please rate each with the grades given in school, from 1 to 5, depending on how satisfied or dissatisfied you are with these things in Hungary today. One means that you are very dissatisfied, and five means that you are very satisfied."

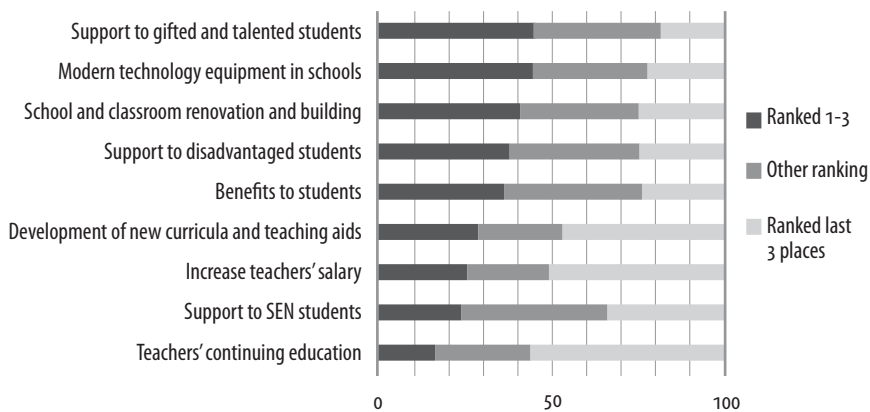
Notes: (1) In the 2009 poll separate questions were asked about public education and higher education. The values shown in the diagram are the average of the two indicators. It is worth noting that there was a very big difference between the two: while the level of satisfaction of public education was 61, in the case of higher education it was only 53. (2) The values of the five-grade scale were transposed to a scale of 0–100.

At the same time it appears that direct experience of or interest in education have a positive influence on perception. Respondents who in 2009 had children under 18 tended to be more satisfied with public education than those who did not. Similarly

to previous findings, the adult population considers pre-school the best of all the public education levels. Next in rank higher education is perceived to have declining standards over the past ten years. The perception of vocational secondary schools and three-year trade schools is the worst.

It is not contradictory to the criticism of education, in fact it highlights its importance, that most of the adult population want to see more spent on education; only those voting for health care are more in number. But while there is no difference in the opinion of respondents on health care, as this is something that directly concerns every citizen, more respondents with children under 18 want more public funds spent on education. According to almost two-thirds of the sample representative of the adult population the State spends too little on vocational training and hardly any of the respondents said too much. More than half of the respondents also think the State does not spend enough money on public education either. Much fewer of them consider higher education underfinanced: relatively many respondents are of the opinion that the State spends too much on this level of education. The adult population is ambivalent about the goals of educational expenditures. Asked to rank nine possible goals for educational spending, approximately half of the respondents put supporting gifted and talented students among the top three goals and only one-sixth ranks it at the end of the line. Opinions differ more substantially regarding support to various student groups. Supporting disadvantaged students and students with special educational needs (students with disabilities) is significantly less preferred than supporting gifted students; nevertheless, more respondents consider spending on the former groups a goal to be supported and fewer rank it lower than the goal related the latter group. Public opinion has a characteristic perception of the

Figure 11.2. Distribution of the population's opinion regarding areas in education on which the State should spend more, by rank of answer, 2009 (%)



Source: Opinion polls about education, 2009 database

Question asked: "In your opinion which are the areas the State should spend more money on? Please indicate only the THREE most important areas. And which are the areas the State should spend less money on? Again, please indicate only the THREE most important areas."

problem of teachers. When asked about the reasons in the background of inadequate student performance, inadequate training of teachers was chosen by the fewest respondents, and relatively most of the respondents pointed out lack of parental supervision, overload of children, or a selective school system. The fact that the population considers teachers' continuing education the least preferred goals to be supported may be related to this perception. At the same time teachers' wage increase also features among the least preferred of the nine goals listed. This indicates that in the eyes of the public children's school performance is not primarily related to the teachers.

11.2. Schooling and learning

The rate of those who agree with free school choice greatly varied over 20 years: in 2009 their number increased again, though their proportion is far less than in 1995. In 2009 three-quarters of the respondents advocated for a selective school system; public agreement with the statement that children should be sent to the school best suited to their knowledge and abilities as early as possible was only greater in 1995. Only a fraction of the respondents agreed with school closures, and the great majority of parents raising school age children consider it necessary to keep at least the lower grades (1 to 4). Survival of an institution should depend on the quality of education according to only a tenth of the population. The rate of those who would take schools out of the sphere of competence of local governments and pass them into the stewardship of churches or foundations is very low (approximately 3%). Parents living in rural areas tend to regard local government operated schools as the best, but some of them, mainly those with higher educational attainment, prefer church schools. At the same time the 2009 opinion poll also highlighted the fact that school closures are not necessarily opposed in theory even by people raising school age children. If the quality of the institution is poorer and there is another local government school in the vicinity (in the same village or easily accessible) at least half of the par-

Table 11.1. Distribution of the respondents raising school age children regarding whether certain conditions of education are better in a small school or in other schools, 2009 (%)

Conditions of education	Better in a small school	Better in a bigger school of another municipality	Equally good in both	NK/NA*
Quality of teachers' work	22.7	15.2	51.9	10.2
Effectiveness of education	20.6	21.5	48.1	9.8
Level of equipment	3.1	64.3	22.0	10.6
State of repair of building	4.7	50.3	30.8	14.2
Relations with local community	59.1	7.7	25.5	7.7
Relations among students	59.1	5.1	28.5	7.3
Teacher-parent relations	62.1	3.7	26.6	7.6

Source: Opinion polls about education, 2009 database (parents sub-sample, N=572)

Question asked: "In your opinion in which school are the following better?" (conditions of education in the table).

* NK/NA: Did not know/Did not answer.

ents can accept school closure. The opposition to closure is biggest when an institution is closed solely because of dropping student numbers or when there is no easily accessible alternative school. According to the public, the most important difference between larger and smaller schools to the advantage of the larger ones lies in the state of repair and the level of equipment of the school building.

When asked about selecting a primary school, respondents were offered a choice of 14 possible answers to pick the criteria they found most important. The most important considerations were proximity to the home and highly qualified and experienced teaching staff. These were followed by a pleasant atmosphere and teaching order and discipline, then by foreign language learning opportunities. The answers indicate that almost half of the population clearly give precedence to quality aspects when choosing school. Not surprisingly, in the more qualified population groups, who pay more attention to their children's schooling, less than 40% mentioned proximity of the school among the three most important criteria, and even so, fewer of them chose this over and above the other two considerations (good teachers, and pleasant atmosphere). The higher the respondents' educational attainment, the more important they rate language teaching, and the less important they expect the school should teach order and discipline. It is also remarkable that when selecting a school one of the least important consideration is students' achievement at various examinations, study competitions and external assessment tests. Similarly unimportant is the appearance of social differences, i.e. that mainly children from good families should go to the chosen school, and the wide educational choice on offer, including applications of alternative educational methodologies. Various social groups apparently have largely different strategies that determines their school choice (or would supposedly determine their school choice if they have children reaching school age). This unequivocally shows an inherent possibility of segregation if the differences among schools are substantial.

Table 11.2. Some criteria influencing primary selection as perceived by the public, by respondents' educational attainment (%)

Consideration	Less than 8 grades of primary school	8-grade primary school	Trade school	Secondary school leaving exam.	Higher ed. graduate	Total
Should be close home	77.8	61.8	59.2	48.8	37.3	54.4
Should have good teachers	35.6	44.6	36.1	41.5	55.3	42.5
Should have a pleasant atmosphere, children should have a good time	11.1	24.0	25.3	34.8	43.4	29.8
Should teach children order and discipline	42.2	38.0	31.0	19.0	17.1	27.7
Should offer foreign languages in high numbers of lessons	4.4	9.5	14.1	22.1	25.7	16.6

Source: Opinion polls about education, 2009 database

Question asked: "When parents try to find a primary school for their child they have different criteria of selection. Please look at the criteria on the cards and choose no more than three that you think are the most important if you were to find a primary school for your child."

The population seems to take an increasingly firm stand concerning the age of moving up to the next level, i.e. secondary education. There is little support for the earliest (age 10-11) change of school level and for the 12-grade school type (7% each). The 8-grade secondary school appears, at best, as in demand by certain population groups. There has been a clear shift in the rates of those preferring the 6-grade and 4-grade secondary school: while after 2002 the need to change school at the age of 12-13 markedly increased, in 2009 more than half of the respondents advocated for the traditional model. Here, too, there is a difference in terms of educational attainment: more highly educated respondents favour early school change in numbers above the average; this means 6-grade secondary school in the case of respondents with secondary school qualifications. On the other hand, a higher proportion of college or university graduates are in favour of changing school level at 10 years of age.

The leading criterion in selecting secondary educational institutions is for students to be able to learn what they are interested in and, in the case of vocational education and training, to have a good chance to find a job in the particular trade after leaving secondary school. In the selection of grammar schools and vocational secondary schools it is also important that the school should have good teachers and students stand a good chance to continue in a higher education institution. Financial aspects are also important: parents of children in secondary education also consider the costs of education but barely pay attention to the school's safety or performance at competitions.

The overwhelming majority of the population agree that children must continue their studies after secondary school: 60% of respondents favour learning a trade, and one-third would advise a young person to go on to higher education. In this respect, too, the educational attainment of respondents seems to be a determining factor: the more qualified the respondents, the more likely they advocate for higher education. While 27% of respondents with lower educational attainment (primary education and trade school) would suggest to continue studies in higher education, the same rate is 60% among those who are graduates themselves.

Table 11.3. Distribution of the population's opinion about continuing education after the secondary school leaving examination, by respondents' educational attainment, 2009 (%)

	Less than 8 grades of pri- mary school	8-grade primary school	Trade school	Secondary school leav- ing exam.	College	Univer- sity	Total
Don't continue studying	2.2	2.1	0.8	1.2	0.0	0.0	1.1
Learn a trade after the secondary school leaving examination	73.9	63.2	68.4	54.4	44.0	34.4	59.2
Go on to college or university	10.9	27.3	26.6	34.0	47.0	59.7	32.0
Don't know	13.0	7.4	4.2	10.4	9.0	5.9	7.7

Source: Opinion polls about education, 2009 database

Question asked: "If a friend or a relative asked for your advice about what his or her child should do after the secondary school leaving examination what would you suggest?"