Equity in Education

Country Report: Hungary

Prepared by: Judit Keller

September, 2008
Table of contents

**Situation analysis: the “equity profile” of Hungary**

1. Introduction
   1.2. Dimensions of educational inequalities
   1.3. Inequalities across levels of public education

**Trends in the policy framework**

2. Making the necessary financial and human resources available
   2.1. Strategic documents on equity in education
   2.2. Regulations for more equitable education
   2.3. Resource map of financing: normative, competitive, complementary funding
   2.4. Supplementary human resources (psychologists and teaching assistants)

3. Policies aiming at transforming education service delivery in institutions
   3.1. The transformation of schools
   3.2. Supplementary and/or mainstreaming approaches
   3.3. School-community, school-parents relationships (Report on PE 2006)
   3.4 Policies aiming at reducing segregation and exclusion

4. Setting targets for institutions and their impact on equity
   4.1. Setting targets and standards
   4.2. A professional accountability system for greater equity
   4.3. The measurement-assessment system of Hungarian public education

**Appendix**

**References**
Situation analysis: the “equity profile” of Hungary

1. Introduction

That Hungarian public education reproduces socio-economic inequalities has become a central topic of social, economic and educational policy in the past years. In spite of several policy attempts since the second half of the 90s, Hungarian public education still segregates socio-economically disadvantaged groups through selection mechanisms that influence students’ performance and individual learning paths from a very early age on. These issues had gained public attention only by the end of the 90s, even though several pieces of research had tried to call attention to growing inequalities in public education. It was not until the results of PISA 2000 that policy makers began to address the issue. Since then, several OECD (PISA 2000, 2003, 2006; Special Needs Education, 2000) and national studies (Csapó, 2002; Radó, 2000; Radó, 2003; Andor–Liskó, 2000; Hermann-Horn-Kádár, et al.-2008, Report on Public Education 2006) have pointed out that selection mechanisms in Hungarian public education system increase differences among schools to the extent that they cannot provide equal opportunities for students who enter the system with socio-economic-cultural disadvantages. On the contrary, socio-economic inequalities are multiplied by selection-segregation mechanism of public education.

Until recently these issues remained only in the focus of education policy, neglecting the direct link between educational inequalities, the inefficiency of public education and the low activity and economic growth rate of the Hungarian economy. Lately, correlations between the economic power, the socio-economic developmental potentials of a country and accessibility of quality public education for all social groups[1] - as indicated by international studies – has become acknowledged in Hungarian policy discourse as well. The argument that the smaller educational disparities are between socially advantaged and disadvantaged groups measured in educational output, the bigger the economic performance capacity of the country (Levin, 2003) reflects a new approach to educational inequalities. As opposed to the “same for all” logic of the equal treatment approach, a new approach – based on the concept of equity – would promote principles of „fairness and justice”; i.e. compensating for inherent socio-economic disadvantages through education by respecting individual abilities and needs. The „same for all” principle conveys a (re)-distributive logic that has been reflected in the exclusive use of per capita funding provided by central state agencies on integrated forms of education over the years. This supplementary funding for the „equal treatment” of students different from „their normal peers” in one way or another (learning difficulties, different socio-cultural or linguistic background, organic deficiencies), however, has not induced integration within mainstream public education, but without standard criteria it has often reproduced the original problem of segregation.

In the light of these problems, changes in education, fiscal, social and economic policies can be observed in the past 2-3 years. Changing policy trends will be discussed in in the second part of this paper. Firstly, the equity profile of the Hungarian public education system is outlined with a view to the impact of differences in socio-economic status, residence, ethnic origins, gender and individual special needs on educational outcomes and students’ performance. The

[1] This is explained by an improved evolution and use of personal capacities and by the complex positive impact of educational qualifications on the quality of life. In countries where a certain social groups are excluded from attaining qualifications necessary to actively participate in social and economic life, the expenses of the social and healthcare budget increase significantly. This means that a considerable amount of human resources are not made use of in participating in economic production, and that parallel to this the expenses of state budget increase to the extent that a low-performing economy cannot support.
equity profile of the public education system reflects on these issues by analyzing the various dimensions of educational inequalities and their significance on socio-economic trends.

1.2. Dimensions of educational inequalities

1.2.1. Socio-economic status

Consecutive PISA reports since 2000 (2003, 2006) have called attention to the poor performance of Hungarian 15 year olds in mathematics, sciences and in reading. PISA 2006 data shows that the overall performance of Hungarian 15 year olds is below the average in all three domains (PISA 2006). PISA studies have also indicated that Hungary has exceptionally large differences in performance between children of high and low socio-economic status. The strong correlation between the ESCS index and student performance functions through differences between schools. Compared to the OECD average (21%), in Hungary 46% of the variance of the ESCS index derives from socio-economic differences among schools; i.e. the socio-economic composition of its student body. Among the OECD countries Bulgaria (51%) and Chile (53%) were the only countries that scored higher (worse) than Hungary in this dimension. In other words, 70% of the differences in students performance is explained by differences among schools (see Appendix).

Data implies that the Hungarian public education system is incapable of providing fair access and quality education for all children regardless of socio-economic status. Secondary schools are segregated by socio-economic status and students’ performance in mathematics, sciences and reading literacy strongly correlates with differences in socio-economic status between secondary school types. But attainment of higher education is also dependent on socio-economic status: children with lower socio-economic status stay out of the education system after secondary degree: e.g. the percentage of the Roma in higher education is way below the proportion of the Roma represented in the cohort of 18 year olds (in 2005 it was 10%, in 2020 it is expected 20% and in 2050 over 20%) (Discussion Paper on Equal Opportunities, 2006).

1.2.2. Residential differences

Inequalities in public education do not directly correlate with regional socio-economic disparities. On the other hand, in students’ progress, in access to various educational services, their quality and in related aspirations great differences can be observed across regions and settlements. This is most visible in the case of single schools of small settlements. Due to the relative small size and the economic disadvantages of the settlements, local governmental costs to finance the single school are relatively higher than in the case of larger settlements (Hermann, 2005b). In terms of opportunities to continue education, a greater percentage of graduates of primary schools in small settlements continue their studies in vocational schools.
In their budget constraints, to ensure more per capita funding of the institution, single schools of small settlements take all that they can; i.e. they have a more heterogeneous student body than schools in larger towns. *(Small Schools of Small Settlements, 2006).* This heterogeneous composition often displays extreme differences in the socio-economic backgrounds of students: with the highest proportion of Roma in these schools we may also find children with higher ESCS index in the same school. *(Forray–Hegedüs, 2003).* As a result in small settlements segregation exists only at the inter-municipal level (as parents with higher socio-economic status take their children to a more homogeneous - i.e. with less Roma – school of neighbouring settlements or towns). Data shows that selection mechanisms have reversed effects in residential differences: the bigger the settlement, the more selective its schools are in terms of students’ socio-economic background. In bigger towns schools can afford to select a homogeneous student body for classes; i.e. to get more motivated students from higher socio-economic statuses *(Report on Public Education 2006).* These differences between smaller and bigger settlements correlate with educational outcomes; i.e. there are great disparities between the capital and villages with regard to students’ reading literacy and mathematics skills measured in the National Competence Tests.

### Average performance of 6th and 10th graders by type of settlement, 2004

<table>
<thead>
<tr>
<th></th>
<th>Mathematics</th>
<th>Comprehension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budapest</td>
<td>508.8</td>
<td>512.0</td>
</tr>
<tr>
<td>County seat</td>
<td>498.4</td>
<td>501.3</td>
</tr>
<tr>
<td>Town</td>
<td>473.4</td>
<td>479.9</td>
</tr>
<tr>
<td>Village</td>
<td>438.3</td>
<td>444.3</td>
</tr>
</tbody>
</table>

*Source: Calculations by Dániel Horn from the database of the National Competence Assessment of 2004*
1.2.3. Gender differences

Gender differences in educational outcomes do no longer denote women’s limited access to education but differences in the learning paths and in the aspirations of students of different sexes. While in the labour market women are still at a disadvantage compared to men, in public education inequalities tend to concern young males. In primary and secondary education the number of male and female students is the same, but female students are 20% better represented in secondary schools of higher prestige. It is also female students who participate in higher education in greater number: the percentage of female students was 51-52% at universities and 56-57% in colleges. In the same vein, gender differences in learning paths can mainly be identified with regard to participation in general secondary and vocational education. In secondary vocational education participation ratio has been balanced since 1997/98, but in vocational schools young males are over-represented. The drop-out rate within this group of males is generally very high, that leads to their failure in the employment market and eventually to social marginalization.

1.2.4. Ethnic differences

1.2.4.1. Migrants

The structure of immigration in Hungary is unique in international comparisons since the majority of immigrants have arrived from neighbouring Romania from the Hungarian minority in Transylvania. The greatest number of immigrants from a non-neighbouring country have arrived from China: their number in 2005 was over 5%. This mainly Hungarian ethnic composition of immigration strengthened assimilative pedagogical approaches in Hungarian public education that were – paradoxically – welcomed by the Chinese community. Despite their difficulties in mastering Hungarian as a second language Hungarians are less prejudiced against them than their Hungarian speaking Roma country fellows. Hungarian public education system has not developed pedagogical tools to teach Hungarian as a foreign language, to use foreign languages in teaching and to handle pedagogical tasks related to immigration. (Vámos, 2006).

1.2.4.2. Roma students in the education system

In Hungary there are no official statistics about the education of the Roma population. As of the Act on the Protection of Personal Data and Disclosure of Data of Public Interest in 1992 personal data may not be collected and processed about the ethnic background of citizens. Estimates from research surveys are available but we lack a detailed overview of the situation (Report on Public Education 2006). Not only does the lack of official data impede the creation of an accurate statistical portrait of the education of Roma people, it limits educators’ and policy makers’ abilities to identify educational issues of aspiration and performance of students of ethnic minorities and to fully document and address discrimination. Because they lack data to differentiate between “mentally disabled”, “disadvantaged,” and Roma children, these categories are sometimes used as if they were synonymous and the same programmes and policies are required for each group (OECD Thematic Review, 2005).

According to recent estimations, in 1999 11% of school-aged children were Romas; in 2008 this ratio is expected to reach 15% (Havas–Liskó, 2005). It has been well-known that the efficiency of the Hungarian public education system is impeded by the practice of enrolling 10 times more Roma children in schools with special curriculum for the „mentally disabled”. The practice of qualifying Roma children „mildly mentally disabled” by expert committees has been criticized by national and transnational experts. In 2005 the OECD recommended the abolishment

[2] A study in an elementary school in Kecskemét in 1996 showed that 73% of the Hungarian students had no problems with having a Chinese sitting next to them. At the same time, 50% of them said they would be disturbed by having a Roma student sitting next to them. (Horváth Á., 1997).
of the entire category, the revision of the procedures of expert committees and the introduction of new standard protocols for qualifying children with special education needs. (*OECD Thematic Review*, 2005).

At the same time some promising trends can also be observed in the education of the Roma. While at the beginning of the 90s less than half of the Roma population graduated from primary school, today 90% of them complete the 8th grade although at an older age than their peers. Figures on continuing education reveal a rapid expansion of secondary education of the Roma although disparities can be seen in their representation in different types of secondary education.

**Changes of the Roma continuing their studies after primary school by programme type, between 1993/94 and 2002/03, (%)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Failed to continue</td>
<td>49.8</td>
<td>16.5</td>
<td>16.1</td>
<td>14.9</td>
<td>9.9</td>
<td>10.2</td>
<td>8.1</td>
</tr>
<tr>
<td>Special vocational</td>
<td>9.4</td>
<td>8.6</td>
<td>10.4</td>
<td>9.4</td>
<td>5.5</td>
<td>5.4</td>
<td>6.2</td>
</tr>
<tr>
<td>training school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocational school</td>
<td>30.2</td>
<td>61.6</td>
<td>57.5</td>
<td>56.5</td>
<td>62.8</td>
<td>63.6</td>
<td>63.8</td>
</tr>
<tr>
<td>Vocational secondary</td>
<td>10.0</td>
<td>9.3</td>
<td>12.0</td>
<td>15.4</td>
<td>16.2</td>
<td>16.3</td>
<td>15.9</td>
</tr>
<tr>
<td>General secondary</td>
<td>0.6</td>
<td>3.7</td>
<td>3.8</td>
<td>3.6</td>
<td>5.6</td>
<td>4.4</td>
<td>5.9</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>N</td>
<td>166</td>
<td>168</td>
<td>176</td>
<td>182</td>
<td>419</td>
<td>430</td>
<td>452</td>
</tr>
</tbody>
</table>

*Source: Havas–Liskó, 2004*

The representation of Roma students in higher education is still at around 2% but this number is also growing: in the first part of the decade it was only 0.5%. One of the main obstacles to the educational effectiveness of the Roma population is the variety of segregational practices that have become quasi-norms in the daily functioning of schools (*Havas–Liskó, 2005; Kertesi–Kézdi, 2005; Mártonfi, 2005*). On various forms of segregational practices that entail qualitatively worse educational services see section 1.3.3.

### 1.2.5. Personal abilities and special needs

In Hungary the official categorization of children with special education needs has blurred differences between children with organic disabilities, learning difficulties and social disadvantages (*Report on PE* 2006). Unlike the OECD’s 3D category system that differentiates between children with organic disabilities (A), with learning difficulties (B), and children not belonging to either of the first two categories but in need of special educational services (e.g.: migrants) (C), the Hungarian system has created a separate category for „children with individual attainment” in addition to categories of A and B. This group included children with disabilities, learning difficulties and social disadvantages.

This classification has contributed to anomalies of qualifying large numbers of Roma children as students with special education needs because of their „mild mental disabilities”. There has been a silent consensus among experts that most of these Roma children have no mental disabilities at all. At the same time, the lack of consensus among experts to standardize qualification tests have further contributed to an overall increase of students categorized with special education needs over the past 4 years. In 2001/02 4.8% of all elementary students were classified as SEN students, in 2002/03 5.3% of them, in 2003/04 5.9% of them and in 2004/05 6.3% of them (*Report on PE* 2006).
Related to this problem, qualitative aspects of special education have also gained special attention. SEN institutions have often been criticized for not promoting the integration of these children into society. Advocates of inclusive education have argued that social integration can only take place through the inclusion of SEN students in mainstream public education. For inclusive education to happen mainstream school must be open to and capable of teaching children with different needs, ranging from organic disabilities, disadvantaged social background to outstanding talent (Kőpatakíné, 2004). The practice of separated training of “normal” and SEN children (even in schools that have an “integrated” approach but in reality they offer separate curriculum for the “mildly mentally disabled”) however increased differences between these children. In special education classes legal requirements of a quality education are often not met: three out of four teachers in these programmes are not qualified special education teachers and in three out of ten schools there are no special education teachers at all. (Report on PE 2006). In more than 80% of the cases these special classes combine children of different ages whose majority is overaged (Havas-Liskó, 2002).

The over-representation of the Roma in SEN programmes and the high ratio of SEN children in elementary schools have generated critical remarks from the OECD, from national researchers and from civil organisations. As a result, changes in the legal background of the SEN category system and in the procedures and standard protocols of expert committees have recently began to address these anomalies. The detailed discussion of changes in policy and legal measures will be in sections 2.2
1.3. Inequalities across levels of public education

1.3.1. Pre-schooling

Pre-school education is available from the age of 3 and is compulsory from the September of the year the child turns 5 years old. It is also possible to enrol during the year. In case the capacities are met, the child is put on a waiting list. Parents may freely choose any kindergarten, but only the institution of the district where the child lives has the obligation for acceptance. Pre-school education is free of charge. The expenses of the meals provided are to be covered, but the needy, the ones receiving support on the basis of the child protection system receive free meals as of September 2003. The better the head of the household is educated, the more they are likely to take advantage of pre-school services. The results of a research show that besides the fact that rejection of application to a kindergarten happens mostly because of the lack of capacities, the second most common reason is that one of the parents of the household does not work and therefore can take care of the child. (Equity in Education CAR, 2005).

This is especially relevant in the case of Roma children whose serious disadvantages in public education derive from the incompatibility of their informal knowledge (socialization) with the framework of formal mainstream public education (Radó, 2002, Hermann-Horn-Kádár, 2004). Pre-school education could equip these children with proper skills but the non-attendance of kindergartens by the Roma has been an obstacle to their early development. In 1993/94, 20% of 5 year old Roma children did not participate in pre-school education (Report on PE 2006). Improvements have taken place since then; in 2002, 88% of the 5 year old Romas participated in pre-school education (Havas-Liskó, 2002).

Modifications of the law on public education done in 2003 introduced new measures to make pre-schooling widely available for children living in poverty and with compound disadvantages. In this vein, a three-year-old child with compound disadvantages, and children with eligibility for daycare according to the law on child protection may not be rejected by the kindergarten. In 2008 a pre-school fund has been created to provide financial incentives for disadvantaged parents to send their children to kindergarten. See discussion in section 2.2.

1.3.2. People without primary education

According to data on primary education, although compulsory education was extended until the age of 16, during the 90s the number of students leaving day-time education without a primary qualification had increased. In 1993–1994 90% of the 15 year old population finished the 8th grade of primary school as required by law. Within the Roma population this ratio was 44% (Report on PE 2006), including those Roma students who finished the 8th grade at an older age, this ratio was at 77%. Today, 90% of the Roma graduate from primary school, although every 5th of them has studied in a segregated school (Havas–Kemény–Liskó, 2002). In the last few years this data has stabilised around 5%, which means 5-6 thousand young people per year (Report on PE 2006). The latest data show that half of the students without a primary final will not acquire a primary qualification later either, which eliminates their chances of getting a job. In order to (re-)integrate these students in the education system and the labour market several programmes had been launched in the past years (see sections 2.3., 3.).

1.3.3. Types of segregation in primary education (Hermann-Horn-Kádár, et al., 2004)

1.3.3.1. Segregation across schools

Segregated schools emerged as segregation of Roma settlement districts/sites in run-down outskirts evolved. This goes back to the spontaneous migration of the 1990s when large numbers
of unskilled – and in the new economic conditions – unemployed Romas moved from towns to poorer, backwards regions and settlements. As their number grew the more advantaged local population migrated to towns and regions with better infrastructural facilities and employment. As a result, the number of non-Roma students in local schools decreased as non-Roma families sent their children to schools (non-Roma) in neighbouring settlements. In 2000 in 28 schools – out of 192 – non-Roma parents sent their children to schools in neighbouring settlements despite the fact that their settlement had more than one school facilities (Havas–Kemény–Liskó, 2002). Roma parents not being able to afford travel expenses of daily commuting or being unaware of the importance of their choice of school sent their children to the closest local school. The unintended consequence of this process was the evolution of ethnically segregated schools. The qualitatively worse educational services that these schools offer discourage non-Roma parents to send their children to these institutions (Report on PE 2006).

1.3.3.2. Segregation within schools
   Due to local government’s budget maximizing needs, some schools in order to prevent the „emigration” of non-Roma students to other settlements established class structures that allowed the segregation of Roma students. The various forms of in-school segregation are:
   a) classes of special needs education for students to fall in line with their peers, where requirements in performance are lower, teaching is of worse quality and the proportion of Romas is very high. According to a study, 81,8% of Roma children study in these SEN classes that are often organized for children whom expert committees did not consider „mildly mentally disabled” but with such behavioural problems that their teaching in integrated classes was not recommended (Havas–Kemény–Liskó, 2002)
   b) classes of intensive courses where certain subjects are taught in intensive courses (e.g.: English, mathematics) that are mostly attended by non-Roma students.
   c) classes of „minority Roma education”. Before 2002 local governments received per capita funding minority education that they often used to establish segregated Roma classes.

1.3.3.3. Special schools
   The official explanation of sending Roma children to segregated special schools has been that they are not able to learn at the speed of their peers due to the lack of socialization in Roma families and the failure to attend kindergarten. In practice, however, Roma children’s catching up with their peers in special schools is seriously hindered by poor equipment facilities and low teaching requirements in these schools. In addition, teachers’ pedagogical performance in these schools is of lower quality due to the low prestige of special schools. In special schools where the ratio of Roma children is above 75%, the proportion of unskilled teachers is around 30,8%, while in mainstream institutions it is only 17,4% (Liskó 2001). Children are to stay in special schools until their abilities are reconsidered apt for mainstream primary school education by committees. In most cases this means that they stay in special schools until the end of their primary education.

1.3.3.4. Private student status
   A relatively new form of segregation is the practice of private student status that exempts children from daily school attendance and requires them to pass exams at half-terms. Private student status can be obtained either upon the request of the parents or at the recommendation of expert committees. While in the first case it is the responsibility of the parents to prepare children for the half-term exam, in the second it is that of the school. In 2001 the Ombudsman for National and Ethnic Minorities reported that parents are sometimes forced to sign the private student status of their children by the school. A modification of the decree in 2002 was expected to eliminate this problem with the inclusion of the childcare service in reviewing the decision on private student status. Nevertheless, local governments and schools have been on the same side to segregate these mostly Roma children (Hermann-Horn-Kádár, 2004).
1.3.4. Secondary level: typical learner careers

The horizontal and vertical expansion of secondary education took place during the 90s. Joining secondary training programs and institutions (secondary school, vocational high school and vocational school) became a possibility at several points: at the age of 10, 12 or 14. The distribution of students among types of secondary schools displays inequalities between Roma and non-Roma students: 57% of Roma students continue their education in vocational schools, while only 19% of them study in vocational high and/or secondary schools finishing their training with a maturata. It is estimated that 50% of Roma students drop out in the 9th and 10th grades, which means that only 32% of them begin 11th grade, where many of them drop out during the year, leaving only 24% of Roma students to finish their secondary school training (Report on PE 2006).

Table. • Continuing education in the proportion of graduates 1998/99

<table>
<thead>
<tr>
<th>Secondary school studies</th>
<th>Roma</th>
<th>Non-roma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not continue</td>
<td>14,9</td>
<td>3,2</td>
</tr>
<tr>
<td>Special vocational school</td>
<td>9,4</td>
<td>3,2</td>
</tr>
<tr>
<td>Vocational school</td>
<td>56,5</td>
<td>36,8</td>
</tr>
<tr>
<td>Vocational high school</td>
<td>15,4</td>
<td>38,1</td>
</tr>
<tr>
<td>Secondary school</td>
<td>3,6</td>
<td>18,4</td>
</tr>
</tbody>
</table>

Source: Liskó, 2002

Over the years vocational schools have eroded to take students that are „left behind”. The gap between the socio-cultural background of students in vocational schools and in the other two types of secondary schools is enormous: only one-third of vocational students’ mothers have maturata. This ratio in the case of secondary schools students is 70%. Nearly half of the vocational school students live in poverty and commute from villages. Their „choice” of vocational school had been „determined” by their low average grades or failures in the primary school. As a result, these students are unmotivated and many of them drop out in 9th and 10th grade. The lack of consensus over the function, the requirements and the financing of the vocational training of the 9th and 10th grade of vocational schools further contributes to an overall lack of motivation among teachers and students as well (Report on PE 2006)

1.3.5. Career correction and second chance (CAR 2005)

1.3.5.1. Adult education in secondary schools

From the mid 90s it has served less the training of “adults” and this way the correction of earlier educational career, but it became a framework for alternative educational career. This alternative training route reversed the earlier sequence of primary and professional training, starting with professional training (in vocational school, daytime), then later providing the general secondary education (within the framework of adult education). Most students apply to these studies as young adults intending to continue their previous studies (e.g.: drop outs from vocational training, or graduates from vocational schools without a maturate and employment problems). Many of these students are active salary earners, which increases the demand for flexible, evening courses. Unfortunately, not many vocational high schools offer these kinds of second chance courses for the attainment of the maturata. This means that they are not prepared to take large numbers of salary earner students and offer them flexible course structures adjusted to students’ working hours.
1.3.5.2. Vocational training

In the case of students heading towards vocational training, we can claim that an increasing rate of students receiving vocational qualification passes the maturata before vocational training. In 2001 an eight times higher number of students (34,326 people) received qualification connected to the maturata than in 1990 (4,668 people) while the number of people receiving qualifications without taking the maturata became much lower. It is also a typical career possibility from this training program for students to use higher level vocational training as a stepping-stone and with an easier entrance process they continue their studies in an institution providing a higher education degree (Equity in Education CAR 2005).

1.3.5.3. Transition from school to work

The third possibility from secondary level is to enter the world of work, which is not any more characterised by the practices of a period a few decades earlier, which preferred stepping to the world of work right after finishing secondary studies. Today the “transition period” between education and the world of work became typical during the period of becoming an adult. The transition is well characterised by the representation of people in their twenties in the education system, and especially the rate of people between the age of 25-29, which rate has also increased during the last few years. Considering people in their twenties, “double dipping” is also a typical phenomenon, which means that besides working somebody acquires two different degrees at the same educational level. This characterises young people acquiring a second profession after leaving vocational high schools just as well as highly educated students heading for a second diploma. The career routes characterising this age group have become individualized and they show a very colourful picture, which was not known before. Young adults have left the system of secondary education, but intensive learning periods are included into this period of their lives, let them be within the framework of formal or non-formal learning (Equity in Education CAR 2005).

The equity profile of Hungarian public education system can be evaluated by an estimated weighing of the dimensions that explain differences in educational outcome. The table below provides a summary of the equity profile of the Hungarian public education system.

<table>
<thead>
<tr>
<th>Dimensions of inequalities</th>
<th>Impact of dimension on outcomes</th>
<th>Trend of direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-economic status</td>
<td>great impact</td>
<td>Growing</td>
</tr>
<tr>
<td>Residential status</td>
<td>weak impact</td>
<td>not changing</td>
</tr>
<tr>
<td>ethnic, language background</td>
<td>great impact</td>
<td>not changing</td>
</tr>
<tr>
<td>Personal disabilities</td>
<td>medium impact</td>
<td>Weakening</td>
</tr>
<tr>
<td>Gender</td>
<td>medium impact</td>
<td>growing</td>
</tr>
</tbody>
</table>

Source: Discussion Paper, 2006
Trends in the policy framework

2. Making the necessary financial and human resources available

2.1. Strategic documents on equity in education

Since the second half of the 90s inequality-equity problems of public education have gained special emphasis in policy-making and in government programmes. These trends can be traced in strategic programme documents, in concrete development programmes and in regulations. The Public Education Development Strategy in 2003, for instance, regarded educational inequalities one of the most important problem areas of public education and assigned the following developmental goals to their reduction:

1.) The expansion of pre-school education within disadvantaged social groups;
2.) The modernization of vocational training;
3.) The integration of Roma and other disadvantaged children;
4.) Antidiscrimination programme;
5.) The integration of children with special needs.

The Strategy for Lifelong Learning was adopted by the Government in 2006. The document defines the ‘support of disadvantaged groups and groups at risk on the labour market’ as one of seven urgent intervention areas. The focus of this intervention area is on preventing drop-outs and increasing the chances of disadvantaged groups to participate in lifelong learning programs. In this vein the strategy intends to develop programmes for vocational training, disseminate integrated forms of education and level out regional differences in education and in training. With a cross-sectoral view, the strategy also intends to reconsider social assistance and to create an environment that encourages the combination of training and work in the case of disadvantaged groups (part-time work practices, training during maternity leave). Less overtly but the Vocational Training Development Strategy 2005-2013 also promotes the integration of disadvantaged social groups in vocational training by defining its main goal as „high quality vocational training for all” and the integration of drop-outs through vocational training (Report on PE 2006).

More recent strategic documents, such as the National Action Programme for growth and employment 2008-2010 and the National Strategy Report on Social Protection and Social Cohesion (2008-2010) also discuss educational inequalities and equity measures respectively from the perspective of economic growth and from social cohesion. The National Strategy Report on Social Protection and Social Cohesion 2008-2010 defines the development of equal opportunities in the education system as central in fighting child poverty and reducing the rate of inactivity in the labour market. On the basis of the recommendations of the Commission, the National Action Programme for growth and employment introduces two measures to address educational inequalities in a lifelong learning perspective. The measure on the „improvement of investments in human resource development” focuses on the training of disadvantaged groups, especially adults without primary education by extending the „Step One Ahead!” programme. The measure on „education and training matching labour market needs” intends to improve the quality, accessibility and efficiency of public and higher education mainly relying on the Social Renewal Operational Programme financed by the European Social Fund. The priorities of this measure are:

- Supporting pre-school education to ensure equal educational outcome between disadvantaged and mainstream groups.
- Abolishing school segregation and disseminating integrated forms of education: training mentors, kindergarten teachers, scholarships, etc.
- Improving the quality of public education through competence-based education: teacher training in this framework, new measurement and evaluation, diagnostic tools for testing.
Higher education matching labour market needs
Establishing a National Qualifications Framework.

The transformation of the institutional framework necessary for the implementation of the priorities of this strategic document has already started. Specific mechanisms that have been used to implement strategic priorities have been:

- The introduction of new legislative regulations in public education
- The transformation of the system of financial incentives
- The introduction of a new measuring-assessment system
- The introduction of a system of communication and dissemination

2.2. Regulations for more equitable education

The past few years have seen a series of legislative attempts to support „equity” and fairness in education. The Act on Public Education (1993 LXXIX 121. § 14.) defined the terms of „disadvantaged” and „compound disadvantaged” status. On the basis of European Union Council measure (2000/46), the Government set up the Equal Treatment Authority by decree (362/2004. (XII. 26.). The Authority may take action in individual cases and may investigate violations, if any, of the principle of equal treatment under an administrative procedure. The Act on Equal Opportunities and Equal Treatment in 2003 defined criteria for equal treatment in all state and public administration sectors. It also identified specific mechanisms of direct and indirect discrimination, harassment, segregation and it establishes provisions for legal sanctions.

On the basis of § 65th of the Act on Public Education the Ministry of Education in 2002 initiated the development of the National Network of Integration in Education, for supporting the implementation of tasks associated with the education of disadvantaged children, particularly the Roma. The network had two objectives: firstly, to establish a system of basic institutions responsible for integrating mainly the Roma into education; secondly to improve professional background services. In 2003, an Integrative System of Pedagogy was introduced in the basic schools of the network but cumbersome procedures and changing rules of financing created hiccups in the implementation of the program, which eventually failed to live up to original expectations.

In 2008 decrees 12/2007. (III. 14.) and 9/2008. (III. 29.) of the Ministry of Culture and Education introduced new financial mechanisms to replace “integration head quotas” and to promote equal opportunity and the closing-up of the gap between disadvantaged and mainstream children (see section 2.3.). The decrees introduced competitive grant funding to support ability-development, integrated trainings and pre-school development programmes. This type of funding represented a major transformation of the mechanisms and the system of financing equal opportunity-equity practices as supporting legislation provided mechanisms to apply benchmarks in the provision of funding. Unlike in the case of previous head quotas (see section 2.3.) regulations of the ability-development grant fund required local governments to fulfil requirements on the demarcation of school districts and the preparation of an action plan for equal opportunities in public education if they wanted to apply for this type of funding. Both requirements had been defined in respective pieces of legislation (see below). In the evaluation of applications performance in competence-development is also taken into account: schools have to attach their results in a table of indicators of National Competence Assessment with a view to the ratio of children with compound disadvantages in the school.

Further modifications in the 1993 LXXIX Act on Public Education (2007 LXXXVII) also aspire to promote the integration of disadvantaged children in public education. These modifications are:
• Financial support to those disadvantaged families that send their children to kindergarten before the child’s 4th birthday
• Local governments must prepare an institutional quality management programme related to the self-evaluation of schools
• Schools must participate in the annual National Competence Assessment that provide external evaluation of schools’ teaching performance through students’ outputs in mathematics and literacy skills
• The local government of low performing schools must prepare and action plan for school development
• § 89. raises the preparation of an action plan for equal opportunities in public education the condition of participation in any of the national and transnational competitive funding programmes. The overall goal of the program is to reduce the segregation of Roma and disadvantaged children, the reduction of assigning them to the category of “mildly mentally disable”, improving their attendance in kindergarten, to reduce unequal access to education service and the drop outs of these children, the abolishing of educational discrimination.
• § 66. modifies the practice of the free choice of schools by making it mandatory for schools to take children whose residence is within the school district. If there is more than one school in the settlement, school districts are to be drawn in a way that the percentage of children with compound disadvantages is maximum 15% higher than the ratio of children with compound disadvantages in the settlement. In those school districts where the ratio of compound disadvantaged children is above 50% schools cannot be obliged to take all children from the district, especially if other schools in the settlement have free space. Schools after having fulfilled their obligations towards children from their districts are required to take children with compound disadvantages to fill free spaces in the application.

Major modifications in the legislative environment of the education of children with special needs have also taken place. Firstly, the direct impact of the “From the Last Bench” program was the reconsideration of the methodology and procedures of expert committees in classifying children with special needs (see section 1.2.5.) that resulted in the introduction of new standards for testing. At the same time, the 2007 LXXXVII modification of the Public Education Act established new categories for the classification of children with special needs. On the basis of the new categories expert committees reviewed children who had been classified with special needs because of “learning difficulties as a result of psycho-developmental problems”. In the case of 4202 children out of 31918 participating in the review, no learning or behavioural difficulties could be identified!

Finally, it is the intention of the Ministry of Culture and Education to introduce complementary stipend for teachers working with children with compound disadvantages. The planned complementary stipend is expected to be accepted by the Parliament in October-November, 2008 regulated by 138/1992 (X. 8.) government decree.

---

[3] The free choice of schools – introduced in 1985 – has contributed to the evolution of educational inequalities and the practice of various forms of segregation (Szira, 2005b). The first modification of the public education act in 2005 restricted the rights for liberty of schools to select their future students only from the applicants.


[5] MEGMAGYARAZNI A PPT ALAPJAN!
2.3. Resource map of financing: normative, competitive, complementary funding

Four types of financial incentives can be distinguished in the support of equity in education: per capita funding (head quotas), competitive grant funding, market-based funding (vouchers) and individual complementary funding schemes. Hungarian education policy has been in favour of per capita funding (head quotas) and to individual complementary funding. Recently competitive grant funding has replaced head quotas. The logic of action of head quotas followed the principle of “the same for all” without particular target appropriation. Competitive grant funding, on the other hand, provides means for education policy administration to establish benchmarks and standard targets and monitor and evaluate the implementation of projects.

2.3.1. Per capita funding (head quotas)

In the absence of clear legal criteria and target appropriations the head quota for national and ethnic minority education and its successor the head quota for integration provided perverse incentives for beneficiaries (local governments) and schools to practice non-inclusive forms of education. The head quota for national and ethnic minority education, for example, was found to be used by schools to organize in-school segregation of Roma students ([Report of Ombudsman 2001, 2002]). The head quota for integration and ability-development established in 2002 as a financial incentive for schools participating in the National Network of Integration a.) failed to encourage local governments to abolish residential segregation that usually serves as basis for educational segregation; b.) did not respect school-specific costs in the teaching of disadvantaged children as its distribution neglected differences in the distribution of children with compound disadvantages in the education system; c.) in the absence of criteria and target appropriation for integration beneficiaries (local governments) often used the funding only “to fill the budget” through formal integration of segregated schools.

Anomalies of implementation
The external evaluation of the Network in 2007 pointed out that unclear legislative definitions and standard requirements caused the misuse of funds. The – so called – “integration head quota” established by the 57/2002. decree of the Ministry of Education to encourage the integration of Roma students was often used to formally “integrate” two institutions, thus overcoming segregation across schools, but leaving in-school segregation of Romas intact in the new institutional formation (see section 1.3.3. on types of segregation).

Per capita funding schemes still exist today for the support of national and ethnic minority education and the education of children with special needs. National and ethnic minority head quota is available for local governments (beneficiaries) provided that teaching takes place in the minority language or bilingually. The head quota for children with special needs is available at differentiated rates, provided special education is guaranteed in the institution for children with severe or compound disabilities, children with mild organic mental disabilities and children with severe and/or permanent non-organic learning and behavioural difficulties.

2.3.2. Competitive funding

One of the main advantages of competitive grant funding is that it provides instruments for education policy administration to set standard requirements and to monitor and evaluate implementation. Whereas in the case of head quotas the only benchmark of financing is the number of disadvantaged children, policy makers can set several conditions for the use of competitive grant funding (e.g.: specifying the circle of potential beneficiaries, setting targets in implementation). This kind of financing mechanism can better ensure the spending of funds on original goals with a view to school-specific circumstances and costs. Modifications of the 1993 Act on Public Education established several types of competitive grant funds have been established to provide financial incentives for beneficiaries and schools to abolish forms of
segregation and to implement equitable and integrated forms of education. The table below summarizes these funds:

<table>
<thead>
<tr>
<th>Name</th>
<th>Beneficiary</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Assurance fund for the employment of external experts 17/2007 (III. 14.)</td>
<td>Local governments</td>
<td>Quality control and management for transparency and accountability</td>
</tr>
<tr>
<td>Performance motivation grant fund 17/2007 (III. 14.)</td>
<td>Local governments whose quality management program includes a teachers’ performance evaluation system</td>
<td>Financial incentives for improving teachers’ performance</td>
</tr>
</tbody>
</table>

Competitive grant funding is not an entirely new policy instrument in Hungary to promote equity in education. Between 2004-2006 ESF and ERDF funded development programmes provided considerable amounts of competitive funding for development programmes promoting social cohesion. Measures of the second priority of the Human Resource Development OP (2004-2006) focused on reducing inequalities in the education system through:

2.1 The provision of equal chances for disadvantaged students in the education system aiming to reduce the rate of drop-outs among disadvantaged (especially Roma) students;
2.2 Supporting programmes on social integration;
2.3 Improving the employment rate of the disadvantaged, especially the Roma population.

Competitive grants were available through tenders in several areas: in six the target group was disadvantaged students while two programmes focused on the inclusion of children with special education needs (Report on PE 2006). One of these programmes focused on financing the revision of methodology and procedures of expert committees examining children for special education. The programme was carried out under the 2.1.1. B component of the HRDOP and it involved a pilot project of developing and testing the new methodology. Among programmes for the integration of disadvantaged groups “Step one ahead!” and “Training Embedded in Employment” must be mentioned in particular. The “Step one ahead” programme aimed at supporting the (re-)training of adults with low degrees or without vocational degrees. Participants received after every 150 hours of training one month salary of the minimum wage as well as financial support for book purchase. Mentors were also available for trainees with compound disadvantages. The condition for participation in the programme was to undertake training in vocations particularly needed in the county of residence. Given the successful implementation of their original targets, both programmes were planned to be continued within the financial framework of the Social Renewal Operational Programme (SROP) of the 2nd National Development Plan. Unfortunately, due to current budget restrictions of the central government the “Step one ahead!” programme has recently been halted despite ongoing registrations of new participants across the country.

The third priority area of the Social Renewal OP for the period 2007-2013 is devoted exclusively to the development of the system of public education with a view to providing access to quality education for all. Measures of this priority are the following:
3.1. Supporting the dissemination of competence-based education
3.2. Improving the efficiency of public education, innovative solutions and cooperation
3.3. Reducing the segregation of Roma students and students at compound disadvantages, the provision of equal opportunities
3.4. Supporting inclusive and intercultural education of children with special needs.
<table>
<thead>
<tr>
<th>Title</th>
<th>Goal</th>
<th>Amount 2007-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SROP 3.3.2</strong> According to the modification of the Act on Public Education (1993. LXXIX. 89. §) participation in tendering in national and/or transnational competitive funding programmes is conditioned by the preparation of an action plan on equal opportunities by maintainers (local governments or multi-purpose micro-regional associations) of public education institutions.</td>
<td>Maintainers that define specific measures in their action plan to establish greater equity in their schools for disadvantaged students and the implementation of these measures cannot be financed otherwise may apply for grants to implement the action plan.</td>
<td>1 483 178 000 HUF.</td>
</tr>
<tr>
<td><strong>SROP 3.3.3</strong> Supporting the quality assurance and networking of schools with integrated forms of education</td>
<td>The overall goal of the programme is to support the coming about of best-practice institutions that can act as role models for other school in integrated forms of education. The network of these best-practice institutions is encouraged by the programme. 35-40 applications are expected in the programme</td>
<td>1 319 000 000 HUF</td>
</tr>
<tr>
<td><strong>SROP 3.3.4</strong>. Supporting continuing learning paths of students with compound disadvantages to higher education</td>
<td>The goal of the programme is to increase the number of disadvantaged students in higher education, to support Roma students in higher education. The programme has three components: - improving language competencies of students with compound disadvantages - preparing these students for a successful maturata - supporting good performance of Roma students in higher education, providing additional services for preserving their Roma identity. In 2008 1500 students with compound disadvantages are expected to participate in the preparatory courses for the maturata and another 1500 in language competence courses. Between 2008 and 2010 120-200 students in higher education will participate in special mandatory and/or optional courses.</td>
<td>Financial framework in 2008 768 676 876 HUF</td>
</tr>
<tr>
<td><strong>SROP 3.3.5</strong>. Supporting extra curricular study group programmes and the development of a antidiscrimination signalling system</td>
<td>The goal of the programme is to reduce drop-outs while strengthen and improve learning paths of Roma children and students with compound disadvantages for secondary school education. Extra curricular study groups are informal educational forums organized by parents, students or NGOs where these students can receive individual help in different areas of their studies.</td>
<td>Financial framework in 2008 1 650 000 000 HUF</td>
</tr>
</tbody>
</table>
The antidiscrimination signalling system is intended to map out practices of school segregation and discrimination and introduce developmental intervention tools. The programme is also expected to provide legal help for students in critical cases. 50-75 applications are expected.

<table>
<thead>
<tr>
<th>SROP 3. 2. 1. B New forms and system of learning</th>
<th>The goal of the programme is to reintegrate drop-outs into secondary education with a maturata in order to improve their chances on the labour market. The programme supports Second Chance Secondary Schools and digital forms of education for this disadvantaged group. The programme aims at developing extra curricular activities and networks for these students to compensate for their social and cultural disadvantages. Approximately 24 applications are expected.</th>
<th>Financial framework in 2009 330 000 000 HUF</th>
</tr>
</thead>
<tbody>
<tr>
<td>SROP 3.2.1 A and C Employment embedded in training</td>
<td>The program is the continuation of the „Training embedded in Employment” program of the HRDOP 2004-2006. Similarly, the goal of the new program is to provide alternative learning paths with employment schemes for Roma students having dropped out of the formal education system. The training-employment model Roma students can obtain realistic employment positions in the labour market working as pedagogical or general education assistants. As a result of their work, drop out rates, school absenteeism can be reduced the performance of disadvantaged and non-disadvantaged students can be improved. Mentors at employers’ are employed to help the integration of these students in the labour market. Participants will work in public and general education institutions where they can also obtain the necessary hours of practical education in vocational training.</td>
<td>9 billion HUF during 7 years from 2009</td>
</tr>
</tbody>
</table>
2.3.3. Individual complementary funding

Several individual supplementary funding schemes have existed since the early 2000s to provide financial assistance in nurturing talented disadvantaged children to participate in secondary education. Programmes that have provided scholarships, dormitory-, travel-funds are:

For the road (Útravaló) programme

The programme was launched in 2005 under the government decree 152/2005. (VIII.2.). The overall purpose of the programme is to help disadvantaged students to obtain vocations, the maturate or higher education diplomas through the financial support of their studies by scholarships and mentoring teachers. The three sub-programmes of this scholarship scheme are:

- Road to the secondary school
- Road to the maturata
- Road to vocation

In 2005 20,045 students participated in the programme, in 1675 schools, supported by 7739 mentoring teachers. For the time of their participation in the programme, both mentoring teachers and students received scholarships (Report on PE 2006).

Catapult mentor programme

From a lifelong learning perspective it is important to note this scholarship scheme for mentors in higher education. The overall goal of the programme is to provide assistance for students at compound disadvantages in integrating into the structure of higher education and in preventing drop outs. The output goal of the programme is to help these students in their integration in the labour market at the end of their higher education training. It is a programme set up by the Ministry of Culture and Education that finances the scholarships of mentors, establishes benchmarks for the training of mentors and monitors implementation.

Arany János Programme

- Arany János Dormitory-Vocational School Programme for Students with compound disadvantages: The purpose of the programme is to offer an inclusive environment in dormitories of vocational schools for disadvantaged children to compensate for socio-economic disadvantages and through this to reduce drop-outs and support their participation in vocational training.
- Arany János Dormitory Programme for Disadvantaged Students: The goal of the programme is to provide pedagogical support in dormitories for children with socio-economic disadvantages to study in vocational high and secondary general schools and to successfully obtain their maturata.
- Arany János Talent Supporting Programme: The overall goal of the programme is to provide pedagogical help, conditions for obtaining competitive knowledge and personality development for disadvantaged students mainly from small settlements to successfully obtain their maturate. The beneficiaries of the fund are: secondary schools, dormitories.

2.4. Supplementary human resources (psychologists and teaching assistants)

The „training embedded in employment” programme of the National Public Education Institute was financed by the National Employment Fund within the framework of the HRDOP 2004-2006. Public education institutions participating in the program through tendering, could select locally unemployed Romas who while working for the public education institution obtain the maturata and/or a vocation. Participants received the minimum salary for their employment at the institution. Following their final exams public institution were obliged to employ the participants for two years.
The overall goal of the programme was to establish a best-practice model that at the same time provides conditions for outside-classroom learning, for the expansion of teachers’ professional activities, for promoting equity in social mobility, and for ensuring new forms of secondary education. More specifically, the programme intended to integrate Romas into the world of education and employment at the same time by offering them role models from the middle-class with diplomas, language skills and a culture for labour. The ultimate goal was to train them to be role models within their own local communities.

Some statistics of the programme are indicative of its success. Out of 60 participants

- 14 of them already had a maturata at the beginning of the program: after one year 12 of them graduated as pedagogical assistants and 2 as child supervisors
- 46 of them was preparing for the maturata: 2 dropped out; 40 obtained the maturata; 4 postponed the maturata in 1-2 subjects.
- 44 of them obtained a professional qualification: 14 as special education teachers; 14 as child supervisors, and 16 as pedagogical assistants.

Participants spent an average of 4 years in the programme. 47% of those who have already successfully finished the programme are currently working, 20% of them are full-time housewives, 13% is studying on the secondary level and 13% is unemployed. 1/3 of the participants are expected to continue working in the mentor-institution, 1/3 of them would like to continue their studies (secondary and higher levels) and ¼ of them expect to be unemployed on the long run.

It was not only that the original goals of the programme were realized during implementation and its best-practices in reducing unemployment among the unskilled that established its popularity in the media and in international professional circles as well. As opposed to traditional approaches of communal work, this programme provided opportunities for progress through its strong emphasis on learning and on the planning of individual learning paths. This way the programme supported the development of adaptational and employees’ skills as well as decision-making based on individual responsibility that on the long run may have a positive impact on participants’ families and communities. Despite the success of the programme, legislative modification that would make the employment of Roma coordinators, teaching assistants, psychologists, etc mandatory in public institutions is currently not on the agenda (Evaluation of the programme ...., 2008).
3. Policies aiming at transforming education service delivery in institutions

3.1. The transformation of schools

Educational inequalities became central topics in education policy through problems of quality, efficiency and effectiveness of the Hungarian public education system. It was a series of PISA tests (2000, 2003, 2006) that called attention to the low performance of Hungarian students in particular competence areas. Besides problems of the quality and effectiveness of education, PISA studies also highlighted the inefficiency of the public education system when comparing low outcome with high GDP spending of the education sector (PISA 2006).

It was in this context that several new policy elements were introduced to promote the better quality, the efficiency and effectiveness of public education. The most important of these were:

- the system of national competence assessment (2001),
- the introduction of the new competency-based maturita\textsuperscript{[6]},
- the dissemination of the practice of institutional quality development (Radó, 2006b).

The overall goal was to provide a balanced support of the decentralization of content development by means of output regulations and evaluation. Defining key competences of policy expectations and enforce them by regulations was especially important in the decentralized system of Hungarian public education where a multiplicity of methods and approaches thrived due to local interpretations of the institutional framework in setting the goals and targets of (local) education. From the perspective of educational equity, this had a major negative impact on differences among schools in terms of the quality and efficiency of the pedagogical output (see situation analysis 1.2.1). In other words, the goal to strengthen the principle of professional accountability in public education was expected to provide policy and legal instruments to publicly measure, evaluate and if necessary sanction low institutional performance occurring in schools with a majority of disadvantaged students. As sanctions would introduce developmental tools to improve institutional performance, a measuring-assessment system could ensure equal opportunities and greater equity in public education.

3.1.1. Problems of accountability in Hungarian public education: evaluation systems

Accountability in public education is about the definition of education services, the evaluation of these services and the application of intervention measures in case of low quality service provision. In Hungary these elements have been rather weak and fragmented (Radó, 2006b).

1) The division of tasks between the three levels of education management (central state administration, local (maintainer), institutional (school)) is clear but not entirely regulated.

- In terms of quality assessment, it has been the duty of the maintainer to evaluate school but the dimensions of evaluation were not clearly defined;
- The external evaluation mechanism of a quality assessment system through school inspection (and attached feedback) has been entirely absent since 1985 despite EU recommendations (2001) on school inspection as a supportive tool of institutional self-evaluation;

\textsuperscript{[6]}This new exam was designed to test school learning as opposed to broader learning gained through family status and to provide a tertiary entrance exam, thereby eliminating additional tests to enter tertiary education (OECD Thematic Review 2005)
• The external assessment of student performance has been the obligation of the central administration but its beneficiaries are schools;
• Information and research system was maintained by the education management but data has been available to anybody while feedback was not provided for institutions;
• The responsibility of intervention has also been dispersed across the three levels without consequences on low performance.

2) In the absence of proper evaluation of education policies and development programmes it has been difficult to give an account of the impact of policy tools.
• What is known is that the effects of regulations, the framework curriculum, per capita quotas and competitive grant funding are always shaped by the local context (interpretation);
• What may be assumed is that the new competency-based maturata had enormous effect on secondary education;
• What is entirely unknown is what effects financial resources provided by development programs may have had (the decisive role of the local context on the absorption of funds; it is only assumption that it often takes place without significant transformation of the local context).

3) Hungarian schools are not goal and output-oriented organizations that could provide external requirements for teachers. The reasons for this are:
• The maintainers’ of schools (local governments) do not define goals in synergy with other local goals; they do not establish expectations towards schools beyond daily functioning.
• In the absence of external institutional evaluations institutional goals accepted by all are of marginal importance.
• Schools are protected from the external world; their performance is not evaluated on the basis of external expectations.
• In the absence of holding school management accountable their internal institutional references are more significant than external ones.
• Parents support teachers rather than define expectations towards them.
• Student self-governments have been reduced to free-time organisations, thus they cannot influence institutional processes.

It was in this context that the Centre for Education Policy Analysis (CEPA) of the Ministry of Education in 2006 prepared a strategy for the establishment of a uniform quality assessment system in Hungarian public education. The quality assessment system was proposed to be accompanied by a system of developmental intervention tools in order to achieve the desired effects of feedback at all management levels. The overall goal of strategy was to transform schools – through a quality management system – so that the effectiveness of public education measured by students’ performance would match the efficiency of cost appropriation. Its central important element would be a quality assessment system that could function as an output-management system connecting performance to costs at all management levels in public education.

3.1.2. Recommendations of the CEPA strategy (2006)

Student performance assessment: national/central assessments and exams

1. Assessments and exams should serve the following goals:
   • Learning development: the development of teachers’ evaluation practices and methods and the strengthening of their reflexive teaching.
   • School development: the development of the self-evaluation practices of schools, the strengthening of institutional quality management as related to learning development
   • Ensuring professional accountability: feedback on the basis of measuring/assessing institutional output, curricular requirements and output standards.
2. Goals in the implementation of the above requirements with a view to harmonizing existing resources, assessments and exams at different points of the system:
   - A diagnostic developmental assessment at 4th and 6th grades including all students. Performance results are aggregated only at the national level.
   - A summative assessment of fulfilling requirements in mathematics, grammar and literature, natural sciences at 8th grade including all students. This assessment is to evaluate the performance of schools, hence students do not receive direct feedback. The evaluation of tests takes place at the national level.
   - A “small maturata” of mandatory subjects for those who participate in secondary training ending with maturata at 10th grade. National evaluation of results does not take place.
   - A summative assessment of general knowledge requirements at 10th grade in vocational schools before obtaining qualifications. This assessment is to evaluate the performance of schools, hence students do not receive direct feedback. The evaluation of tests takes place at the national level.
   - A final examination (maturata) at 12th grade for summative assessment.

Institutional evaluation

3. Institutional efficiency can be increased by the development of institutional procedures and mechanisms. Therefore, institutional evaluation is not exclusively about learning and pedagogical performances but also about studying and evaluating factors, processes and actors that influence efficiency. The evaluation of the quality of institutional mechanisms is about comparing conditions and processes with outputs. Actors of institutional evaluation are the central state, the maintainer (usually local governments) and schools. The institutional evaluation of the central state is a summative assessment of intermediate institutional performance through student performance assessments, thematic evaluations and central state control. The institutional evaluation of the maintainer is a summative, critical and developmental assessment of the school. The goal of institutional self-evaluation is the development of the effectiveness of pedagogical work.

4. Self-evaluation – is a systematic study of the institution with the purpose of providing deeper knowledge of the institution about its own functioning and thus increase its efficiency. The functions of self-evaluation are:
   - Comparing students performances with the pedagogical goals of the institution.
   - Studying users’ satisfaction (students, parents).
   - Analyzing pedagogical and operational activities and processes of the institutions (situation analysis, mapping out problems).
   - Making decisions about necessary developments with the help of self-evaluation, which is the first step in institutional quality assessment.
   - Improving efficiency through implementing developmental goals.

5. Fields of institutional self-evaluation:
   - Evaluation the pedagogical programme
   - The effectiveness of learning
   - The satisfaction of parties concerned
   - Circumstances and activities influencing institutional efficiency
   - Learning management, institutional activities supporting learning
   - Evaluation of teachers’ work
   - Organisational operations of the institution
   - The realization of the goals of development plan.

6. External evaluation by the maintainer – that is an evaluation of the complex scope of institutional activities. It serves the accountability of institutions towards the maintainer and
the assessment of users’ and the maintainer’s expectations as well as fulfilling central policy goals. Its functions are:

- Providing information for the maintainer about fulfilling its obligations as maintainer in service provision and developmental policy.
- Informing parties concerned about the quality of public education services.
- Informing the maintainer about the realization of its expectations towards the institution.
- Evaluating the basic tasks of the institution (teaching and training) along its program goals.
- Input data for developments that serve efficiency improvement.

7. Areas of maintainer’s assessment:

- Evaluation of pedagogical programme
- The effectiveness of learning
- Realization of maintainer’s expectations
- Evaluation of the management of the institution
- Efficiency of institutional operation
- Results of institutional development

Information system

8. The goals of an integrated information system would be:

- Ensuring the harmonization of data collected at different aggregate levels, for various purposes on public education;
- Satisfying the information needs of various levels of education management (national, regional, maintainer, institutional);
- Providing background for the indicator-system of national quality assessment;
- Providing information for maintainer and institutional self-evaluation;
- Integrating data on students’ performance.

Quality-evaluation sub-systems and possible interventions

9. A complex quality-evaluation system through measurement-assessment and the provision of feedback is expected to have a great impact on public education. As a tool of education policy quality-evaluation systems can only operate if i) quality-evaluation is harmonized with particular sub-systems and ii) if conditions for intervention on the basis of quality evaluation are provided. These sub-systems:

- A system of control
- Accreditation mechanisms
- Content regulation
- Management and planning
- Financing
- Human resources
- Professional services

10. Aggregate student performance assessments ensure the identification of those primary, secondary and vocational schools that perform below the average of the school-type at three consecutive national competence assessments. The minister of education obliges the maintainer to prepare an action plan where it maps out the reasons of low performance. The action plan must also include specific measures and an institutional development programme. The implementation of the programme is monitored by National Public Education Evaluation and Assessment Center.

3.2. Supplementary and/or mainstreaming approaches

The quality assessment system expected to be introduced in January 2009 would be a major step towards upholding equity measures through a tangible accountability system within the
framework of mainstream public education. Standardized measurement of student achievements would provide tools to see disadvantaged students’ performance against mainstream standards (that is still unavailable at the moment) and the aggregated institutional assessment could help reducing differences among schools. Appropriate indicators of a quality assessment system to measure educational outcomes at the individual and institutional levels would provide reference points for equity measures and could re-shape traditional supplementary funding schemes currently offered to promote equal opportunities for disadvantaged children.

Education policy that aspires to promote “equal opportunities and equal treatment” of disadvantaged students at the margins of mainstream public education tends to provide *supplementary funding* as a form of compensation for socio-economic disadvantages. Ironically, this logic of governance separates rather than integrates the education of disadvantaged groups into mainstream public education. By creating two separate interpretative contexts the original intention of the policy maker on equal treatment fails. A typical way of financing disadvantaged education at the margins within the supplementary framework is the provision of head quotas. The logic of action of per capita funding, however, finances the daily functioning of institutions on the basis of the number of children and in the absence of standard requirements on quality attached to accessing funding it does not promote the transformation of existing practices of segregation and discrimination.

Recently the traditional system of per capita funding has been replaced by competitive grants (see section 2.3). The institutional logic of competitive grant funding operates with indicators on the basis of standard requirements and a monitoring system that is capable of creating a single institutional context for the interpretation of disadvantaged students’ performance within the framework of mainstream public education. Developments regarding the establishment of a national quality assessment system and the harmonization of financing (competitive grants) and regulative sub-systems are indicative of steps having been taken towards a *mainstreaming approach*. However, at the strategic level mainstream public education has been separated from policy elements aiming at “equal opportunities”. The establishment of the Directorate General for Equal Opportunities independent of the State Secretariat of Public Education in the Ministry of Culture and Education is one example of this separation at the strategic level. This cognitive separation of equal opportunity-equity measures from the overall development of public education is also reflected in organization of competitive funding in educational development policy.

The third priority in the Social Renewal Operational Programme of the 2\textsuperscript{nd} National Development Plan (2007-2013) concentrates on ensuring access to quality public education for all on the systemic level (Table in 2.3). Nevertheless, in the organization of measures the reduction of the segregation of disadvantaged groups appears separately from other mainstream public education measures, such as competence-based education or the improvement of the efficiency of public education. This still reflects the logic of the traditional supplementary approach that places the education of disadvantaged groups in separate interpretative frames from overall developmental goals of mainstream public education.

**Example for supplementary approach in the SROP**

As intervention 3.1 contains measures on a complex dissemination of competence-based education, 3.1.4 focuses on complex institutional development of schools including special education curricula, and 3.1.6 is about the development of a uniform special education service provision. Thus, while intervention 3.1 is about complex competence-based institutional development in public education, it neglects institutional development from the perspective of the education of Romas and disadvantaged groups. It seems to be the intention of policy makers to organize the fragmented measures into integrated tender modules, where applicants could apply for development funds within a single uniform developmental framework. In the case 3.1.4, this would mean the inclusion of measures...
about the desegregation of Roma and disadvantaged students within the complex institutional development plan of schools. In other words, modular tendering would enable the system to include the promotion of equal opportunities for disadvantaged groups within mainstream public education.

3.3. School-community, school-parents relationships (Report on PE 2006)

The transformation of schools and the development of transparent mechanisms to evaluate school and teacher performance for a better quality education have become particularly important with a growing dissatisfaction with schools in the aftermath of the PISA-shock. One way to increase the transparency of the teaching process would be to involve parents actively in the quality management of teaching. The public education act provides opportunity for the establishment of school committees (involving parents, maintainers’ school management) that “interpret” parents’ recommendations for the school management and mediate between the two parties. Parents have the right to improve the management or the quality of education by written recommendations. However, according to a recent study school boards have failed to fulfil their legal obligations of representation (Report on PE 2006). 17.9% of parents had some kind of recommendations towards the school. 57% of these recommendations concerned the quality of education in the school (Report on PE 2006).

Unfortunately, the numerous parental organisations that exist in Hungary – most of them under the umbrella organisation of the Hungarian Parents’ National Association – have not become channels for representation (Report on PE 2006). It is indicative of the nature and the size of the problem that the number of NGOs in the education sector has increased while in other sectors there has been a sharp decline. Many of these NGOs in the education sector are foundations established by parents to help financing the school of their and their children’s choice (Report on PE 2006).

The transparency of the teaching process within a school community can also be established through webpages, students’ self-governments and school-days. Secondary schools are considerably ahead of primary schools in all these fields. School webpages are especially important new virtual forums of transparency. Although less than half of the schools, but 90% of secondary schools, have webpages in 50% of the cases schools’ policy and pedagogical program is on the website. Other virtual community functions such as galleries, forums and notice boards are also widely used by the schools.

Official education policy websites form a loose and often redundant network. The website of the Ministry of Culture and Education (www.okm.gov.hu) mostly addresses school management and teachers through a compilation of statistics, legislation, tenders, etc. The most popular website of the sector is Sulinet (www.sulinet.hu) that has three sub-portals: public network-Sulinet (to which schools are attached), Sulinet Expressz (for tax benefits and purchasing ICT products) and Sulinet Digital Knowledgebase (a free educational learning system). The website of Sulinet Digital Knowledgebase has not been finalized since 2004. Other alternative channels of the education sector for instance are the websites of History teachers’ Association, the National Association of Head Masters, Waste Reduction Alliance.

Despite tense and often conflict-ridden relationship between parents and schools legal provisions to strengthen the transparency of school management are not currently on the agenda.

3.4 Policies aiming at reducing segregation and exclusion

Policies aiming at reducing segregation and exclusion can be divided in two groups: those that have direct impact on desegregation and social inclusion and those that indirectly influence these. Below is a summary of policy instruments of both kinds.
4. Setting targets for institutions and their impact on equity

4.1. Setting targets and standards

Until the beginning of the decade the multiplicity of methods and approaches to measure performance in public education were rather fragmented. In 2001 it was the introduction of the National Competence Assessment system that first established uniform standards to measure students’ performance. The two new policy elements of the period – the competence assessment system and the new competency-based maturata – were intended to set appropriate targets for schools and for teachers about nationally required learning outputs at the end of various educational periods (e.g. at the end of 4th, 6th and 8th, and 12th grades). The list of competences were defined in the National Curriculum by a government decree in 2003 (243/2003 (XII. 17.). This was strengthened by an act (CXXV. §91) in 2004 that specified the annual mandatory measurement of the pedagogical work of schools with regard to the development of basic competencies. Results of the competence assessment would be published in the official journal of the Ministry.

The outcome of the PISA-shock in Hungary was an intense policy discourse on problems of quality, efficiency and the transformation of the system of national standards. These attempts were encouraged by the OECD and the EU whose 2001/166 EC recommendations on European cooperation in quality evaluation in school education were especially relevant for the Hungarian context. The recommendations directly linked issues of quality and efficiency of the education system to greater equity ensuring quality education for all regardless of socio-economic, ethnic background or residential status. In this vein, the recommendations put forward the establishment of a transparent quality evaluation system in school education that ensures equal opportunities and social inclusion in a lifelong learning context. In order to achieve this, the preparation of school self-evaluation methods and an external evaluation system was encouraged and the clarification of the purposes and conditions of self-evaluation in particular.

Although the establishment of a national system of competence assessment in 2001 was an important step towards setting appropriate uniform standards for measuring performance, the role of these standards in policy development were defined until 2006. Standards are one of the key elements in assessing the quality of education by providing means of comparability. At the same time proper feedback and in the case of low performance, intervention mechanisms must also be ensured for policy improvement. All in all, from among the five systemic conditions of an institutional quality evaluation system, feedback and intervention mechanisms, demand-oriented
developmental support and criteria (legal and policy) for assessment were not provided in Hungary until 2006\(^7\).

The enforcement of assigned targets and the establishment of a performance oriented model of a quality assessment system finally took place through the modification of the Act on Public Education in 2006 that connected the system of competence measurement to institutional quality management assessment. The modification also provided links between the new quality assessment system and the Lifelong Learning Strategy of the Hungarian Government (2005), in so far as the priorities of the strategy include the content and methodology development of public education and the improvement of a quality assurance and management system in order to support the inclusion of disadvantaged social groups in the labour market via access to lifelong learning programs (LLL Strategy).

The framework of this modification was provided by 2006/962 EC recommendations on key competencies for lifelong learning. The recommendations are set in the context of promoting equal opportunities in education in a lifelong learning perspective. They encourage member states to develop the provision of key competencies for all as part of their lifelong learning strategies, with a view to ensuring that initial education offers all young people key competencies that equip them for adult life. In this context appropriate provisions must be set for those young people who due to educational disadvantages caused by personal, social, cultural or economic circumstances need particular support to fulfil their education potential.

4.2. A professional accountability system for greater equity

On the basis of these recommendations modifications of the Act on Public Education intended to support the quality of learning at all levels of school education, the efficiency of public education and the accountability of the three management levels: the state, the local government and the school. The methodological background of a new measurement-assessment system was to be provided by the recommendations of the strategy prepared by CEPA in 2006 (see section 3.1.2). The modified act promises to launch the new measurement-assessment system in January 2009, thus the first academic year to be evaluated by the new method will be 2008/09.

The new system is going to be a mixture of an output-oriented and quality-oriented accountability system (Radó, 2006b). Output-oriented accountability systems are based on the regular measurement of students’ achievements based on output standards and direct consequences attached to the results of measurement (Radó, 2006b). Quality-oriented accountability systems, on the other hand, are based on quality and efficiency standards, the measurement of students’ achievements that provide information for the external evaluation of schools (Radó, 2006b). In this accountability system consequences are linked to institutional evaluation rather than directly to student achievement. Furthermore, output and quality standards are clearly defined towards school and intervention mechanisms in case of low performance serve developmental purposes and use tools accordingly. The elements of the measurement-assessment system are:

- standardized measurement of the achievement of students,
- examinations,
- the self-evaluation of schools
- the external assessment of school performance on the basis of student achievements,
- an indicator-based information feedback and
- intervention measures in cases of low performance.

\(^7\) Radó (2006b) lists the following systemic conditions to a quality assessment system: institutional autonomy, assigned targets, intervention is low performing institutions, access to demand-oriented developmental support, quality assessment and feedback.
4.3. The measurement-assessment system of Hungarian public education

- The institutional quality management program of schools must include the dimensions and methods of institutional self-evaluation and its relevance to the quality management program of the maintainer (local government);
- On the basis of the annual National Competence Assessment of students’ performance annual external evaluation of schools;
- If the pedagogical output of a school is measured below the average of the national standard, the maintainer must order the school to prepare an action plan for institutional development;
- The results of the evaluation must be made public by the maintainer;
- If the evaluation of the school indicates below the average results again in the following year, the Education Agency instructs the maintainer to prepare an action plan and to take an “external expert” for professional support;
- The maintainer’s action plan must be approved by the Education Agency that also monitors the implementation of the plan;
- For the improvement of pedagogical output of these schools maintainers can apply for financial support to hire “external experts” for quality assurance. This is guaranteed by the 17/2007 (III.14) decree of the Ministry of Culture and Education that also contains provisions for a performance motivation grant fund to provide competitive grant funding for schools for teachers’ income completion.
- The 2008/09 academic year is the first when the Ministry publishes the results, in 2007 there was a progress report.
### Table 4.1a Between-school and within-school variance in student performance on the science scale in PISA 2006

<table>
<thead>
<tr>
<th>OECD country</th>
<th>Total variance in SP</th>
<th>Total variance in SP as a percentage of the average variance in student performance across OECD countries</th>
<th>Variance explained by the PISA Index of economic, social and cultural status of students</th>
<th>Between-school variance explained</th>
<th>Within-school variance explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>89.6</td>
<td>91.6</td>
<td>7.8</td>
<td>4.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Austria</td>
<td>85.3</td>
<td>106.5</td>
<td>7.9</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Belgium</td>
<td>87.1</td>
<td>120.1</td>
<td>11.0</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Canada</td>
<td>97.5</td>
<td>137.0</td>
<td>4.3</td>
<td>3.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>98.7</td>
<td>108.0</td>
<td>12.7</td>
<td>1.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Denmark</td>
<td>95.8</td>
<td>118.9</td>
<td>6.0</td>
<td>0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>Finland</td>
<td>9.3</td>
<td>9.3</td>
<td>1.2</td>
<td>1.9</td>
<td>0.0</td>
</tr>
<tr>
<td>France</td>
<td>90.3</td>
<td>105.8</td>
<td>11.6</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Germany</td>
<td>99.0</td>
<td>104.6</td>
<td>11.8</td>
<td>1.7</td>
<td>0.1</td>
</tr>
<tr>
<td>Greece</td>
<td>92.6</td>
<td>106.0</td>
<td>11.0</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Hungary</td>
<td>72.0</td>
<td>101.0</td>
<td>9.4</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>Iceland</td>
<td>92.4</td>
<td>101.2</td>
<td>11.3</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>Ireland</td>
<td>96.8</td>
<td>104.3</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Italy</td>
<td>90.0</td>
<td>99.5</td>
<td>7.8</td>
<td>4.9</td>
<td>4.9</td>
</tr>
<tr>
<td>Japan</td>
<td>98.1</td>
<td>104.8</td>
<td>4.9</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Korea</td>
<td>97.5</td>
<td>108.4</td>
<td>3.0</td>
<td>0.8</td>
<td>0.2</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>91.4</td>
<td>103.2</td>
<td>12.4</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Mexico</td>
<td>91.7</td>
<td>72.3</td>
<td>4.1</td>
<td>0.3</td>
<td>0.8</td>
</tr>
<tr>
<td>Netherlands</td>
<td>98.3</td>
<td>102.1</td>
<td>6.0</td>
<td>0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>New Zealand</td>
<td>121.0</td>
<td>125.1</td>
<td>10.6</td>
<td>16.1</td>
<td>5.5</td>
</tr>
<tr>
<td>Norway</td>
<td>88.6</td>
<td>96.3</td>
<td>7.2</td>
<td>1.2</td>
<td>6.0</td>
</tr>
<tr>
<td>Poland</td>
<td>80.4</td>
<td>98.7</td>
<td>5.5</td>
<td>8.6</td>
<td>3.1</td>
</tr>
<tr>
<td>Portugal</td>
<td>79.6</td>
<td>91.2</td>
<td>8.8</td>
<td>3.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>86.4</td>
<td>94.0</td>
<td>11.7</td>
<td>2.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Spain</td>
<td>85.0</td>
<td>90.7</td>
<td>5.9</td>
<td>0.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Sweden</td>
<td>91.5</td>
<td>99.0</td>
<td>4.4</td>
<td>6.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Switzerland</td>
<td>91.0</td>
<td>106.5</td>
<td>8.0</td>
<td>4.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Turkey</td>
<td>97.9</td>
<td>77.2</td>
<td>5.9</td>
<td>0.7</td>
<td>0.0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>122.0</td>
<td>123.6</td>
<td>8.6</td>
<td>6.1</td>
<td>2.5</td>
</tr>
<tr>
<td>United States</td>
<td>118.6</td>
<td>124.7</td>
<td>12.7</td>
<td>7.7</td>
<td>5.0</td>
</tr>
<tr>
<td>OECD average</td>
<td>99.7</td>
<td>100.0</td>
<td>7.2</td>
<td>3.8</td>
<td>3.8</td>
</tr>
</tbody>
</table>

1. The variance components were estimated for all students in participating countries with data on socio-economic background and study programmes.
2. The total variance in student performance is calculated from the square of the standard deviation for the students in the analysis. The statistical variance in student performance and not the standard deviation is used for this comparison to allow for the decomposition.
3. The sum of the between- and within-school variance components, as an estimate from a sample, does not necessarily add up to the total.
4. In some countries, sub-units within schools were sampled instead of schools and this may affect the estimation of the between-school variance components (see Annex A3).
5. This index is often referred to as the intra-class correlation (ICC).

For more details, please visit the following link: [http://dx.doi.org/10.1787/142134160511](http://dx.doi.org/10.1787/142134160511)
References


Discussion Paper on Equal Opportunities, Budapest suliNova Kht./Centre for Education Policy Analysis, 2006


Horváth, Ágnes. „Others and us” In Hungarian: Mások és mi. Új Pedagógia Szemle, 1997. November

Kertesi, Gábor - Gábor Kézdi. „Primary school segregation: reasons and consequences”. In Hungarian: Általános iskolai szegregáció. Okok és következmények, Közgazdasági Szemle, 2005/April-May.


**Lifelong Learning Strategy of Hungary.** Budapest. 2005


Radó, Péter. “Ensuring accountability in Hungarian public education”. In Hungarian: A szakmai elszámoltathatóság biztosítása a magyar közoktatásban. *Új Pedagógiai Szemle*. Budapest. 2006b


*Science Competencies for Tomorrow’s World. PISA 2006*. Paris: OECD.

