



## School quality and segregation in Hungary

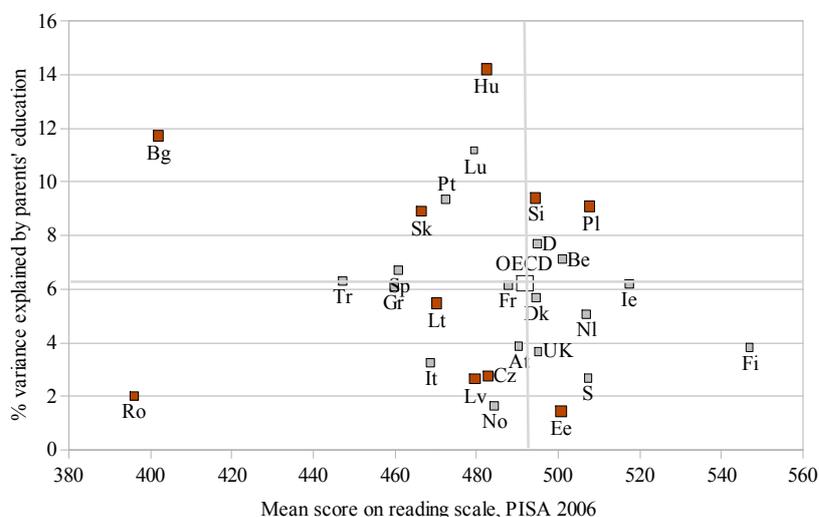
Case study for the project “Good national practices in financing and quality control of rural schools in the European Union: First steps”

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### 1. Low performance and high inequalities in Hungarian public education

Researchers had long been aware of the growing inequalities in Hungarian public education, but it was not until the results of PISA 2006 that policymakers began to address the issue. The PISA surveys of 2000 and 2003 signalled a serious decline in student performance compared to the relatively high ranking of Hungarian students in the 1980s. The surveys also revealed that the between-school variation in student performance is large in international comparison and much of it is related to the students’ socio-economic background. Since then, several OECD and national studies (e.g. Csapó, 2002; Radó, 2000; Havas 2004, Hermann et al. 2004, Kertesi and Kézdi 2005) have documented the problem and showed that it is rooted in the institutional features of the public education system.

#### *School performance in OECD countries in 2006*



Source: OECD PISA 2006 database, tables T6.4.b and T6.1.c. 15 year olds. Hungary (top left quarter) is worse than the EU average in both average performance and the ability of schools to reduce inequality.

## **2. Three factors explaining poor quality**

The poor performance of Hungarian public education may be traced back to three inter-related processes: the institutions inherited from the socialist past which proved inadequate to meet the changing needs of a globalised market economy, teaching methods and teacher quality and lastly, the segregation of disadvantaged pupils in public schools.

### *2.1. Inherited problems and changing needs*

In socialist economies the demand for low skilled workers was much higher than in most developed market economies. The share of undemanding jobs not requiring even basic reading and writing skills was 2-3 times higher in post-socialist economies. This had two important consequences: first, the socialist education system was not challenged to change and focus more on skills, and second, many workers spent much of their working careers in jobs that made little use of their skills, which eroded even the poor skills they had had when leaving school (Köllő 2006, 2009). As a result, the typical post-socialist economy entered into the economic transition with a relatively large proportion of low skilled workers (much larger than the educational composition of the workforce would suggest) and a traditional educational system that continued to produce low skilled workers.

The composition of the new jobs created in the newly emerging market economies was however much like in Western economies in terms of skills requirements, especially where foreign investment entailed green field investments and the introduction of new technologies – as was the case in Hungary.

### *2.2. Teaching methods and teacher quality*

The traditional educational system inherited from the socialist economy stressed rote learning and content over competence and frontal teaching methods over fostering learner autonomy. Meeting the challenge of new social (and not just labour market) needs would have required not simply an increase of years spent in education, but a profound change in teaching methods and objectives and a corresponding change in teacher training, school curricula and management (OECD 2004, Unicef 2009). However, the reforms of the first decade after 1989 failed to address these problems or even aggravated them.<sup>1</sup>

#### *Autonomy without quality control*

In 1989, public education was devolved to municipalities and the centrally managed system of quality assurance and supervision was dismantled. Municipalities were established at settlement level, so that villages and towns, regardless of size, have become responsible for running their kindergartens and primary schools. Schools enjoy a large degree of autonomy but receive very little expert support and supervision (cf. OECD 2004, McKinsey 2007). School curricula remained unadjusted and often unprofessional (where teachers who lacked the necessary expertise decided to develop local curricula) and a stream of untested textbooks has flooded schools. School directors are also dependent on the mayor who is the official employer of both the director and the teachers but is not an expert in education (and, except in larger towns, cannot afford to have experts on their team).

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<sup>1</sup> The lack of reform in educational systems in the NMS is most likely related to the general reluctance to reform public administration. With the exception of the Baltic states, the post socialist member states have not managed to establish a stable and professional central administration, which makes it rather difficult to implement sophisticated reforms especially in areas where potential gains can be reaped only in the long run (Meyer-Sahling 2009).

### *Teaching practice*

School performance is largely determined by the initial disadvantages of pupils when they start school. Skills problems of various types are not identified and distinguished, the causes of poor achievement are not investigated, teaching is not tailored to individual needs and in most schools there are no programmes to help pupils develop the skills they are lacking. Simple causes of substandard performance such as uneducated parents are often overlooked and poor performers from disadvantaged backgrounds are directed to separate special needs classes or schools (Nagy 2008). This is partly explained by the tight curricula which leave no space for differentiating between students, and partly by the general lack of training in modern teaching methods. Few teachers are equipped with the methods for dealing with mixed ability classes and facilitating the development of pupils lagging behind.

### *Early selection*

A consequence of the above deficiency of teaching practice is that children are selected into educational tracks based on their measured abilities at a very early stage.<sup>2</sup> Typically, the children of educated parents are more likely to get better quality early development (both at home and in kindergarten, which they are more likely to start early), so they achieve better in primary school and at age 14, they get into general secondary school leading to university or college. Children of uneducated parents lag behind from the moment they start school and receive little help to catch up, so - unless they are unusually talented - at age 14 they are sent to vocational schools, which are only equipped to teach them some vocation (often not corresponding to labour market demand) but not to develop their missing basic skills.

### *Adverse selection of teachers*

Teachers are less likely to be competent than their colleagues in Western Europe in foreign language and computer skills, so that they are unable to access modern platforms such as IT and the Internet. Their pay is unrelated to the difficulty of the job but automatically increases with age. The relative pay of young teachers is very low compared to other graduate level jobs. As a result, teacher trainees are adversely selected and there is no motivation for teachers to take up jobs in schools where the share of disadvantaged children is high. Teacher training is also of low or at best uneven quality: modern teaching methods are not always part of the core curriculum and trainees get no experience in teaching in difficult schools.

### *2.3. Segregation*

Segregation magnifies the above problems in several ways. When the share of disadvantaged children increases in a school, it becomes a difficult place, so that it cannot attract good teachers. The lack of motivated teachers and supportive (or demanding parents) often leads to a deterioration of educational facilities and services as well, not only to a decrease in teaching quality and in some cases, even lack of teaching staff (Havas 2008).

Spatial segregation of the poor implies that poorer villages (where the share of disadvantages childer in higher) are less likely to be able to spend more on their schools than the minimum covered by state subsidies.

The homogenous composition of classes and schools that results from segregation also deprives children of the opportunities to learn from each other – though a considerable part of learning happens via that channel in mixed ability classes (Havas 2008).

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<sup>2</sup> Note the distinction of *measured* as opposed to *innate* abilities.

### **3. Segregation: where and why it happens**

#### *3.1. The Roma minority in Hungary*

Segregation affects primarily the Roma community, the largest ethnic minority in Hungary. According to the estimations of Hablicsek (2007), the share of the Roma population in Hungary will reach around 6-7 % by 2011. The average number of children is higher in Roma families (about 3 children per family) than in the non-Roma population, however, the gap is gradually narrowing.

80% of Roma adults – compared to 33% in the total population – only completed primary education. Only 42% of Roma children go to kindergarten, as compared to 88% in the total population. Though there has been some increase in levels of education, it has been much slower among Roma than among children from the majority, so that the ethnic gap has in fact increased.

Almost two thirds of the Roma community live in Northern Hungary, one of the country's most underdeveloped regions. Around 40 % live in villages of below 5000 inhabitants, which is only slightly higher than in the total population (35%). However, over 70% live in spatially segregated housing with only or mostly Roma neighbours and up to 26% of the Roma population live in segregated Roma settlements with basic or no infrastructure (6% in Kemény et al 2004, 20-26% in Ungváry et al 2005 and Kósa et al 2009).

#### *3.2. The degree of segregation*

Ethnic segregation between primary schools rapidly increased in Hungary after 1989. Kertesi and Kézdi (2005) use data on children's background and the national competence tests of 2006 to measure the trends and current level of segregation across and within schools. From 1992 to 2006 the index of ethnic segregation between primary schools increased from 0.07 in cities and towns to 0.21. In micro-regions the 1989 level was 0.10 and increased to 0.23 by 2006.<sup>3</sup>

Kertesi and Kézdi (2009) also find that ethnic segregation is significantly stronger than segregation by social disadvantage and between-school segregation is stronger than between-class segregation within schools.

There are considerable regional differences in between-school segregation: it is strongest in the Southern Transdanubia (South-West), Northern Hungary (North-East) and Northern Plains (East), where the share of the Roma population is highest. There is substantial heterogeneity within regions as well: even neighbouring cities can show very different levels of segregation.

School segregation is tightly correlated with the geographical / housing segregation of ethnic and social groups. There are around a hundred (cca. 3%) settlements in Hungary which have irrevocably turned into poor-Gypsy ghettos and a further two hundred settlements are on a seemingly unstoppable course to becoming ghettos. This regional or neighborhood concentration of the poorest and most uneducated groups paves the way for school segregation. A one per cent higher share of Roma pupils in a town or city corresponds to half

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<sup>3</sup> Segregation is defined as the share of students with low socio-economic background in a particular class or school being higher than in the area where they live. The index measures the relative probability that children from a majority or minority background are in the same school or class, given the share of the minority group in the local population. It is 0 if there is no segregation and 1 if there is total segregation.

a per cent higher segregation index (Kertesi and Kézdi 2009).

### *3.2. Causes of increasing segregation*

Though the causal link has not been formally proven, the main cause of segregation is most likely the introduction of free school choice in 1993. Other factors, such as housing segregation, unprofessional school management, prejudices and social pressure also play a role.

Free school choice allows parents to decide which institution their children will attend, and, until 2007 (see below), it allowed schools to decide whether to admit a child from outside their catchment area (which they could not do before 1989). Families' and schools' decisions result in a highly selective system. Middle-class families will send their children to better schools and poorer families – due to their lower socio-economic status, their lack of information and the cost-benefit trade-off they face (e. g. commuting costs) – will keep their children in the nearest (and often poorer) local school. The number of commuting pupils increases with the mothers' education and the size of the city.

Kertesi and Kézdi (2005) model the decisions of schools and families and conclude that given the current policies and laws, segregation is prone to occur. Schools consider three factors: they must (1) survive on the per capita subsidy from the government, (2) obtain the best teachers and (3) achieve a good reputation. The first factor (1) will lead to a competition for pupils (regardless of ability) while factors (2) and (3) make schools favour more able students. This is because salaries are independent of the teaching task (as noted above). If kids are better, teachers still earn the same salary but face better working conditions – less stress, easier tasks – so the schools can attract better teachers, achieve better performance and therefore, a good reputation. As a result, schools will accept better students first. This process deepens the inequalities between schools and prepares the ground for segregation.

Kertesi and Kézdi (2005) show that free school choice is likely to lead to stronger segregation when more schools are available in a neighbourhood: a ten per cent increase in the number of available schools is associated with an increase of 0.4 to 0.7 percentage points in the segregation index by ethnicity. Other characteristics of local educational markets such as the size of the school or the number of commuting students are also likely to influence the degree of segregation.

Increasing intolerance and the pressure put on school directors or mayors by prejudiced parents who want to protect their offspring from the supposedly detrimental effect of poor or Roma children may have also contributed to the increase in school segregation.

## **4. Government response**

Though experts and some government officials had understood the risks of increasing segregation, there was no serious government effort to stop it until the Public Education Development Strategy in 2003, which placed the reduction of educational inequalities at the top of the agenda. The strategy outlined the following five goals (Keller 2009):

- 1.) expand pre-school education for disadvantaged social groups;
- 2.) modernise vocational training;
- 3.) integrate Roma and other disadvantaged children in public education;
- 4.) reduce racial discrimination;
- 5.) integrate children with special needs in public education.

As a framework, the National Network of Integration in Education (OOIH) was set up in order to support the education of disadvantaged children in integrated classes (Molnár and Dupcsik 2008). Participating schools are expected to adopt the Pedagogical System of Integration (IPR): they receive training, teaching materials and mentoring to support their efforts to integrate children with lower socio-economic background.

The government also initiated that school curricula and teaching methods be updated across Hungarian public schools (e.g. project-work, cooperative and person-centred teaching). The new model promotes that children should be evaluated at their own level of development (as opposed to their age or grade) and the time spent on teaching each module to be adjusted to the capacity of the individual child. The school is also expected to seek closer cooperation with the parents as well as with other public institutions involved in education. Naturally this requires much more attention and effort from the teacher's side which has indeed turned out to be the bottleneck of the initiative.

To expand enrolment in pre-primary education, a cash transfer was introduced in 2009 for the parents of multiply disadvantaged children conditional on their children attending kindergarten and kindergartens are also encouraged to deal with these children. The idea is that these institutions can help reduce the developmental disadvantages that children from low social status carry. There is also a financial incentive for municipalities in disadvantaged regions to open a nursery at the premises of their kindergarten (called an integrated nursery-kindergarten) as otherwise they would not have enough resources to have a separate nursery.

The Out of the Back Row program (*Utolsó padból*) (started in 2003) was aimed at reducing the number of children falsely diagnosed as mentally disabled and leading them back to mainstream education. To stimulate their redirection, the ministry offered higher per capita grants for the schools taking these children and implemented changes in the regulation on the category of Special Educational Need (SEN). A related measure also made the procedure of declaring a child a 'home-schooling pupil' more complex (specialists must be involved), in order to prevent schools from excluding (Roma) children from regular school attendance.

Integration efforts also include additional mentoring for disadvantaged children. Tanoda (learning centers) have been promoted to help disadvantaged students via after-school activities. In the *Tanodas*, the children receive expert help to develop their skills and advice on further education. There are also scholarships (like *Útravaló* or *Arany János*), to motivate parents and provide mentoring to the most disadvantaged pupils as they are often marginalised due to insufficient information.

Initially, the education ministry used mostly soft incentives to pursue its goals, leaving the right of free choice of school intact for political concerns. More recently, they have applied a more balanced stick and carrot strategy. While financial incentives are still in place, there are now stricter conditions and sanctions attached to receiving them. Most importantly perhaps, they changed the former system in which additional funding was provided to schools with a high share of disadvantaged children, even if they were taught in segregated classes or schools. Since 2007, this additional grant is available only to schools that undertake integrated education.

From 2007, local governments were also ordered to redraw the boundaries of school-districts to compensate the effects of free school choice and residential segregation. Schools must admit any children within their district and if they take someone from outside their catchment area, they must give priority to multiply disadvantaged children. They are also obliged to

distribute disadvantaged children evenly among the various classes in each grade (Molnár – Dupcsik, 2008). The Education Agency (Oktatási Hivatal) is now responsible for the supervision of the fulfillment of equal treatment requirements and the examination of segregation related complaints.

An important incentive for local governments for keeping these rules is the introduction of equal opportunities objectives into development funding, which means that access to funding resources is dependent upon efforts to improve equal opportunities. This legal incentive is a new policy instrument in Hungary and its introduction was also welcomed by the institutions of the European Union. According to the regulation, municipalities applying for national or international funds in the field of education need to prepare an assessment of the existing local conditions concerning equal opportunities in public education and adopt an equal opportunities action plan for public education. There are plans that this rule would be extended to all local projects, so that access to all state or EU provided development funds available to local governments will be conditional on the adoption of equal opportunities action plans (Budapest Institute, 2010).

## **5. First results of the integration measures**

By 2009, the integration programme reached 75,000 multiply disadvantaged and 150,000 non-disadvantaged children in 1600 schools. One out of four schools is conducting integration practice. Due to related sub-projects 1300 villages and towns made their Action plan for public education provisions (Budapest Institute 2010).

The first qualitative evaluations of the new integration measures showed mixed results. Liskó et al (2007) found that the teachers' attitude changed little after the trainings, though they thought them useful. Németh (2006) found the methodological knowledge of teachers in integrated classes to be very poor, and many teachers were unmotivated. However, a later, very thorough quantitative assessment in 2008 showed that participants of the programme had higher aspirations regarding further education, multiply disadvantaged children performed better and there was no decline in the school performance of non-disadvantaged children (Kézdi and Surányi 2008). The social competences, self-esteem and self-confidence of these children were better than those attending non-integrating schools. Prejudices of non-Roma children in integrating schools also decreased.

## **6. Some lessons**

The impact of the IPR programme on teachers' attitudes was apparently modest and this is almost certainly due to its hasty introduction. Teachers had little time to adapt and they were overburdened during the initial phase of adapting the new programme – they were expected to attend a training course and try new materials in their teaching while teaching the same number of hours. The programme did not include enough elements to provide mentoring and foster peer support (Budapest Institute 2010).

The communication of the programme was also poor, so that neither the general public nor parents or non-participating schools knew the details of the programme. As the encouragement for improving parent-school cooperation was also weak, the overall acceptance of the programme remained low (Németh and Papp 2009). This is now a major risk

as the new government is rather hesitant about continuing the programme and with no public support for it, they can easily choose to close it down.<sup>4</sup>

The efforts to introduce the new teaching methods into the standard teacher training curriculum have so far not been successful, which makes the programme rather expensive to maintain.

Finally, much of the energy of government experts was spent on securing political backing from their own minister and the government, and the lack of their full support also seriously limited the chances of success. For example, though there were plans to increase the initial salary of new teachers and introduce a premium for teachers of socially deprived children, once the 2008 recession put a squeeze on spending, these ideas have been voted down by politicians. Fears of losing the votes of older teachers and of middle class teachers and parents in more developed regions may have also been a consideration when scrapping such spending.

## References and further background material

- Budapest Institute (2010): Equal opportunity and integration in public education - evaluation of the SROP 331 project, Budapest Institute  
[http://www.budapestinstitute.eu/uploads/BI\\_SROP331\\_evaluation\\_summary.pdf](http://www.budapestinstitute.eu/uploads/BI_SROP331_evaluation_summary.pdf)
- Csapó, Benő (2002): Difference between classes and pedagogical added value. In School Literacy. In Hungarian: Az osztályok közötti különbségek és a pedagógiai hozzáadott érték. In: Csapó Benő (szerk.): Az iskolai műveltség. Budapest: Osiris Kiadó, 2002.
- Fazekas, Károly, Köllő, János and Varga, Júlia (eds)(2009): Green Book: For the renewal of public education in Hungary, ECOSTAT Budapest, 2009, downloaded from:  
<http://mek.oszk.hu/08200/08221/08221.pdf> Date: 2011-09-18
- Hablicsek, László (2007): Kísérleti számítások a roma lakosság területi jellemzőinek alakulására és 2021-ig történő előrebecslésére, Demográfia 2007 (1), 7-54.o.  
[http://www.demografia.hu/letoltes/kiadvanyok/Demografia/Teljes/2007/Demografia07\\_1.pdf](http://www.demografia.hu/letoltes/kiadvanyok/Demografia/Teljes/2007/Demografia07_1.pdf)
- Hermann, Zoltán (2005). A falusi kisiskolák és a méretgazdaságossággal összefüggő hatékonyságvesztések [Small schools of villages and losses of efficiency related to size]. In: Hatékonysági problémák a közoktatásban. Budapest: OKI, 2005
- Hermann, Zoltán, Horn, Dániel et al. (2004) Chance for Integration. Budapest: OKI. 2004.
- Keller, Judit (2009): Equity and Education – Country Note: Hungary. In: Equity and education. Tempus Közalapítvány  
[http://www.tpf.hu/document.php?doc\\_name=konyvtar/egyeb/tankonyv\\_2009\\_szept.pdf](http://www.tpf.hu/document.php?doc_name=konyvtar/egyeb/tankonyv_2009_szept.pdf)
- Kemény I (2004): A magyarországi cigány népesség demográfiája, Demográfia, 2004 (3-4) 335-346. o.  
[http://www.demografia.hu/Demografia/2004\\_3-4/Kemeny%20Istvan\\_kozl.pdf](http://www.demografia.hu/Demografia/2004_3-4/Kemeny%20Istvan_kozl.pdf)
- Kertesi, G., and Kézdi, G. (2005): Általános iskolai szegregáció I.: Okok és következmények [Educational segregation. Causes and consequences]. Közgazdasági Szemle, 52, pp 317 - 355.
- Kertesi, Gábor and Kézdi, Gábor (2009): Anna Lovász and Álmos Telegdy (eds): In Focus: Labour Market Discrimination, Budapest 2009 pp. 99-119.  
[http://econ.core.hu/file/download/mt2010\\_eng/discrimination.pdf](http://econ.core.hu/file/download/mt2010_eng/discrimination.pdf)
- Kósa K., Daragó L., Ádány R (2009): Environmental survey of segregated habitats of Roma in Hungary: a way to be empowering and reliable in minority research. The European Journal of Public Health

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<sup>4</sup> Cf the public outrage the new Tory government faced when they announced plans to stop the Sure Start Programme aimed to promote equal opportunities for the children of disadvantaged rural areas in the UK.

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- Köllő, János (2006): Workplace literacy requirements and unskilled employment in East-Central and Western Europe. Evidence from the International Adult Literacy Survey (IALS), Budapest Working Papers on the Labour Market 2006, No. 7 <http://www.econ.core.hu/doc/bwp/bwp/bwp0607.pdf>.
- Köllő, János (2009) A pálya szélén. Osiris, Budapest
- McKinsey (2007): How the world's best performing school systems come out on top, McKinsey & Co.
- Meyer-Sahling, J.H. (2009): Sustainability of civil service reforms in Central and Eastern Europe five years after EU accession, OECD SIGMA paper No. 44.
- Molnár, Emília and Dupcsik, Csaba (2008): Country Report on Education: Hungary, EDUMIGROM Background Papers, 2008, downloaded from: [http://www.edumigrom.eu/sites/default/files/field\\_attachment/page/node-1817/edumigrombackgroundpaperhungaryeducation.pdf](http://www.edumigrom.eu/sites/default/files/field_attachment/page/node-1817/edumigrombackgroundpaperhungaryeducation.pdf) Date: 2011-09-18
- Németh, Szilvia and Papp, Attila Z.: "És mi adjuk az integráció vezérfonalát..." Dokumentumelemzés és kvalitatív vizsgálat eredményei, OFI 2009, <http://www.ofi.hu/tudastar/integracio-gyakorlatban/mi-adjuk-integracio>
- OECD (2000): Knowledge and Skills for Life. First results from the OECD Programme for International
- OECD (2000): Special Needs Education, Paris: OECD . 2000.
- OECD (2004): What makes school systems perform? Seeing school systems through the prism of PISA, OECD, Paris.
- OECD (2006): Equity in education: Thematic review, country note Hungary. Paris: OECD, 2006.
- Radó, Péter (2006): Small Schools of Small Settlements. Budapest: SuliNova Kht. 2006.
- Radó, Péter (2000): Esélyegyenlőség és oktatáspolitikai [Equal Opportunities and Education Policy]. In: Új Pedagógiai Szemle, 1. 2000.
- OECD (2000): Student Assessment (PISA) 2000 OECD , Paris.
- Ungváry Gy., Ódor A., Bényi M., Balogh S., Szakmáry É. (2005): Romatelepek Magyarországon - gyermekek egészségügyi ellátása, higiénés viszonyok. Orvosi Hetilap 146(15): 691-699, 2005.
- Unicef (2009): Learning Achievement in the CEE/CIS Region, Geneva: UNICEF Regional Office for Central and Eastern Europe and the Commonwealth of Independent States.