ANIKÓ FEHÉRVÁRI

The Change of the Paths of Learning

Abstract This paper describes the trends following the regime change in learning/training and the paths of progress in education by levels – within the public education program – compared to that of in the European Union and other developed countries. Branches of training programs in public education also explain the changes (horizontally and vertically) the structure of education has gone through that induced transformation and selection of mechanisms.

Keywords: learning strategies, educational change, vocational education, dropout, early childhood education, educational policy

International trends

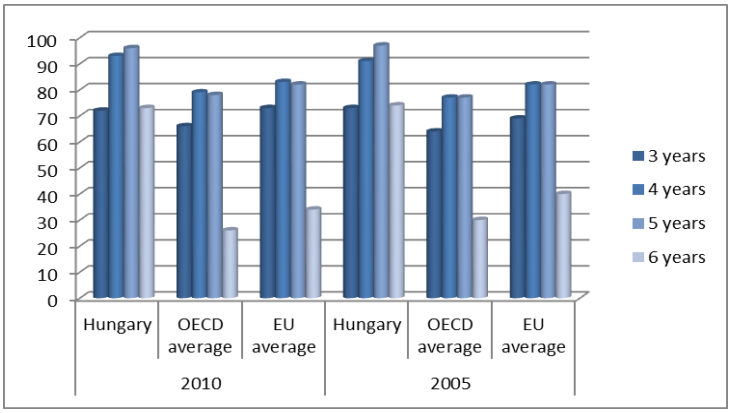
In the last decade, the concept of learning was reinterpreted nationally and internationally but this process has rather just begun on domestic levels**.** Earlier, the concept of learning was highly institution, system or school-centered. Today the individual is in focus instead of the process. The outcome and learning in school (ending schooling in a young age) is what we were talking about rather than a life-long process of learning. This transformation appears in materials regarding education and in the strategies of various large international organizations as well. The change in the concept of learning is reflected in the ISCED 2011, which is to take effect in 2014. This was prepared by THE UNESCO, OECD and EU - *(International Standard, 2010.)* This change appears in line with EU objectives - (*Council conclusions*, 2009.)

An important international trend that the educational policy seeks for the sake of a better operation is the relationship with other social sub-systems. In the nineties the transition from education to employment was the dominant theme in the international trends. In the last decade a more elementary direction has been driving education policy: early childhood education. Nothing reveals this more than the ISCED 2011, which incorporated a new level 0, in early childhood education. Experts state that pre-school education increases school performance - especially for disadvantaged children. The Hungarian competence assessment data clearly support this correlation.

According to data from 2012 from the OECD's Education at a Glance, Hungary performs sufficiently in this area, as the participation of children is almost full among 4 and 5 year olds. This is far beyond the average of the European and the OECD countries. At the age of six, the extent of coverage decreases everywhere as the majority of children enter the school system. The proportion of children receiving institutional care is less among the three-year-olds, although this does not lag behind the international average**.** The data of Hungary are close to that of

regarding other European countries. In this field it is useful to look out to the French, Belgian and Dutch examples, as the institutional coverage of 3-year-olds is 100% in those countries.

Figure 1. Proportion of children receiving institutional care in 2005 and 2010, (%)



Source: *Education at a Glance, 2012.*

In most developed countries in the last decade, not only the number of years has increased in compulsory education, but in general, the time has increased that is spent in connection with activities related to education and access to education became wider. The following diagrams show the figures of participation in education within the age group 15-29 ~~in~~ 5-year periods in our country and in developed countries.

Dating back to 1995, trends by age-groups show the process that developed in Hungary, in the European Union and the OECD states. In Hungary the proportion of pupils between 15-19 years was 82.5 percent in 1995. This ratio moved slowly upwards until 2000, but it jumped suddenly to 91 percent in 2005 and 94 % in 2010. The EU average in 1995 was similar to that of Hungary; it began to rise slowly between 1997 and 2010, and stopped at 90 percent. The average of the OECD countries in 1995 was lower than the figures in Hungary or in Europe, but they also showed a steady increase. The proportion of students was 87 per cent in the 15-19 age groups in 2010. It means that the Hungarian rate in this age-group is above the EU and the OECD average. Regarding the group of 20-24 year old students, Hungary has doubled the proportion in 12 years. The growth has been steady in the OECD and EU countries. The proportion of students was higher than in Hungary even in the base year (1995) but the dynamics of the Hungarian growth was faster in 2000-2005. The number of 25-29 year-old students has increased in Hungary compared to 1995, but in 2010, it showed a decline - while the international averages continue to increase compared to previous years. However, it is less favourable as the rate of unemployment in this age group is higher than the international average. (29% in Hungary, the EU and OECD average is 20%)

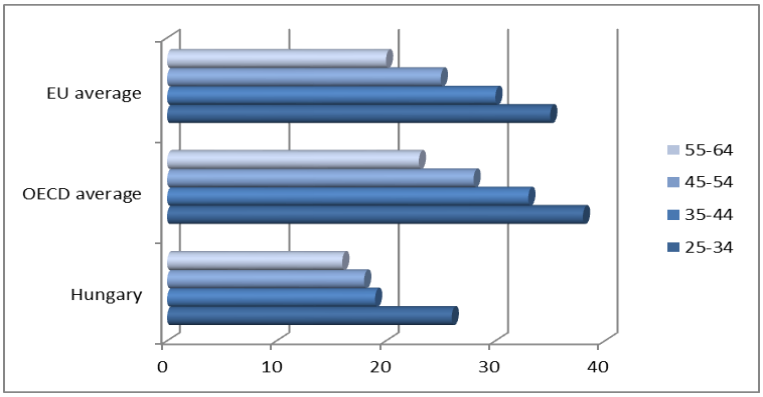
Figure 2–3. Participation in training among the 15-29 year-olds, in 1995 and 2010, %.

Source: *Education at a Glance, 2012.*

Compared to 1995, the most noticeable difference appeared in the age-group of 20-24 years, owing to the massive increase of students in higher education. While 22% of the age group 20-24 studied in 1995, the figures grew to 35% in 2000 and up to 40% until 2005, then it reached a peak of 48% in 2010. The proportion of young people studying in this age group has also increased in other developed countries, but not to the same extent as in Hungary. (the OECD average is 30% -44%). (It also indicates the belated expansion.) The data show that the rate in Hungary was still below the OECD average in 2000, it developed similarly in 2005, and the rate overtook the OECD average by 2010, which means that more people attend schools in Hungary than in OECD countries.

According to international data, Hungary significantly increased the proportion of persons participating in training, catching up with the average of the OECD and EU countries (and in some age groups ahead thereof) - while the proportion of college or university graduates in the whole population lags behind the international average. This gap has not decreased in the recent years.

Figure 4. Proportion of graduates in higher education in 2010 %



Source: Education at a Glance, 2012.

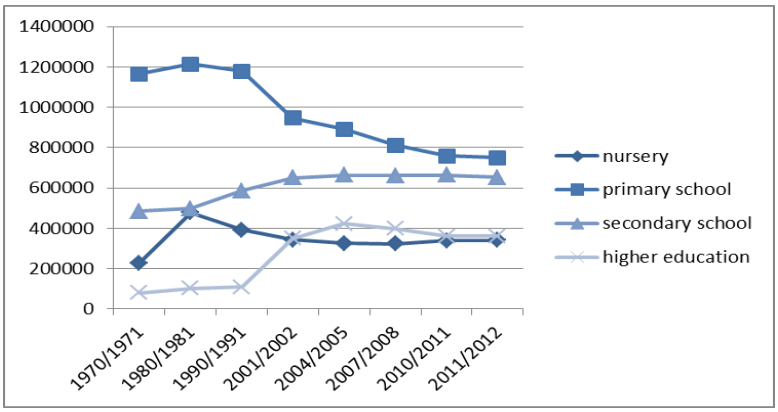
Age-group data show the reason for the difference. It can be seen that the gap is smaller in the older generations than in the younger ones. Although more people enter education in Hungary compared to the international average, the graduation percentage is lower (Varga, 2010).

As we see in the data of the 25-29 age group in Fig. 2, while the participation of Hungarians in the secondary and tertiary educational system is similar or higher than the international average, it is reversed at older age. The proportion of Hungarians in the adult learning system is lower than the international average regarding both formal and non-formal education. (*Ságí & Róbert*, 2011) Hungarian data on adult learning suggests that the lifelong learning paradigm is not just a theory but a reality in other countries – however, in Hungary realization thereof is in its initial stage.

Hungarian Trends

The most pressing problem of the education system is how to handle the consequences of demographic changes. The developed countries are characterized by an increasingly aging population, while a decreasing age group enrol at schools. In the last decades the percentage of primary school children fell to one third, while the number of secondary school students grew by 25%, and students of higher education grew by nearly 30%. However, the expansion affects not only the education, but the pre-school care system, too. After a setback, the number of children attending pre-school is continuously moving upward.

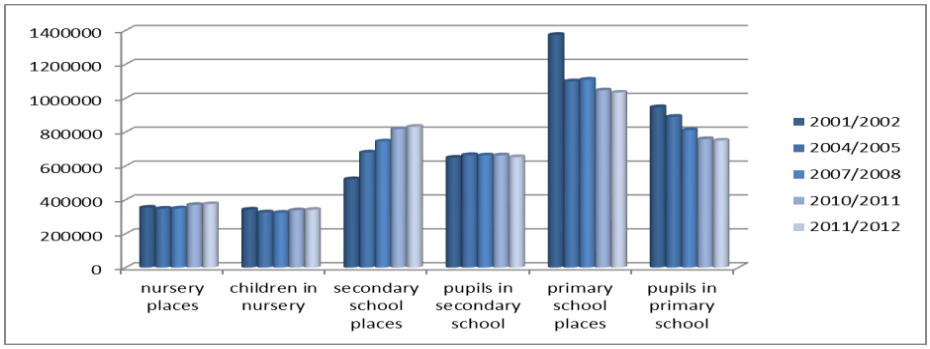
Figure 5. Number of children/young adults in any form of education 1970–2012.



Source: *Hungarian Educational Yearbook, 2001-2012.*

The required age of children enrolling to kindergarten is sliding lower and lower. Years spent in secondary education became longer. The number of entrants to higher education was increased. All these factors contributed to a good utilization of kindergarten and the school system despite the decreasing number of the members of this generation. If we compare the number of available places with the number of children, we can see that the number of kindergarten children follows the number of places. However the number of secondary school students decreased spectacularly in the last two academic years creating significant excess capacity in secondary schools. In the case of primary schools it has been a significant surplus even at the millennium. The discrepancy between the sizes and capacities eased somewhat over the past ten years, but there is still a great overcapacity.

Figure 6. Number of vacant places and the number of children, 2001–2012



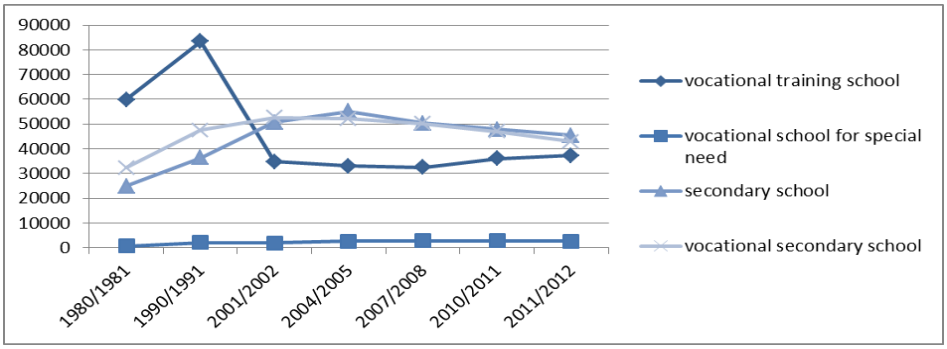
Source: *Hungarian Education Information System, 2001-2012.*

The expansion of education hides the massive demographic problem which is particularly evident in the primary school, since the structure of education has been virtually unchanged there since 1945. The dramatic reduction in the number of children in primary schools can best be detected by the number of entering students

in 2011 that almost halved compared to 1980 (177,397 primary school children entered in 1980, while only 95,366 in 2011).

The number of entrants to secondary schools, however, only began to decline in 2007. This was seen in the number and capacity shown in the above diagram. The capacity of secondary school capacity changed in the last ten years, since the vocational secondary school and secondary school places have increased by a significant percentage in the beginning of the decade. However, from the second half of the decade, the capacities of specialized schools and vocational training schools increased compared to the previous years. The same trend can be seen in the data of the number of pupils. The number of entrants into institutions which provide matriculation steadily increased from the nineties. In 2005, three-quarters of secondary school entrants choose these two types of secondary schools - vocational and grammar schools. This trend was broken in the middle of the last decade**.** The proportion of people entering vocational training schools started growing. In the last two years, this process has even more accelerated.

Figure 7. The number of pupils beginning school, 1980-2012.



Source: *Hungarian Educational Yearbook 2001-2012.*

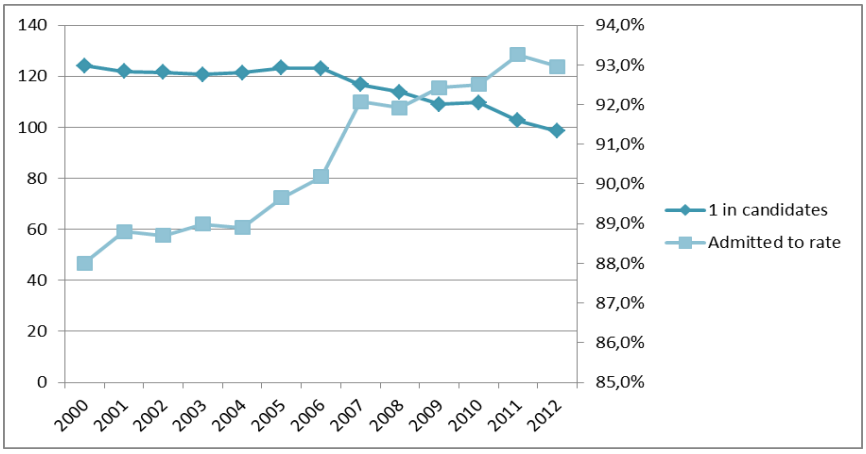
Despite this rearrangement, research data do not back up convincingly its labour market relevance. Data on education and working life show that graduation represents a significant dividing line in the labour market. Without it the risk of unemployment grows radically. (*Nagy, 2010; Fehérvári -Tomasz, 2011*). The objective of a study in 2007 was to review the alteration of certain professions, how their content, structure changed since the change of regimes. The researchers included 16 professions into the study. One of the most important findings was that the individual must have the aptitude for lifelong learning, the ability of renewal and absorbing new knowledge. (*Koszó et al.* 2007) Further researches prove that vocational training school students lack these necessary general skills. (*Kézdi, Köllő, & Varga, 2008*). The data on individual and social returns also argue against the expansion of vocational training. Judit T. Kiss (2011) examined the development of social and personal return of the school-based vocational training between 1999 and 2010. The conclusion was that the rate of individual and social returns of vocational training school trained fall far below the vocational secondary school pupils, and only slightly differs from those with having only primary school attendance in the background.

Compared to the international level, learning is valuable in Hungary. An indicator of OECD EAG (2012) shows the expected earnings among the 25-64-year-olds compared with a reference value of 100 in the case of secondary education. Compared to a system of 100 units, people with secondary education (or less) earned 68 units, while those graduated in higher education had 179 units of income in 1997 in Hungary. The data in 2010 showed the rate as 73 compared to 210.

With a degree in higher education, income is more than two times higher than with a secondary one, and secondary education compared to those having a lesser degree makes a three-fold difference. Other developed countries have an income gap but the benefit of the degree is not that high. Only Brazil shows a more extreme data than Hungary. There, the expected income with under and above secondary education differed between 53 and 256 units In 2009. The OECD average is 76 for secondary (or less) and 159 for higher education. In Norway, Denmark and Estonia, these differences are even smaller. From the individual's point of view, ~~a~~ higher education degree is very useful in Hungary (OECD, 2012).

The following diagram shows the demographics in secondary schools. Two basic trends can be seen from the data. On one hand, the proportion of students entering secondary education declines continuously - the number of candidates decreased to 79% by 2012 compared to the data of the year of 2000, on the other hand, there is a steady increase in the proportion of admitted pupils into secondary education.

Figure 8. KIFIR trends of applications, 2000-2012



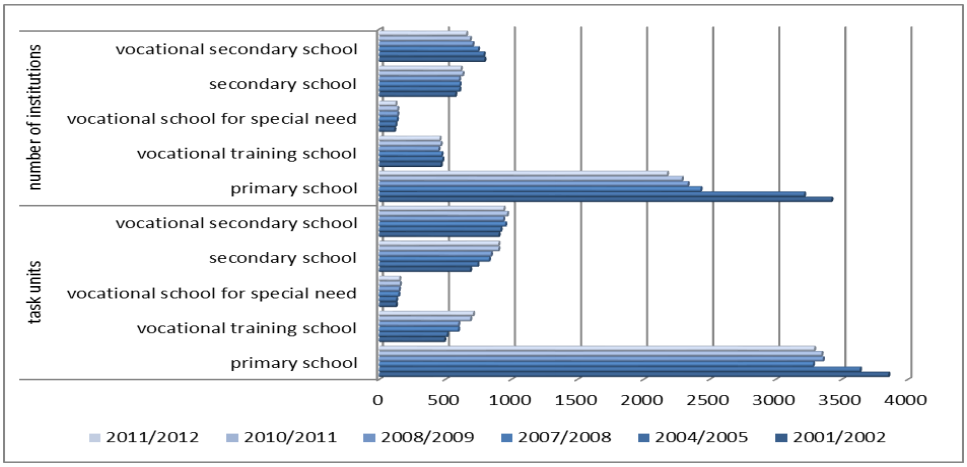
Source: *Hungarian Education Information System – Secondary School Admission Database* (KIFIR)

This trend also increases the chances of access. In 2000 only 66% of young people were able to get into their desired choice of training, while 78% of them succeeded in 2012. However, these chances were not equally applicable to the different forms of training. We compared the applications with the acceptance to priority places by types of training between 2000 and 2012. In 2000, vocational training schools were the easiest to get access to, pupils had equal chances to get into vocational secondary

schools, or to secondary schools. The next few years the chance of applicants to secondary vocational training schools gradually increased, however, the chance of applicants to the secondary school decreased. From 2009, all who applied to vocational secondary schools were accepted. From this year on, fewer pupils applied to vocational secondary schools (as first place) then the ones that actually received acceptance. A hierarchy prevails within the secondary school education. It is more difficult to enter the six and eight-year secondary schools than the four-year ones with a traditional curriculum – and more pupils get into such places than applicants of first places.

The data on the capacity of places in schools and the number of pupils already predict the characteristics of the process of the institutional transformation. (Fig. 8) In the case of primary schools the diagram shows visibly that while at the millennium there were almost as many institutions as task units in the middle of the decade a dramatic drop occurred in the number of institutions but the number of task unit places doesn't change in the same manner. While the number of institutions fell to 63% of those existing around the millennium, the number of places fell only by 15%. The number of primary school students has decreased by 20% compared to 2000. That means that a radical wave of consolidation went through the first decade of the millennium, but decreased with school closures.

Figure 9. The Number of institutions and task units. 2001–2012



Source: *Hungarian Educational Yearbook, 2001-2012*

The move of the structure of secondary schools differed from the primary one. The four training programs show different characteristics. Secondary schools and special vocational training schools went through an expansion regarding both the institutions and the task units.

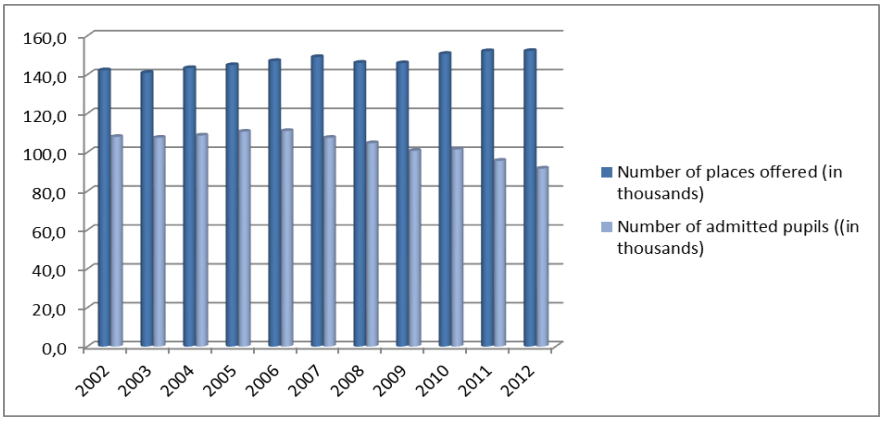
While the vocational secondary schools in the nineties excelled regarding enrolment numbers, they found that in the last decade their position weakened considerably. The number of institutions decreased the most and their task units expanded the least. Vocational training schools face a special situation. Beside a stagnant institution system, the number of task units shows a dynamic growth (the

highest rate in the four training programs) over the past ten years. The number of task units grew to 144% in 2012, compared to 2000.

Nothing can better indicate the increase of competitiveness than a deep insight into the expansion of offers in the secondary schools' recruitment data (KIFIR). In 2000, the number of faculties was less than 4250, but it showed a half fold increase in twelve years with a visible leap in 2010.

The following diagram also indicates the increase of supply and decrease of demand. It shows the places offered and the number admitted in secondary schools. We can also find that the number of entrants decreased continuously while the number of places increased in the past three years. From 2010, a small jump can be observed in the data. Analysis by the types of trainings may provide reason for this.

Figure10. Capacity utilization of secondary school



Source: *Hungarian Education Information System - Secondary school Admission Database* (KIFIR)

Most of the faculties were offered in the secondary education (1580), while vocational training schools offered the least (1134) in 2000. Regarding the relation of the available places and the admitted pupils, secondary schools are considered to be in a favourable position – 82% of the advertised places were filled in 2000. In vocational secondary schools the figure was 77%, while in vocational training schools the rate was only 63%. However in 2012, most of the faculties were announced in the vocational training schools (2806). Vocational secondary schools announced only 1801, and secondary schools offered 2046 faculties. This incredible growth of offer in vocational training schools began in 2009. Within a year the number of announced faculties grew from 1248 to 1758, however it grew to 2568 in 2011, and 2806 in 2012. We presume that this was due to change of the policy on vocational training schools. The introduction of early vocational training was accepted in 2009. This means that the offer of faculties in vocational training schools combines the traditional 2+2 year training with the 3-year training. The advertised places could be filled up to the rate of approximately 75% in secondary schools, 64% in vocational secondary schools, and 44% in vocational training schools.

Hermann and Varga (2012) examined the effect of the efforts of the educational policy to increase enrolment in vocational training schools as well as the effect of the reduction of compulsory school age. They conclude that the reduction of compulsory school age does not entail the growth of drop-outs (the number of young people without basic level education). However, they also found that the two measures - the vocational training school enrolment and the reduction of compulsory school age could cancel out one another. The high dropout rates at vocational training schools - despite the increase of enrolment into vocational training schooling - will not increase the completion rates of vocational training schools by 2020.

Summary

The proportion of participation in education has changed significantly over the last two decades in Hungary. In addition to secondary education, an expansion developed in higher education as well. However some kind of restoration can be perceived in both levels of education by the end of the last decade. In the secondary school system, the proportion of participants started to increase in schools with no graduation. The number of participants has decreased in higher education, too. While the above trends are aligned with the international average, the adult education activity is still below the level of other developed countries.

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