

## EDUCATION – A PRECONDITION FOR EFFICIENT FUNCTIONING OF HUMAN CAPITAL

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The economic development of any state is to a great extent determined by the number of population and their level of education. Formerly the main factor in economy was land, after that capital, nowadays – a person itself and the knowledge this person has. The opinion about the accumulated physical capital as the key element of national wealth has undergone a relevant change. This is testified by the research conducted by the World Bank, according to which, physical capital accounts for only 16% of national wealth, natural wealth constitutes about 20%, the main role being attributed to human capital, which forms 64% of total wealth [6]. Therefore nowadays investments in human capital are regarded to be the decisive factor to promote a country's development towards the knowledge-intensive economy.

Efficiency of human capital in a particular country is characterised by several factors:

- level of education and socialisation of the public;
- living standard of the population, the level of income, life style etc.;
- employment;
- quality of health care;
- possibilities of retraining;
- mobility of human resources and attitude to changes;
- relationship between the level of education and remuneration etc. [1,14].

However, investment in human capital alone is an insufficient precondition for rapid economic growth. Investment should be combined with a well-considered development strategy.

Economic return on investments in education reduces, if quality of education is low or if the knowledge and skills acquired at school fail to meet the contemporary market requirements. In such a case the investment made will not be sufficiently effective. No demand for human capital, due to a slow economic growth, may lead to a situation when human capital will not be fully used and appropriately evaluated [2,76].

Thus, human capital is individual's competence, knowledge and attitude, which is mostly formed through learning. Investments in education benefit

both individuals and also the whole society in general, thus increasing the total wealth of knowledge of the public. Investments should ensure improvements in the educational system, better availability of education at all levels, enhanced involvement of employers in organisation of education, as well as the possibility of life-long learning. The principal mission of education is both to provide intellectual knowledge and to broaden the cross-cultural awareness which would allow any individual to more flexibly adapt to the changes and requirements posed by the labour market. Education has a long-term effect; the parents' level of education has a relevant impact on the level of education of their children (research has shown that mother's level of education is especially important) [3].

The development of human resources and preparation of labour are essentially affected by the supply, territorial distribution and quality of education of 3 sectors of education – initial (primary and secondary) education, tertiary (higher) education, as well as further education programmes.

The development of education both in Latvia as well as in the world is determined by several factors, which over recent years have necessitated changes in the sphere of education, i.e.:

- traditionally, education was associated with the stages of childhood and youth. Education, in this sense, had a character of completion; nowadays education is characterised by dynamics, and each consecutive step in education is the continuation of the previous one;
- traditionally, education has always been teacher's dominated and monitored; nowadays application of a wide scope of new teaching methods allows it to be more and more students focussed. The focus has shifted from teaching to learning;
- the attitude towards the content of education has shifted from acquisition of one particular subject to an integrated acquisition of courses.

Education may be classified as life-style. Education is not only a period in one's youth but is being pursued through the whole person's life span

as a specific style of life. Education is increasingly approached through the perspective of life-time learning. The traditional division of human's life into stages – childhood and youth devoted to learning; the mature age devoted to active employment, and retirement – does not reflect contemporary requirements any more. Moreover, under conditions of social restructuring the pace of life of individuals and interpretation of social roles are subject to change.

Nowadays it is impossible to hope that the package of knowledge accumulated in one's youth will be sufficient to draw upon during the whole life. The rapid changes taking place in the world call for constant updating and upgrading of knowledge. With the scope of knowledge increasing, individuals are faced with the requirement to know how to manage and absorb the increasing volumes of information. Mechanical memorising of facts and figures and narrowly focused knowledge may fast become obsolescent and useless. In such a situation appropriate general education is the best way how to prepare individuals for a flexible and goal-oriented career. Individual's ability to learn is the main prerequisite to meet the requirements of the rapidly changing labour market. Today there is the demand for highly educated, qualified labour force; the decisive factor determining the demand is not muscles but knowledge and the ability to adapt to these requirements. Those who will demonstrate this ability will win, those who will fail to adapt – will turn out to be losers. This has become a topical issue also for Latvia. So far, it is basically related with the changes in the internal environment. With the transition to the market economy many employees, who before that have fulfilled routine, narrowly specialised functions in the sphere of manual or mental work, failed to adapt to the new conditions and could not realize their skills anymore. Retraining activities of such persons in many cases turned out to be inefficient, since different short-time courses can yield a positive effect only if there is the required general and fundamental knowledge. In a longer perspective these problems will be related with global processes. Thus it is possible to speak about general and specific knowledge, as well as about individual's general and specific competences. However, there is a contradiction – presently employers require direct and specific knowledge from their employees, but, at the same time, for personal development these individuals may require a comprehensively advanced level of knowledge and skills, which would allow them to successfully compete in the labour market.

Skills that are very essential today are communication skills, analytical and critical thinking and the ability to find solutions and the ability to find, process and use information. The requirement for

general understanding of human behaviour as well as environmental issues has also come to the fore. Therefore the role of education in a person's life is growing, at the same time employers are interested only in the knowledge and skills they are ready to buy, thus reducing the social role of education. When speaking about the labour market, the main precondition is not whether there is a layer of elite, highly educated persons in the state, but rather whether employers are ready to hire persons who are professional and ready to master knowledge and skills required for the particular business.

The relationship between labour supply and demand is very important. In a situation when the labour market cannot absorb the labour supply, graduates of educational establishments will receive remuneration that will not correspond to their real knowledge, thus the payment for work they will get will not be a true measure of their labour productivity [2]. This means that economic return of education or correspondence of the knowledge and skills mastered to the requirements of the labour market is very important. The relevance of knowledge is manifested by the employment rate – it is much higher for educated/qualified persons than for persons with a low level of education.

In many countries the system of education is a relevant problem, due to political, economic and social changes in these countries, i.e. instability. Moreover, free movement of labour is a process especially topical among qualified specialists, which is also stimulated by the rich countries. The poor countries, which have chosen education as the main factor for their development, risk that educated persons will move to economically more advanced countries, because the latter can offer a higher material wellbeing and social security, as well as better growth possibilities in the respective specialisations.

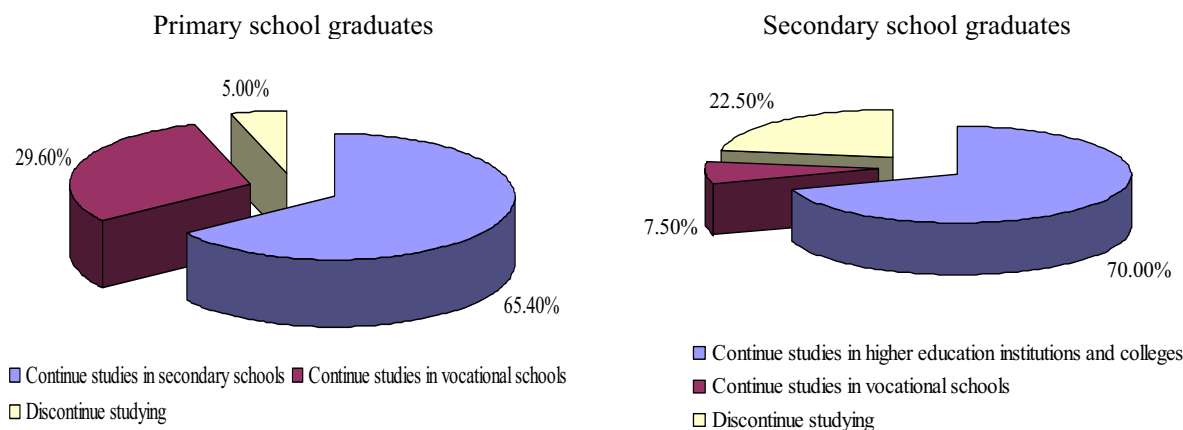
After restoration of independence in Latvia the education system is in the process of restructuring and reforming. However, despite a number of positive changes, the reforms undertaken so far have failed to yield the required positive effect. The quality of the reforms was affected by several factors: insufficient financing, the desire to approach Western standards, selection of inappropriate methods, etc. Therefore the reforms were frequently undertaken for their own sake, without a thorough and serious substantiation, and without a systemic approach. Separate elements of the system were changed, without coordinating them with other elements. When analyzing the system of education, it is necessary to have a common vision; it is also essential to consider organisation of working places, corporate culture and operation of establishments etc. The result of isolated reforms in

some elements of the education system can frequently be sad and may lead to the lowering of quality of education on the whole.

Education as a process is ensured by the functioning of a definite system of education consisting of several stages, which can be classified by several criteria. One of them is the level of education. By this criterion we differentiate between primary, secondary and tertiary (higher) education. Reforms in any of these stages affect the situation in the consecutive ones.

What determines the possibility to complete higher schools with potential students? This depends

on the number of secondary school graduates and the level of their knowledge in a particular line of studies to be undertaken. Unfortunately, many young persons in Latvia still have a low level of knowledge if compared with the Western states, e.g., only 65.4% of the population have comprehensive secondary education (see Figure 1). The analysis of the data on the number of young persons, who do not continue education at a higher stage, shows that this figure among primary school leavers is 5% and 22.5% among secondary school leavers. 70% of secondary school graduates continue education in higher education establishments.



**Figure 1.** Pursuit of further education by pupils who graduated from primary and secondary schools in 2006 (%)

Source: Latvijas statistikas gada grāmata / LR Centrālā statistikas pārvalde. – Rīga: LR Centrālā statistikas pārvalde, 2006. - 103 lpp.

Should a person continue education in a higher school? From the human capital perspective, the answer depends on the financial benefits based on the costs.

- upon completion of secondary school, a person traditionally starts his/her working career already at 18 and continues to do that until the age of 65;
- upon completion of a secondary school a person at the age of 18 to 21 chooses to continue education in a higher school, which takes 3-4 years, starts an independent working career at 22 and finishes active working life at 65 [2,76-78].

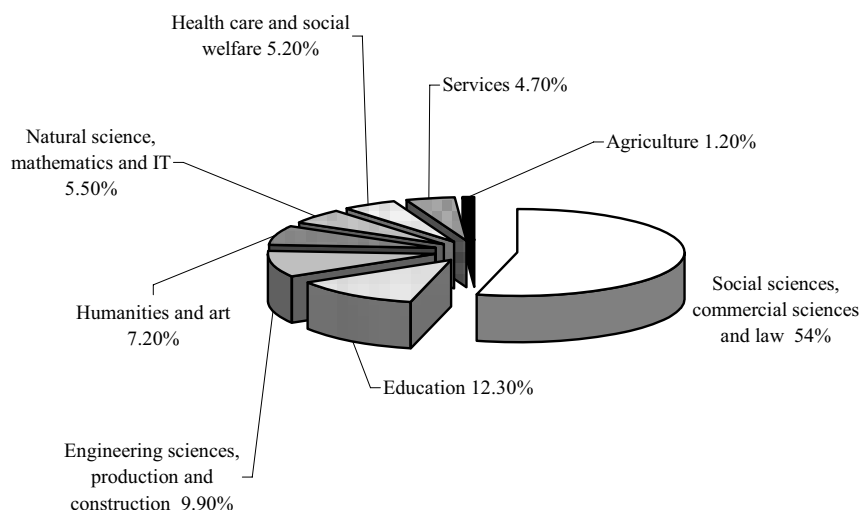
The second option – to undertake studies in a higher school is associated with two types of costs: the first group comprises direct costs, which include the tuition fee, cost of textbooks and other study-related expenditures; the other group comprises income, since the student has chosen to study instead of joining the labour market right after finishing secondary school. This is one of the reasons for the lack of motivation to pursue further education, because if these persons

had joined the labour market, they would have gained financially.

It must be admitted that the public needs different groups of specialists; presently the focus is on natural sciences and engineering specialists capable to ensure further growth of economy. The lack of these specialists is a problem both in advanced countries and also in Latvia. A question arises, why, faced with the demand in the labour market, the number of specialists trained by higher schools is still insufficient and why secondary school leavers are not very keen on mastering these specialities.

This may have several reasons, starting with the abilities of school graduates, their interest in the particular field, orientation towards these specialisations at school, the character of the future profession and ending up with the possibilities of higher schools to train these specialists.

As was already mentioned above, presently Latvia is facing the situation when national economy is desperately lacking specialists in exact sciences. This is proved by the following statistics (see Figure 2)



**Figure 2.** Students distribution by specialised education groups  
2006 /2007

Source: Izglītības un zinātnes ministrijas mājas lapa, Augstākās izglītības pārskats [tiešsaiste:[http://izm.izm.gov.lv/upload\\_file/Izglitiba/Augstaka\\_izglitiba/Statistika/2006/-105\\_lpp](http://izm.izm.gov.lv/upload_file/Izglitiba/Augstaka_izglitiba/Statistika/2006/-105_lpp)]

Over the recent years students distribution by specialised education groups and fields has not changed. Presently, almost every second student in Latvia studies social sciences. The LR Ministry of Education and Sciences tries to rectify the situation by reducing the number of budget-financed places in these specialities and allocates the financing thus economised for training the required specialists. Taking into account the big demand for engineering and natural sciences specialists, the number of budget-financed places for social sciences are reducing with every year, financing being allocated to engineering and exact sciences. At the same time, it has to be outlined that the share of students in engineering sciences, production and construction, despite the increased budget financing, is growing very slowly – from 9.2% in 2004/2005 to 10.3% in 2006/2007. The data show that in 2006/2007 there are 70299 students studying social and commercial sciences, 13344 students have undertaken engineering sciences, production and construction, and only 6916 students study natural sciences, mathematics and information technologies [4]. This is related to the introduction of the system of centralised examinations, as a result school graduates being afraid of centralised examinations in subjects of natural sciences and mathematics (which have to be passed, if they want to enter a higher school) choose subjects in humanities and social sciences and subsequently undertake studies in these specialised education groups. Considering all the above, it must be concluded that attraction of bigger numbers of students to natural sciences, engineering sciences and technologies is not only a problem faced by higher

education, but is basically an issue of the quality of secondary education.

Even countries with an advanced economy demonstrate different levels of knowledge of secondary school graduates. Therefore higher educational establishments of these states try to attract the best graduates of secondary schools of their countries as well as other countries, especially in study specialisations of natural sciences and engineering. In developing countries, with marked social differences, wealthy people can afford to send their off-springs to prestigious schools abroad and pay a higher tuition fee than local students.

In the future knowledge as a resource and a factor of development will increasingly dominate over material resources and the role of education establishments will only increase. The decisive strata will be those, who have knowledge; therefore education and knowledge are the necessary prerequisites for successful integration into global processes. Education and science are the key focus areas for application of material and intellectual forces to ensure economic, social and cultural development of Latvia.

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### **Education – a Precondition for Efficient Functioning of Human Capital**

#### Summary

The article presents an analysis of one of the preconditions for effective functioning of human capital – education. The authors point out that, on the whole, the reforms in the Latvian education system have not been well-substantiated, which has told on the quality of higher education as well as the inability of Latvian higher

schools to train the required number of specialists for the national economy. Due to the ill-considered secondary school reforms, higher schools fail to train specialists in engineering and natural sciences.

**Key words:** human capital, education, development, knowledge, labour market, life-long learning.