

TORINO PROCESS 2014

BELARUS



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MINISTRY OF EDUCATION OF THE REPUBLIC OF BELARUS
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TORINO PROCESS 2014

BELARUS

Prepared by E. M. Kalitsky and I. N. Borovskaya

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EXECUTIVE SUMMARY

The dynamic development of the Belarusian economy requires the active improvement and modernisation of the country's current organisational and economic mechanisms, economic institutes and economic policies. Such improvement and modernisation will make it possible to increase the efficiency, stability and competitiveness of the existing socially oriented, free-market development model of the Republic of Belarus. The main focus areas for improvement include:

- the development of a national innovation system;
- the creation of favourable conditions for the development of business initiatives and for boosting investment in the economy;
- the development of partnerships between the state and private companies to increase the stability of the state financial system;
- increasing independence and responsibility on the part of the regional and local authorities in dealing with socioeconomic matters.

Innovation is the main priority in the current five-year period. In the context of globalised industrial relations, increasing international competition, and the country's lack of its own fuel, energy resources and raw materials, the Belarusian economy's transition towards innovative development is the only way to increase the country's competitiveness and the welfare of its people, thus preserving the sovereignty of the Republic of Belarus and enabling it to maintain its rightful place in the global community.

As President Aleksandr Lukashenko has noted: 'Belarus's tomorrow is in the hands of the ambitious and driven people, those who want to change life for the better and are ready to work hard. Commitment and efficient work is always rewarded. Our new direction requires original ideas, developments, materials and software. And it requires bright minds.'

Training of modern skilled staff is an important component of the country's stable socioeconomic development based on implementation of the national innovation policy. Transition from the economy of technologies to the economy of knowledge requires the training of highly skilled specialists and workers capable of performing the tasks involved in the strategic, innovative development of the economy, first of all for the existing economic sectors. Not only graduates of the professional education establishments but also employees working in the economy at large need to be adequately and appropriately trained, to ensure the principle of continuity of learning throughout their working lives.

It is the system of professional education that provides the main contribution to staff training. Pursuant to the Programme for Socioeconomic Development of the Republic of Belarus for 2011–2015 (11 April 2011), one of the most urgent tasks for the system is to develop a flexible system for the training, retraining and further training of staff in accordance with the demands of the innovative development of the country.

Currently the state education system is oriented towards the rational and balanced provision of skilled specialists for the economy and the improvement and expansion of the system for training workers and mid-level specialists. It has been possible to create a comprehensive system at the legislative level, using budget funds, consolidating the demand for the training of staff and the scope and structure of training and employment for the specialists, workers and office staff trained. The Republic's State Council for Labour and Social Affairs is the body which enables the representatives of different sectors of the economy to be involved in defining the professional and qualification-related structure of staff training at professional education establishments and identifies the necessary requirements for high-quality training.

To guide the performance of the tasks set by the Ministry of Education, together with other interested parties, a set of measures has been developed and implemented that regulates the flows of young people applying to study at the vocational and higher education institutions and colleges. As a result, while the overall number of applications to the professional education establishments dropped in 2011–13, mainly due to demographic decline, the share of those applying to the vocational education (VET) institutions and colleges grew. The main flow, that of enrolment in programmes of VET and college education, still consists of students who have just graduated from secondary schools. The decrease in the numbers enrolled in higher education (HE) institutions was caused by increasing the share of applications being made to VET schools and colleges.

The scope and structure of staff training are defined annually during the enrolment campaign. They are based on the state order for the training of workers and specialists (On certain issues of forming an order for workforce training: Decree of the Council of Ministers of the Republic of Belarus No. 972 of 19 July 2011), taking into account the current situation of the labour market, the regional demography and the potential of the educational establishments.

Since the staff training system is agreement-based, almost all graduates, distributed according to work profile, get jobs in accordance with their training and the qualifications they have attained. Job retention for young workers is a more difficult and complex issue. On the one hand, poor job retention is caused by the low level of professional orientation of the graduates and the sometimes inadequate match between the requirements of employers and the quality of the graduates' training. On the other hand, low competitiveness of the jobs, low wages and a lack of social protection packages are also factors contributing to low job retention.

The adult training system has become widespread and 70% of the professional education establishments participate in it, with different departmental affiliations and ownership. Every year, more than 10% of employed people receive further training, internship, retraining and professional training in the education system and within workplace themselves. Moreover, those who have lost jobs, are unemployed or without any occupation are directed to the further education programmes for adults by the employment agencies.

It is important, however, to make professional education even more widely available to various categories of people, including those who require special social care and support.

There is a system of social guarantees in the country providing people with special needs with assistance in attaining professional education and in finding and retaining employment. The network of establishments where people with special needs, including disabled people, can attain professional education continues to grow. Up to one-third of professional education establishments work with people with special needs. Despite significant improvement in the situation, with a barrier-free environment, there is still an urgent need to increase the number of professional education establishments at different levels where people with disabilities and other special needs can comfortably receive education, and to address the problem of accessibility to professional education for such students. The state guarantee of non-competitive enrolment in education funded by the state or local budgets applies to orphans, children without parental care, and others, in accordance with the law.

For orphans and children left without parental care, material support for professional education is guaranteed by the state. In addition, for this category of persons, admission without competition is guaranteed for training in specific professions funded by state and/or local budgets, in state institutions providing professional-technical education, special secondary education and HE.

For purposes of the identification, establishment, development, and preservation of the intellectual and creative potential of young people, and in order to ensure the continuity of scientific and cultural traditions, the state implements a system of measures to support gifted young people and create conditions for them to carry out their activities effectively. The process of developing young people's potential for innovation is focused accordingly on the priority areas for scientific research and innovation in the country.

At present, the system of professional education faces serious challenges. Its model must be updated to ensure maximum adaptation to the most recent changes in the labour market. In the formation of an innovative economy in the country, there is a growing demand for high-quality staff capable of dealing with new technologies and equipment, whose expertise can ensure qualitative changes in modern production. In this connection, the problem of interaction between the market in educational services and the labour market becomes especially urgent. Lack of coordination between these two markets and the disproportion in the composition of staff training as regards professions and qualifications are among the main reasons why there is still an imbalance between the demand and the supply of skilled labour from the point of view of the professional and qualification structure. This imbalance is increased by the unjustified differences in salaries according to skills and qualifications, and by the emigration of skilled specialists.

To tackle this imbalance between labour market demand and supply, the basic legislation relating to the labour market in Belarus is being updated, together with the structure of professional education and training, so as to satisfy the demands of a socially oriented free-market economy. Serious preconditions for the further improvement of the mechanisms to ensure the quality of professional education and training have been created in the country. Educational establishments have become more independent in making decisions related to their internal operations, educational process and research activities. The economic independence of the professional education establishments has also strengthened: the share of the funds from paid educational and other services to individuals and legal entities, research, sale of intellectual property, etc., in the financing of educational establishments is growing. For the training of qualified staff ahead of market demand and the implementation of the industry strategy of optimising budget expenses on professional education, new forms and methods of organising the educational process are being actively introduced, including the network principle of staff training.

At the same time, the staff training system is not yet ready to provide the country with people with the necessary qualifications. The quantity and quality of graduates are not fully compatible with the actual needs of the employers. As a result, some graduates are left out: some of these work in areas unrelated to their qualifications, some join the ranks of the unemployed and some seek employment abroad.

In order to ensure the transparency of qualifications and the trust society and employers can place in them, and in the quality of professional education and training, the Ministry for Labour and Social Protection has proposed that the National Qualification System (NQS) be improved. This is a global process which breaks with established stereotypes, and it requires both time and financing. No common understanding of the ways of radically reforming the NQS has been achieved yet, but the first steps in that direction have already been taken. It is expected that the improvement of the NQS will be a starting point for a definitive change in approaches to the requirements as regards the skills, abilities and competencies of staff. In the long term, it will create a powerful boost to the economy, driving development at a faster pace.

One of the key factors ensuring the quality of the professional education and the advancement of modern technologies and teaching methods is the condition of the human resources in the education system. Today's professional education and training policy is aimed at the optimum use of educators in accordance with their professional qualifications, experience and abilities, and the improvement of their professional competencies. The necessary provisions have also been put in place for the further education, retraining and internship of teaching staff. The existing system of methodological support for teachers allows the heads of establishments and methodology departments to ensure the professional growth and development of the teaching staff, based on a diagnostic, differentiated and personalised approach.

The steps taken are aimed at the practical implementation of effective mechanisms to improve the quality of professional education, which are associated with high achievements by students, the creation of a modern informative-educational environment within educational establishments, satisfaction with the

conditions and results for all those involved in the education process, and motivation of the educators to increase their personal contributions to the common results and achievements of teaching activities.

1. OVERVIEW OF THE NATIONAL SYSTEM OF PROFESSIONAL EDUCATION AND TRAINING

The Republic of Belarus has entered a new stage of social and economic development, whose distinctive feature is the formation and development of an innovation economy.

New technologies and knowledge are becoming the main route of development and the key challenge of the five-year period is to develop breakthrough manufacturing facilities, companies and industries making high-tech export-oriented products with high added value, including those resulting from the large-scale structural transformations of the economy.

In his address to the nation and the National Assembly of the Republic of Belarus on 20 April 2010, President A. G. Lukashenko highlighted the need for a breakthrough in the national economy. This economic breakthrough is possible based on a number of new strategies involving technology, business, transport, energy and total computerisation. These strategies will allow Belarus not only to preserve its respectable place in the modern world, but also to move forward and work more efficiently than before.

The implementation of an innovative strategy to develop the country requires highly qualified human resources and a transition to global standards of training. The National Strategy for the Sustainable Socioeconomic Development of the Republic of Belarus until 2020 and the Programme of Socioeconomic Development of the Republic of Belarus for 2011–2015¹ set the objectives and goals for professional education and training. According to the National Strategy, the strategic objective in the education sector is ‘to create a system of education corresponding to the needs of individuals, society and the state, to shape the conditions for its further development, to prepare new generations for life and work in a civil society with a stable social market economy. Pursuant to the Programme for Socioeconomic Development, the most urgent tasks for professional education and training are to ensure availability and quality and to create a flexible system for training, retraining and further training of human resources in line with the requirements for the innovative development of the country.

The organisational bases for the implementation of the policy are the state development programmes for vocational, college and higher education over the five-year period². In these programmes special attention is paid to:

- optimising the scope and structure of training specialists and the labour force to meet the demands for the development of high-tech manufacturing;
- updating and optimising the content and quality of professional education and training;
- strengthening the practical approach to training;
- improving material support and staffing;
- introducing new information and communication technologies to the process of education; and
- growth in the export of educational services.

¹ Approved by the National Committee for the Sustainable Socioeconomic Development of the Republic of Belarus (record No. 11/15 of 06 May 2004) and the Presidium of the Council of Ministers of the Republic of Belarus (record No. 25 of 22 June 2004).

² State Programme for the development of vocational education in the Republic of Belarus for 2011–2015 (27 December 2010); State Programme for the development of college education for 2011–2015 (27 December 2010); State Programme for the development of higher education for 2011–2015 (1 July 2011).

The main medium-term priorities of professional education and training are:

- to improve its quality. This is the main resource in the innovative development of the country. In creating the innovative economy and its competitive environment, the professional education and training system should ensure conformity of the acquired knowledge and skills with the rapidly changing requirements of society and technology, and also the development of personal initiative and adaptability, which enable a person expanding his/her possibilities to integrate ideas and innovations;
- to give the social partnership new momentum towards ensuring coordination of the labour and educational services markets, to eliminate disproportion in training by levels of education, professions and specialisms, to optimise the educational space, to ensure quality in professional education and training and conformity with the requirements of the labour market, and to increase the competitiveness of graduates and their maximum adaptation to the labour market;
- to promote VET and college education among young people, their parents and society in general;
- to accelerate the improvement of the NQS, which will lead to transparency in qualifications, trust in the qualifications on the part of employers and society, a high quality of professional education, and training that meets the demands of the labour market;
- to integrate the professional education system of the Republic of Belarus into the global educational space while preserving national achievements and traditions.

2. OVERVIEW OF THE BELARUSIAN ECONOMY

The Belarusian economy is characterized by the following features:

- The economy is of the same size as those of Central European countries with one of the highest levels of integration into global markets in the region: Belarus is 13th in the world measured by percentage of exported goods and services in relation to its GDP (84%). This means that the economic development of the country is inevitably highly dependent on trends in the global economy and on its main export partners.
- Belarus's integration into global scientific and technological spaces is limited to entry-level international cooperation (supply of low-tech products with low added value) and the donation of creative ideas and their authors.
- The economic policy makes excessive use of extensive factors and state budget support of weak, non-competitive or obsolete manufacturers (e.g. by means of subsidies), which in fact preserves the obsolete economic structure.
- The country is not rich in natural resources, resulting in dependence on imported raw materials and energy.
- The manufacturing sector is well developed, the leading industries being machine industry (manufacture of agricultural machinery and heavy trucks), oil refining (mainly based on Russian oil) and export-oriented agricultural production, industries which are closely linked to the economic and political conditions of the Russian market.
- Belarus has a reputation for strong social policies aimed at the protection of all elements of the country's social structure in the interest of ensuring a decent level and quality of life for the people. At the same time, the scope of these policies is limited by the country's medium-to-high per capita income, which in 2013 made up USD 15 900, giving Belarus a ranking of 85th out of 229 countries

and regions). This is higher than the average index in the world, which is USD 12 100, but it is also significantly lower than the level enjoyed in developed market economies.

As regards sustainable development, the main stumbling block is insufficient integration of the country's economy into global processes. This is not a quantitative matter; the main problem lies in the quality of the integration, as competitive ability is today's ticket to the global economy. Today Belarus is trapped in a situation that analysts call the 'middle-income trap': the growth of the economy slows down and eventually stops after reaching middle-income level. To overcome that situation, it is implementing a gradual transition to a strategy of innovation, searching for new markets to support export growth and also to increase internal demand. The main problem is the transition from economic growth based on domestic resources and dependent on cheap labour and capital to growth based on high performance and innovations. That shift requires investments in both infrastructure and education.

Lack of a solution to these problems not only slows down socioeconomic development in Belarus but also creates threats to national interests. In this context, the Joint Action Plan of the Council of Ministers and the National Bank for structural reforms and increasing competitiveness of the Republic of Belarus (10 October 2013) (hereinafter the Joint Action Plan) is an important step towards enabling the situation in the country to be stabilised. According to the Joint Action Plan, among the key tasks are the improvement of the monetary, investment, budget and tariff policies; optimisation of state programmes; complex improvement of the taxation system; improvement in the efficiency of state property management and the mechanisms for the state property privatisation; boosting exports; improvement of the system of remuneration for work; increasing competitiveness; and improvement of the laws governing pensions. As regards the development of the private sector and the support of small and medium businesses (SMEs), the Joint Action Plan includes measures to liberalise business conditions and reduce the administrative and tax burden.

2.1 Support to entrepreneurship

The authorities and businesses are trying to establish a productive dialogue to find solutions for the development of the economy and to boost entrepreneurial activities. In recent years, there has been evidence of positive changes taking place to establish business regulations aimed at improving the business climate and investment attractiveness of the country.

Directive of the President no. 4 of 31 December 2010, 'On the development of entrepreneurial initiative and stimulation of business activity in the Republic of Belarus', kick-started the growth of business activity: the number of small companies began growing rapidly and at the end of 2013 reached 91 600 (from 33 000 in 2005), while their percentage of GDP reached 15.2%, 26.2% in export and 26.7% in investments. Small companies employ over 847 000 people, almost as many as the public sector. Adding to this 243 000 self-employed people, the number of those working in small businesses is over a million. Together, SMEs generate almost 25% of the GDP, 42% of export and 31% of taxes. Streamlining the conditions for doing business has also given a strong boost to entrepreneurship.

So far, the education system has not had any notable effect on the development of entrepreneurial activity; however, taking into account the demand for training of unemployed people, it is becoming one of the most important directions of state policy as regards supporting small businesses and dealing with unemployment.

2.2 Main economic factors affecting the labour market

The following are the main factors affecting the national labour market:

- shrinking labour resources;

- modernisation of the economy to improve its competitiveness, optimising the number of employed;
- excessive labour force in a number of organisations coupled with a shortage of skilled employees;
- imbalance between the demand and supply of jobs, by professions and qualifications;
- low competitiveness on the labour market especially of people requiring social security, i.e. disabled people, youth, women, ex-prisoners and those who have been out of work for a long time (over a year);
- aggravation of the shortfall of skilled staff due to the outflow of workers to neighbouring countries.

3. PERFORMANCE AND EFFECTIVENESS IN SATISFYING THE DEMANDS OF THE ECONOMY AND LABOUR MARKET

Among the conditions for creating an innovative economy in Belarus, there is a growing demand for high-quality staff capable of dealing with new technologies and equipment and of ensuring qualitative changes in current production. In this connection, it becomes especially urgent to forge effective links between the educational services market and the labour market becomes. On the one hand, the educational services market involves the public in the training process and further determines the situation of an individual in a particular segment of the labour market. On the other, the labour market sets the social demand for the quantity and quality of educational services and thus influences the education market.

In terms of their functionality, the markets considered today do not fully match one another in their respective demands and opportunities.

3.1 Labour resources and employment

The current labour market can be described as stable, manageable and controlled. Nonetheless, alongside the areas that are doing well, there are ailing areas and sources of possible problems on the employment map of Belarus. First of all, the labour force offer is decreasing, while regional and qualification imbalances in supply and demand in the labour market are rising against a background of low workforce mobility.

The Belarusian labour market faces a growing demand for workers mainly because of demographic factors. The birth rate is currently too low to cover simple replacement of the population, and the population is ageing and increasing in dependency. The law on the demographic security of the Republic of Belarus (4 January 2002, amended 31 December 2009) and the National Programme of Demographic Security of the Republic of Belarus for 2011–2015 (11 August 2011, amended 12 September 2012) made it possible to slow down some of the negative trends. The birth rate has grown in recent years, but not sufficiently to stop the natural decrease in the population. In the country as a whole, 118 000 people were born and 125 300 people died in 2013, the number of deaths exceeding the number of births by 6.2%. The natural decrease in the population in 2013 was 7 300 people, a fall of 31.1% in comparison with 2012 (Table 1).

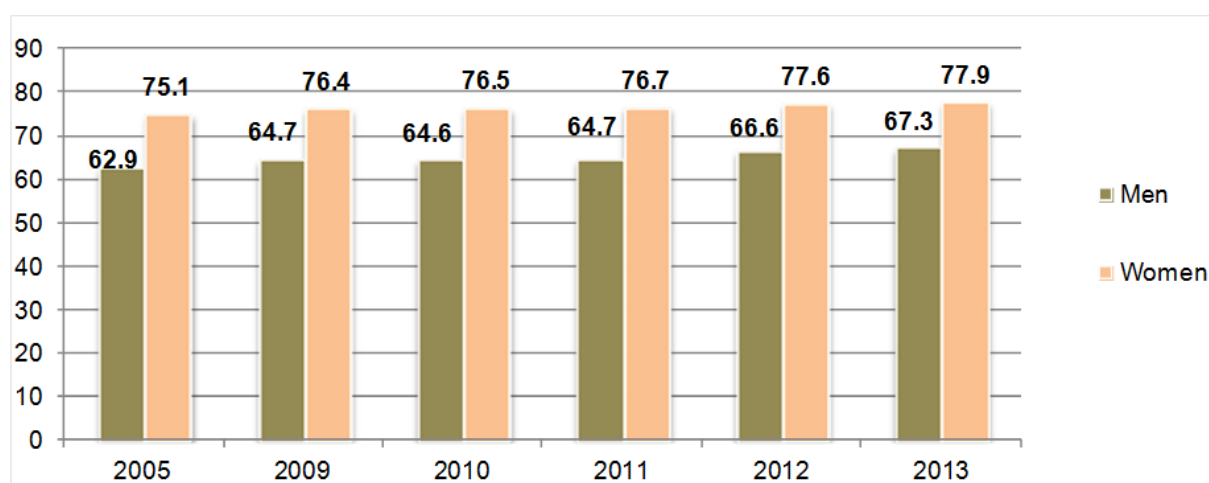
Table 1. Birth rate, death rate and natural population increase in the Republic of Belarus

Year	Total, people			Per 1 000 people		
	born	deceased	natural increase, decrease (-)	born	deceased	natural increase, decrease (-)
2005	90 500	141 900	-51 400	9.4	14.7	-5.3
2009	109 300	135 100	-25 800	11.5	14.2	-2.7
2010	108 000	137 100	-29 100	11.4	14.4	-3.0
2011	109 200	135 100	-25 900	11.5	14.3	-2.8
2012	115 900	126 500	-10 600	12.2	13.4	-1.2
2013	118 000	125 300	-7 300	12.5	13.2	-0.7

Source: Demographic Yearbook of the Republic of Belarus. Statistical Book. Minsk, National Statistical Committee of the Republic of Belarus, 2014, p. 122.

The main negative effects of the low birth rate are the increasing imbalance in the age structure of the population and an overall decrease in labour resources.

The gradual decrease in the population of working age and increase in the number of people beyond working age in the country has a negative effect on the labour market and increases the burden on the social security system. According to international criteria, a population is considered old if the proportion of people aged 65 and older is 7% or more. Currently, every seventh person in Belarus, i.e. almost 14% of the population, is 65 years old or over. The ageing of the population is caused by both the low birth rate and the increase in average life expectancy. In the period from 2010 to 2013, life expectancy in the country increased from 64.6 to 67.3 for men and from 76.5 to 77.9 for women (Figure 1).

Figure 1. Life expectancy at birth (number of years)

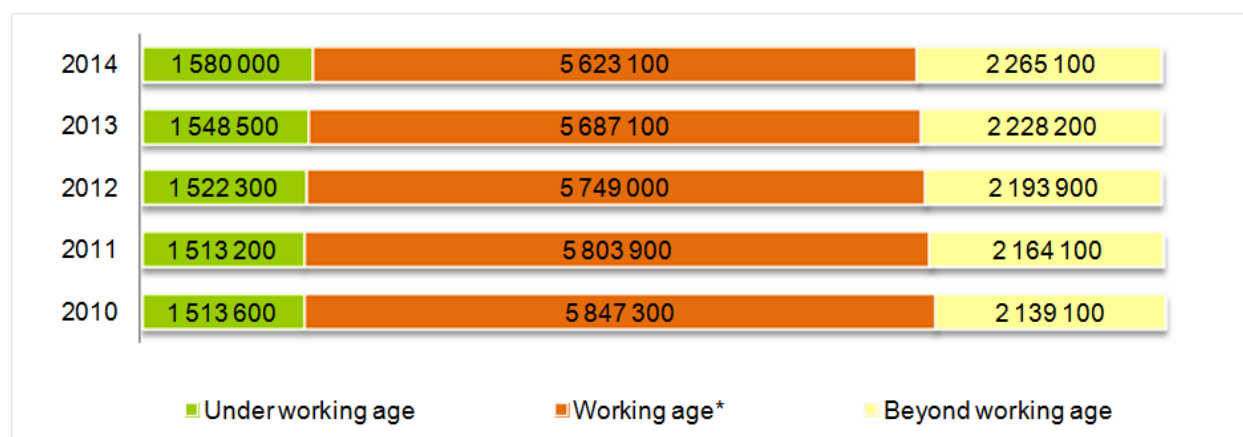
Source: Demographic Yearbook of the Republic of Belarus. Statistical Book. Minsk, National Statistical Committee of the Republic of Belarus, 2014, p. 162.

Currently, the burden on the working-age population has reached its highest point in the entire post-war history of the country. In 2010, there were 366 people older than working age for every 1 000 working-age people; at the beginning of 2014, this figure had risen to 403. At the beginning of 2014, the total working-age population was 5 623 100 (59.4% of the total population); within a year this had

decreased by 64 000 (Figure 2). The population under working age (under the age of 15) in 2014 was 1 580 000 (16.7% of the total population) and within a year it grew by 31 500. This growth is explained by the fact that women born in the 1980s, when the birth rate was high, have now reached childbearing age.

The population beyond working age at the beginning of 2014 stood at 2 265 100 people (23.9% of total population) having grown by almost 37 000 during 2013. This age category has been growing steadily for many years.

Figure 2. Distribution of population by age group (beginning of year; people)



* Men aged 16–59, women aged 16–54.

Source: Statistical Yearbook of the Republic of Belarus, 2014. Statistical Book. Minsk, National Statistical Committee of the Republic of Belarus, 2014, pp. 61–3.

The Belarusian labour market is currently characterised by a gradual decrease in labour resources, mainly explained by the dwindling number of young people reaching working age. Labour resources in 2013 shrank in comparison with 2010 by 1.5% to 5 989 100 people (Table 2). There has thus been a decrease in the working-age population able to work. In other words, the demographic foundation of labour resources has changed. In the period reviewed, the number of people capable of working in the working-age population decreased by 2.7%, to 5 587 100 people, and that proportion of the labour resources shrank from 94.5% to 93.3%.

Table 2. Trends in labour resources, 2005–2013

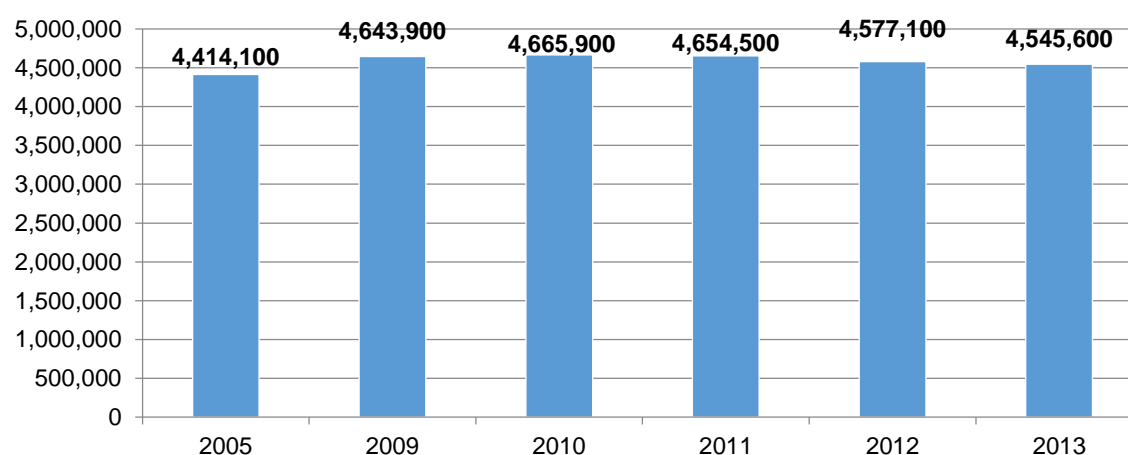
Years	Labour resources, people	Including:		
		population of working age and able to work	people beyond working age employed in the economy	people under working age employed in the economy
2005	6 106 100	5 838 200	267 700	200
2009	6 081 400	5 777 800	303 500	100
2010	6 078 500	5 742 000	336 400	100
2011	6 031 400	5 694 900	336 400	100
2012	6 030 000	5 637 400	392 500	100
2013	5 989 100	5 587 100	401 900	100

Source: Labour and employment in the Republic of Belarus. Statistical Book. Minsk, National Statistical Committee of the Republic of Belarus, 2014, p. 29.

As a result of the demographic processes taking place in the country, the total labour pool on the country's labour market is gradually shrinking and its deficit is becoming more critical. In this situation, the need for additional sources of labour emerges. The first of these sources is the increasingly important pool of people beyond working age who are still employed and have experience and professional skills. Their number has been growing rapidly: from 336 400 people in 2010 to 401 900 in 2013, a rise of 19.5%, with a corresponding rise from 5.5% to 6.7% of the labour pool. A new labour resource trend has become evident, where the main component of the labour resources, i.e. the working-age population able to work, is decreasing, while the number of people beyond working age and still in work is increasing.

Against a background of shrinking labour resources, the number of employed people in the economy of Belarus is also decreasing: from 4 665 900 people in 2010 to 4 545 600 in 2013, or by 2.6% (Figure 3).

Figure 3. Movement in the number of employed persons in the country 2005–2013 (people)

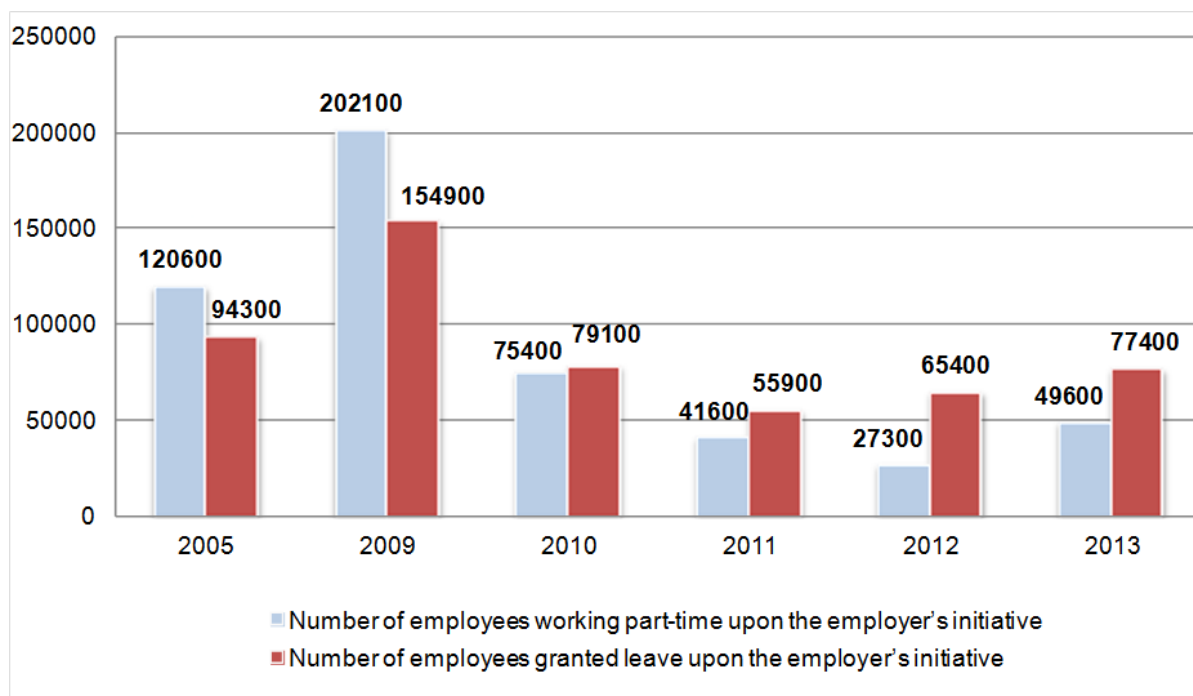


Source: Labour and employment in the Republic of Belarus, p. 38.

Despite the falling numbers of employed persons in the economy, the employment level in 2013 was 81.4% of the total working-age population. To a great extent this is explained by the high number of women in work.

The high level of employment is accompanied by significant losses of working time and low efficiency in the use of labour resources, for example the accumulation and retention of excess staff, which poses a high risk of employee redundancy and rising unemployment. It should be noted that the number of people forced to work part-time is dropping (from 154 500 people in 2010 to 127 000 in 2013, or by 17.7%), but the figures are still rather high (Figure 4).

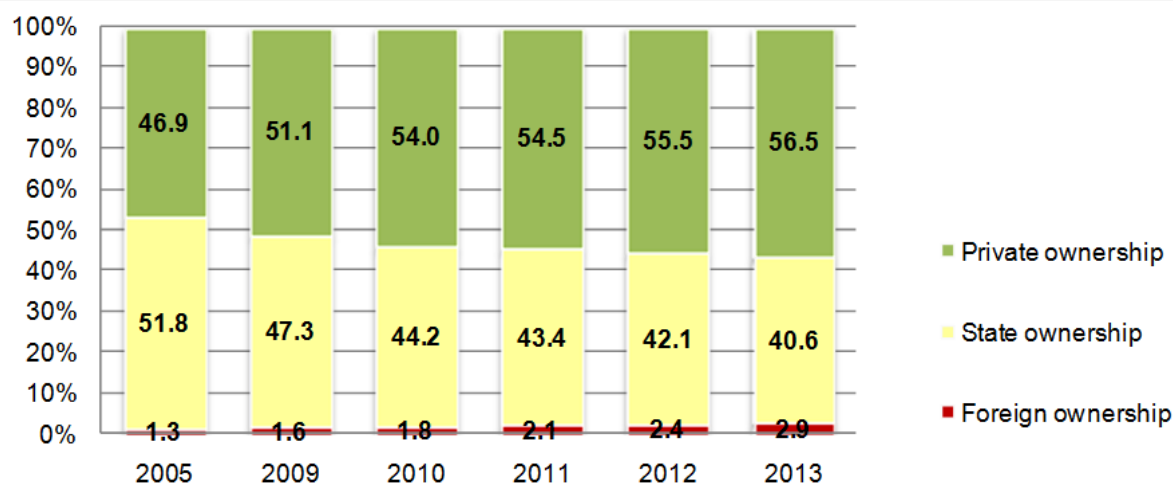
Figure 4. Compulsory part-time employment (people)



Source: Labour and employment in the Republic of Belarus, p. 189.

One of the main indicators of the market reforms in Belarus is the change in the number of people employed in the state and private sectors. The employment dynamics in the state sector are characterised by a steady downward trend. In the period from 2009 to 2013, the population employed in the state sector decreased from 47.3% to 40.6% with labour outflow to the private sector, where the employment in that period grew from 51.1% to 56.5% and under foreign ownership from 1.8% to 2.9% (Figure 5). The employment development of the private sector is shaped by the economic policy of the state.

Figure 5. Structure of employed population by forms of ownership (% of total)



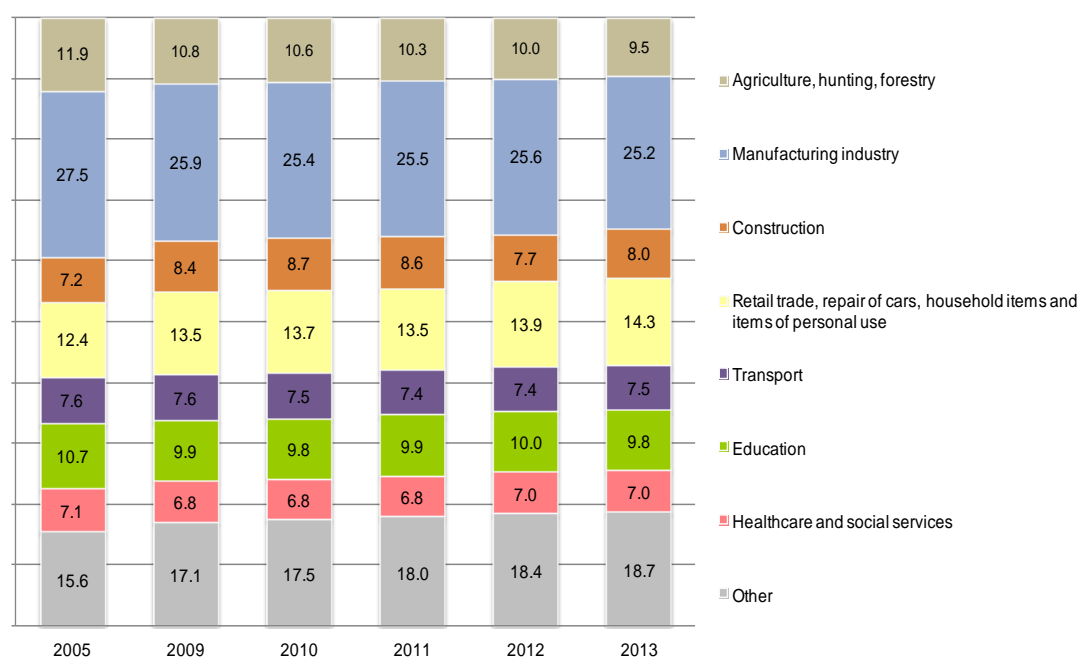
Source: Labour and employment in the Republic of Belarus, pp. 40–3.

Pursuant to the National Strategy for Sustainable Socioeconomic Development of the Republic of Belarus until 2020, the employment structure is moving towards deindustrialisation of the economy and growth in service industries. The percentage of the population employed in the manufacturing sector dropped from 45.1% in 2009 to 42.8% in 2013. The largest reduction was in the agricultural sector, where

the number of employed people dropped from 499 500 in 2009 to 433 400 in 2013 and the percentage of the total from 10.8% to 9.5% (Figure 6). This fall is explained mainly by the increase in the efficiency of use of workers in that sector of the economy and the continuing migration of people from rural to urban areas in search of further education and employment. The proportion of people employed in manufacturing industry remained stable over the period of 2009-2013, with minor fluctuations within the range 25.2–25.9% of the total number of employed.

The number of people employed in the service sector as a percentage of the total employed grew from 54.9% in 2009 to 57.2% in 2013. The main sectors are commerce, vehicle repairs, servicing of household appliances and other items for personal use. Activities of these types as a percentage of the total employed population in the country grew from 13.5% in 2009 to 14.3% in 2013.

Figure 6. Distribution of employed population by types of economic activity (% of total)



Source: Labour and employment in the Republic of Belarus, pp. 47–8.

The most important indicator of the quality of the potential labour force is the proportion of employees with basic VET and above; this is known as professional saturation. Currently, the proportion of such employees in the country is 70.5% of the total of employed people. The highest level of professional saturation is in the financial sector, at 92.6%, followed by 87.8% in state administration and 83.5% in education. Many employees with basic professional education are in retail (75.0%), construction (68.7%), manufacturing (67.2%), transport and communications (64.5%), and in organisations representing utilities, social and personal services.

According to data from the National Statistical Committee of the Republic of Belarus, the employment structure by level of education shows a reduction in the number of employees without basic VET from 33.2% in 2008 to 29.5% in 2012 (Table 3).

Table 3. Distribution of employees by level of education (year end)

	<i>People</i>				<i>% of total</i>			
	<i>2005</i>	<i>2008</i>	<i>2010</i>	<i>2012</i>	<i>2005</i>	<i>2008</i>	<i>2010</i>	<i>2012</i>
Total employees	3 994 276	3 987 523	4 017 899	3 868 273	100	100	100	100
including those with education:								
HE	913 139	948 367	1 021 692	1 061 163	20.1	23.8	25.4	27.4
college	909 209	904 746	909 868	870 261	24.4	22.7	22.6	22.5
VET	753 689	808 938	828 488	795 517	19.6	20.3	20.6	20.6
general secondary	1 247 242	1 190 726	1 143 008	1 044 022	30.5	29.8	28.5	27.0
general basic, including general primary education	170 997	134 746	114 843	97 310	5.4	3.4	2.9	2.5

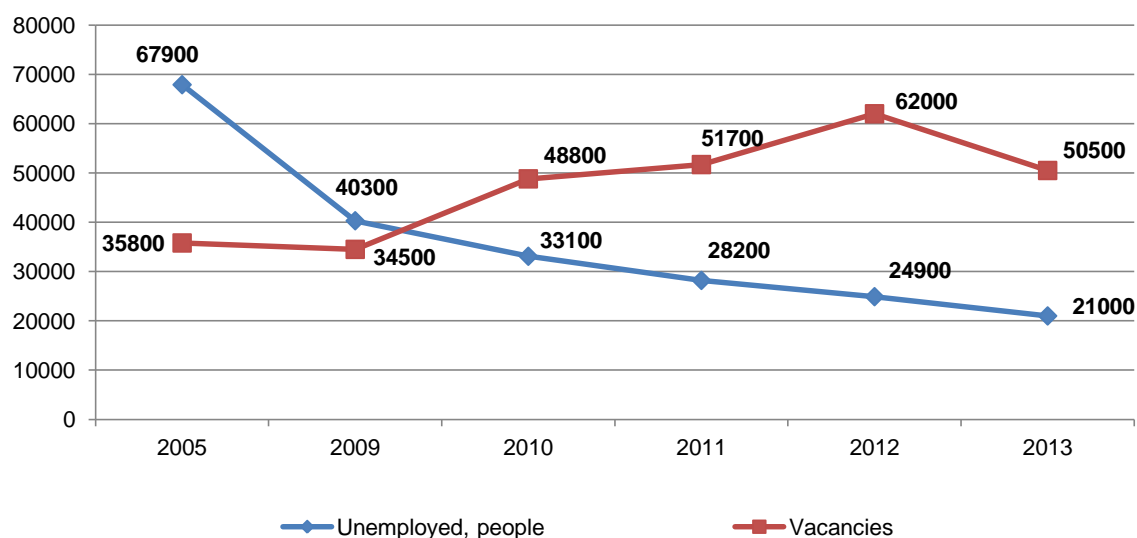
Source: Labour and employment in the Republic of Belarus, pp. 144–7.

The improvement in the educational, professional and qualification structure of the employed results from the increase in demand for specialists and skilled workers. The demand for engineers, doctors, agricultural specialists, and nano-, bio-, laser and information technology specialists, as well as for skilled workers in almost all areas, is growing. At the same time, the improvement in the sector structure results in a decrease in demand for economists, lawyers and other specialists in the field of humanities. The lack of correspondence of the professional and qualification structure of labour training with employment market needs leads to a further increase in the imbalance between the labour market demand and supply for professionally qualified people. Despite the development of the system of college and vocational education, skilled workers are in increasingly short supply in almost all professions and specialisms.

3.2 Employment and unemployment

It is characteristic of the overall labour market conditions in Belarus that the demand for labour constantly exceeds the supply (Figure 7). At the same time, as in the past, the labour market is oriented towards jobs for workers. According to employers' requests, at the end of 2013 there were 50 500 vacancies in the country, 75.5% of which were for workers. We should note that the percentage of vacancies for unskilled labour was about 11%.

Figure 7. Supply and demand on the labour market in 2005–2013 (year end)



Source: Labour and employment in the Republic of Belarus, pp. 222, 259.

The demand for employees over the period shown was mainly from such areas as the processing industry, construction, agriculture, hunting and forestry, commerce, repair of vehicles, household appliances and personal items, transport and communications, real estate operations, rentals/leasing and consumer services, healthcare and social services.

The number of officially registered unemployed people decreased from 33 100 at the end of 2010 to 21 000 in the same period of 2013, or by 36.9% (Figure 7).

Labour market intensity decreased from 0.7 to 0.4 unemployed per vacancy in 2012–2013. Low intensity on the national officially registered labour market is explained by the set of measures being implemented by the authorities to support employment and maintain unemployment at a socially acceptable level, and by small unemployment benefits. The average unemployment benefit in 2013 was 10% of the minimum wage³, 14.3% of the subsistence level⁴ and 2.7% of the national average wage. Unemployment benefits as low as this do not allow unemployed people to satisfy their minimum needs and encourage them to turn to the employment services. Moreover, to be entitled to unemployment benefits, an unemployed person must do a certain number of days of unpaid community work every month.

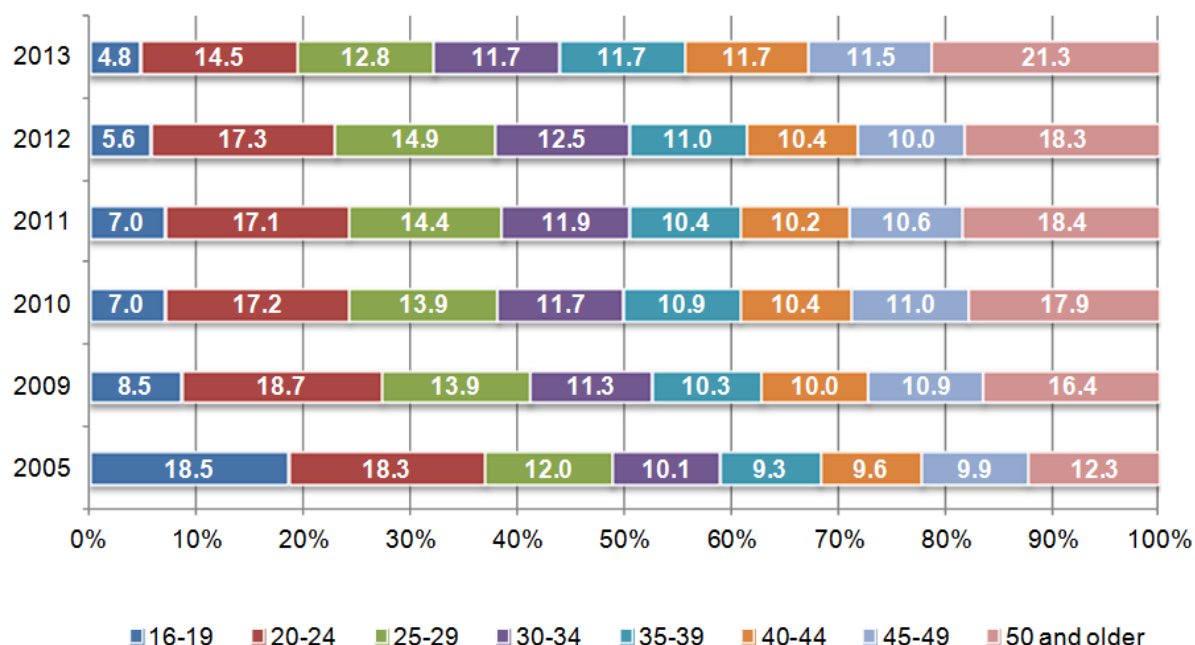
Despite the stable and relatively low unemployment level in the country in 2013 (0.5% of the economically active population), the social aspects of unemployment remain a matter of special concern. More than half of the jobless people turning to the labour, employment and social security authorities for employment assistance are for various reasons less able to compete on the labour market. Among them are the long-term unemployed, young people (including those under 21 years of age), first-time job seekers (including women who have not worked due to childbirth and childcare), disabled people, people

³ The minimum wage (monthly and hourly) is the state's minimum social standard of payment for work, which is to be used by employers as the lower limit of payment for the work of employees in normal conditions, for normal working hours, when performing their duties in accordance with the law, local statutory regulations and the corresponding employment agreement.

⁴ Subsistence level is defined as the minimum basket of foodstuffs required to preserve human health and ensure sustenance, plus non-food products and services, the cost of which is determined as a fixed proportion of the minimum basket of food products. A subsistence level budget is the cost value of the subsistence level together with mandatory charges and payments.

without qualifications, and ex-prisoners. Thus, unemployment among young people aged 16–29 remains very high. Among the overall number of unemployed, almost every year one-third falls into that age group (Figure 8).

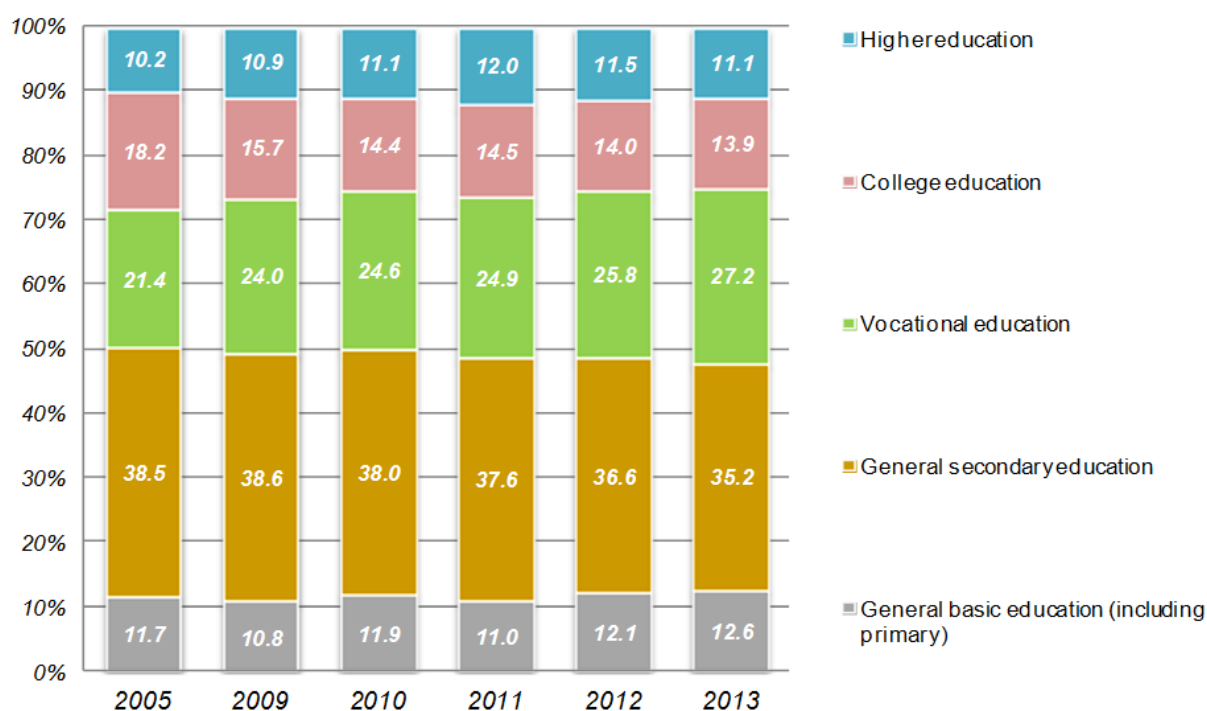
Figure 8. Unemployed people registered with the labour, employment and social authorities, by age group (year end; % of total)



Source: Labour and employment in the Republic of Belarus, pp. 238–41.

The issue of long-term unemployment remains urgent, and is mainly linked to the low level of education of registered unemployed people. The largest group of unemployed people is those with general secondary and vocational education, even though there are many vacancies for blue-collar jobs on the Belarusian labour market (Figure 9).

Figure 9. Unemployed people registered with the labour, employment and social authorities, by level of education (year end; % of total)



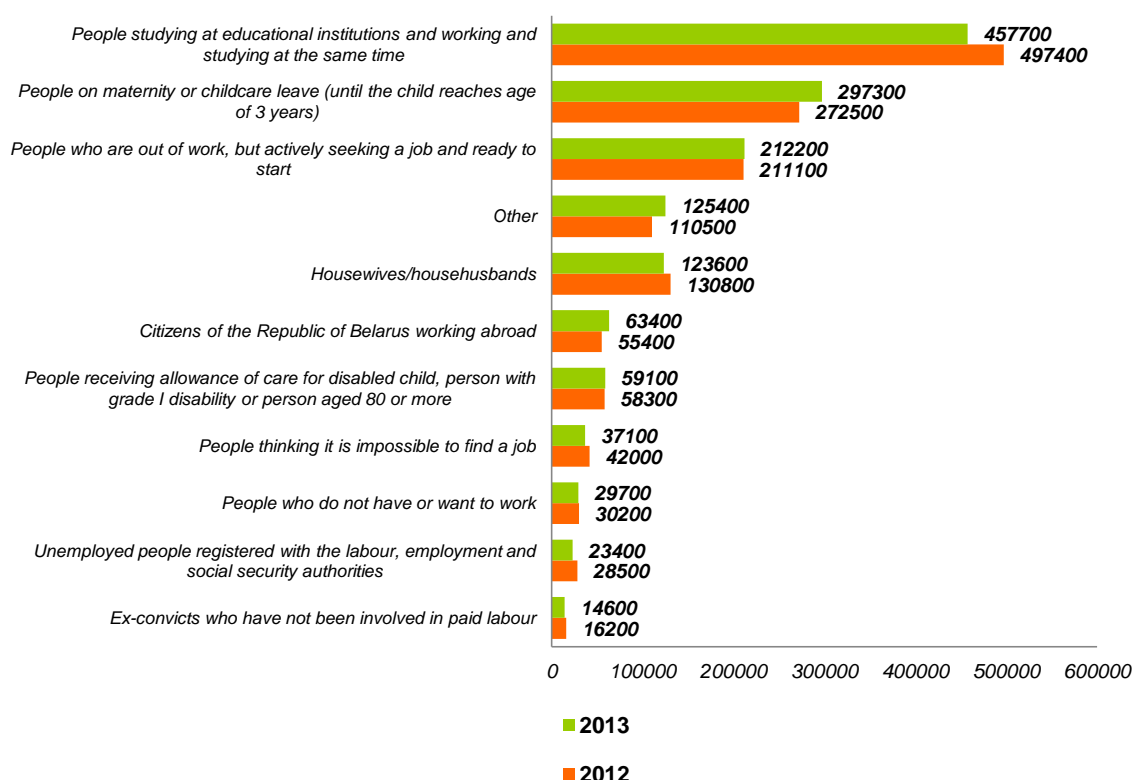
Source: Labour and employment in the Republic of Belarus, pp. 242–3.

3.3 Unemployment-related social security

The active social security measures currently being taken are aimed at integrating the unemployed into the labour market, including those unable to compete on the labour market and those who wish to change their job. These measures are implemented through information support, professional guidance services, professional training, retraining and further training, organisation of paid community work, support of unemployed in starting a business, becoming self-employed, and so on (see Appendix 1). The level of employment through the labour, employment and social security authorities in the country is seen to be quite high. In 2013, it was 76.4% of the total number of unemployed, which indicates the effectiveness of such measures.

As mentioned above, the employment level in the country remains high. At the same time, the number of people able to work but not employed is also relatively high. According to national employment figures, in 2013 the total number of working-age people able to work but not employed was 1 443 500, of whom 212 200 were out of work but actively seeking jobs and ready to start work, 37 100 thought it impossible to find a job, 29 700 did not need or want a job, and 125 400 people did not provide any reason for their unemployment and were placed in the 'others' category in the labour resources statistics (Figure 10).

Figure 10. Structure of the working-age population able to work but not employed in the Republic of Belarus in 2012–2013 (people)



Source: Official data of the National Statistical Committee of the Republic of Belarus.

Thus, in 2013, 404 400 people (6.8% of labour resources) did not have any official income, were not registered as unemployed, were not on maternity leave, were not studying at any educational institutions, were not housekeepers, were not working abroad, etc. On the one hand, these categories have the potential to increase the official unemployment figures, but, on the other, they represent a labour reserve to be integrated into the economy. Some of these people work in the grey economy and have income not declared for taxes. In that context, assessment of the scale of this grey employment and development of effective measures for its legalisation and minimisation is a very urgent task.

3.4 Labour migration

The shortage of labour resources is aggravated by labour migration driven by the lower wages in Belarus in comparison with neighbouring countries. Given the persistent decline in the working-age population, labour migration presents a challenge for the Belarusian economy. The Department of Citizenship and Migration of the Ministry of the Interior of the Republic of Belarus (hereinafter the Department of Citizenship and Migration) records migrant workers entering and leaving the country to work based on signed agreements and contracts. Since many Belarusian citizens fail to inform the authorities that they are going abroad to work, the Department of Citizenship and Migration does not have complete data on outward labour migration. According to the labour resources figures of the Republic of Belarus, the number of citizens working abroad in 2013 grew by 14.4% in comparison with 2012 and reached 63 400 people (Figure 10). According to expert assessment by the National Statistical Committee of the Republic of Belarus and the Ministry for Labour and Social Security of the Republic of

Belarus, the number of citizens working abroad reaches 100 000 annually (Piluy, 2014). Belarusian economists note that more skilled workers leave the country than enter it every year (Piluy, 2014).

A virtual component of external labour migration is growing rapidly: people live in their own country, but work for companies located outside the Republic of Belarus (outsourcing). Outsourcing is growing and is carried out through the provision of high-technology services. However, it leads to a drain of highly skilled labour resources and, as a rule, does not bring taxes into the state budget.

Overall, outward migration processes limit the availability of labour resources on the Belarusian labour market and worsen the skills and qualification structure of the employed population, as unskilled labour comes into the country while highly skilled specialists leave it to work abroad, lowering the quality of the labour force.

3.5 Links between the labour market and the market in educational services

Lack of coordination between the labour market and the educational services market and the disproportion in the professional and qualification composition of staff training are among the main reasons for the continuing imbalance between the demand and supply of skilled professional, qualified labour. The imbalance between the demand and the supply of skilled labour is increased by the unjustified differences in salaries according to skills and qualifications, and the emigration of the skilled specialists.

To tackle this imbalance, the legislation base in the country is being updated, together with the structure of professional education and training, in order to satisfy the demands of the social market economy. As a result, a legal mechanism was introduced aimed at ensuring the connection between the demands of organisations requiring employees and the volume of employee training at different levels of professional education, using an automated information system called 'Preparation of forecast indices of acceptance and formulation by the government bodies of an order for the training of skilled employees' (hereinafter referred to as the Automated System). This system is designed to ensure the planning of staff training at professional education institutions, gathering information on the additional needs of organisations requesting employees for skilled work, forming requests for staff training from government agencies, approving draft forecast indices of acceptance by the ministries of Education, Finance, and Labour and Social Security of the Republic of Belarus, and providing information and tools for calculating demand in the staff training structure for all sectors of the national economy.⁵ All professional education institutions (VET, colleges, and HE) and government bodies are registered in the system. The experience of using the Automated System since 2010 has demonstrated that, overall, the system creates the conditions for the statistical accounting and analysis of changes in professional education and training connected with the system of qualifications and skills and allows demands in the labour force training structure for the national economy to be calculated. However, it should be noted that today's personnel policies in many organisations are mainly aimed at achieving immediate results rather than long-term development. Although the professional education and training system and consumers of its services are equally responsible for the development of labour resources, far from all organisations are involved in forecasting additional demands for labour resources⁶ and formulating orders for training workers at the expense of state professional education institutions and/or local budgets; and this leads to a deterioration in the quality of decision making about the regulation of volumes and structure of the entry flows of students entering the educational institutions.

⁵ On certain issues of forming an order for workforce training: Decree of the Council of Ministers no. 972 of 19 July 2011.

⁶ Here, the additional need for labour resources means the demand for graduates of colleges and VET and HE institutions in the year of their graduation to reinforce the workforces of organizations, these graduates being required for the development of manufacturing facilities, implementation of innovative projects including the creation of new high-tech production facilities, and the replacement of staff who have left.

When approving the tentative enrolment plans, every year the Ministry of Education and other heads of educational institutions adjust the volume and structure of training, taking into account the forecast, the results of graduate placements, the information from the Ministry of Labour and Social Security on unemployed graduates from all professional education institutions who have applied for assistance to the employment agencies, and vacancies on the labour market. It provides a basis for expanding government-funded training for the qualifications demanded by the labour market and for reducing training for those where the training supply is found to be excessive.

In this way, it has been possible to create a holistic system at the legislative level consolidating the demand for the training of employees, the scope and structure of training, and the employment of specialists, workers and office staff trained using public funds. We should note that active work is under way at present to improve the Automated System, taking into account the experience of its use.

The State Council for Labour and Social Affairs is the body which enables the representatives of different sectors of the economy to be involved in defining the professional and qualification structure of staff training in the professional education institutions and the necessary training quality requirements.

The Ministry of Education keeps its leading role in strengthening cooperation between all the interested parties, such as participants in the professional education and training system and employers, to involve them in the development of professional education and training. For dealing with current issues between the professional education and training sector and the labour market, a system of work has been developed, which includes the following:

- Entries to the VET, college and HE (state-funded) levels are based on applications and agreements with the organisations for the training of specialists;
- New training in skills and specialisms is organised based on applications from the organisations requesting the specialists, including SMEs;
- Resource centres funded from public funds and by the organisations requesting labour resources have been created to prepare students for work with knowledge-intensive equipment and technologies;
- The administrators of innovation funds are allowed to use the funds for developing the facilities of professional education institutions and equipping study sections either subordinate to, supervised by or included in the structure of organisations;
- Educational standards and study documentation covering the content of the education programmes are subject to expert assessment and approval by the organisations requesting labour resources and governmental bodies administering the field;
- Regional labour, employment and social security authorities assist the graduates to find employment, primarily in their specialist knowledge areas;
- Students who have completed programmes of education at a particular level have an opportunity to go for a higher level of professional education.

At the same time, we must admit that the staff training system is not yet ready to provide the country with labour that has the necessary qualifications. Neither the quantity nor the quality of graduates from the educational institutions fully matches the actual demands of employers. Young workers and specialists enter the market with knowledge, skills and abilities that by no means always satisfy the requirements of employers. As a result, some of them are left out: some work in other areas not related to their qualifications, some join the ranks of the unemployed, and some seek employment abroad.

The Scientific Research Institute of Labour of the Ministry of Labour and Social Security of the Republic of Belarus (hereinafter the Labour Institute) has conducted a survey of different organisations

with different forms of ownership, studying their workforce demand and their assessment of the quality of training of those they employ. The director of the Labour Institute, Svetlana Shevchenko, has described the results of the survey. They are not what one would call optimistic. Over 65% of organisations experience a shortage of skilled workers and office staff (Prus, 2014).

Graduates from the educational institutions constitute the main resource for eliminating this deficit. Businesses have not rated the level of their training highly. The majority of the employers admitted that they had to provide their new staff with additional training to achieve the required level.

In order to ensure that qualifications are transparent, that society and the employers trust them, and that the quality of professional education and training is adequate, the Ministry of Labour and Social Security proposed to improve the National Qualification System (NQS). This is a global process which breaks with the established stereotypes and requires both time and financing. No common understanding of the routes to radical reformation of the NQS has yet been achieved, but the first steps in that direction have already been taken.

By the order of the government, an interdepartmental working group was created in 2010 to develop proposals to improve the NQS, taking international experience into account. It included representatives of 17 government agencies, the National Academy of Sciences, the Academy of Public Administration under the aegis of the President of the Republic of Belarus, and the associations of employers and public organisations. The proposals presented by the working group became the basis for the Comprehensive Plan for the Development of the National Qualification System of the Republic of Belarus for 2013–2015. Decree of the Council of Ministers no. 34 of 17 January 2014 defined the pilot sectors of the economy which would trial individual elements of the new NQS model. These are the IT sector and the management sector, the two most advanced sectors of the Belarusian economy, where there already is understanding of the need for a competency-based approach to staff training.

In 2014, Sector Skills Councils attached to the Academy of Administration and the Hitech Park were created as coordination and advisory bodies to ensure cooperation between representatives of the associations of employers and employees, educational institutions and government agencies involved in a particular sector of the economy or area of professional activities. They also include other parties interested in the development of new elements of the NQS, such as professional and qualification standards, sector qualification frameworks and typical professional development and career roadmaps. Methodological guidance of the Councils is ensured by the Labour Institute of the Ministry of Labour and Social Security.

With the participation of those new bodies, the first professional and qualification standards and professional development and career roadmaps have been created for the pilot sectors of the economy. Professional and qualification standards are documents defining the requirements for the content of work activities and qualifications necessary for employees to perform their duties. Typical professional development and career roadmaps are documents defining possible paths of training to ensure professional development and career planning, based on the professional and qualification standards.

National Qualification Frameworks (hereinafter referred to as NQFs) for the pilot sectors of the economy of the country are structured similarly to European NQFs, which have eight levels of qualification (Appendix 2). The knowledge, skills and competencies required for each level are defined, using descriptors. The transition to the next level is only possible after completion of all of the preceding level. By the end of 2014 it is planned to develop a set of tools which will enable work to start on the creation of professional and qualification standards in other sectors. The proposals for the implementation of new elements in the NQS will be prepared and submitted to the Council of Ministers of the Republic of Belarus in 2015. It is expected that the improvement in the NQS will be a starting point for the definitive change in approaches to the requirements as regards the skills, abilities and competencies of staff. In the long term, it will create a powerful boost to the economy, driving development at a faster pace.

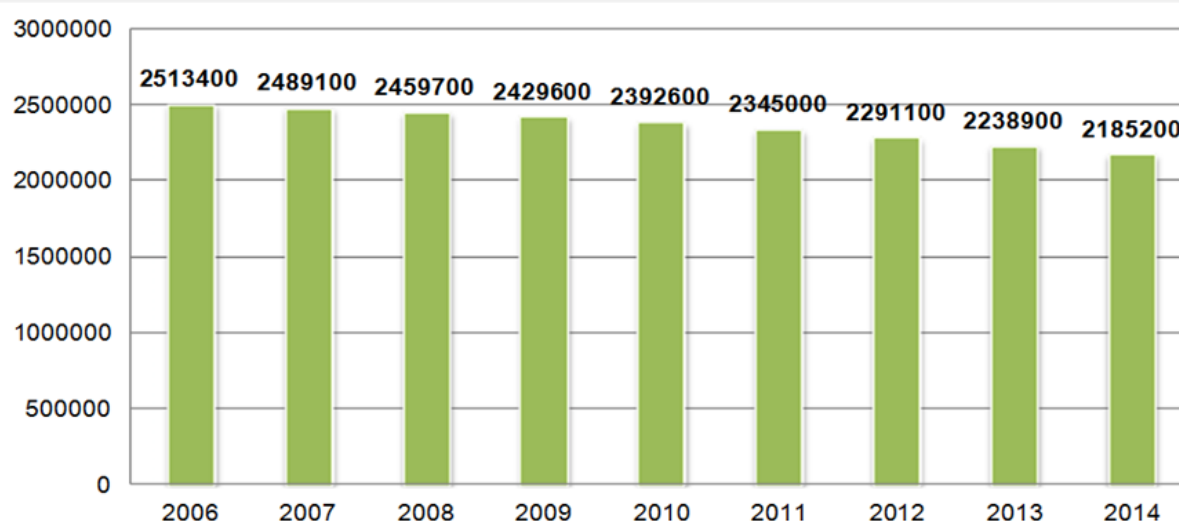
4. PERFORMANCE AND EFFICIENCY IN SATISFYING THE DEMANDS OF DEMOGRAPHIC DEVELOPMENT, SOCIAL NEEDS AND THE NEEDS OF SOCIAL INTEGRATION

Belarus, acting under conditions of extremely complex political and social processes, directs its social policy towards ensuring favourable conditions for the general and professional development of every person. The humanitarian orientation of that state policy is expressed through its focus on continuous education.

The national education system is being developed in accordance with the constitutional requirements and guarantees ensuring equality in access to education, uniformity of the education system, and continuity at all levels of education (Appendices 3 and 4). The availability and accessibility of the education system to all are ensured by free education in all state educational institutions, an equal right to professional education and training and competition-based college and HE, the creation of conditions for receiving education taking into account national traditions, the possibility of paid-for education, and the guaranteed choice of the language of education, among other things.

Young people, being the nation's most dynamic and active social group, are best placed to shape the future development of the society and country and are the nation's strategic potential. They remain the main consumers of professional education and training services. On 1 January 2014, there were 2 185 200 young people aged 14–31 in the country, or 23.1% of the total population (Figure 11).

Figure 11. Population aged 14–31 years (year beginning, people)



Source: Age and gender structure of the population of the Republic of Belarus on 1 January 2014 and annual average population in 2013. Statistical Bulletin. Minsk, National Statistical Committee of the Republic of Belarus, 2014, p. 7.

The overwhelming majority of young people (83.2%) live in the cities and urban areas and only 16.8% in rural areas. The decline in the number of young people living in rural areas is mainly explained by migration outflow to the cities to continue education or to find work.

The largest age group among young people is 25–30 years; at the beginning of 2014 this group included 940 000 people, or 43.0% of the total youth population of the country.

At the beginning of 2014, the proportion of young people able to work in the overall active age population was 35.6%.

According to the results of the multiple indicator cluster survey of the condition of children and women conducted by the National Statistical Committee in 2012, the literacy rate among young people aged 15–24 was 100%. No differences were observed that would depend on location, region, income or

other factors. In 2013, 32.2% of the young people in this age group were in full-time (daytime) education in VET, college and HE programmes.

An annual decrease in the number of graduates from general secondary education institutions in the country is a persistent trend. In 2013, 87 300 people attained basic secondary education and 62 700 attained general secondary education (Table 4).

Table 4. Graduation from general secondary education institutions (people)

	2000	2005	2008	2009	2010	2011	2012	2013
Attained general basic education	154600	148400	98000	229100	100400	95100	89200	87300
Attained general secondary education	94800	101000	96700	105400	92600	79900	68900	62700

Source: Institutions of general secondary education of the Republic of Belarus as at 1 September 2013 (Stat. ref. Ministry of Education of the Republic of Belarus, State Data Analysis Centre, response to V.A. Tsekhanovich, MIAC, 2013), p. 152, table.

4.1 Basic professional education

Currently, the state education system is geared to the rational and balanced provision of skilled specialists and the improvement and expansion of the system for training skilled workers and mid-level specialists. The Ministry for Education, together with interested parties, has developed and implemented a set of measures to regulate the flows of young people entering VET and HE institutions and colleges. These include the following:

- A new, revised version of the rules for admission to higher and college education⁷ has been drawn up and approved, making provisions for limiting enrolments in distance-learning HE, changes in the enrolment conditions for targeted training, and liberalisation of the enrolment process for colleges for applicants with basic secondary education by replacing entry exams by the mean score in the basic general education certificate.
- The minimum centralised test scores⁸ for entry to HE institutions were increased.
- A suite of additional measures to interest college students in undertaking VET⁹ has been devised.

As a result, while overall enrolment to HE institutions and colleges decreased in 2011–2013, mainly because of demographic decline, the number of those accepted into the VET institutions and colleges grew. The main flow of enrolments, which is the enrolment in programmes of VET institutions and colleges, still consists of the students graduating from secondary schools that year.

A reduction in the number of graduates who continued studying at secondary schools was observed in the graduation structure of Grade II general secondary education programmes in 2011–2013 due to the increase in the number of ninth-grade graduates continuing their education in professional education and training and college programmes (Figure 12). The reduction in the number of people accepted into HE institutions in the graduation structure of Tier III general secondary education

⁷ Rules for admission to Tier I higher education: Decree of the President of the Republic of Belarus no. 80 of 7 February 2006 (as amended by Decree of the President of the Republic of Belarus no. 130 of 20 March 2014).

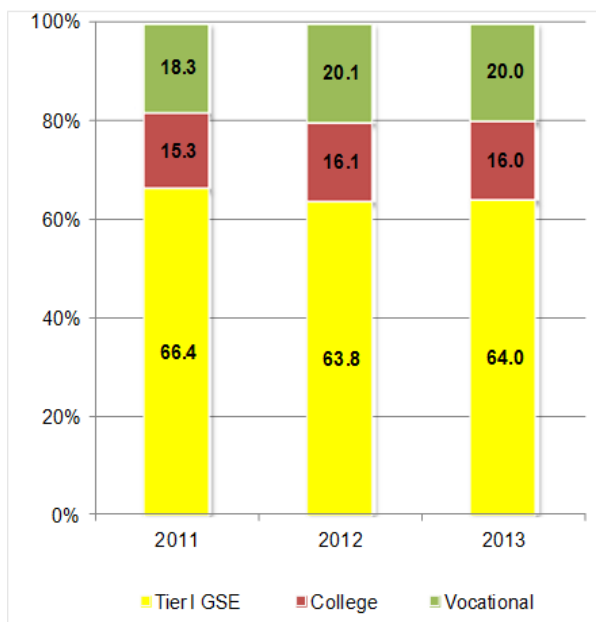
⁸ Centralised testing in the Republic of Belarus is a form of entry examination based on education tests, standardised test control procedures and processing, analysis and provision of results used for competitive entry to higher education institutions.

⁹ Set of additional measures to interest college students in attaining vocational education (23 November 2013).

programmes results from the increase in the numbers entering vocational and college education (Figure 12).

Figure 12. Distribution of graduates from general secondary education institutions in the reporting year by channels of further education (% of total graduates)

Tier II general secondary education



Tier III general secondary education



Source(s):

Educational Institutions in the Republic of Belarus that Provide Technical Vocational Education and Training: as of the beginning of 2013/2014 school year : (Statistical book) / Ministry of Education of the Reppublic of Belarus, Central Information and Analytical Center of the Ministry of Education of the Republic of Belarus; responsible for the publication R. D. Bykova. - Minsk : CIAC, 2013.

Educational Institutions in the Republic of Belarus that Provide Secondary Specialised Education: as of the beginning of 2013/2014 school year: (Statistical book) / Ministry of Education of the Reppublic of Belarus, Central Information and Analytical Center of the Ministry of Education of the Republic of Belarus; responsible for the publication N. V. Tarasava, P. R. Urman. - Minsk : CIAC, 2013.

Institutions of Higher Education in the Republic of Belarus: as of the beginning of 2013/2014 school year: (Ministry of Education of the Reppublic of Belarus, Central Information and Analytical Center of the Ministry of Education of the Republic of Belarus; responsible for the publication G. P. Zhygala, I. Ya Trusila. - Minsk : CIAC, 2013.

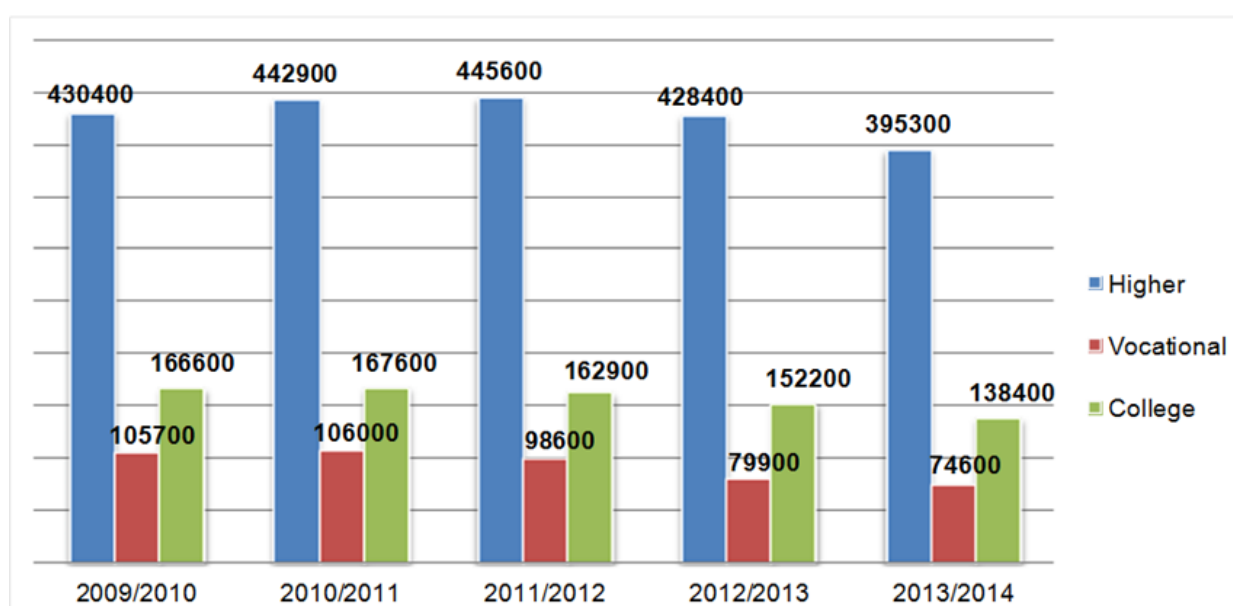
Institutions of General Secondary Education in the Republic of Belarus: as of September 1, 2013: (Statistical book) / Ministry of Education of the Reppublic of Belarus, Central Information and Analytical Center of the Ministry of Education of the Republic of Belarus; responsible for the publication V. A. Tsekhanovich. - Minsk : CIAC, 2013.

It is important to highlight that about 60–70% of graduates from general secondary education institutions continue studying in the region where they live and 30–40% go to Minsk.

The optimisation measures for the basic professional education system allowed for the restructuring of the educational institution network, which led to a decrease in numbers and eliminated duplication of training for the same skills. Changes in the form of ownership and the merging of similar educational institutions made it possible to optimise the use of financial, technical and human resources and thus satisfy supply and demand in the labour market.

At the start of the 2013/2014 academic year, there were in Belarus 213 educational institutions offering professional education and training programmes, 231 institutions, including 12 private institutions, offering college education programmes and 54 institutions, including 9 private, offering HE programmes. There were 74 600 students at vocational level, 138 400 at college level and 395 300 at HE level (Figure 13).

Figure 13. Distribution of students in vocational education institutions by level of education (beginning of academic year; people)



Source(s):

Educational Institutions in the Republic of Belarus that Provide Technical Vocational Education and Training: as of the beginning of 2013/2014 school year : (Statistical book) / Ministry of Education of the Reppublic of Belarus, Central Information and Analytical Center of the Ministry of Education of the Republic of Belarus; responsible for the publication R. D. Bykova. - Minsk : CIAC, 2013.

Educational Institutions in the Republic of Belarus that Provide Secondary Specialised Education: as of the beginning of 2013/2014 school year: (Statistical book) / Ministry of Education of the Reppublic of Belarus, Central Information and Analytical Center of the Ministry of Education of the Republic of Belarus; responsible for the publication N. V. Tarasava, P. R. Urman. - Minsk : CIAC, 2013.

Institutions of Higher Education in the Republic of Belarus: as of the beginning of 2013/2014 school year: (Ministry of Education of the Reppublic of Belarus, Central Information and Analytical Center of the Ministry of Education of the Republic of Belarus; responsible for the publication G. P. Zhygala, I. Ya Trusila. - Minsk: CIAC, 2013.

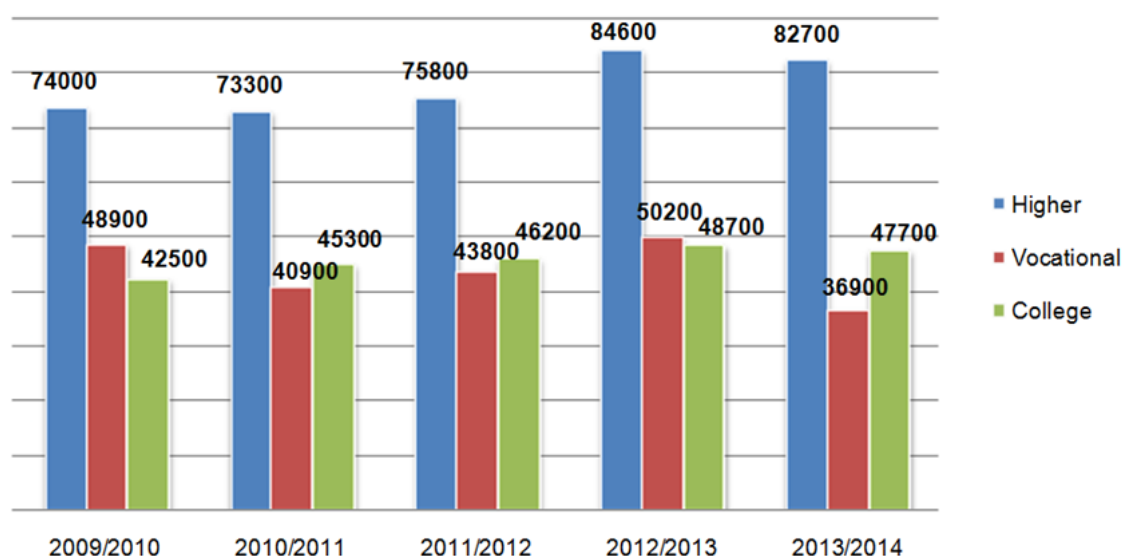
It should be noted that the numbers and structure of training in vocational, college and HE are determined annually during the admission campaign when finalising the figures for acceptance into the educational institutions. They are based on the order for the training of workers and specialists drawn up by the government bodies, which is adjusted taking into account the state of the labour market, demographic situation in the area, and education service capacities of the educational institutions.

In 2013, the educational institutions implementing the vocational education programmes trained 36 900 skilled workers, 26.5% fewer than in 2012 (Figure 14). Full-time VET was undertaken by 35 400 skilled workers, which on the whole met sector demands (33 500 people), including signed agreements and requests. Taking into account technical and technological changes in the sectors of the economy, 15 800 young workers with advanced skills (44.6% of total full-time graduates) were trained for knowledge-intensive and high-tech industries and 75.5% of the graduates attained two or more qualifications.

College (workers') diplomas were received by 47 700 students in 2013 (Figure 14). State educational institutions trained 42 000 people, including 21 100 full-time state-funded students. This fully covered the demand of the organisations requesting staff (20 300 people).

In recent years, the educational institutions offering HE programmes have trained over 80 000 specialists. Some 82 700 people received HE in 2013 (Figure 14). In terms of education profiles, the number of graduate specialists was significantly higher than the forecast demand for specialists with HE. Such graduation compensates for the labour turnover caused by outflow of specialists after the expiry of the placement period and corrects the understated labour needs of organisations.

Figure 14. Distribution of graduates from professional education institutions by level of education (beginning of academic year; people)



Source(s):

Educational Institutions in the Republic of Belarus that Provide Technical Vocational Education and Training: as of the beginning of 2013/2014 school year : (Statistical book) / Ministry of Education of the Reppublic of Belarus, Central Information and Analytical Center of the Ministry of Education of the Republic of Belarus; responsible for the publication R. D. Bykova. - Minsk : CIAC, 2013.

Educational Institutions in the Republic of Belarus that Provide Secondary Specialised Education: as of the beginning of 2013/2014 school year: (Statistical book) / Ministry of Education of the Reppublic of Belarus, Central Information and Analytical Center of the Ministry of Education of the Republic of Belarus; responsible for the publication N. V. Tarasava, P. R. Urman. - Minsk : CIAC, 2013.

Institutions of Higher Education in the Republic of Belarus: as of the beginning of 2013/2014 school year: (Ministry of Education of the Reppublic of Belarus, Central Information and Analytical Center of the Ministry of Education of the Republic of Belarus; responsible for the publication G. P. Zhygala, I. Ya Trusila. - Minsk : CIAC, 2013.

Thanks to the well-functioning system of training specialists based on agreement, almost all graduates to be placed in work get jobs according to their newly attained qualifications. Job retention for young workers is a more difficult and complex issue. On the one hand, the level of professional commitment of the graduates regarding their further professional activities is low, as is conformity between the requirements of the employers and the quality of graduate training. On the other hand, competitiveness of the jobs is poor, wages are low, and social protection packages are lacking.

The situation as regards the registration of graduates from VET institutions and colleges with the labour authorities does not cause any concern. By 1 December 2013, 68 graduates of the vocational educational institutions (0.2% of the total number of VET graduates) and 1053 college graduates (2.2% of the total number of college graduates) were registered in the reporting year.

4.2 Further and continuing professional education

The educational institutions, individual organisations, and centres for worker training, further training and retraining remain the main suppliers of further adult education services. Within the adult education infrastructure created in the country, every year colleges and VET and HE institutions provide continuing professional education and training offering programmes of professional training, further training and retraining of workers (office staff). About 40% of colleges have received licences to provide further training and retraining of management staff and specialists.

VET institutions are clear leaders in this area: 76% of the institutions have substantial experience in the provision of this kind of education service. Some 24 600 people received professional training, retraining or further training at 154 VET institutions in 2013.

The education services within organisations are provided by training employees on site (individual training, group training, training courses) and include acquiring new qualifications, retraining, further training, training with work placement, and targeted training. For example, at Minsk Automotive Plant, individual worker training to attain a first qualification and on-the-job training courses to attain a second qualification, targeted new equipment training courses, and quality assurance courses are provided. Worker training, further training and retraining centres are operating under various titles in most of the sectoral ministries. For example, the Ministry for Construction and Architecture provides training for construction workers at seven training centres, two training facilities and 13 training nodes. Belenergo has six training centres and seven training nodes, where about 3 000 people are trained in 60 subjects every year.

It should be noted that every year, more than 10% of employed people are directed by their organisations to undergo further training, training with work placement, retraining and/or professional training at educational institutions and within the workplaces themselves. The largest number of employees covered by professional training is observed in such sectors as manufacturing industry, education, construction, healthcare and social services, transport, and communications. Priority areas in further training and retraining of managers and specialists are the management of innovation, investment and export activities, crisis management, small and medium entrepreneurship, and construction activities.

In addition, adult unemployed and unoccupied people are directed to further training programmes by the employment agencies. Thus, as a part of the implementation of the State Programme for the promotion of employment of the population of the Republic of Belarus for 2013 (27 December 2012), the training of 9 600 people was organised in the period January–November 2013.

4.3 Professional education and training for people requiring special social care and support

An integral part of professional education and training is making it more accessible to various categories of people, including those who require special social care and support.

4.3.1 Professional education and training for people with special needs

Making vocational, college and higher education availability to people with special needs involves creating special conditions for their education, taking into account the specific characteristics of their needs. Belarus has a system of social guarantees which ensures that people with special needs receive help with professional education and training and employment. For example, there is a guaranteed right to free professional education and training, there are special favourable conditions for entering colleges and HE institutions for disabled people and people with special needs, quotas for the employment of people not able to compete equally on the labour market, and compensation for the costs of creating and maintaining additional jobs, as well as giving the first job to people with special needs.

Every year VET institutions and colleges announce the recruitment of people with special needs for studies. In the 2013/14 academic year, 85 educational institutions (41.9% of the total number of VET institutions in the country) provided professional education and training to people in this category. The number of people with special needs studying at those institutions was 2 259. The percentage of people with special needs in the total number of students receiving full-time professional education and training in 2013/14 was 2.4% (2.6% in 2012/13, 2.5% in 2011/12).

In the 2013/14 academic year, 895 people with disabilities were receiving college education (867 people in 2012/13, 845 people in 2011/12), or 0.9% of the total number of full-time college students. At

the beginning of the 2013/14 academic year, the number of disabled people studying at HE institutions was 1 641, of whom 1 274 people, or 0.7% of the total number of students receiving full-time education, were in full-time programmes (0.6% in 2012/2013 and 0.6% in 2011/2012).

People with special needs studying at VET institutions and colleges include people with hearing and visual impairment, musculoskeletal disorders, severe speech disorders and intellectual impairment. In VET institutions, most of them are students with intellectual impairment, and at colleges most have musculoskeletal disorders and visual impairment. In VET institutions and colleges this category of students is taught either in study groups where the study process is organised only for people with special needs or in study groups where the study process is organised for both people with special needs and others. The content of the study groups is adjusted depending on the students' impairments.

The most common form of learning in VET institutions is studying in so-called 'special study groups', i.e. study groups where the study process is organised only for people with special needs. Currently, about 81% of this category of students participate in 156 such study groups in VET institutions.

To ensure the accessibility of the educational process and successful learning in VET institutions and colleges to people with special needs, 'integrated studying', where the study process is organised for both people with special needs and others, is being actively developed. The number of such groups in VET institutions has grown from 21 in 2009-2010 school years up to 119 in 2013-2014 school years in the last five years. In VET institutions this is the most commonly used form, with more than 70 such integrated groups.

People with special needs receive VET in the qualification areas set out in the National Classification of the Republic of Belarus OKRB 011-2009, 'Specialisms and qualifications' (2 June 2009), which includes 44 specialisms and 114 qualifications for people with special needs, including 19 specialisms and 43 qualifications for people with intellectual impairment. People with special needs study mainly at VET level for qualifications in construction, manufacturing, agriculture, public utilities and services. Studies in 25–30 qualifications for people with special needs are announced annually by the VET institutions.

Despite the significant improvement in the situation brought about by the barrier-free environment, the problem of accessibility for such students remains urgent. There is a pressing need to increase the number of professional education establishments at different levels where people with disabilities and other special needs can comfortably receive education.

4.3.2 Professional education and training of children left without parental care, and others, in accordance with the law

In accordance with the law, orphans, children left without parental care, and others receive professional education and training with guaranteed financial support from the state. This category of persons is also guaranteed non-competitive entry to colleges and vocational and HE institutions for particular study disciplines (qualifications), funded from state and/or local budgets.

4.4 Developing the innovative potential of young people

Development of the potential of young people for innovation is carried out in accordance with the priority foci of scientific research and innovation activities in Belarus. Belarus is the first post-Soviet country to develop and adopt specific solutions to create and implement a strategy of innovative development and systematic modernisation of the economy and society. On the initiative of the Head of State and the government, the following programme documents were adopted:

- the National Innovation System (NIS) Concept (2006);

- the State Programme for the Innovative Development of the Republic of Belarus for 2007–2010 (2007);
- the Strategy for Technological Development of the Republic of Belarus until 2015, the State Programme for the Deployment of New and Advanced Technologies for 2011–2015 (2010);
- the State Programme for the Innovative Development of the Republic of Belarus for 2011–2015 (26 May 2011).

Together with these programme documents, a number of legislative and statutory acts were adopted to improve the system of administration of scientific, technical and innovation activities. These became important prerequisites for the development of the innovative potential of Belarusian society, especially its young people. Many of these legislative acts directly concern the creation of favourable conditions for study and encouraging creative work by young people. These are the objectives of, for example, the Law of the Republic of Belarus no. 65–3 of 7 December 2009, ‘On the bases of the state youth policy’ and Decree of the President of the Republic of Belarus no. 199 of 26 April 2010, ‘On certain issues regarding the creation, maintenance and use of data banks of gifted and talented young people’. By putting special emphasis on creating a legal basis for developing the innovative potential of different categories of young people aged 14–31 (pupils, students, young workers, specialists and scientists), the government has ensured a continuous process of sustainable innovation, development of the economy and the achievement of a creative society in the future.

According to data from comparative sociological studies conducted in industrial enterprises and HE institutions, a general trend can be observed: young people are increasingly interested in innovations and in prestigious professions, mainly related to economics and management, and have ambitions to attain a degree in economics, management or both. On the other hand, many graduates are unable to solve non-standard creative problems in management and manufacture (Sapolykin, 2011). The main reasons for this mismatch between levels of education and qualifications to cope with the nature and content of work, at a moment when the economy is undergoing modernisation and liberalisation, are:

- the obsolescence and physical deterioration of a large proportion of the fixed assets of businesses in the real sector of the economy;
- the gap between theoretical knowledge and actual practice;
- the weak practical focus of the educational process;
- conservatism in the higher and college education system;
- low activity around innovation;
- low professional mobility of human resources.

These factors result in a shortage of training courses and special courses in innovation, heuristics, theory and practice of solving invention tasks, innovation process management, protection of intellectual property, patent management, and the use of interactive forms and methods of organising teaching.

To a certain extent, the difficulties experienced until recently in developing the innovative potential of young people in the professional education and training system have been caused by the lack of laws and statutory regulations that adequately reflect the innovation processes in the country and society, from the standpoint of prospects for the creation of a single information, educational, scientific, technical and technological space. It is no coincidence that the development of a set of legal acts for all grades and levels of the national education system has taken more than 10 years. It was not until the end of 2010 that the complete legislative act, the Education Code of the Republic of Belarus, which clearly defined the structure and the forms, methods and means of functioning of the national education system, was developed and adopted by Parliament. The Code enables other statutory acts aimed at the training of highly skilled labour for the innovative economy to be adopted.

The existing structure of the institutes that shape and achieve the innovative potential of young people, with a certain degree of adjustment and systematisation, enables the successful solving of the problems of innovative development of the economy to be achieved.

Based on the results of comprehensive sociological studies conducted in different regions of the country and on the particular goals and objectives of the innovative development of the country, a structural functional diagram of the institutes, illustrating how they train young people and bring out their innovative potential, has been created (see Appendix 5). It consists of four interrelated modules.

The central module is the system of state regulation of innovation processes. The main feature of this system is the drafting of the appropriate legislative acts to give impetus to the process of systematic modernisation of the national economy and society. The State Programme for Innovative Development of the Republic of Belarus for 2011–2015 provides for the adoption of laws and other statutory acts to improve the national innovation policy, the innovation system, scientific, technical and innovation activities, and the protection of intellectual property.

One of the most important structural elements of state regulation is the youth policy being implemented in the country. This is an ensemble of social, economic, political, organisational, legal and other measures aimed at supporting young people and implemented to facilitate the social formation and development of youth and fuller realisation of their potential, in the interests of the entire society. Its purpose is to create an environment for the free and effective participation of youth in the political, social, economic and cultural development of society, the education and nurturing of young people, their civil and professional formation, preparation for working life, and assistance in solving their housing and other social problems. It also proposes regular systematic analysis, forecasting, planning, accounting, monitoring and controlling all processes and events in the youth environment.

The second module consists of the institutes whose task is to develop the innovative potential of young people. It includes a number of systems: education, social and professional guidance, professional selection and adaptation of the workforce, scientific, technical and artistic creativity, including scientific research conducted by students and the activities of postgraduate programme providers which train candidates for the top qualifications such as those of Masters and Doctors of Science. The structural elements of this module are the educational institutions and centres for technical and artistic creativity, which bring out the gradual development of the innovative potential of young people.

Important links in developing innovative potential are the Special Fund of the President of the Republic of Belarus for the Social Support of Gifted Students and the Special Fund of the President of the Republic of Belarus for the Support of Talented Youth. These funds pay scholarships and some bursaries, and also provide one-off financial assistance. The finance from the funds is used for national and international student scientific conferences, competitions, seminars and Olympiads, as well as for financial support for the participation of creative young people in international competitions, exhibitions, symposia and other cultural and artistic events.

Various other youth innovation programmes can also be considered to be developers of young people's innovative potential. The existing practice of international cooperation, youth exchanges in education and science – for example in the international technical assistance programme – is worth noticing in the context of the creating a single information, educational, scientific, technological and economic space. At the same time, such exchanges can lead to undesirable out-migration. The activities of the Advanced Technology Park are an example of the reduction of out-migration of talented young people and their settling down in the sphere of advanced technologies. In 2014 there were 140 companies resident in the Advanced Technology Park and involved in the development of software products and provision of IT services to customers from more than 55 countries worldwide. In recent years, the IT sector has received serious support from the state and has become one of the priority sectors of the Belarusian economy. In 2005, the President of the Republic of Belarus signed Decree no. 12 'On the Advanced Technology Park', established for the purpose of creating a favourable

environment for the development, within the country, of competitive software and data communications technologies. The Advanced Technology Park has the right to grant regular tax benefits. The legislative initiative of the government relieves the companies resident in the Park from all corporate taxes, including VAT, tax on profits and customs duties.

A network of libraries, scientific and technical, cultural, sports and travel centres has been created and can serve as a basis for both educational and innovative activities. It includes important institutes in developing the innovative potential of young people.

The mass media play a special role in this process, but the most popular resource among young people is the internet. It is important that access to internet resources is ensured in all regions of the country. Nevertheless, the use of information technologies does not lead directly to an increase in the innovative potential of young people, but rather is just an additional source of different sorts of information. In this connection, the need emerges to model education and information programmes to target a young audience, which would include active forms and methods of developing the creative abilities of individuals. The possibility of publishing affordable, specialised scientific and popular science magazines for young people is being explored, containing promotional material about education services, the labour market, centres for social and career guidance, scientific and artistic creations, and entertainment.

The third module of the institutes for developing the innovative potential of young people includes the National Innovation System, with a related administration structure at national, regional and sectoral levels. This structure has become one of the most important features conditioning the development and implementation of national, regional and sectoral programmes of innovative development. Young people are given the opportunity to participate actively in the formation and development of subjects in the innovative infrastructure, primarily technology parks, business incubators, information and marketing centres, where they can realise their creative potential and run a real business.

Reinforcing scientific research and engineering organisations through the optimum rotation of young specialists and scientists ensures the stable development of scientific, technical and innovative activities. The most mobile, and rather effective, form of young people's participation in scientific research work is temporary scientific teams, which are able to conduct research funded from the state budget or other sources based on agreements with the enterprises in real sectors of the economy.

Innovative entrepreneurship is a very promising area for the participation of young people in the development of SMEs using innovative technologies. This is facilitated by the implementation of the requirements of Directive of the President of the Republic of Belarus no. 4 of 31 December 2010, 'On the development of entrepreneurial initiative and promotion of business activity in the Republic of Belarus', which aims at the creation of a favourable business environment in the country. Youth is characterised by social activity, proactivity and the desire to be involved in collective creative developments based on common interests and needs. That is why creative youth organisations can become an organic part of the institutes that develop the innovative potential of young people. However, such creative formations are still scarce. Young people are not rushing to participate in creative organisations composed mainly of older people, but rather are proposing the development of various innovative projects and the creation of youth business incubators. Meanwhile, the law allows for creative youth formations to be set up within the existing mass organisations of the Belarus National Youth Association and the Belarusian Committee of Youth Organisations.

The fourth module is represented by possible sources of financing the innovative potential of young people. These are national and local budgets, loans from commercial banks, organisations' own funds, the Belarusian Innovation Foundation, as well as the venture fund and innovation funds of state and local authorities. Other national or international funds can also be used.

The structural and functional approach outlined above allows for a more dynamic process of developing the innovative potential of young people within the systematic modernisation of the economy and society, while avoiding duplication of functions and bureaucracy in the operations of different state administration bodies.

5. INTERNAL EFFICIENCY OF THE PROFESSIONAL EDUCATION AND TRAINING SYSTEM

Improving the quality of education nationwide is one of the main priorities of the state's social policy. The country is planning to move from a system of quality control to one of quality assurance in education.

5.1 Main activity areas for improving the quality of professional education and training

Nowadays, 'quality' is an integral part of education. The Education Code gives the following definition of quality: 'Quality of education is the compliance of the education with the requirements of the education standard and of the appropriate education programme documentation.'

The main measures to improve quality of education in the country include the following:

- improvement of the legal and methodological base of the education system;
- development of networks of educational institutions in accordance with the demands of the labour and educational service markets, and improvement of their resource base;
- improvement of teacher training, strengthening of the professional skills and social status of educators;
- introduction of modern educational technologies and electronic educational tools;
- improvement of the student achievement rating procedure and final attestation of graduates of the educational institutions.

5.2 State monitoring of quality assurance in education

State monitoring of quality assurance in education is the set of activities carried out by government bodies to verify that education conforms to the education standard and the education programme documentation and that education activities comply with legal requirements. State monitoring is divided into three tiers based on the supervisory bodies: sectoral (thematic), internal control and external control.

- *Sectoral control* is performed in the education sector's system by superior bodies in respect of their subordinates. It is present in the system of the Ministry of Education and in other systems that have educational institutions (those of the ministries of Health, Culture, Defence, etc.). It is routine and operative monitoring by the administrations of the respective ministries, state committees and boards, their subdivisions and educational authorities at the local level.
- *Internal control* is carried out by the educational institutions themselves. It is a form of self-assessment. Internal control of quality assurance in education is a comprehensive analysis of educational activities, including self-checking and self-assessment of its educational activities by the institution. The procedure and the periodicity of internal quality control exercises are determined by the heads of educational institutions.

- *External control* is carried out by third parties not included in the systems of the respective sectors (e.g. healthcare, internal affairs, defence). In most systems it is the responsibility of the Ministry of Education and its bodies, such as administrations (committees) for education and youth affairs. However, there is no external control of the Ministry of Education's system.

A special body, the Department of Education Quality Monitoring, with suprasectoral authority, was created in the Ministry of Education to monitor the quality of education nationwide. This body is responsible for coordinating the activities of the administrations (committees), departments of education and youth affairs of local authorities and other organisations that monitor the quality assurance of education provided by the educational institutions. Currently, the Department has the tasks of improving the quality assurance monitoring system, and studying and implementing progressive improvements in quality assurance control methods based on international experience.

5.3 Accreditation of institutions and programmes of professional education and training

Accreditation is carried out by the Department of Education Quality Monitoring to guarantee the quality of education in the country. The state accreditation of an educational institution is a set of activities carried out by the state bodies to establish conformity of the institution's educational activities with the laws on education, and compliance of the content and quality of the education offered with the requirements of education standards and education programme documentation.

On completion of the state accreditation process, a decision is taken to grant or deny state accreditation to the educational institution. If the decision is positive, the educational institution is considered accredited and receives a State Accreditation Certificate (or Certificates). The decision to grant accreditation to an educational institution establishes that institution's right to issue education certificates to its graduates.

It is important to note that educational institutions must periodically reconfirm their state accreditation. The state accreditation reassessment is carried out at least once every five years from the date of issue of the relevant Certificate of State Accreditation, to verify that the educational institution conforms to its declared type, education profile and education area. If the state accreditation is not confirmed, the institution loses its accreditation.

5.4 Policy on educators in the education system

One of the key factors in ensuring the quality of professional education and training and the advancement of modern technologies and teaching methods is the condition of the human resources involved.

Currently more than 20 000 educators work in the vocational and college education system. At the beginning of the 2013/14 academic year, 3 788 teachers and 4 111 production instructors ('masters') were employed in the VET system. The staffing level for teachers was 90.4%, and for production instructors 84.8 %. On average there were 9.6 students per teacher and/or production instructor in the VET system at the beginning of the 2013/14 academic year (9.2 in 2012/13 and 10.3 in 2011/12).

The number of staff educators at state colleges at the beginning of the 2013/14 academic year was 9 441, of whom 3 727 were in the highest qualification category (39.4% of the total number of staff educators), 2 578 in the first qualification category (26.6% of total), 1 469 in the second qualification category (15.9% of total) and 1 667 in the 'without qualification' category (18.1% of total). On average there were 13.6 students per staff educator in the college education system at the beginning of the 2013/14 academic year (13.9 in 2012/13 and 14.8 in 2011/12).

At the same time, there is a notable age imbalance in the college and VET systems: the percentage of teachers and production instructors of retirement or pre-retirement age is 29%, 13% being of retirement age. The replacement of teaching staff is slow: only 19% of teachers and production instructors are under 30 years of age. The challenge is not only to bring in young graduates of higher and college education institutions to vocational schools as educators, but to create the conditions to make them stay in the jobs and increase their work motivation.

The education process in the HE institutions in the country is carried out by teaching and scientific staff with an average educator to student ratio of 1:10. Masters and Doctors of Science account for over 40% of the teaching staff, which is in line with world practice.

To optimise the number of teaching staff and improve the working time structure, in 2013 the standard teaching load for educators in the further education system was increased from 18 to 20 hours a week. For the vocational and college education system, this increase was from 720 to 800 hours a year¹⁰. Along with the increase in the standard teaching load, salaries were increased.

The government is taking active steps to increase educators' salaries. Pursuant to the government's Decree no. 818 of 23 August 2014, 'On certain issues of raising the remuneration for work for individual categories of education system employees', as of 1 September 2014 educators and other staff of educational institutions received a pay rise. A completely new indicator was to be used to calculate salaries in the education system: there would not be the same rise for everyone, as in the past, but a differentiated raise based on the qualification categories. It was expected that this approach would encourage educators to undergo further training, leading to an improvement in the quality of education.

5.5 Continuous professional development of educators

The current professional education and training policy is aimed at the optimum use of educators in accordance with their professional qualifications, experience and abilities, and at improving their professional competencies.

5.5.1 Further education, work placement and retraining of educators

All necessary provisions are in place for the further education, retraining and work placement of educators. Every year, the Ministry of Education of the Republic of Belarus issues an order 'On the further training and retraining of staff' and approves the State Coordination Plan of Measures for Work with Educators and Managers of the Education System between Periods of Study.

Every year, about 20% of the management staff and specialists successfully follow programmes of further education on current issues in professional education and training, using modern training formats and education technologies, including distance learning.

Participation in work placement programmes boosts the professional level of educators. However, only 5% of the teachers of professional component subjects (disciplines) and 17.5% of practical vocational instructors participate in work placements in leading organisations and companies at home and abroad, which is not enough to enable new technologies to be introduced adequately into the education process and to ensure high quality in that process, taking into account the demand in the relevant sector of the economy.

¹⁰ Decrees of the Ministry of Education nos. 51, 52, 53 of 22 July 2013 amending decrees of the Ministry no. 255 of 5 September 2011, no. 5 of 30 March 2007 and no. 70 of 25 November 2004 pertaining to the increase in hours of the standard teaching load.

5.5.2 Attestation of educators in the professional education and training system

The attestation system for VET system staff aims to improve the quality of education and the professional development of teaching staff. Attestation of the teaching staff appraises their professional, personal and work qualities, the results of their teaching work as regards developing the knowledge, skills and abilities of the students and their intellectual, ethical, creative and physical development of the students while delivering the education programmes of the VET system.

It is important to highlight that the attestation of teaching staff is used for granting and confirming their qualification category. Attestation for attaining a qualification category is performed at the request of an educator, but attestation for confirmation of the qualification category is requested by the head of the institution in the education system.

Currently, attestation to confirm a qualification category is a mandatory procedure for educators with the highest qualification category, that of teacher and teaching method developer, and is carried out once every five years. The mandatory attestation to confirm the qualification category can be carried out on the initiative of the head of the organisation in the education system for any educator whose level of performance has fallen and whose work fails to comply with the set requirements, or any educator who has not occupied a teaching position for more than two years.

5.5.3 Methodological support for educators

At present, methodological work is the most important link in the continuous teaching education system. The existing system of methodological support for educators allows the heads of institutions and methodology departments to ensure the professional growth and development of teaching staff based on a diagnostic, differentiated and personalised approach.

Currently, individual methodological work is the most common way of improving teaching skills. Various forms of methodological teamwork, such as teaching and methodology councils, guidance and methodology meetings, methodology boards, creative groups, teaching workshops, open classes, practical seminars, lectures, conferences, competitions, roleplay, and so on are still actively used by educators. Attention to the main methodological areas is ensured by the work of methodology departments, methodology councils, methodology boards, creative groups and young teacher/instructor schools.

5.5.4 Encouraging young specialists to remain in VET institutions

Mentoring remains one of the effective tools for encouraging young people to stay in their jobs and for attending to their adaptation, training and further education in the workplace. It is arranged for young educators on their first appointment. Mentoring is most commonly carried out on an individual basis, where the mentor ensures the high quality and timely training of a young educator throughout the entire training period.

The education departments of the local executive committees and the Education Board of Minsk Executive Committee are committed to encouraging young teaching staff to remain in their jobs at the VET institutions, especially those in rural areas. The collective agreements of the educational institutions provide incentives for young specialists, such as bonuses, partially subsidised rent for accommodation, and free travel to the workplace. Favourable conditions for work, life and leisure activities of the educators are among the areas of focus.

Usually, young specialists are guided to work where their parents live, which encourages them to remain at the educational institutions after the mandatory two years, reducing the outflow of labour resources and eliminating the housing problem.

There is methodological support available in the form of Young Educator Schools in the methodology departments, and an annual Methodology Marathon with master classes, round-tables and video conferences for young specialists. Promising young educators are included in the regional and oblast 'promising reserves' of the Education Administrations.

Despite all this effort, 7–8% of young educators change their place of work after the end of their mandatory placement period. This is an internal movement of staff within the system itself: after the end of the mandatory placement period a young specialist changes job to move to a city from a rural area or vice versa. Outflow from the system is low and most of the trained educators continue to work in the education system.

5.6 The education process

5.6.1 VET content and education

Constant work is going on, nationally, to upgrade the content of vocational education and ensure a more practical approach and higher economic efficiency in order to improve the quality of training of specialists and workers. Thus, the percentage of training in production at VET institutes has been increased to at least 40%, and at colleges and HE institutes practical work has been increased to 20%.

The content of professional education and training programmes is determined by the education standards for each qualification, based on a competency model of training of workers and specialists.

It is crucial to keep the content of professional education and training up to date. This is ensured by reflecting relevant changes in science, the economy and the social sphere in the study programmes and by introducing study programme documentation which has been developed together with the organisations requesting labour resources.

Study plans and programmes are adapted to the needs of individual students and groups of students. For instance, individual study plans define the special characteristics of professional education and training for gifted and talented students or students who, for legitimate reasons, cannot attend an educational institution, either temporarily or permanently, and/or complete the required attestation period. At the same time, excessive detailing and over-regulating of study plans and programmes at all levels makes it difficult to update the educational content quickly and adapt it to regional needs. Strict regulation in accordance with the Education Code, standardised staff schedules for educational institutions and other regulatory documents tends to hinder the introduction of educational innovations. The regulatory documents do not cater for new ways of carrying out activities, and it is not possible to make flexible changes in the amount of classroom-based teaching as a function of the electronic teaching tools and data communications technologies used by the educators.

In the light of competitive industrial, construction and agricultural complexes and the services sector, and the implementation of an industry-specific strategy for the optimisation of public expenditure on professional education and training, qualified staff need to be trained ahead of market demand. This requires the introduction of new forms and methods of organising the educational process, including the networking principle of staff training.

The network principle of the professional education and training organisation has the following features:

- targeted concentration of individual high-value resources in specialised network units, such as colleges acting as resource centres;
- organisational and administrative management of the use of resources, centralised from other institutions and organisations into one unit of the network;

- organisation of intra-network interaction between network units;
- organisation of intersectoral cooperation between professional education institutions and regional organisations (customers and employers of skilled labour).

The functioning of the resource centres that implement the network principle of training is the mechanism that brings the qualifications of professional education and training graduates and employees into line with the existing and future requirements of industry. It should also be noted that organisations that regularly request labour resources work together with the educational institutions and sign agreements on all types of student internships.

5.6.2 Computerisation of the professional education and training system

The introduction of information technologies (IT) is an integral part of the improvement of the education process. The Concept of Computerisation of the Education System of the Republic of Belarus until 2020 was adopted in 2013. It sets the main goals, tasks and directions for the computerisation of the education system and defines the basic principles, approaches and conditions for the successful completion of the computerisation process.

Currently, the main objectives of the computerisation of the professional education and training system are:

- to create for the people equal opportunities to receive quality education services that satisfy the current requirements of national and international standards, irrespective of domicile and place of study, using modern information technologies;
- to educate persons adapted to life in the information society with all its strengths, weaknesses, opportunities and threats.

Today, information and communications technologies are used at all levels of professional education and training in Belarus, and the need for computer equipment is 100% satisfied. The further training and retraining of IT teaching staff has been updated by creating a network of regional IT tutors. Certification of professional education and training system specialists as skilled users of IT has been organised. However, only 78% of the educators in the VET institutions and 83% in colleges use IT in the teaching process.

5.7 Funding of professional education and training

A sound financial policy supports the quality of education in Belarus. Currently the state professional educational institutions are funded from the public purse, founders' funds, income from profit-making activities, and donations (sponsorship) from legal entities, individual entrepreneurs and other sources not prohibited by the law. The continuing modernisation of the professional education and training system strengthens the role of non-public sources of financing of educational institutes as a result of commercial education services and business activities. Additional funding from non-public sources makes it possible to cover the shortfall in public funds for maintenance, restoration, expansion of capital funds, expansion of infrastructure, wage rises and retention of labour resources within the professional education and training system.

The professional education institutions present quite a broad spectrum of types of non-public-funded activities. However, practice shows that stable financial results are shown by those educational institutions that focus on developing the most profitable kinds of non-public-funded activities.

5.8 Introduction of a quality management system

The assessment of education quality is open and is carried out by representatives of the academic community, employers and the consumers of education services.

The introduction of a quality management system (QMS) based on the ISO-9001 series of standards in the professional education and training institutions aims to optimise education quality management and put in place organisational and teaching conditions, methods, principles and management approaches typical of a market economy. It should be noted that a QMS based on the ISO-9001 series of standards is already in place in all HE institutions in Belarus. QMSs were also actively adopted at colleges and vocational schools during the years 2012 and 2013.

The QMS enables systematic analysis at several levels of management:

- strategic – at the level of the head of an educational institution;
- tactical – at the level of deputies (as owners of the processes: training, education, production training);
- process – at the level of educators, trainers (masters), group tutors.

The results of the analysis are used for joint discussions at meetings of teaching councils. They present accurate information for making decisions on any improvement or adjustment of any process, depending on the location of the problems identified and the measurable target indices that were not achieved.

The adoption of the QMS has enabled the education process to be flexible in response to the changing requirements of organisations requesting labour resources, including the development of new programmes for new qualifications.

Thus, the steps being taken are geared towards the practical implementation of effective mechanisms to improve the quality of education. Such improvement is linked to high achievements by students and the creation of a modern IT-based educational environment for the educational institutions. When all those involved in the education process are satisfied with the conditions and results of quality management, educators are motivated to increase their personal contributions to the common results and achievements of the educational institutions.

6. MANAGEMENT AND POLICIES IN THE PROFESSIONAL EDUCATION AND TRAINING SYSTEM

Management of professional education and training is in the state and public interest. The management objectives in professional education and training are the implementation of the state policy on professional education and training, the improvement and development of a professional education and training system, and the delivery of professional education and training programmes.

State management of professional education and training is ensured by the President of the Republic of Belarus, the government, state bodies subordinate and/or accountable to the president, the National Academy of Sciences, state administration bodies, other governmental bodies, and local executive and administrative authorities, within their respective competence.

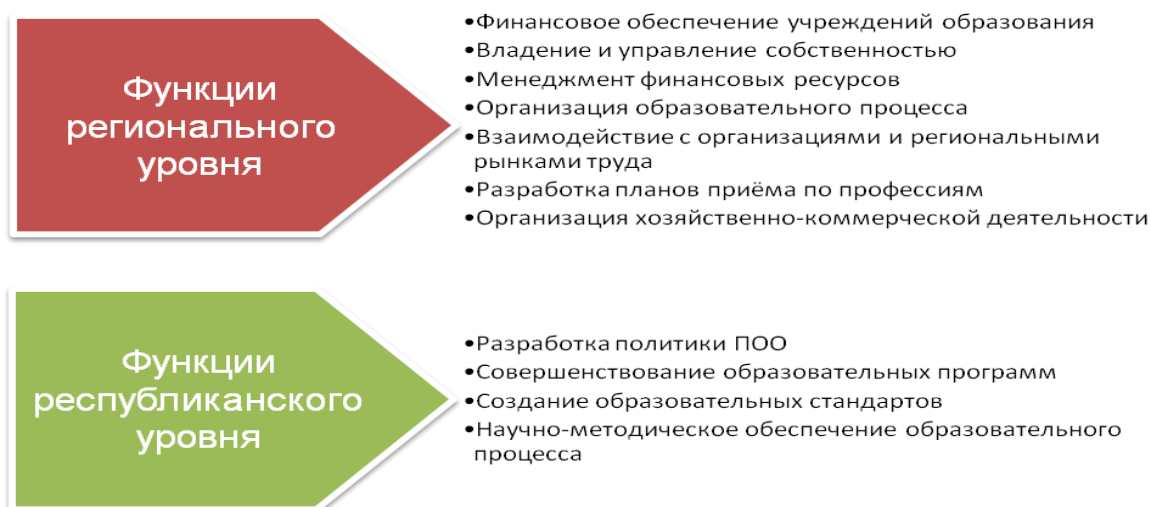
- The state's professional education and training policy is determined by the president.
- The government is responsible for the implementation of the national professional education and training policy and general administration of the professional education and training system, and also determines the areas of cooperation between the national state administration bodies, other state organisations subordinate to the president and local executive and professional education and

training administration authorities.

- The Ministry of Education is responsible for carrying out the state's professional education and training policy.
- The professional education and training system is administered by the Ministry of Education via six oblast (regional) departments and the Education Board of Minsk Executive Committee, which supervise the work of the educational institutions at the oblast level. These departments coordinate the work of the regional departments of education responsible for the educational institutions at their level.

Currently, the management of professional education and training is tending towards centralisation and decentralisation simultaneously, although the trend to decentralisation, i.e. the transfer of many functions of the Ministry of Education to local authorities and educational institutions, is more evident. The turning point for the delegation of powers to lower levels of administration was the transfer of the funding of professional education and training institutions from the state budget to regional budgets and the transfer of property into the ownership of the oblasts. Today, the oblast administration level is the subject (owner) of property and the financial resources of professional education and training. The professional education and training institutions themselves are the managers of their allocated funds and property (Figure 15).

Figure 15. Professional education and training system management (decentralisation and centralisation)



Regional level	Financing of educational institutions Property ownership and management Management of financial resources Organisation of education process Liaisons with organisations and regional labour markets Drafting plans of admission by qualifications Organisation of commercial and other activities
National level	Professional education and training policy development Improvement of education programmes Development of standards of education Methodological support of education process

Source: A.I.Zhuk, E.M. Kalitsky. Areas of Development and Experience in Modernization of Vocational Education of the Republic of Belarus: International Context. Materials for International research and practice conference "Vocational Education in the Context of Global Challenges"(Minsk, April 3–4, 2013).

The educational institutions are independent as regards the organisation of the education process, financial and economic activities and other activities within the bounds set by legislative acts, and typical regulations on educational institutions and their statutes. They also liaise with companies, regional and local labour markets, develop admission plans by qualifications and professions, organise their commercial, economic and other activities and manage their property.

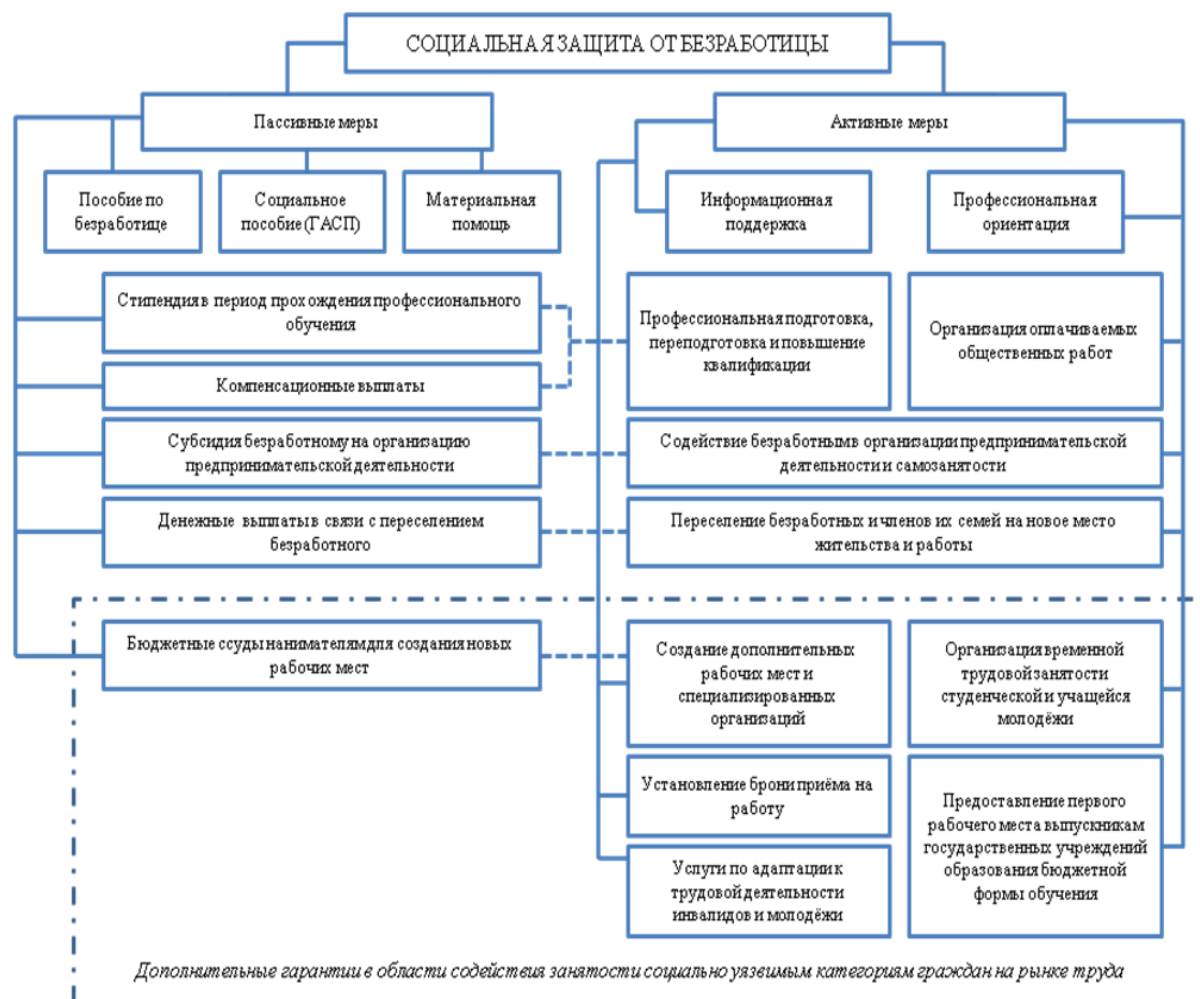
A tendency towards increasing the centralisation of professional education and training management has also been noted. Such management functions include:

- development of the professional education and training policy;
- setting priorities and directions of qualitative changes in the education programmes;
- development of national standards and sets of methodological teaching documentation according to the standards.

Upon the initiative of the Ministry of Education, a number of state education development programmes have been drafted. The implementation of measures provided in the programmes has significantly strengthened relations between the central and regional authorities, as well as the heads of the educational institutions.

APPENDICES

APPENDIX 1. SOCIAL SECURITY MEASURES AGAINST UNEMPLOYMENT IN THE REPUBLIC OF BELARUS



SOCIAL SECURITY AGAINST UNEMPLOYMENT				
Passive measures			Active measures	
Unemployment benefits	Social benefits	Financial aid	Information support	Career guidance
Scholarship during VET			Professional training, retraining, further training	Organisation of paid community work
Compensation payments			Assistance to unemployed in starting a business or becoming self-employed	
Subsidies to unemployed for starting a business			Relocation of unemployed people and their families	
Payments due to relocation of unemployed			Creation of additional jobs and specialised organisations	Organisation of employment of students and studying youth
Budget loans to employers for creation of new jobs			Reservations on jobs	Giving first jobs to graduates from budget funded state educational institutions
			Services of adaptation of youth and disabled people for work	
Additional guarantees for the promotion of employment among socially vulnerable people on the labour market				

Source: Mantsurova, 2014.

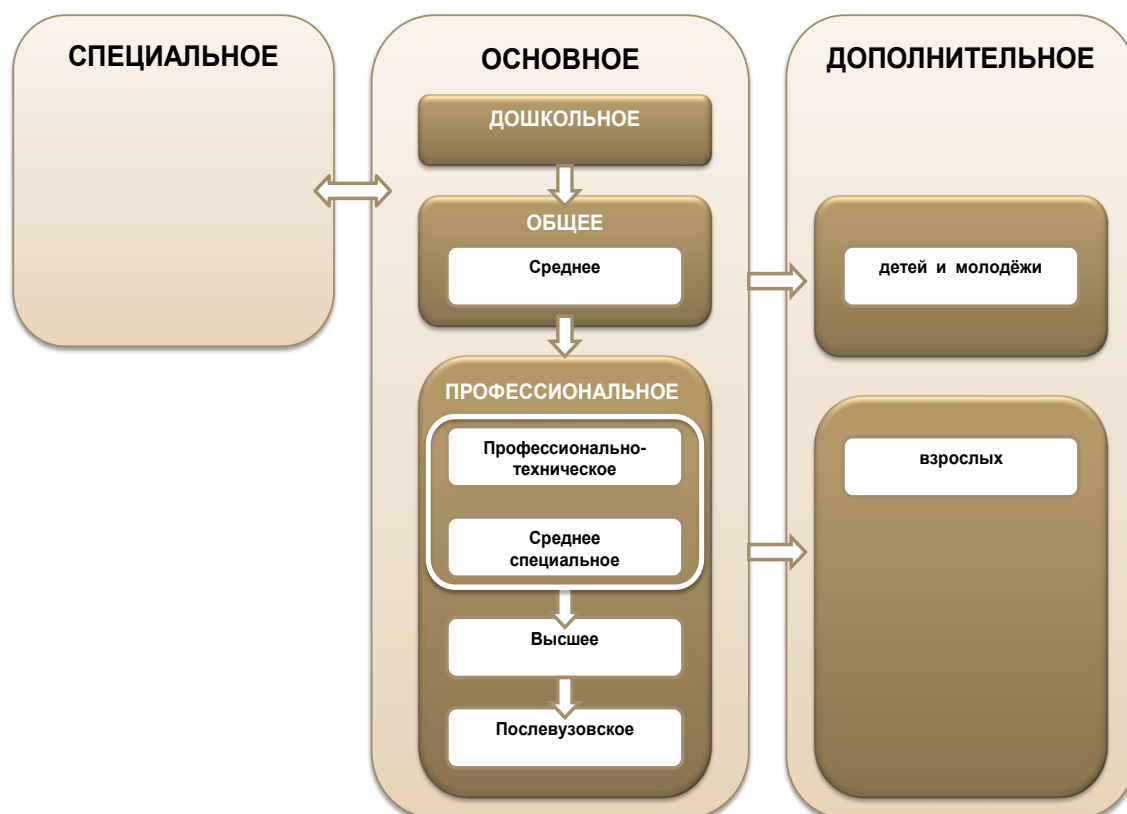
APPENDIX 2. NATIONAL QUALIFICATION FRAMEWORK FOR THE PILOT SECTORS

Qualification level	Descriptors		
	knowledge (theoretical and/or practical)	skills and abilities	competencies (responsibility, independence)
1	basic general knowledge	basic skills and abilities allowing performance of simple tasks	performance of activities under direct supervision
2	basic knowledge of professional activity	skills and abilities allowing performance of non-complex tasks in accordance with instructions	performance of activities under supervision with some degree of independence
3	knowledge of principles, rules and procedures for performing typical tasks in the professional field	skills and abilities allowing performance of typical tasks and choice of methods of performance from a given set	independent performance in accordance with set goals and responsibility for the result of the work
4	system of professional knowledge in the particular field of activity and basic knowledge of management	skills and abilities allowing planning, organising and supervising performance of work in a standard situation	independent management of own work and/or organisation of work of employees of level 1–3, with partial responsibility for the results of their work
5	specialised knowledge in the particular professional field and knowledge of management	skills and abilities to work with data, including data collection, processing and analysis, ability to adapt in case of minor changes of the situation	independent professional development, management of a sub-unit (group of employees), full responsibility for the results of the work of subordinate employees, participation in training of subordinate employees and appraisal of the results of their training
6	system of specialised knowledge, including interdisciplinary, understanding of intersubject relations in respect of the particular professional field	ability to work in a team and make joint decisions, creative approach to problem solving, ability to work in uncertain and unpredictable conditions	management of projects with low to medium complexity or in a group of connected subdivisions, responsibility for organisation and conduct of training of subordinate employees, appraisal of the results of their training
7	advanced knowledge in the particular professional field, forming innovative thinking	skills and abilities to integrate the knowledge and generate new, innovative approaches to problem solving	management of complex projects, small or medium organisations, or a line of activities in a large organisation, responsibility for the result of the work, planning of professional development and career advancement of subordinate employees
8	knowledge of phenomena and processes in fields related to the professional field of activity, understanding their relationship	skills and abilities to plan, organise and monitor innovative activities and appraisal of the results	management of a large organisation or innovative activity in one or multiple systems

Notes: 1. For the purposes of this Appendix, 'descriptor' means requirements as to knowledge, skills and abilities characterising the level of education. 2. In the development of sectoral qualification frameworks in pilot sectors of the economy, the composition of management and professional competencies by level of qualification is determined taking into account the specifics of professional activities in a particular sector of the economy.

Source: On certain issues of development of the National Qualification System of the Republic of Belarus (17 January 2014).

APPENDIX 3. THE EDUCATION SYSTEM IN THE REPUBLIC OF BELARUS



SPECIAL	BASIC	ADDITIONAL
	PRESCHOOL	
	GENERAL Secondary	Children and youth
	PROFESSIONAL	
	Vocational	Adult
	College	
	Higher	
	Postgraduate	

Source: Characteristics and structure of the national system of education <http://www.bsu.by/Cache/pdf/427623.pdf>.

APPENDIX 4. THE PROFESSIONAL EDUCATION AND TRAINING SYSTEM

Vocational education: ISCED 3 (based on general basic education) and ISCED 4 (based on general secondary education)

Vocational education (VET) is the level of basic professional education concerned with the personal development of students and their professional education. They receive specialised theoretical and professional training leading to the qualification of skilled worker or skilled office worker upon completion of the training.

VET programmes are divided into:

- VET programme for the qualification of worker (office worker);
- VET programme for the qualification of worker (office worker) with in-depth study of individual subjects;

- VET programme for the qualification of worker (office worker) and general secondary education;
- VET programme for the qualification of worker (office worker) and general secondary education with in-depth study of individual subjects.

VET programmes are implemented in full-time and distance education formats.

The period of full-time VET is:

- general basic education without attaining general secondary education or specialised education – one to two years;
- general basic education and attaining general secondary education – thirty months to three years;
- general secondary education – one to two years.

College education: ISCED 5B

College education is the level of basic professional education concerned with the personal development of students. They receive specialised theoretical and professional training leading to the qualification of specialist with vocational secondary education or worker with vocational secondary education.

College education can be based on general basic, general secondary and vocational education.

College education programmes are divided into:

- programme with attainment of qualification of specialist with secondary special education;
- programme with attainment of qualification of worker with secondary special education;
- programme with attainment of qualification of specialist with secondary special education integrated with VET programmes;
- programme with attainment of qualification of worker with secondary special education integrated with VET programmes.

Attainment of the college education programmes based on general basic education ensures general secondary education.

Upon completion of the college education programme ensuring the qualification of specialist with secondary special education, as set forth in the education standards for college education, the qualification of worker is granted.

College education programmes are implemented in full-time and distance education formats.

The period of full-time college education is:

- based on general secondary education – two to four years;
- based on general secondary education – two to three years;
- based on VET with general secondary education – one to three years.

Higher education: ISCED 5A

Higher education (HE) is the level of basic professional education concerned with the personal development of students, and their intellectual and creative abilities. They receive specialised theoretical and professional training with attainment of qualification of specialists with HE, Master's degree.

HE is divided into two tiers.

Tier I HE ensures training of specialists with fundamental and specialist knowledge, skills and abilities, leading to the qualification of specialist with HE.

Tier I HE includes:

- Tier I HE programme leading to the qualification of specialist with HE;
- Tier I HE programme leading to the qualification of specialist with HE integrated with college education programmes.

Tier I HE gives the right to continue studying for Tier II HE and employment in the field of the qualification (specialist area) attained.

Tier II HE offers in-depth training of specialists, acquiring knowledge, skills and abilities in scientific/teaching and scientific/research work, leading to a Master's degree.

Tier II HE includes:

- Tier II HE programme generating knowledge, skills and abilities in scientific/teaching and scientific/research work, leading to a Master's degree;
- Tier II HE programme with in-depth training of specialist, leading to a Master's degree.

Tier II HE gives the right to continue at postgraduate education level and employment in the field of the attained qualification (specialist area).

HE programmes are implemented in full-time, part-time and distance education formats.

The period of full-time Tier I HE is from four to five years.

The period of evening-class or distance Tier I HE is determined by the duration of full-time education and can be extended for one year maximum.

The period of Tier II HE is from one to two years.

Postgraduate education: ISCED 6

Postgraduate education is the level of basic professional education concerned with the personal development of postgraduates, doctoral students and candidates, the realisation of their intellectual and creative potential, and their acquisition of the professional skills of organising and conducting scientific research, leading to the scientific qualification of researcher.

Postgraduate education includes two tiers:

- Postgraduate studies – Tier I postgraduate education aimed at training specialists with abilities to plan and independently conduct scientific research, with in-depth theoretical knowledge that leads to preparing a scientific paper (dissertation) for the candidate of sciences degree. Tier I postgraduate education includes the postgraduate education programme for attainment of the scientific qualification of researcher.
- Doctoral programme – Tier II postgraduate education aimed at training of specialists with abilities to organise scientific research work in a new field of scientific research or for further exploration of current scientific research areas, to summarise and analyse the results of scientific work that leads to preparing a scientific qualification paper (dissertation) for the Doctor of Sciences degree. Tier II postgraduate education includes the doctoral education programme.

Postgraduate education programmes are divided into:

- postgraduate education programme for attainment of the scientific qualification of researcher;
- doctoral education programme.

Tier I postgraduate education includes the postgraduate education programme for attainment of the scientific qualification of researcher and is implemented in full-time and distance education formats or candidacy (*soiskatel'*) format.

Doctoral education programme is implemented in full-time education or candidacy format.

Postgraduate education attainment period:

- full-time studies – three years maximum;
- distance studies – four years maximum;
- in the form of candidacy – five years maximum.

Professional training for management staff and specialists

Professional training for management staff and specialists aims at professional improvement, learning new methods, technologies and elements of professional activities, acquiring professional skills and getting new qualifications at the higher and college education level.

Management staff and specialists receive additional professional education by attaining the following programmes of further adult education:

- further training of management staff and specialists;
- retraining of management staff and specialists with HE;
- retraining of management staff and specialists with college education;
- training with work placement of management staff and specialists;
- training in organisations.

Blue-collar professional training

Blue-collar professional training includes the following programmes of further adult education:

- further training of workers (office staff);
- retraining of workers (office staff);
- professional training of workers (office staff)

APPENDIX 5. STRUCTURAL-FUNCTIONAL BLOCK DIAGRAM OF THE INSTITUTIONS ENGAGED IN FORMING AND IMPLEMENTATION OF THE INNOVATIVE POTENTIAL OF THE YOUTH OF THE REPUBLIC OF BELARUS



FORMING INSTITUTIONS			IMPLEMENTATION INSTITUTIONS	
The national system of education of the Republic of Belarus		STATE REGULATION: Laws and normative acts youth policy analysis, forecasting, planning, account, control, motivation monitoring of innovative processes	The national innovative system of the Republic of Belarus	
The system of social and occupational guidance, occupational selection and adaptation			Subjects of innovative infrastructure	
The system of scientific-technical and artistic creativity of the youth, research scientific work of students, Master's degree programme, postgraduate courses			Research and design-construction organisations	
The system of retraining and further training of the staff			Innovative enterprises, secondary employment, labour crews	
The special fund of the President of the Republic of Belarus in support of gifted trainees and students, as well as talented youth			Innovative entrepreneurship, small and medium business	
International youth-orientated programmes			Youth creative organisations	
Mass media, library network, cultural, sports centres and tourists resort areas		FUNDING SOURCES	Contests, festivals, forums, exhibitions, presentations, conferences and workshops	
Republican and local budgets	Bank credits	Own funds of organisations	Innovation fund, including venture capital funds	National and foreign funds

Source: Sapyolkin, 2011.

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For any additional information please contact:

European Training Foundation
Communication Department
Villa Gualino
Viale Settimio Severo 65
I – 10133 Torino

E info@etf.europa.eu

F +39 011 630 2200

T +39 011 630 2222

