National Observatory stocktaking report

WORKING REPORT

Belarus

2001

This report was produced in the context of the
National Observatory Network
established by the European Training Foundation

European Training Foundation

The National Observatory of Belarus is part of a network of similar institutions in the countries of Central and Eastern Europe, the New Independent States and Mongolia

European Training Foundation

The network was established by the European Training Foundation, an agency of the European Union, which works in the field of vocational education and training in Central and Eastern Europe, the New Independent States and Mongolia, as well as the Mediterranean partner countries and territories. The content of this report is the responsibility of the author. The views expressed herein do not necessarily reflect those of the European Training Foundation.

This project is supported by the European Union's Tacis Programme

The vocational education and training system in Belarus

Compiled by:
E. M. Kalitsky, B. V. Ivanov, A. Kh. Shklyar,
M. V. Ilyin, E. N. Gonchar, N. I. Latysh,
I. V. Novikova, P. A. Davydkov, L. Ye. Goncherenko,
L. P. Iskortseva

The National Observatory of the Republic of Belarus
Republic Institute of Vocational Training
ul. K. Libknechta, 32, 220004, Minsk, Republic of Belarus
Tel: 220 11 80, Email: kalitsky@open.by

Minsk
2001

Table of contents

Introduction

The Republic of Belarus is charged with the task of forming an open, accessible, continuously developing vocational education and training system that guarantees free vocational education and training, general secondary education and secondary special education on a competitive basis. The system is required to provide the citizens of Belarus with the qualifications required by the economy and a socio-cultural sphere for highly qualified personnel. Moreover, it should also provide for the constant development of their professional skills.

In accordance with the Concept of Vocational-Technical Education Development in the Republic of Belarus, the principal aims of vocational education and training and secondary special education are as follows:

- Produce highly qualified workers and specialists who are trained according to the requirements of their employers and to achieve a balanced distribution of school graduates within further education and employment;
- Encourage cooperation between vocational education and training, secondary special education systems and the economy;
- Achieve the capacity to react flexibly to labour market requirements for highly qualified personnel;
- Reach a situation where educational services in vocational-technical educational institutions are in accordance with personel requirements and the demands of the State and society;
- Set up educational structures based on the integration of vocational education and training and secondary special education curricula.

The basic measures relating to the development of vocational education and training and secondary special education systems include the promotion of professional-qualification structures, curricula which cover the training process, training of professional-pedagogical personnel, and the creation of a quality control system for working personnel and specialists.

Within the last three years the number of vocational education and training institutions dealing with the training of highly qualified workers and specialists, has remained static (249) as has the number of secondary special educational institutions providing specialist training (157). Irrespective of this, the access to vocational and secondary special education has improved. In the 1999-2000 academic year the number of students at vocational schools increased by 3% in comparison with 1998-1999, and by 5% in secondary special institutions. The number of highly qualified workers and specialists who graduated from vocational schools has also increased by 5% and specialists who graduated from secondary special institutions by 6%.

The process of developing vocational-technical and secondary special education institutions will widen their sphere of activities. Both vocational and secondary special education may be carried out in the same educational institution along with the professional training of school children, comprehensive training of a higher level in lyceum groups, training of adults and personnel training for different spheres of vocational activity. A total of 72% of graduates of secondary specialist institutions and 59% of vocational-technical school graduates were assigned a job in 1999 (in 1994

62% and 58% respectively). Over 12% of vocational-technical school graduates went on to study in higher and secondary specialized educational institutions, while almost 20% serve in the army. For various reasons nearly 10% had to apply for a job independently.

At the same time, the decrease in vocational education financing has not been overcome, and nor has the reduction in the financial allowances from enterprises and organizations. Neither the creation of effective systems of social partnership (with a view to work out requirements for vocational-technical and secondary special education) nor quality evaluation criteria for graduate training have been completed. Their completion demands a legislative involvement on both the republican and regional levels.

A disparity between the vocational-technical education and training provided and the professional qualifications needed still exists, and is especially noticeable in regard to the developing sectors of the economy. The continuity of general secondary curricula, vocational-technical curricula, secondary special curricula and higher education curricula as well as the vocational training of workers and specialists is not provided in full. The variety of vocational education models and curricula makes it necessary to create and disseminate common educational standards and improve the personnel training quality control system. The number of pedagogical workers who do not have the required level of psychological-pedagogical training is still large. There is a lack of manuals, teaching aids, means of teaching and teaching equipment at educational institutions.

1. Socio-Economic background

1.1 Economic development

After the Republic of Belarus achieved sovereignty, the need to formulate an independent economic policy became a major issue and was indeed a key factor in all social and political life. In the first half of the nineties the country was embroiled in the search for its own transformation model of development.

Table 1. Republic of Belarus: Main economic indicators

	1991	1992	1993	1994	1995	1996	1997	1998	1999
GDP (annual increase, %, over corresponding period in previous year, in comparable prices for 1995)	-1.2	-9.6	-7.6	-12.6	-10.4	2.8	11.4	8.4	3.4
Annual consumer price index, factor of -	2.48	16.59	20.97	20.60	8.9	152.7	1.53	1.73	3.94
Unemployment, % of economically active population	0,05	0,5	1,4	2,1	2,9	3,9	2,8	2,3	2,1
Average annual inflation level, %	183.5	793.5	617.1	683.1	268.4	119.4	140.1	148.6	207.7

Source: Belarus: Choice of path. National Report on Human Resources Development 2000, pp 118-121
Statistical Yearbook of the Republic of Belarus, 2000, p 44

As can be seen from the above table economic indicators show a decline in the rates of economic growth and standard of living, and gradually increasing unemployment levels and inflation after independence. Improvement can be seen from the mid 90s and data from the new millennium will show if the positive development has been sustained. Over the same period state property was privatised, and the private sector was expanding. By 1995 the proportion of state sector employment had fallen from 73.9% to 59.9% while employment in the private sector had increased from 1.2% to 7.8% and collective enterprise employment had likewise increased from 24% to 31.3%. Programmes specifically designed to counter inflation and create employment had not been introduced.

After the establishment of a presidential republic in 1994, new priorities in economic policy came to the fore. It was hoped they would help to stimulate the market and underpin financial stability in the economy. Crisis-calming measures and macroregulation led to a certain smoothing of the macroeconomic indicators and the situation began to improve in many sectors of the economy. But it was in monetary policy that the greatest measure of success was achieved, with stabilisation of the exchange rate for the Belarus's rouble for eighteen months.

In 1996 the main priorities of the economic policy were exports, housing construction and the agrarian sector. The years 1996-1998 were marked by a policy of fiscal expansion and strict pricing control. Results were achieved by stimulating effective demand in specific growth areas and by increasing state interference in the economy, and also by mobilising resources in other sectors. Economic growth began to show up in GDP parameters, agricultural output, investment in fixed

capital, retail turnover, paid services, and real cash income. According to a UN Report 1997 found the country ranked 60th in the human potential development index. In the human potential development index, the GNP component per head of population had grown for the first time. Nonetheless the country still lacked any real market infrastructure.

In the mid-90s the process of employment reductions in the private sector began. The number of those employed in the private sector fell in 1999 by more than a third, compared with 1995. The relative proportion of the number of employed fell from 7.5% to 5.1%. The process of restructuring state property and the creation of collectives had virtually come to a stop, though there was some increase in the numbers of those employed in enterprises with some foreign capital ownership. Unemployment took on predominantly hidden forms, and the increase in officially registered unemployment stopped. For the period 1996-1998 the number of unemployed dropped by more than a third. Loss of value in main assets across the sectors reached 70%.

The main thrusts of economic policy for 1999-2000 were defined as the achievement of financial stabilisation in the productive sector of the economy, the strengthening of the national currency, improvement in price formation and at this level the creation of conditions for stable economic growth and raising of the standard of living. These were not, alas, achieved in 1999. In 1999, the annual increase in growth in the volume of GDP, compared with 1997, dropped by a factor about 3, the growth in GDP per head of the population fell by a factor of 2, as did the consumer price index and the manufactured goods index, while increase in the volume of industrial output fell by a factor of almost 2.

The absence of demand in the productive sector for additional staff training had a pronounced effect on the training of young people in vocational schools. Intakes for training fell right back right up to 1997 (by more than 25% compared with 1990). Training of skilled workers under agreements with industry was also severely curtailed, as was the number of students getting guaranteed offers of employment. In the last two years there has been a slight improvement in the situation.

These unfavourable economic conditions did not however detract from the ongoing process of improvement in the quality of vocational education offered. The transformation in vocational education was driven by the need to achieve best world standards. Changes in vocational and technical institutions had a multi-profile and multi-function focus and were geared to international standards (ISCED-97 and the international standard classification of occupations, 1988). A quality assurance system for vocational and technical education, based on the ISO 9000 family, was formulated.

1.2 Demography

The crisis aspects evident in the country's social, economic and ecological development in the 90's were accompanied by exacerbating demographics. Population growth was replaced by depopulation. The population structure by sex and age was altered and life expectancy dropped to a low level. Mortality indicators strengthened. The drop in the birth rate affected all women of childbearing age. The social and economic consequences of the Chernobyl disaster, the psychological effect of ever-present inflation, the absence of any real imperatives to improve the social and economic situation in the future – all these had a stultifying effect on demographic processes.

During the 90s the following trends shaped the structure of the student population at all levels of education. Right up to 1999/2000 there was an increase in the number of students enrolled at

general education day schools and in the aggregate student population at all levels of education. However up to 1997/1998 the percentage of young people (6-23 years old) involved in education remained lower than the 1990 level (74%). In the last three years the number of young people in education has grown, mainly because of the increase in numbers in tertiary education. Both the cohort of students in vocational and technical teaching institutions (vocational education and training institutions) and special secondary teaching establishments and the level of training coverage was still lower than the 1990 indicators. This lowering in the coverage level also impacted on the downward trend in performance among those up to 24 years old and able to work, especially those who had not completed secondary education (ILO-based research - see Tables 2 and 3).

Table 2. Activity Rates

Description	Activity Rates (%)								
	Males			Females			Total		
Description	1998	1999	2000	1998	1999	2000	1998	1999	2000
24 and younger	50.70	50.70	46.40	49.00	53.10	51.10	49.80	51.90	48.70
25 and older	95.90	98.40	97.80	96.10	97.60	96.90	96.00	98.00	97.30
Total	86.10	87.90	85.90	85.80	87.60	86.90	85.90	87.70	86.40

Source: Figures from household surveys, carried out by the Ministry of Statistics and Analyses (1999-2000)
Note: Figures calculated at the beginning of each year.

None of the alternatives available for forecast spending in the country, adjusting for policies to increase the birth-rate, reduce mortality rates, improve life expectancy and mitigate the migration balance, offer an optimistic outlook for overall population growth. One science and research institute forecast that the period to 2020 would see a general overall fall in the population, with an increase in the percentage and number of people older than working age and a continuing reduction in the number of children, who of course will make up the population of the future junior and secondary school classes. Offset against this critically unfavourable background for long-term demographic reproduction, the forecast for the years up to 2007 was for an absolute and relative increase in the number of the population of working age, a fall in the number of people past working age, and a marked reduction in the number of young people. It was of critical importance to use this knowledge to stimulate economic growth and labour market processes, and to put in place targets to improve the level of education in the population in general and to make improvements at different levels of education.

The indicator for the educational coverage of the population of young people in the country is significantly lower than it is in the most developed countries. Because of the particular features of the age structure of the population a significant increase in the level of education for the country's population can only be achieved with those over the age of 23, mainly those in tertiary education. Any attempts to push the numbers of those embarking on courses in teaching establishments offering secondary-level education above those for the 90s will be severely handicapped by the demographic factor. However both the forecasts and the evaluations prompted by choice of development priorities at the various levels and stages of education have supported the policy of retaining vocational and technical colleges in the education of youth as an overarching factor. This is underpinned by the recognition of their role in the youth education process where secondary education may be partial or unfinished, - training establishments strategically located for population spread, functions expanded to cover the training of unsupported groups of young people and the unemployed, still meeting industry's needs for staff with secondary school qualifications.

Table 3. Activity rates by educational attainment of the population (25-59 years old) (%)

Years	Males									Females									Total								
	ISCED level 0-2			ISCED level 3			ISCED level 5-7			ISCED level 0-2			ISCED level 3			ISCED level 5-7			ISCED level 0-2			ISCED level 3			ISCED level 5-7		
Years	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**
25-29 year olds	71.9	83.00	69.40	97.5	96.20	97.30	98.40	99.50	99.30	7650	74.10	66.70	89.30	84.70	88.30	89.10	90.60	92.80	73.10	79.90	68.50	93.70	90.30	93.30	92.60	94.40	95.20
30-39 year olds	79.0	74.70	84.50	96.2	95.60	95.70	95.70	98.60	97.50	79.60	74.50	42.20	90.60	91.90	89.00	93.50	93.70	93.40	79.20	74.70	61.90	93.50	94.00	92.90	94.30	95.60	95.00
40-49 year olds	85.2	85.00	7180	95.4	96.90	96.00	94.30	95.10	94.00	84.70	90.90	83.90	92.40	93.00	92.60	94.60	94.80	94.60	85.00	86.10	75.80	94.00	95.00	94.40	94.50	94.90	94.40
50-59 year olds	77.8	78.80	74.50	83.8	88.10	8600	84.60	86.20	88.00	58.2	59.9	76.9	79.4	83.3	79.2	89.1	91.9	89.0	72.0	73.3	75.3	82.2	86.4	83.5	86.3	88.7	88.9

Source: Figures from household surveys, carried out by the Ministry of Statistics and Analyses (1999-2000)
Note: Figures calculated at the beginning of each year.

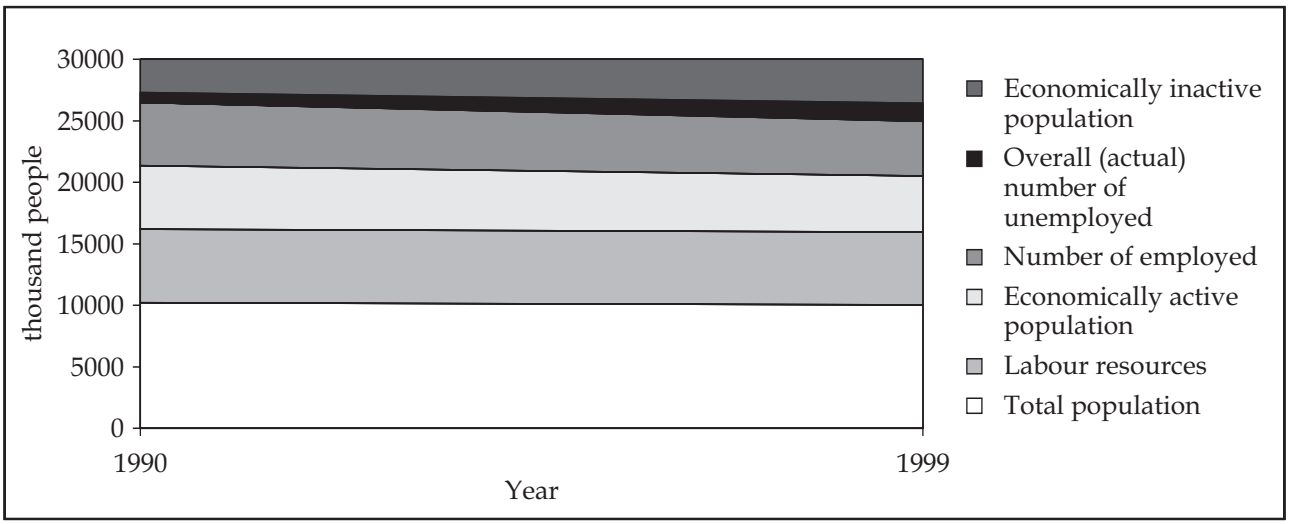
2. Labour market

2.1 Labour market background

Belarus has at present a transitional mixed labour force, with traditional and new mechanisms for shaping it.

There were no significant changes in the 1990-1999 period in the overall numbers of the workforce and in its relative proportion of the population as a whole (Fig. 1).

Figure 1. Labour resources in the Republic of Belarus, 1990 and 1999



Source: Statistical Yearbook of the Republic of Belarus, 2000

However, from 1997, there has been tendency for them to rise. Forecasts indicate that the country's workforce will increase in number and will reach 6.1 million by 2005, which is by 155 000 people or 2.6% more than in 2000. The economically inactive sector of the population of working age (persons occupied in the home, students, pupils in the senior years of secondary school, other persons unemployed but able to work) represented 8-10% of the total population in 1999. The proportion of the population active in the economy was 75.4%.

Throughout 1998 and 1999 labour surplus was typical of the labour market in the Republic of Belarus. At the end of 1999 work force availability exceeded demand. Compared with 1998, though, there was a slight relaxation of tension in the labour market. The structure of the demand for labour force was not changed. Workers remained the most solicited at the labour market (comprising almost 82% of the total number of vacancies), while amongst the unemployed every third person was a former engineering, technical worker or office worker This section I do not understand. Should be checked.against the Rus version.

The main requirements employers expect of their future employees are a high standard of qualification and work experience. There is still a greater demand for men in the workplace.

Generally throughout the country those most in demand for work remain those in the construction and machinery construction industries. There is also demand for workers in the agrarian sector.

The number of those in the engineering, technical and office sectors significantly exceeds demand. These people tend to be process engineers and technicians, mechanical engineers, book-keepers, workers in the education field, librarians etc. Supply also exceeds demand in the many of the manual occupations – cooks, sales assistants, pastry cooks, cutters etc.

A typical trend in the 90s was the low cost of labour. Wages was 37-42% of GDP. The overwhelming majority (80%) of vacancies and jobs on offer are paid at less than the minimum consumer budget and do not attract potential employees. Pay has lost its role as the main source of income, stimulus for growth in production and increase in work output.

The dominance of social protection principles in pay structuring is bringing about a devaluation in the value of standard levels of education and qualifications and degrades the social status of employees in sectors where higher qualification levels are required – education, health, culture, science etc.

2.2 *Employment*

The most far-reaching changes in the work environment were brought about by changes in the ownership structure. The transition to a market economy changed the structure of employment, with state sector employment being cut from 73.9% in 1990 to 57.3% in 1999. The growth in the numbers employed in the non-state sector was due mainly to the auctioning off of enterprises, the increase in the number of people employed in cooperatives and other types of social associations. The number of people employed in the private sector, including individual entrepreneurs, rose by a factor of 3.4 in the same period.

In the early 90s Belarus was, by international standards, an industrial nation. In the period from 1990 to 1999 there was a significant trend towards the service sector, both in terms of employment and in the structure of the GDP.

Table 4. Change in production and employment level, 1990 to 1999, %

	1990		1999	
Sectors	**Employment**	**% of GDP**	**Employment**	**% of GDP**
Agriculture	19,00	20,00	14,80	10,70
Industry	31,20	40,30	27,60	29,60
Service	38,30	27,50	47,90	38,80

Source: Calculated from data in the Statistical Yearbook of the Republic of Belarus, 2000. pp 102, 277

The reduction in the number of employees in industry occurred not because of any rationalisation in production but mostly because of the shedding of superfluous workforce, curtailment of business and closure of redundant facilities. The processes involved in reducing the number of people employed in industry have to be viewed in a positive light as this sector was host to a high level of hidden unemployment due to the practice of working short days (or weeks) and making employees take compulsory administrative leave. In December hidden unemployment in the productive sector

of the economy was 1.7 Do you have a year and source for the information?%. Employment in agriculture had dropped, mainly due to the reductions in work performed by people of pensionable age. Further reductions in employment in these two important sectors of the economy can be expected. There will also be reductions in industry as employment shifts to the service sector. Reductions in employment in agriculture will be mainly caused by the demographic factor since a major percentage of those employed in this sector are of pensionable age or about to become so.

This change in the numbers of people employed in the various sectors of the economy is accompanied by the shift of a significant proportion of the population into informal employment. In 1998 the economically inactive population (without students) grew by 28 200 or 3.8%, 12,9% of the country's labour force.

A marked feature of the redistribution of labour resources is the rapid rate at which employment in the state management, credit and insurance agencies, and in the health and education sectors, has grown. The increase in the number of people employed in education has been due to the increase in the number of pupils in schools and in particular to the widening of the intake in to general education day schools. The growth in the number of those employed in the health sector is associated with the development of paid medical services to a population supplementing the services available from the state health service.

However, the structure of employment in terms of sector of the economy is, as before, skewed – two thirds of employees work in industrial production and the redistribution of the work force into the more socially-oriented sectors has been curbed by state policy on employment control.

2.3 *Unemployment*

One aspect typical of the national labour market is the fall in numbers of registered unemployed. However, there are significant differences between official unemployed figures and figures calculated from household surveys. According to data from the Ministry of Statistics, the unemployment level, calculated from household surveys, has been over the last three years, as a percentage of the population able to work, 7.9% in 1998, 7.5% in 1999 and 6.5% in 2000.

Table 5. Unemployment

Description	Unemployment rate (%)								
	Males			Females			Total		
	1998	1999	2000	1998	1999	2000	1998	1999	2000
24 and younger	18.73	23.63	18	19.88	17.35	14.4	19,31	20.34	16.1
25 and older	7.43	7.07	7.2	5.01	4.04	3.4	6.20	5.54	5.2
Total	8.88	9.18	8.6	6.87	5.85	4.9	7.86	7.49	6.5

Source: Figures from household surveys, carried out by the Ministry of Statistics and Analyses (1999-2000)
Note: Figures calculated at the beginning of each year.

The proportion of registered unemployed to population able to work was 2.26% in 1998, 1.89% in 1999 and 1.69% in 2000. The total number of registered unemployed for 1999 fell from 105 000 to 95 400 but the proportion of young unemployed grew, particularly among those who had no skills or work experience – the proportion of unemployed young people up to 29 years old was almost 53%

by the end of 1999. With a numerous generation of young people reaching working age in the period from 1980 –1986, there was a big increase in the influx of young people with no occupation, i.e. school leavers, including those at basic level, onto the labour market. The job placement index for school leavers is very low.

A factor to bear in mind is that leavers from vocational education and training institutions who have not received either an order for work or a guaranteed first job are allowed to register.

Table 6. Level of unemployment amongst school leavers from teaching establishments in the total number of registered unemployed, at start of year:

Year	1998	1999	2000
Number of unemployed	100	100	100
Including:			
■ School leavers from general education schools	4.9	8.4	9.7
■ Leavers from vocational education and training institutions	2.9	2.1	1.7
■ Leavers from specialised secondary teaching institutions (SSUZ) and higher educational establishments (VUZ)	1.9	1.6	1.6

Source: From the statistical report of the Committee for Employment, Ministry of Labour (annual)

The data from the household survey also confirmed the trend towards a fall in the unemployment rate amongst young people up to the age of 24. Nonetheless the rate remains high – more than three times higher than among all other age groups over the age of 25 (see Table 5). The unemployment level amongst women in the youngest age groups (16-20 years old) of the population of working age had fallen, compared with the previous year, as had their participation in education (see Table 7).

Table 7. Labour market and education/training situation of 16-25 year olds (%) at beginning of year:

	Percentage of individuals whose main activity is											
Males	**Education/Training**			**Employed**			**Unemployed**			**Other**		
Year	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**
16-20 year olds	58.60	53.90	57.40	18.10	18.20	15.90	7.00	8.90	6.60	16.30	19.00	20.10
21-25 year olds	5.20	5.10	7.30	77.80	75.00	75.80	10.60	13.70	10.30	6.40	6.20	6.60
16-25 year olds	34.00	32.20	35.30	45.60	43.40	42.40	8.70	11.00	8.30	11.70	13.40	14.00

	Percentage of individuals whose main activity is											
Females	**Education/Training**			**Employed**			**Unemployed**			**Other**		
Year	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**
16-20 year olds	55.60	57.20	54.90	19.90	22.50	20.70	10.10	8.80	7.00	14.40	11.50	17.40
21-25 year olds	7.90	7.20	6.20	70.70	75.00	74.40	7.60	8.00	8.00	13.80	9.80	11.40
16-25 year olds	33.40	33.40	30.90	43.50	47.50	47.20	8.90	8.40	7.50	14.20	10.70	14.40
Total												
16-20 year olds	57.00	55.60	56.20	19.00	20.30	18.20	8.60	8.90	6.80	15.40	15.20	18.80
21-25 year olds	6.60	6.30	6.70	74.20	75.00	75.10	9.10	10.60	9.10	10.10	8.10	9.10
16-25 year olds	33.70	32.90	33.10	44.50	45.50	44.80	8.80	9.70	7.90	13.00	11.90	14.20

Source: Figures from household surveys, carried out by the Ministry of Statistics and Analyses (1999-2000)
Note: Figures calculated at the beginning of each year.

There was a tendency over the year to a reduction in the level registered unemployment amongst women, at all levels of vocational education. However the level of unemployment amongst women remains high, at 61.2%, and indeed there is a rise in the indicator for young people in the 16-29 year old group.

The structure of the population registered as unemployed can be broken down in terms of education: higher education – 7.6%, specialised secondary– 15.5%, general secondary 64.4% and non-completed – 12.5%.

The distribution of the unemployed population older than 25 with different levels of education (ISCED 97), with breakdown by age and gender, calculated using the International Labour Organisation Method, reflects the same trends as the data for the registered unemployed (Table 8).

To improve the competitive power of the unemployed in the labour market special occupational consultancy services, psychological assistance and vocational training are offered. In 1999 the state employment agency sent 28 800 people on vocational courses, ie 9% of those who had gone to an employment agency about job placements (7.9% in 1998).

Special care has been given to the matter of vocational education for young people (16-29 years old), who constitute 78.5% of the total number of those sent on courses. Around 50% of unemployed persons registered with the agency, up to 18 years old and without any qualified skills, had the opportunity of going on a vocational course. The overwhelming majority of them (93.8%) were school leavers. To give this category of unemployed better quality training, the courses lasted for 9 – 11 months.

The practice of vocational training for the unemployed to suit employers' requirements, with a guaranteed job afterwards, is growing. In 1999 15% of those sent by the employment agencies on courses undertook their studies on this basis.

To widen the opportunities for job placements the unemployed were offered assistance to set up their own businesses, consultancy services, career advice and educational assistance available from the state.

Practical and administrative measures to assist employers in the creation of new jobs, using government job creation funds, enabled 5 865 new jobs to be created, while the help given to 72 small business led to the creation of 1 316 jobs.

For job placement of unemployed people not able to compete on equal terms in the employment market (young people, disabled people, those returning to work after release from a place of detention etc) around 1 000 additional jobs were created, 17 700 people were placed in work, and of these, 4 800 were under 18 years of age and around 1 000 were disabled. Government employment assistance funds provided reimbursement for 14 enterprises employing disabled people for the purchase of equipment to adapt the workplace to special needs.

We can see, therefore, that some of the principal socio-economic pre-conditions shaping education policy to a greater or lesser extent are:

- limited state funding opportunities, affected by the drop in GDP;
- no demand in industry to expand youth employment, curtailment in numbers employed in the state sector without development of the preconditions for growth in employment in the private business sector;
- state policy to maintain a smallish level of official unemployment, with the indicators, calculated by ILO methods, remaining high;
- direct relationship between the increase in the level of activity in young age groups and increase in the level of education, take-up of vocational qualifications and combination of vocational education and work experience.

Table 8. Unemployment rates by educational attainment of the population (25-59 years old) (%)

Years	Males									Females									Total								
	ISCED level 0-2			ISCED level 3			ISCED level 5-7			ISCED level 0-2			ISCED level 3			ISCED level 5-7			ISCED level 0-2			ISCED level 3			ISCED level 5-7		
Years	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
25-29 year olds	19.80	9.90	40.50	11.20	14.00	10.20	9.00	9.50	9.00	19.30	26.60	11.90	13.60	9.70	8.00	5.60	3.40	2.70	19.70	15.30	31.60	12.20	12.00	9.30	7.00	6.10	5.10
30-39 year olds	20.60	25.80	20.90	9.10	8.30	9.40	6.90	5.80	6.40	6.10	11.40	17.60	7.00	4.80	6.40	3.70	3.80	2.70	16.00	21.60	19.70	8.20	6.80	8.10	4.90	4.60	4.20
40-49 year olds	12.90	13.00	4.10	8.40	6.80	7.90	2.60	5.30	4.10	14.80	6.10	7.60	3.70	4.20	4.00	3.70	3.20	1.70	13.70	9.10	5.40	6.20	5.60	6.00	3.20	4.00	2.60
50-59 year olds	7.70	4.70	8.10	6.00	6.00	4.80	3.10	4.10	2.80	0.00	2.90	1.70	4.90	2.00	2.70	1.00	1.80	1.80	5.10	4.10	5.60	5.50	4.40	3.90	2.10	2.80	2.20
25-59 year olds	12.00	9.60	11.20	8.90	8.30	8.30	4.90	6.00	5.30	7.70	6.40	5.20	6.60	5.10	5.10	3.60	3.30	2.20	10.40	8.40	9.00	7.80	6.80	6.90	4.10	4.40	3.40

Source: Figures from household surveys, carried out by the Ministry of Statistics and Analyses (1999-2000).
Note: Figures calculated at the beginning of each year.

3. The Governance of vocational education and training

3.1 *Vocational education and training policy and legislation*

The goals and principles of the state policy of the Republic of Belarus on vocational education are aimed at its democratisation, continuation, and concern for the interests of the individual. The law 'On education in the Republic of Belarus' enacted in 1992 established state/public management of education. Provision was made for the establishment of public councils and associations made up representatives from the general public, education workers and enterprises on a territorial, occupational or other basis. Educational institutions were given considerable autonomy over the teaching process, finances and other areas.

A Programme for the Development of Vocational and Technical Education to 2005 was approved by the Council of Ministers of the Republic of Belarus in June 2000. It made provision for:

- the introduction of a new List of Integrated Teaching Specialisms, which would be multi-profile and flexible in available choice of models of vocational education and training at regional and local levels;
- assurance of the continuity of educational curriculum for vocational training at different levels;
- implementation of an individually centred approach;
- provision of social partnership in vocational education;
- introduction of information technology into the management of teaching establishments and the educational process;
- monitoring teaching staff needs;
- management of the quality of training for employees and specialists, based on educational standards and a special system of control indicators.

Intake into state vocational education and training establishments is via agreements with enterprises and organisations.

The development of a continuing professional development system is based on standardising legislation such as the Provision on higher vocational colleges, regional vocational education and training centres, vocational schools, vocational technical colleges, colleges and higher colleges, the Provision on a department of retraining and continuing professional development for specialist secondary schools and vocational education and training institutions, model Regulations on integrated teaching associations of vocational and technical establishments and specialist secondary institutions, and the Provision on lyceum classes (groups).

Future legislation and the development of a standardising framework regulating relations within vocational education will be put in place once preliminary laws have been adopted: 'On higher

education', 'On vocational and technical education', 'On special education in the Republic of Belarus', 'On the introduction of changes and amendments to the law of the Republic of Belarus 'On children's rights', and 'On educational book publishing'. It is also proposed that an independent state accreditation agency be set up, as well as a national system of monitoring development and quality control in education, with all relevant social partners involved in it.

It is envisaged that the vocational education and training intake will be widened to be available to the more disadvantaged groups - disabled children, orphans, children with special psycho-physical needs, children not in their parents' custody, etc.

3.2 *Responsible organisations, including social partners*

Two opposite trends were typical of the management of vocational education in Belarus in the 90s – the trend to centralisation and to decentralisation. The logic behind the devolution of authority to different management levels was driven by the importance of the goals to be achieved.

But the most pronounced trend in vocational education and training management in the first half of the 90s was the tendency to decentralise and to transfer many functions from the Education Ministry to regional bodies and educational institutions.

The most important aspect of this delegation of authority to lower management levels was firstly the transfer of financial provision for vocational colleges from the Republic Budget to regional budgets and secondly the transfer of Republic property to ownership at oblast level. At present the oblast (regional) management level is the legal subject (bearer) of vocational education and training property and financial resources. The vocational education and training institution is itself the manager (awarding body) of the funds and property allocated to it.

Unfortunately there still has been no special law for the allocation of management functions to different education levels, and these are therefore regulated under general Republic legislation.

Since the mid-90s there has been a firming up of the trend to centralise the management of vocational education. Today, the following functions are part of the management remit:

- development of a vocational education policy;
- selection of priorities and goals for quality changes in different types of educational institutions;
- development of state standards and teaching and methodology documentation packages for them.

A raft of governmental and departmental programmes for the development of education and training was elaborated in 1996-1998, on the initiative of the Ministry of Education. Once the measures envisaged in these were actioned, cooperation between the central and regional authorities, and with the management of the educational establishments, improved.

Future improvements in management efficiency will be driven by further devolution of authority from the Ministry of Education and by finding a variety of ways of encouraging social partnership. By decision of the Council of Ministers a suite of medium-term programmes was drawn up, enabling social partnerships to be constructed on a new basis, vertically as well as horizontally.

Educational institutions can take independent decisions on the organisation of the educational process, and financial and other activities within the limits set by legislation, model regulations for educational institutions and their charters. They are also able to work with businesses and regional and local labour markets, and draw up plans for intake to specific occupations; they can organise commercial activities and manage property. Educational institutions have to agree all main managerial decisions with the oblast education authorities.

Appointment to headships of educational institutions and methodological services, substantiation of funding and decision-making in the most important issues in teaching and practical training are the responsibility of the oblast education authorities, who also supervise the implementation of social support functions for children and local young people.

The Ministry of Education and the Ministry of Labour interact at many levels. In the mid-90s a Standard Framework of Reference was drawn up to regulate relations between the Ministry of Labour, the Ministry of Education, other sectoral ministries and departments and other central and local authorities in the implementation of continuing professional development for employees and training for the unemployed. At that time the Framework of Reference only defined the overall nature of relations between these authorities. By the end of the 90s, with more forceful expansion of management centralisation and the development of medium- and long-term forecasts and programmes for industrial and economic growth, the scope of the ministries and areas for interaction had both begun to expand significantly. Complete mutual understanding was achieved in the settlement of issues concerning qualification requirements, vocational training for the unemployed, guaranteed first work placement scheme for leavers from educational institutions and so on. There are still, however, certain areas where issues remain difficult to resolve – funding, and forecasting employment by sector, territory and occupational group.

Issues involving future economic development and funding are agreed with the Ministry of Economics. In this area, partnership is usually limited as all social programmes are subject to overarching financial and monetary forecasts and amendments.

However, further expansion of the Economic Ministry's functions (developing programmes for the social and economic growth of the country to 2010, programmes for long-term industrial growth and growth in other sectors, programmes to bring about quality changes targeted at employment restructuring, re-skilling and modernisation) will increase opportunities for social partnership in vocational education and training.

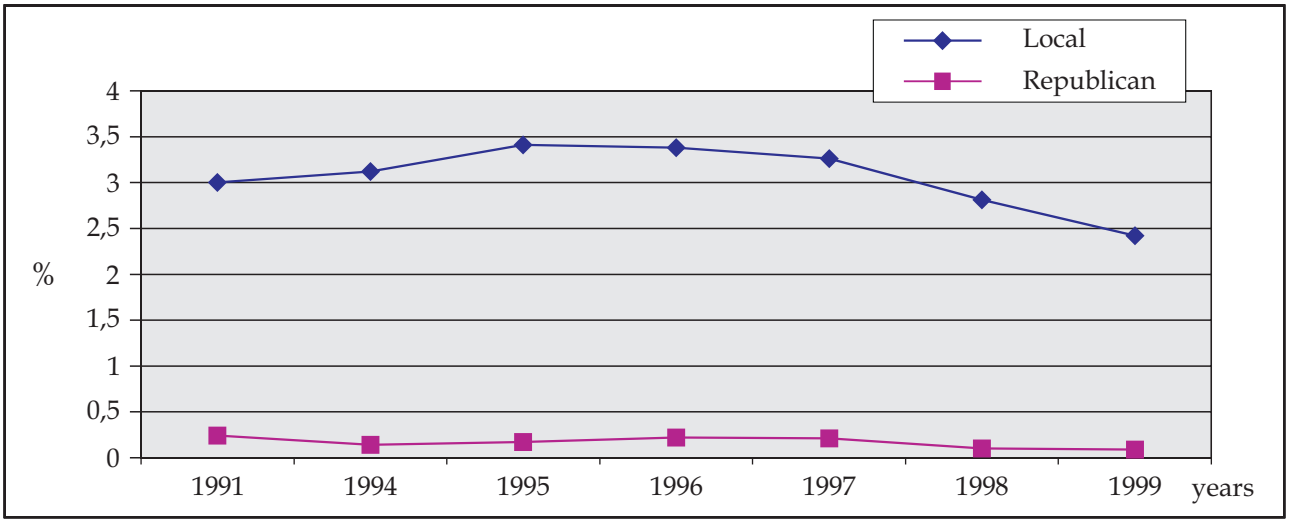
3.3 Vocational education and training financing

In recent years education has received 60-70% of the funding it needs for from the State Budget.

Budget expenditure on vocational education and training increased continuously to 1993. From 1994-1999 however there was a noticeable drop in expenditure – budget expenditure as a percentage of GDP was 0.58% in 1991 and 0.50% in 1999.

Vocational education and training is financed mainly – more than 97% - from local budgets (Fig. 2). The proportion of expenditure on vocational education and training within the State Budget as a whole in 1999 was 1.38%, virtually the same as in 1990 when it was 1.35%.

Figure 2. Share of expenditure, %, on vocational education and training in the Republican and local budgets



At the heart of the mechanism for creating budgetary resources for vocational education and training lies the principle of social support for students and teachers. There being no mechanism for budget expenditure on the basis of per-student quotas, the principle of social support serves to maintain a certain equality in the pay structure for teachers, catering and student grants. The general subsidy is the main transfer instrument, levelling out regional differences in funding.

From the 1992/93 academic year onwards, educational institutions for vocational educational and training have been actively seeking outside sources of funding. There is no standard procedure for constant monitoring of information sources for outside funding (sources of income at republic level). According to information released by oblast authorities on additional funding for vocational technical colleges, outside financing accounted for around 8% of total funding in 1995, 10% in 1997 and 12.5% in 1998.

The main source of additional funding for vocational education is the output of the educational institutions themselves.

New legislation sponsored by the Ministry of Education and the Ministry of Finance has given vocational education and training institutions the right to expand the types of activity they can undertake to attract outside funding. It is also expected that vocational education and training institutions will intensify their search for new sources of funding. At the same time, new guiding principles will be introduced to prevent financial interests from dominating pedagogical interests to their detriment.

Vocational training for the unemployed is funded by the State Fund for Employment Assistance which has an allocation for vocational training (payments on the basis of contracts with the educational institutions). The fund also covers expenditure on methodology provision for the teaching process, compensation to enterprises for training offered to the general public, and social benefit payments to unemployed persons sent on training courses.

In addition to these allocations from the State Budget for the development of vocational education and the Employment Assistance Programme, funding is also available for student maintenance from the Chernobyl Programme for liquidation of the aftermath of the accident.

4. The vocational education and training system

The education system in Belarus is progressing towards the creation of a set of conditions for lifelong training taking into account each individual's potential and capabilities.

4.1 Initial vocational education

The goal of vocational and technical education is to create conditions satisfying the educational needs of the individual, and to train the workers required for society and the running of the state in various occupations.

Vocational and technical education is based on the general secondary or basic level of education. Its development is at present typified by two trends; firstly, alignment of vocational education and training institutions with the general education school's senior level in vocational colleges, and secondly, integration with specialist secondary education in vocational technical colleges.

Vocational education is available in vocational and technical training centres (PTU), regional vocational education and training centres, higher vocational training centres (VPU), vocational lyceums and vocational technical colleges.

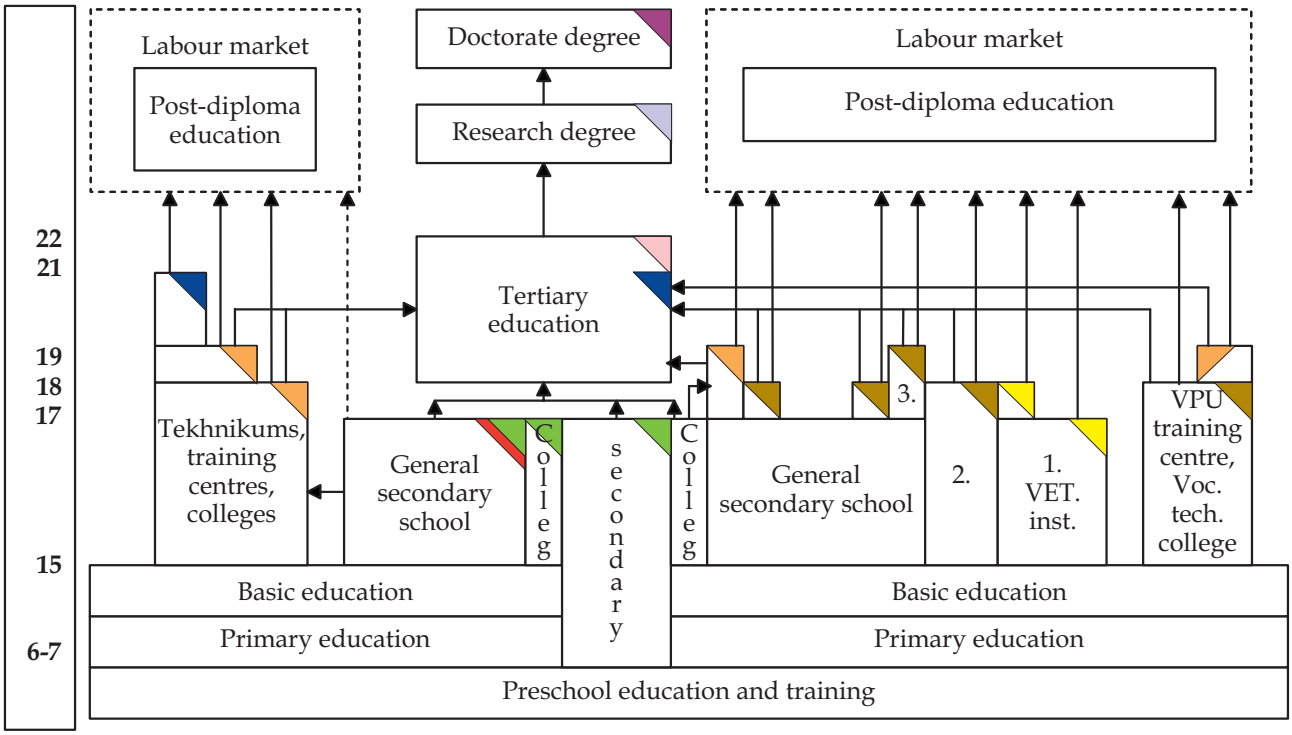
Belarus has a fairly good network of vocational education and training institutions adequately distributed throughout the country – although the number has decreased by six since 1990. As of the beginning of the 1999/2000 academic year, there were 249 vocational education and training institutions operating throughout the republic. Of these, 240 come under the Ministry of Education and the other nine under sectoral ministries. Of the total number, 35 are higher vocational training centres and 6 are regional centres for vocational education.

The reduction in the number of educational institutions was mainly due to the economic downturn in the industries for which the educational institutions prepared future employees. This reduction was in itself not a rational step, given the sharp drop in the number of young people in places.

The principal assets of the vocational education and training institutions were set up mainly in the 70-80s. In subsequent years there was a limited amount of new building and reconstruction work, and purchasing of new equipment and teaching aids. By now almost ¾ of the equipment has been in use for over a decade. These vocational education and training institutions have 76.5% of their computer equipment needs, only 11% up to date. In the next two years all vocational and technical training centres will be linked up to both republic and international information resources. Despite the problematical situation with the economy, the goal for 2001-2005 is to re-equip the technology in vocational education and training institutions and attract as many social partners as possible.

Recent years have seen increasing flexibility in the vocational education and training system. Each year the vocational education and training institutions offer training for 20-30 integrated trades and occupations and discontinue courses in the same number of narrow specialist qualifications. There is a continuous shift to broad-profile employee training. 77% of the more than 350 occupations for which training is currently offered in vocational education and training institutions are integrated or combined. Around 70% of leavers obtain two or more qualifications for one period of study. In addition, free catering – one meal a day – is still available in these establishments.

Diagram 1. Education system in the Republic of Belarus



Key to numbering and abbreviations:
1. training in vocational education and training institutions, offering basic education without secondary education
2. training in vocational education and training institutions, offering basic education, with secondary education
3. training in vocational education and training institutions, offering secondary education

VPU – higher vocational training centre

Vocational education and training institution - includes vocational technical training centre, regional centre for vocational education,vocational lyceum

Level of educational level:

- basic
- secondary
- vocational technical specialist secondary tertiary/higher

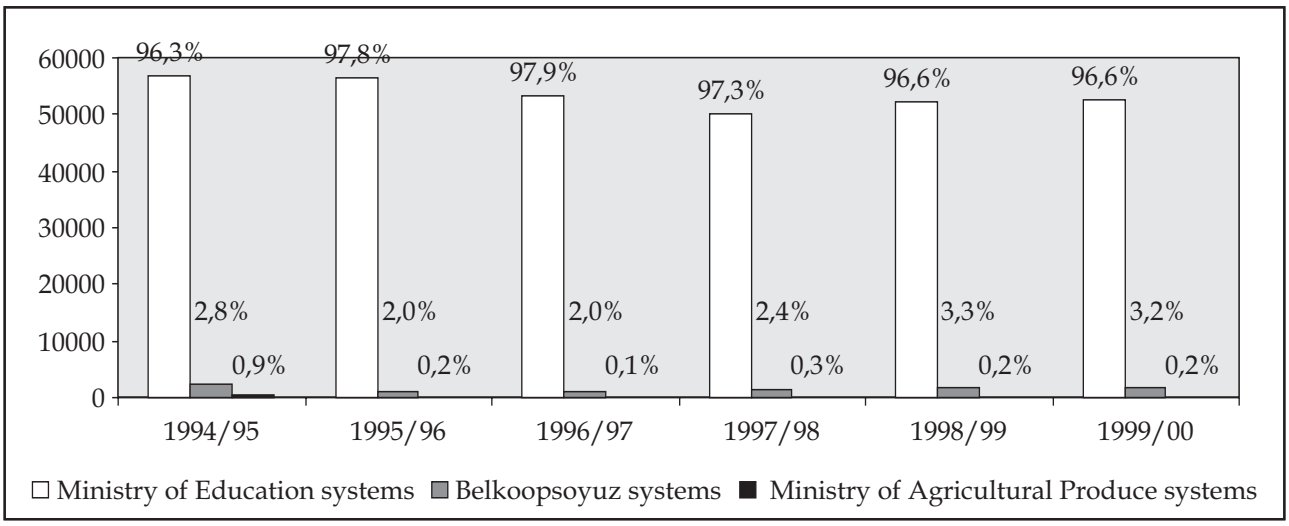
Educational certificate:

- Secondary school certificate
- Certificate of achievement of work qualification
- Vocational and technical education certificate
- Vocational and technical education diploma
- Specialist secondary school diploma
- Diploma of higher education (Baccalaureate)
- Masters degree
- Candidate of Sciences degree
- Doctor of Sciences degree

In the 90s key measures were taken to remedy the difficult situation with methodological and teaching aids. Before the collapse of the Soviet Union around 80% of the text book requirements in vocational education and training institutions had been supplied from Moscow. A publications system now had to be virtually created from scratch. In all, 80 new publications for vocational and technical education were issued in 1994-2000.

In the first half of the 90s the overall number of students accepted for training fell (Fig. 3), as did the level of the school leaver intake. From the mid-90s however there was a growing trend to increase the school leaver intake (from 130 100 in 1995 to 137 700 in 2000) but there was less emphasis on widening vocational training for the female population or young people with special needs. In the last two years, with the general trend to widen intakes and increase the proportion of school leavers at both levels, access to vocational education for disadvantaged young people has become easier. However, training for young women in vocational education and training institutions remains an issue. The proportion of young women in the 1999/2000 was 38%, down from 43% for the 1993/1994 academic year.

Figure 3. Number of students in vocational education and training institutions (in 000s)



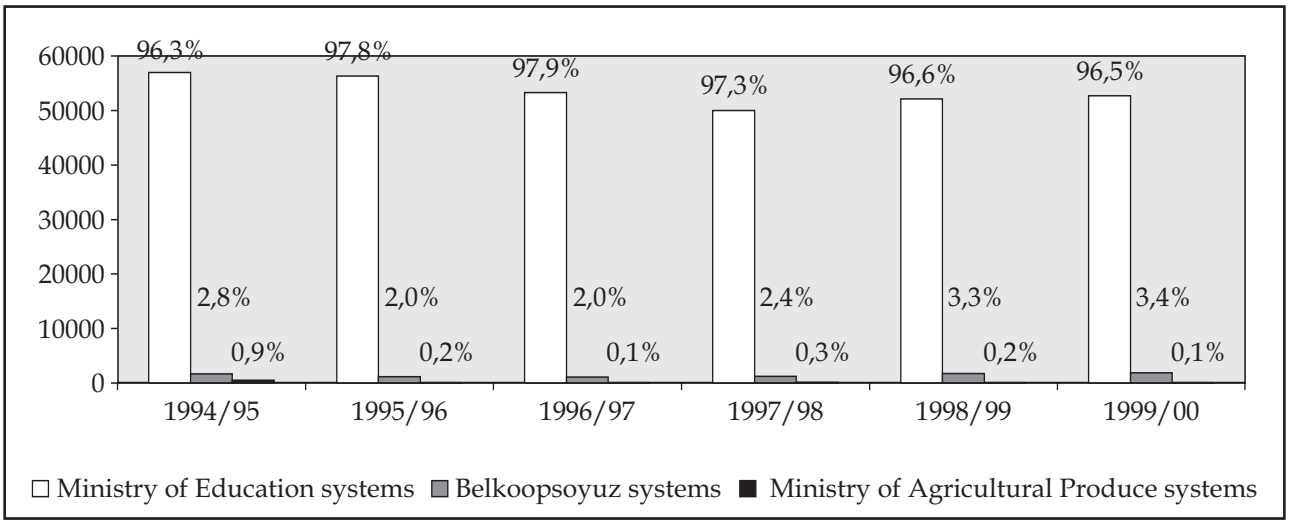
Source: Vocational education and training Institutions of Republic Belarus on beginning 2000/2001 academic year (statistical book), 2000, p. 18

The proportion of secondary school leavers in the student cohort is 18-19%, and the intake level shows a trend towards reduction. There is still a small and stable proportion (4-5%) of students receiving vocational training but not secondary education.

The graduation rate from vocational education and training institutions is similar to the one for intake (Fig. 4).

On completion of their courses at these establishments the leavers are allocated according to several options: some are placed in work, others find work independently or through an employment agency, some continue their studies at a specialist secondary teaching establishment (SSUZ) or higher educational establishment and some have to do their national service. Recently the number of leavers receiving a guaranteed first job placement has increased as has the number continuing their studies in the continuing professional development system. In 1999, 58.3% of leavers from vocational and technical teaching establishments were offered jobs in enterprises, 11.3% continued studying in higher educational establishment or specialist secondary teaching establishments, 20.5% started their national service and 9.9% received the right to independent job placement.

Figure 4. Number of workers completing training in vocational education and training institutions (in 000s)



Source: Vocational education and training instituons of Republic Belarus on beginning 2000/2001 academic year (statistical book), 2000, p.23

There is no report on job placement for leavers from vocational education and training institutions by sector of the economy. Those dropping out general education schools and vocational education and training institutions come under the supervision of the local committees for juveniles. Under current legislation they are guaranteed employment in enterprises.

4.2 Continuing training

Continuing professional development (CPD) for employees includes training, retraining, training for other combined occupations and qualification improvement (refresher courses). In all, in 1999, 427 600 people undertook training and qualification improvement (refresher courses). Of these:

- 34 700, or 8.2% of the number taken on by enterprises but having no previous vocation, received initial vocational training
- 42 300, or 9.9% of those released from employment and wishing independently to change occupation, were retrained (learned a new trade)
- 40 200, or 9.4%, were trained in different (combined) trades.
- Increased qualification within the same occupation and other forms of training – 310 400 or 72,5%.

The bulk of those undergoing vocational training, 72.6%, were employees of enterprises on qualification improvement (refresher) courses to keep up with new technologies and progress and multi-level training in standardisation, certification and quality assurance.

Training, retraining and qualification improvement (refresher courses) for workers, employees in enterprises and officially unemployed persons is offered by training centres, training course joint units, and training and refresher course departments in specialised secondary schools and vocational and technical training centres. Employees in enterprises are also trained at their place of work.

Vocational training for the unemployed in Belarus is offered for different occupation. Training in 150 occupations and specialisations is offered through the network of 400 educational institutions:

111 (29%) of these are vocational and technical training centres, 28 (7.3%) are higher educational establishment, 23 (6%) are specialist secondary teaching establishments, 61 are training and production centres, 52 are training centres, 48 (50.5%) are enterprises – operating through three centres set up with the employment service. In 1999, given the demand for labour and the need to improve competitiveness amongst the unemployed, the state employment service offered vocational training to 28 800 people, or 9.0% of those looking for job placements. Of these, 7 200, or 25%, studied in a vocational and technical training centre.

4.3 Training for teachers and trainers

In Belarus there are eight specialist schools and four higher institutes of education which offer occupational training to teaching staff.

At present 14 034 management and industry training staff are employed in Ministry of Education vocational education and training institutions. Of these, 7 154 are trade specialists and 4 034 are teachers. Considering the size of the student cohort there is a 20-30% shortfall of trade specialists.

Of the total number of heads, deputies and teaching staff, 56% have tertiary (university level) or partial tertiary education and 41% have specialist secondary education. Of the trade specialists, only 20.2% have tertiary education and 72.7% have specialist secondary education. Among the deputy heads and technical organisers the number of those with specialist secondary education is also high. Of the teachers in general vocational and specialist disciplines, 95.4% have tertiary education; however, 81.2% of these – people with a technical education – have been adequately trained in psychology and pedagogy.

The existing network of educational institutions and the scope of training for trade specialists (over 1 000 a year) generally covers all vocational fields and would, overall, be adequate to meet their requirements were it not that the high 'leakage' of trade specialists due to poor rates of pay and limited opportunities to improve qualifications and professional ability makes the issue of staff shortages chronic.

The transformation of the country's vocational schools, with their multifunctionality, alternatives in educational curriculum and new qualification needs brought about by changes in the working environment due to the expansion of the non-state sector and the increase in small businesses, has led to a need for teachers able to be actively involved in planning, administration and organisation as well as innovative pedagogical practices.

A start has already been made in the country's vocational education and training system to implement a new generation of teaching aids based on the formulation of vocational education and training standards, curriculum models, standard study plans and curricula. The shift from an information-imparting model to the idea of a teaching process based on evolving training centred on the individual cannot be implemented without suitable training for teaching staff able to put new educational approaches into practice.

To address these issues, Belarus is at present setting up a new tertiary-level college – an educational non-university institution running a 4-year course and offering the trade specialist the new qualification requirements.

Particular importance is attached to the development of a system of retraining and qualification improvement for teachers in the vocational school. The existing output of the Republic Institute of Vocational Education (on average 3 600 a year), which also has the burden of providing qualification

improvement for specialised secondary teaching staff, cannot meet this demand. At the beginning of the 1999/2000 academic year the number of applications for courses to improve the educational level of technical trainers in vocational education and training institutions was 4 157. It is possible to increase opportunities for qualification improvement and staff retraining by setting up branches of the Republic Institute of Vocational Education and organisations at regional level, and also by running courses independently in educational institutions.

5. Anticipation of skills needs and standards

5.1 Skills needs and standards

The creation of a proper labour market is taking place in the difficult conditions of structured adjustments to the economy, and the closing down of redundant state enterprises and privatisation of others. The transformation of the macroeconomy and the expansion of the microeconomy entail functional changes in occupations which in their turn force changes in the qualification structure.

The relationship between the vocational education and training system and the evolution of the labour market has still not been fully explored. Traditional training has been accustomed to use those professional practice models which were well studied in the past. The rapidly changing socio-economic, technological, information and communication systems impose new demands on the education paradigm. Educational concepts are moving away from the traditional exclusive importance of the knowledge sets and skills forming an integral part of a specific job and now focus primarily on the principles of a holistic preparation for working life (continuing professional development). This is one reason for the multiplicity and variety of professional practice models, educational programmes and ways of organising the training process. This also gives rise to society's need for standardised requirements.

The main source of a definition of standard requirements is actual professional experience, not just in the sense of using technology but in all aspects of professional life – creative, communications skills, educational etc.

The educational standard is the most important point along the route to smoothing the structural unbalance between supply and demand in the labour market.

One of the most important aspects of government employment policy is the formulation of legislative and administrative mechanisms to support effective cooperation between the vocational education and training system, employers and employees. Up to now, however, there has been no clear-cut system for authorised representatives from all sides to develop vocational education standards.

Educational authorities play a decisive role in formulating standard educational requirements and implementing them in the curriculum, and indeed the Ministry of Education has been an initiator in the development of such standards. Draft vocational education and training standards have been elaborated by the Republic Institute of Vocational Education. The structure of a vocational education and training standard incorporates essential requirements for a specialist and also new approaches to content design and quality assessment of the training of qualified staff.

The educational standard for an academic specialisation is included in the List of Standardising Documents which regulate vocational education and training. A vocational education standard includes a list of functions for which the specialist must be trained, the competencies which are required to implement them, a forecast of the developments in production technology, requirements for professional performance, and required periods of training.

The Ministry of Education has worked most closely with the Ministry of Labour in the formulation of standards and their pedagogical interpretation in curriculum planning. The combined forces of these two ministries and their research departments have studied the marketing of the labour

market, investigated shifts in qualification requirements, defined principles for the integration of occupations and formulated sector requirements for different educational levels.

In tandem with this, a study was made of forecast parameters and the outlook for growth in sectors associated with expansion in technology, with the on-going formation of the non-state sector and small business, improvements in management structures and so on. The thoughts and opinions of employees in key enterprises and representatives of scientific associations, and official documents (Programmes for the future development of sectors of the economy) were all incorporated in the study.

5.2 Curriculum development

The main documents used in implementation of the requirements of the educational standard are the outlines of vocational qualifications and educational curriculum. The outlines of vocational qualifications offer a description of all types of activity carried out by specialists in connection with the requirements for knowledge, skills and practical results in the course of their work. In its detail design the curriculum fulfils the role of a set tools for a particular specialism, in terms of systems and methodology.

Specific features of the new content of educational curriculum are the strengthening of the social and humanities component, integration of individual qualifications into an academic specialism and the inclusion of an IT curriculum.

Work on the standards and educational curriculum has only gone through its first stage. Draft standards and vocational education and training curriculum have been drawn up for 27 integrated specialisms (out of 100). The drafts have been sent for appraisal to science and methodology centres, educational institutes, oblast administrations and the Ministry of Labour.

To date, sectoral and territorial procedures for the development and support of education have been drafted as part of the long-term Programme for vocational education and training development. It is expected that there will be collaboration on the appraisal of all new transformations targeted at supporting quality in the training of specialists, and that the various sectors of the economy will create additional requirements for the content of vocational training. It is proposed to set up Consultation Committees, under the Ministry of Education, to assess the new curriculum and implement procedures regulating relations between the sectors.

The principal goals of the Republic Institute of Vocational Education's research work, over a period of years, are to describe a methodological for the development of standards, formulate standard requirements, develop a set of tools for use in the selection of curriculum content, and draft standard curriculum documentation.

5.3 Research

Key scientific staff and the requisite material resources for developing vocational education in Belarus have been assigned and allocated to the Republic Institute of Vocational Education, set up in 1993 under the aegis of the Ministry of Education.

In the course of this research work, the main focus of attention will be the transformation of vocational education in the context of reform to tertiary and general secondary education, improvements in content and methodology, development of a quality assurance system for

vocational education based on educational standards, and the cohesive functioning of new types of educational institutions.

The most significant outcomes of research thus far have been the formulation of the *Concept of development of vocational education in the Republic of Belarus* and the *List of teaching specialisms and vocational education and training qualifications*; standardising documents for a vocational education and training system have been drafted and content and methodology have been formulated. The *Universal state classification of the Republic of Belarus for 'Specialisms and Qualifications'* has been drawn up, the concept of vocational education and training standardisation has been framed and standard guidance documents for the methodologies involved in designing and drafting standards have been written. To describe these results in more detail:

a) *Development of a quality assurance system for vocational and technical education in the current economic and socio-cultural conditions*: This analysis the present state and effectiveness of vocational schools in Belarus. The importance of improvement in the quality of vocational education in the socio-cultural and economic space is assessed as a key factor in development, changing and reinforcing the new status of the individuality of the future employee, giving key support economic reforms and facilitating the growth of the intellectual, spiritual and aesthetic potential of society. The systemic nature of quality is demonstrated and, on this basis, the principal trends in the construction and creation of a quality assurance system in vocational education are highlighted. Valuable information on subsystems in standardisation, quotas and monitoring in quality control has been accessed. The potential for setting up a quality assurance scheme for vocational education has been substantiated.

b) *Background and drafting of standardising documents regulating relations between vocational education and training institutions and enterprises, organisations and establishments in the socio-economic sphere in the Republic of Belarus*. This analysis looked at the negative outcomes of the processes which led to the total rejection of enterprises and public institutions. The *Provisions on secondary vocational and technical training centres as the base enterprise (association, organisation)*, effective since 1985, set out the need to formulate new standardising documents regulating relations between vocational education and training institutions and enterprises, organisations and institutions. It was established that the concept of social partnership could be put in place, using the content of these documents as a basis. Conceptual principles were formulated and a draft of the *Provisions on relations between vocational education and training institutions and enterprises* prepared.

c) *Development of model provisions for model arts and technical colleges, conditions and criteria used in the decision-making process on awarding an educational institution the status of College*. Work practices in colleges throughout the country and abroad were studied and an analysis produced of the legal framework in which colleges operate; from this, a draft *Provision* on colleges, their structure, model colleges and curriculum which could be offered in them was formulated. A list of documents for awarding an educational institution the status of College was drawn up and validated, as were the criteria for the decision-making process for awarding College status.

d) *Development of a set of standard methodological documents on standardisation in a vocational education and training system*. National and international literature on issues involved in the development of standards and the use of standards in vocational education was collected, analysed and summarised. The educational content of ten specialisms and the curriculum documentation for them was studied. Research resulted in the preparation of the *Concept* of standardisation in the vocational education and training system, the procedure for developing educational standards, a model educational standard, and drafts of standards for ten specialisms.

e) *Scientific and methodological framework for the content of vocational education, and development of the framework, with reference to the new vocational qualification structure for staff training*. National and international literature on the issues involved in the development of standard features in

qualifications, curricula and curriculum was collected, analysed and summarised. An analysis was made of curricular material currently in place in Belarus and other countries and other documentation used in education. Research resulted in the drafting of principles for integrating individual qualifications into taught specialisms and model features for qualifications and curricula were developed.

f) *Development of the Universal state classification of the Republic of Belarus for 'Specialisms and Qualifications'*. Using synergetic and systemic approaches, a procedure for formulating the classification was developed. The Classification offers a unified approach to the creation of a system of specialisations and qualifications at three levels of vocational education (tertiary, secondary specialist and vocational technical).

g) *Theoretical framework for designing a model of specialisms and curricula for colleges*. An analysis was made of the labour market and the activity of specialists with specialist secondary education in industrial conditions. This enabled the researchers to identify non-conformities between the specialists' level of training and their functions and tasks. The conclusion was drawn that the level of their theoretical knowledge and had to be improved and their practical focus and purposefulness strengthened. Another conclusion reached was the need to set up regional tertiary colleges and, through them, offer specialists appropriate higher education and reinforcement of their practical focus. A 'model specialist' was developed. Theoretical frameworks for curricula in regional tertiary colleges were outlined.

h) Other research areas were:

   i) Development of content for training management teaching staff in vocational education and training systems;

   ii) Routes to socialisation of students in a vocational school;

   iii) Development of an integrated health and safety at work system, and psychophysiological and sanitary parameters for the optimisation of competent students in vocational education and training institutions;

   iv) Development of a method of measuring the level of culture in vocational teaching in educational institutions;

   v) Development of the content of qualification improvement based on a systemic approach, adjusting to the requirements for reform in vocational education;

   vi) Continuous psychological education in the vocational school in Belarus.

This research resulted in a basic framework, and curricula were developed for training managers working in the education field. New approaches for improving the content of qualification improvement courses for educational workers in vocational education and training institutions were outlined. A suite of preventative health measures for students in vocational education and training institutions was elaborated, and standard signifiers for the vocational, psychological and social qualities required in the contemporary environment by employees and specialists were drawn up, etc.

In the Republic of Belarus the work of the National Observatory set up by the European Training Foundation, is becoming more and more important.

The Observatory is becoming not just a centre for the exchange of information on vocational education; it is a centre for scientific collaboration within the Republic Institute of Vocational Education, the National Education Institute, the Republic Tertiary School Institute and faculties in higher educational institutions where the issues surrounding the labour market and vocational education can be addressed.

Annexes

1. *Bilateral and multilateral sponsorship in vocational education and training*

The Republic of Belarus is in a phase of economic and political transition from a planned economy to a social market economy. The country is in want of external support and constructive help. Over a period of years such help was and is available in the form of know-how transfer and collaborative partnerships. International cooperation in vocational education and professional development is of central importance.

During these years of cooperation with other countries a raft of key problems emerged; these were always a centre of focus in annual plans and curriculum for the training and retraining of specialists and managers for all sectors of the economy, and all the programmes took the country's priority issues into account in their planning.

Once the initial stage of general exchange of experience about specialists' requirements for vocational education and requirements for vocational and technical education systems was passed, cooperation in the area of vocational education very rapidly reached a level of intensive, focused and constantly expanding improvement and development.

The main thrust of this cooperation was joint development of structures for training staff in commercial work, and assistance in the growth of small and medium-sized businesses, backed up with vocational training and retraining programmes.

Of particular significance is the joint action to set up model vocational education and training centres pioneering innovatory methods to modernise whole groups of occupations with a view to harmonising a training system for personnel, aligning it as closely as possible both to issues of practice and market needs. The Model Centre for Vocational Education in Economics was the first Model Centre, set up in the Republic Institute of Vocational Education in 1994 with the assistance of the Federal Institute of Vocational Education and the Private Economic Academy (Germany). It is currently the base for theoretical and practical courses in marketing, management, accountancy, the national economy and industrial economics, health and safety at work and ecology, and use of the computer.

In August 1996 a new Byelorussian-German Model Centre was set up, under the international TRANSFORM project, in the town of Bobruisk, as part of the Bobruisk Road Transport Tekhnikum, with the assistance of the Federal Institute of Vocational Education and Volkswagen's Educational Institute (Germany). The aim of this Centre was to train a new kind of specialist in vehicle servicing and to offer continuing professional development to road transport specialists. The Model Centre is tasked with giving students a practical training and an occupation in demand; it also offers continuing professional development courses to specialists in the country's single-profile teaching institutions and road transport enterprises. Training is based on a new curriculum which reflects the experience of vocational training in car mechanics in Germany and is geared to the needs of vehicle servicing in the Republic of Belarus. To facilitate acquisition of new technologies through the Model Centre, German-Byelorussian seminars are run for road transport specialists.

Two Teaching and Training Companies were set up with the assistance of the Federal Institute of Vocational Education and the Private Economic Academy (Germany), as part of the Minsk Higher Technical College and the Vitebsk Industrial and Technical Tekhnikum. The German partner provided the teaching companies with equipment for the practical orientation courses in economics, specialising in 'Secretary/typist with knowledge of book-keeping, typing in foreign languages, and modern office technology', 'Economics and management of enterprises' and 'Manager-Economist'. The training companies are able to train people of any age and provide re-skilling and retraining for the unemployed.

Thanks to support from the Carl Duisburg Society (West Germany) a series of seminars was held on 'Management in vocational education', 'Continuing development and retraining the adult population', and 'Vocational education for disadvantaged people'. In the course of these seminars heads of vocational education and training institutions were able to learn about work in market conditions. Business plans and projects for changing the profile of the institutions were drawn up.

In 1997 a tripartite agreement was arranged under the TRANSFORM programme between the Federal Institute of Vocational Education (Germany), the Centre for Vocational Education (Lomza, Poland) and the Republic Institute of Vocational Education (Minsk, Belarus) to set up within the Minsk Higher Technical College a Model Laboratory for courses in programming and microprocessor control maintenance. Equipment from Germany and methods from Poland are used in the teaching process to train students as 'technicians in the servicing of automated equipment'.

Seminars were held for managers and teachers in finance and economics colleges and technical institutes, as part of the 'Training in Banking' project run by the Republic Institute of Vocational Education and the Teaching Academy for Training in Banking (Berlin, Germany), and six teaching modules were devised and implemented. These were:

➥Movement of means of payment

➥Passive operations

➥International accounting standards

➥Securities

➥Credit operations

➥Work with foreign partners.

To promote cooperation in vocational education the Republic Institute of Vocational Education held a conference, the International Conference on Science and Practice, in December 1999. The conference theme was 'An Open Vocational Space – Route to the Future'. The conference enabled the participating countries to discuss the following issues:

➥Internationalisation of the labour market and job mobility

➥Economics of vocational education

➥Development of a vocational space

➥Forms of international cooperation in vocational education between countries.

In 1996 the European Training Foundation (Turin, Italy) set up 23 National Observatories. The National Observatory of the Republic of Belarus observes trends in the labour market and identifies priority areas in vocational education. It collects data on vocational education, informs the higher authorities of current trends and facilitates exchange of information between countries.

2. List of abbreviations and acronyms

АЭС	Атомная электростанция	Nuclear power station	-
ВВП	Валовой внутренний продукт	Gross domestic product	GDP
ВПУ	Высшее профессиональное училище	Higher vocational college	-
ВУЗ	Высшее учебное заведение	Higher educational establishment	VUZ
МОТ	Международная организация труда	International Labour Organisation	ILO
МСКО	Международная классификация образования	International classification of education	ISCED
МСКП	Международная стандартная классификация профессий	International standard classification of occupations	-
НИИ	Научно-исследовательский институт	Science and Research Institute	NII
НИР	Научно-исследовательская работа	Research	-
ИРЧП	Индекс развития человеческого потенциала	Human potential development index	-
ИСО	Международные стандарты по управлению качеством	International quality control standards	ISO
ОКСК	Общегосударственный классификатор Республики Беларусь “Специальности и квалификации”	Universal state classification of the Republic of Belarus for ‘Specialisms and Qualifications’	-
ООН	Организация объединенных наций	United Nations Organisation	UNO
ПО	Профессиональное образование	Vocational education	-
ПТК	Профессионально-технический колледж	Vocational technical college	-
ПТУЗ	Профессионально-техническое учебное заведение	Vocational technical education institution	VET institution
ПЭВМ	Персональная электронно-вычислительная машина	Computer	-
РИПО	Республиканский институт профессионального образования	Republic Institute of Vocational Education	-
ССУЗ	Среднее специальное учебное заведение	Secondary specialised teaching institution	[SSUZ]
УМЦ	Учебно-методический центр	Education and methodology centre	s-
УПК	Учебно-производственный комбинат	Training and production centre	-
ЧАЭС	Чернобыльская атомная электростанция	Chernobyl Nuclear Power Station	-
-	-	Continuing professional development	CPD

3. Glossary

Gross Domestic Product (GDP): key indicator of the national accounting system in the Republic of Belarus. Expressing the cost of goods and services produced in all sectors of the economy in the country and intended for end consumption, accumulation and net export.

State Budget: this is the main fiscal plan for the formation and spending of financial resources in support of the functions of the organs of state power. The State Budget combines the Republican Budget and local budgets.

The average monthly wage of employees is found by dividing the actual accrued pay fund of pay by the average establishment staff total used for calculating the average wage, and by the number of months in the particular period.

Labour resources: this is the population of working age, of both genders (with the exception of non-working disabled people and groups of non-working people receiving an age-related pension on preferential terms) and also other employed persons (teenagers and the population of people older than the working age).

The **working age** of the population is 16 to 59 for men, and 16 and 54 for women.

Urban and rural populations: the term is allocated by place of residence; urban population applies to those living in populated areas legally classed as urban (town, town type of settlement, industrial and resort settlements). All other populated areas are rural.

Economically active population: that part of the population offering its labour for the production of goods and services. The economically active population includes all the employed population and the unemployed.

Economically non-active population: those persons not considered employed in economic activity or the unemployed of working age.

Employed: these are persons working in enterprises, in institutions or organisations of all types of legal ownership including small private businesses, and the self-employed.

Unemployed and registered with the state employment agency: persons able to work and residing in the Republic on a permanent basis who are not in work nor are engaged in entrepreneurial activity, are not studying in day teaching establishment or are not engaged in military service and are registered with the state employment agency.

Unemployment index: this is the ratio of unemployed to the number of the economically active population.

Number of registered unemployed: these are persons registered with the state employment agency.

4. Main organisations

Republic Organs of State Management and Administration	Telephone
Ministry of Education of the Republic of Belarus Ul. Sovetskaya 9, 220010 Minsk, Republic of Belarus Министерство образования Республики Беларусь Республика Беларусь, 220010, г. Минск, ул. Советская 9	227-47-36
Ministry of Labour of the Republic of Belarus Pr. Masherova 23, 220004 Minsk, Republic of Belarus Министерство труда Республики Беларусь 220004, г. Минск, пр. Машерова, 23	206-38-84
Committee for Employment, Ministry of Labour of the Republic of Belarus Pr. Masherova 23, 220004 Minsk Комитет по занятости населения при Министерстве труда Республики Беларусь 220004, г.Минск, пр. Машерова, 23	222-49-50 222-49-51
Ministry of Economics of the Republic of Belarus Ul. Bersena, d 14, 220050 Minsk Министерство экономики Республики Беларусь 220050, г. Минск, ул. Берсена, д.14.	222-60-48
Ministry of Statistics and Analysis of the Republic of Belarus Pr. Partizanskii, d 12, 220070 Министерство статистики и анализа Республики Беларусь 220070, г. Минск, пр. Партизанский, д.12.	249-52-00
Republic Institute of Vocational Education (RIPO) Ul. Libknekhta 32, 220050 Minsk Республиканский институт профессионального образования (РИПО) 220050, г. Минск, ул. К.Либкнехта, 32	220-09-92
National Institute of Education (INO) Ul. Korolya 16, 220004 Minsk Национальный институт образования (НИО), 220004, г.Минск, ул. Короля, 16	220-59-09
Republic Institute of Colleges and Universities Ul. Moskovskaya 15, 220001 Minsk Республиканский институт высшей школы (РИВШ БГУ), 220001, г. Минск, ул. Московская, 15	222-83-15
Academy of Postgraduate Education Ul. Ulyanovskaya 8, 220600 Minsk Академия последипломного образования 220600, г.Минск, ул. Ульяновская, 8	226-13-06
Computerisation and Analysis Centre (VATs) Ul. Zakharova 59, 220088 Minsk Вычислительно-аналитический центр (ВАЦ) 220088, г. Минск, ул. Захарова, 59	236-15-94
Regional Education and Methodology Centres	
Brestskaya oblast Education and Methodology Centre Ul. Kuibysheva 34, 224000 Brest УМЦ Брестской области 224000, г. Брест, ул. Куйбышева, 34	8-01622 3-38-13 3-37-57
Vitebskaya oblast Education and Methodology Centre Ul. Lenina 8, 210015 Vitebsk УМЦ Витебской области 210015, г. Витебск, ул. Ленина, 8	8-0212 37-44-18 37-45-77
Gomelskaya oblast Education and Methodology Centre Ul. Pervomaiskaya 18a, 246000 Gomel УМЦ Гомельской области 246000, г. Гомель, ул. Первомайская, 18а	8-0232 53-86-17 53-38-20

Grodienskaya oblast Education and Methodology Centre Ul. Gorkogo 79, 230011 Grodno УМЦ Гродненской области 230011, г. Гродно, ул. Горького, 79	8-0152 31-74-81
Mogilevskaya oblast Education and Methodology Centre Ul. Yakubskogo 18, 212026 Mogilev УМЦ Могилевской области 212026, г. Могилев, ул. Якубовского, 18	8-0222 26-83-29
Minskaya oblast Education and Methodology Centre Ul. Vitebskaya 21, 220029 Minsk УМЦ Минской области 220029, г. Минск, ул. Витебская, 21 а	226-59-79
Minsk Education and Methodology Centre Ul. Zhelznodorzhnaya 18a, Minsk УМЦ г. Минска г. Минск, ул. Железнодорожная, 18а	213-12-27

5. *Bibliography*

1. Statistical Yearbook of the Republic of Belarus. Minsk, 1995, 1999, 2000
2. Form N 2-T, N 3-T. Summarised report on the number of unemployed and placement in employment for January-December 1995, 1996, 1997, 1998 and 1999
3. Staff numbers, composition and vocational training in 1999. Minsk. 2000
4. Belarus. Choice of path. National report on human development, 2000. PR UNO
5. Constitution of the Republic f Belarus, 1994 (with amendments and supplements). Minsk. 1997
6. On the main trends in the development of a national system of education. Decree of the Council of Ministers of the Republic of Belarus of 12 April 1999, no. 500
7. Education for all: Trends in the development of a national system of education. National Report of the Republic of Belarus. Minsk. 1998
8. Main trends in the development of all echelons in the national system of education. // *Nastaunitskaya gazeta*, 24.11.1998. No. 141 (4922)
9. Vocational technical schools at the beginning of the 1998/99 academic year. Statistical Yearbook. Minsk. 1999
10. Republic of Belarus in figures, 2000. Short statistical collection
11. Strazhev, V I. State and paths of development of school education in the Republic of Belarus. Educational edition. Minsk. 1997
12. Specialist secondary education institutions of the Republic of Belarus at the beginning of the 1999/2000 academic year. Statistical Yearbook. Minsk, 1999
13. Specialist secondary education institutions of the Ministry of Education at the beginning of the 1999/2000 academic year. Statistical Yearbook. Minsk. 1999
14. Concept of the development of vocational technical education in the Republic of Belarus. Approved by Decree No. 795 of the Council of Ministers of the Republic of Belarus, dated 01 June 2000
15. Ministry of Education of the Republic of Belarus. Collection of standardising documents on the activity of vocational and technical education institutions of the Republic of Belarus, in 5 parts. Laws, decrees, regulations, provisions and instructions. Minsk. 1997, 1998

16. Collection of standardising documents on the activity of specialist secondary education institutions of the Republic of Belarus. Decrees, regulations, provisions and instructions. Minsk. NMTsentr, 1997

17. Decree no. 795 of the Council of Ministers of the Republic of Belarus, dated 1 June 2000, 'On the concept and programme of development of vocational technical education'

18. Order no. 426 of the Ministry of Education of the Republic of Belarus, dated 30 June 1999, 'On approval of the Regulations on vocational schools and the Regulations on vocational technical colleges'

19. Standard provisions on continuing professional development for employees, approved by regulations and provisions of the Ministry of Education and the Ministry of Labour of the Republic of Belarus, 2 June 1995, no. 201/51

20. Provisions on continuing professional development for managerial staff and specialists, approved by decree no. 20 of the Cabinet of Ministers of the Republic of Belarus, dated 11 December 1995

6. *Country-specific bibliography*

National Observatory Stocktaking Report (1998, 1999)

This report contains information on the development of the vocational education and training sector prepared by officials of the National Observatory and leading experts of the Republic of Belarus in the field of the labour market and vocational education and training with the support of the ETF.

The materials of the report are a good basis for the development of further in-depth studies by National Observatory experts and other scientific groups on the problems of the labour market, vocational education and training, social partnerships, and their interrelationships. It also describes the practical activities underway in the reform of Byelorussian vocational education and training.

In-Depth Study Report (1999)

This work discusses the labour market situation under reform conditions in social relations, aimed at socio-oriented market. The demographic situation in the republic, employment, its age structure, the educational level of employees, the gender structure of employment, different sorts of employment, and unemployment were analysed.

Social Partners Report (1999)

'The Role of Social Partners in developing Training in Belarus'. The objective of this report is to describe the current situation, involvement, recent development and good practical examples in the area of social partners.

Key Indicators Report (2000)

This report presents statistical information on the vocational education and training system and Labour Market situation in Belarus in recent years. Key indicators were developed with the European Training Foundation prepared in two rounds.

These reports can be obtained from the National Observatoty of Belarus.