



**UNEVOC**

International Project on Technical and Vocational Education  
Projet international pour l'enseignement technique et professionnel

**The Role of  
Technical and Vocational Education  
in the Education System  
of the Russian Federation**

The International Project on Technical and Vocational Education (UNEVOC) is a project of the United Nations Educational, Scientific and Cultural Organization (UNESCO). Its purpose is to contribute to the development and improvement of technical and vocational education in Member States.

UNEVOC works in *three programme areas*:

*Programme Area A* deals with the international exchange of experience and the promotion of studies on policy issues. It is devoted to *system development* in technical and vocational education.

*Programme Area B* is devoted to strengthening national research and development capabilities, that is to the development of *infrastructures*.

*Programme Area C* concerns access to data bases and documentation in its broadest sense, in other words, with *information and communication*.

The basic concept behind *Programme Area A* is to *enhance the role and status of technical and vocational education* within national education systems.

UNESCO held a consultation in 1993 with experts from different regions of the world in order to identify some of the factors which determine *role and status of technical and vocational education*. Based on the findings, a series of case studies has been initiated on the relevance of these factors within given national education systems.

The present study on "The Role of Technical and Vocational Education in the Education System of the Russian Federation" has been prepared in this context.

This study was prepared by Prof. I. SMIRNOV, Director, Institute of Development of Vocational Education of Russia, in March 1995, in close collaboration with Dr. D. SOLOMAKHIN, Deputy Head, Department for Personnel Training, Russian League of Industrialists and Entrepreneurs, and Dr. E. SEDYKH, Senior research fellow, Institute of Development of Vocational Education of Russia.

This print version has been prepared at the  
UNEVOC Implementation Unit ♦ Fehrbelliner Platz 3 ♦ 10707 Berlin ♦ Germany  
Fax [+49] (30) 86 49 15 41 ♦ E-Mail: info@unevoc.de ♦ Web: www.unevoc.de

© UNESCO 1995

Date of this reprint: 25 January 1999

Document Nr. ED/IUG/003

# The Role of Technical and Vocational Education in the Education System of the Russian Federation

## Table of Contents

<b>1 Introduction .....</b>	<b>3</b>
<b>2 Interdependence between vocational education and labour market .....</b>	<b>3</b>
2.1 The Labour Market .....	4
2.2 Employment .....	4
<b>3 Reform of vocational education .....</b>	<b>6</b>
3.1 Unemployed Youth .....	9
3.2 Social Consequences .....	9
<b>4 The State Standard as the basis for a new model of vocational education .....</b>	<b>11</b>
<b>5 Vocational education as a means of revival of Russian economy .....</b>	<b>13</b>
<b>6 Conclusion .....</b>	<b>15</b>
<b>References .....</b>	<b>16</b>
<b>Annex .....</b>	<b>17</b>
1 Development of Vocational Education 1985-1994 .....	17
2 Students .....	17
3 Graduates .....	18
4 Personnel .....	18
5 Standard Regulation .....	18



## 1 Introduction

The Russian experience of transition from the totalitarian model to democracy has great historical value and importance for many countries which have chosen this uneasy road. That is why it is very useful to analyze both its positive changes and mistakes.

From the question "to be or not to be" concerning the market economy in Russia the discussions have turned to the problem of how to transform the monopolized economy into the market one. The adaptation of enterprises to market relations and the process of creating various forms of property, especially private property, are going on.

There have also been deep changes in the economic and social spheres.

A free labour market is being established for the first time.

It has necessitated fundamental reforms in the whole system of vocational education. From the semi-military organization with the strict centralized control it is turning more and more into the sphere of educational service which is especially needed in the market economy.

The new model of vocational education as an element of a system of interaction between the state, employers and trade unions is being set up. It leads to greater interdependence of vocational schools and regional educational authorities. The functions of the Federal centre are gradually transforming into coordination and attain a scientific-methodological character.

The present document analyses the difficult process of development of reforms in the Russian vocational education and its adaptation to the market economy.

## 2 Interdependence between vocational education and labour market

The Russian labour market is forming under the influence of deep economic transformations. The destruction of the State monopoly of property and

rapid growth of joint-stock companies, private and other types of enterprise are based on these changes. On January 1, 1995 about 70% of industrial enterprises became private, 40 million Russians became shareholders and more than 1 million owned small enterprises. At present over 50% of all the employed work in the non-state sector.

The gradual process of the adaptation of enterprises to the market conditions is under way. They have become more independent and now rely less on the State.

In spite of the comparatively high rates of privatization of property, the efficiency of the national economy is declining.

In 1994 the gross national product was only 59% of that in 1991 and productivity reduced by 38% (6.30). In fact, the Russian Federation sets an example of the deepest recession in the economic history of humanity. According to independent experts' data, in 1995 the reduction of production will continue and might fall by 10% more.

Despite some measures adopted in 1994 for social protection of the population, the situation in the social-labour sphere is still very difficult. Economic motives and incentives for effective performance have become weaker: labour organization and protection have become worse, the scale of latent unemployment approached a very dangerous level, the retraining of personnel and upgrading of workers' skills at enterprises has practically stopped. Recession and the necessity to support certain industries have reduced financial resources needed for social development and maintenance of the living standards of socially vulnerable population groups. Many large enterprises have stopped their production or do not work a full day, which makes the situation worse and leads to higher inflation in Russia.

Negative tendencies in the social-labour sphere have also caused demographic changes. The natural decrease of population began at the end of 1991. By 1994 it was observed in 68 (out of 89) regions in Russia. The average life expectancy is 65.8 years as compared with 69.3 in 1986.

Public and political forces concerned with such situations appeal to the national leadership for more radical economic measures. For example, it was recommended to declare a state of emergency in the economy, with a partial return to planning, to enhance the state's role in the process of economic reforms.

Some decrees to improve the economic situation were issued by President B. Yeltsin in 1994; including those concerning the bankruptcy of enterprises, and state control over unprofitable enterprises.

It is evident that the Russian economy is approaching the climax of its reforms. But everyone can see that the generally correct orientation towards the market economy has taken. It determines the social development strategy of the labour market and consequently the new requirements for vocational education.

## 2.1 The Labour Market

In spite of the contradictory process in economic development the labour market is being established.

The labour market is a system of relations, including legal and economic norms providing the reproduction and effective use of the labour force. The main components of the labour market are the market of jobs and the market of unemployed labour force.

The economically active population of Russia is 71 million people or 48% of the total population. In 1994 the number of employees decreased by 3.9%, with a rather high fluctuation of personnel. During the year about 15 million employees resigned from their previous jobs for different reasons (about 21% of the employed population) and 13 million applied for a job at enterprises, offices, organizations (18%).

There are three industries distinguished by the character of changes in the structure of employment:

- fuel and energy complex where in spite of the decrease in output (from 20 to 7%), the number of employees has gone up (from 7 to 10%);

- engineering, light industry, chemical and petrochemical industry where with the substantial reduction of output (from 30 to 15%) the number of employees has decreased (from 10 to 3%).
- ferrous metal industry where with the significant reduction of production (14-9%) employment has not dramatically changed.

The process of economic changes oriented to services instead of the industry is going on simultaneously. The private sector is growing in the sphere of trade, hotel and restaurant business, auto service, residence and office repair, etc.

The multi-directional dynamics of employment is not so much connected with output changes but rather with a different level of wages in various sectors. The growth of employment is observed in banking, insurance, tax inspection, legal offices and consulting services, i.e. in such branches where wages are higher than the average level in Russia.

## 2.2 Employment

By some estimates, 20% positions held by workers at Russian enterprises are redundant, i.e., potentially unemployed (8.20).

The migration of the labour force is caused not only by economic factors but also by political ones: ethnic conflicts and violation of human rights in some republics of the former USSR. Now there are about 3 million refugees and forced migrants in Russia.

On April 19, 1991, the Law of Employment was adopted in Russia. On the basis of the constitutional principles of state policy this law determines legal, economic and organizational conditions and state guarantees to the right to work for all permanent residents of Russia.

The Federal Employment Service and its regional bureaus were established to help citizens find jobs.

In 1994 the number of such bureaus at all levels reached 2,400 and their personnel 32,000, or 43% more than the year before.

According to the Law of Employment, citizens able to work, registered at the employment service to seek a suitable job are regarded as unemployed. Citizens below 16 as well as pensioners and invalids cannot be considered unemployed. Persons who refuse twice to take suitable job options within 10 days of the date of notification by the employment service or those having no professions, who refuse twice to take professional training options lose the status of unemployed.

Russian citizens have the right to receive

- consultation and information at the employment service offices,
- assistance in choosing a proper job and
- legal protection from unjust dismissal.

The state also guarantees free vocational training and upgrading for the jobless.

Furthermore, the Federal Employment Service is obliged:

- to take part in professional rehabilitation of invalids;
- to assist in the professional adaptation of former servicemen and their return to the civilian jobs in various branches of the national economy;
- to promote (through vocational training) the development of small business;
- to help adolescents to find jobs;
- to organize professional consultations for various groups of the population, including young people;
- to take part in reorganization of enterprises by promoting professional training and retraining of their staff.
- to participate in solution of the regional labour market problems.

The State Employment Fund was established to finance these functions. The Fund is organized at the expense of the obligatory insurance, contributions of the employers, deductions from workers' wages and subsidies from the budgets of the Russian Federation and its subjects.

The present situation on the labour market has its specific features. According to the official data, by January 1, 1995, the unemployed constituted approximately 2% of persons of employment age.

Taking into consideration the fact that the fall of industrial and agricultural production in the last few years amounted to nearly 50% of the level of 1990, these data do not reflect the reality. It is noted that only a third of those who lost their jobs are registered in the unemployment service. Consequently, actual unemployment is not less than 6%.

Besides, unemployment is rising; about 50% of the jobless have not got jobs during the whole year. Simultaneously the number of vacant jobs in the economy sharply reduced: from 1 million in 1993 to 480,000 in 1994. Additionally there is large scale latent unemployment, which is about 10% of the total work force.

Number of Persons	in 1000
applied to the employment services	2,283
got jobs	883
received unemployment allowances	550
received vocational training	81
took part in public works	148
granted pension ahead of schedule	91

The main results of the Federal Employment Service's activity in 1994

Independent Russian experts consider that the iceberg of unemployment together with its invisible "underwater part" is more than 20% of the work-force. No matter where the jobless are: at the labour exchange or at the plants, which interrupted activity; no matter what kind of payment they received, whether unemployment allowances or unearned wages - the invisible part of the work force.

The low level of unemployment in Russia is a result of the financial policy, growing inflation and artificial creation of thousands of extra (unnecessary) jobs at enterprises. It is possible to say, that unemployment in Russia has been exchanged temporarily for inflation. But when the rates of inflation declines, thousands of workers will become unemployed.

All this should change the old views of unemployment as a process of forcing out the workers from the enterprises. As a rule, only those workers whose occupations or skills do not meet the

requirements of a concrete enterprise and economy as a whole are forced out.

This is also reflected in the distribution of unemployment by branches of industry.

The highest levels of unemployment are in the Ivanovo, Kostroma and Yaroslavl regions. Their strongly developed textile industry is practically broken down because of a structural crisis in the economy and a disruption of traditional ties between regions. A similar situation can be found at enterprises of Udmurtia and in some other regions where the military industrial complex has lost state orders. In these regions about 100 people lay claim to each vacant job, while in Russia as a whole the ratio is 3.5 (2.10).

Unemployment has a professional character and this is its weak point. The unemployed are not lazy, and they need help in professional retraining or skill upgrading. That is why the unemployment is not a defect of the market but an indication of the slow transformation of Russian vocational schools.

### **3 Reform of vocational education**

The reform of vocational education reflects the economic changes and has also been affected by the decentralization of state management which occurred in the last few years.

The problems of exploring the labour market, developing a new model of vocational schools, training teachers to work there are increasingly becoming more a part of the regions' competence. Coordination, normative and methodological functions are being assumed by the Federal authorities.

The competence of Federal authorities in vocational education includes:

- designing and pursuing a uniform state policy in the field of vocational education;
- legislative regulation of relations in the field of vocational education;
- research in vocational education;
- designing and implementing federal and international vocational programs;

- designing regulations for various kinds of vocational schools;
- setting up state standards of vocational education;
- ensuring equivalence between foreign and national diplomas of vocational education;
- developing standard curricula, textbooks and teaching aids.
- establishing the procedure of teacher certification;
- creating federal requirements for construction norms and regulations of specified standard number of training equipment;
- determining the order of inspection for vocational schools.

The new structure and the content of the Russian system of vocational education are being created simultaneously (See Annex 1). This system consists of the following vocational programs:

- Primary vocational education;
- Secondary vocational education;
- Higher vocational education;
- Postgraduate vocational education;
- Supplementary vocational education.

Taking into account individual requirements, vocational programs are being worked out for the following forms: educational institutions, family education, self-education, and accelerated studies.

Mixed forms of vocational education are also possible.

Primary vocational education is aimed to train skilled workers for all branches of the economic and social spheres. 1,773,000 students study at 4,269 primary vocational schools. Teacher training is carried out at 48 industrial-pedagogical colleges and at two vocational-pedagogical higher educational institutes. There are two publications: a monthly journal "Professional" and the information bulletin "Vocational Education" (see Annexes 2 to 4).

Secondary vocational education provides the training of mid-level specialists.

There are 2,609 colleges which have about 2 million students and 160,000 teachers. Most of the



graduates are concentrated in industry (32.8%), construction (7.9%), agriculture (7.5%), transport and communications (6.5%). Part of these specialists are engaged in public health and social security (13.5%), education, culture and art (9.5%), i.e. outside the sphere in production.

Higher vocational education trains and upgrades engineers and other specialists to appropriate levels. The system has 535 institutes and universities with 2.6 million students.

The institutes of higher education train at present 407,000 graduates. About 20 million specialists work in the Russian economy, and 8.7 million of them have higher education, which is more than the Russian labour market actually needs. Almost 50% of students study at the technical institutes and for every 10 of their graduates (engineers) there are another 14 graduates of other professions. This ratio in most developed countries is strikingly different. Thus according to the data of the International Bank of Reconstruction and Development (The World Bank) in Germany it is 10:37, and in the USA - 10:114 (8.67). At the same time 85% of vacancies in the Russian economy are the jobs for the skilled workers.

Postgraduate vocational education gives citizens the possibility to continue their education and to improve their scientific and pedagogical qualification on the basis of higher vocational education. It can be obtained through postgraduate courses at the higher vocational institutes and at research centres. There are two academic degrees which postgraduates can obtain: candidate of science and doctor of science.

Supplementary vocational education includes different kinds of educational programs carried out at:

- educational and vocational institutions outside their formal programs;
- appropriately licensed special courses, centres of vocational orientation, music and art schools, centres for development of children's creative aptitudes;
- through individual pedagogical activity;
- various educational institutions which have the license to provide their graduates with a diploma of corresponding levels of education

and/or qualification in accordance with the license. This is an obligatory condition for continuing education at state and municipal educational institutions of the supplementary level.

The Russian system of vocational education as well as the whole Russian economy is undergoing a process of transformation and adaptation to the new market conditions. Many graduates of vocational schools are not needed in modern production. For example, about 15% of primary vocational school graduates, 60% of secondary vocational school graduates and 50% of higher vocational institution graduates could not get any job last year. Thus, almost 50% of graduates of vocational institutions of all levels have come to the labour market. The training of workers on the basis of agreements with enterprises today involves less than 10% of students.

In the last three years the number of students in post graduate vocational institutions has sharply declined: among the heads of the organizations and specialists of different kinds by over 3 times, among the workers - by 5 times. The number of workers who have been trained, retrained or studied for the first time has been reduced by half. Many enterprises have closed their structures responsible for vocational education.

The social and psychological investigations of the staff at 200 industrial enterprises of various forms of property have revealed:

- the administration of enterprises is reluctant to invest in development of personnel and professional skills upgrading;
- the workers have no motivation to continue education (more than 35% do not wish to study at all), to improve their qualification (more than 20%), to change their profession (more than 17%).

The analysis of the appeals to regional vocational orientation centres for psychological support of the population showed that some workers have a psychological fear of the labour market. Up to 40% of students leave school without choosing their future occupation; 45% of students at vocational schools are not sure of their choice, and every third graduate is not satisfied with his

speciality. Young people put the value of labour in 14th place among the main life priorities (in some countries youth puts the value of labour on the second or third place).

The labour market requires a higher quality of training of the national labour force. According to the Russian Institute of Development of Vocational Education the worker should master not less than three modern professions to feel well on the labour market. The Minister of Education of the Russian Federation E. Tkachenko says, "Now, the primary objective is to meet individual's requirements in vocational education, taking into consideration that the person in future, perhaps, will not be engaged in the occupation, corresponding to the qualification received. But everyone should be able to find a place on the labour market in line with one's knowledge." (12.10)

This is mainly connected with the high territorial mobility of the labour force in Russia. Annually intensive flows of people change their residence; ethnic migration is growing, many Russians living in the former Soviet republics are now returning to Russia. They must often change their occupation in new places. Having a second (or third) profession permits them to feel more confident on the labour market.

Besides, the requirement to have more than one profession is enhanced by the character of modern production when workers, often have to improve their professional skills and expand their professional field of occupation.

The structural reorganization of manufacturing and conversion of a great number of enterprises in the defence industry lead to the disappearance of many previous professions. This process is accompanied by reduction of some jobs. If a worker is good at more than one profession he can quickly change his occupation.

However, the need to have several professions is not a specific feature of the period of change in Russia, but it is a general requirement for countries with a stable market economy.

According to the World Bank, at present the worker engaged in modern manufacturing is to

have the technical knowledge of 5-7 professions (8.48). The similar situation is characteristic for agriculture with its seasonal work and often changing occupations. As the graduates of some agricultural vocational schools of Kostroma region say, 30.5% of them have two professions, 20.7% three and 8.5% have four or more professions. 40.3% - have only one profession (5.37).

That is also characteristic of small and middle-size enterprises without a narrow specialization of labour, where the worker fulfils the whole technological cycle using his skills in various professions. And the number of such enterprises is constantly growing. In this case the scale of the training of specialists for small business and self-employment is growing too. They already amount to 20-30% of the total number of students studying at primary vocational schools. Of course, it is linked with a very rapid development of small business and emergence of small private cafe, bars, shops and craft workshops. The attraction of these professions in primary vocational education is conditioned by better opportunities to find a job. Thus at the Yaroslavl Lyceum No. 36 where the joint Russian - German project to train businessmen for trade and small enterprises is under way, the competition among young people entering this lyceum is getting stronger. This is mainly due to real job opportunities for its graduates.

The development of craft trade enterprises is an important step towards restructuring the Russian economy. For example, a great demand for craft trade services to modernize privatized housing can be observed in Russia. Craftsmen must assume responsibility for the work they do, their work must show technical precision and compliance with the aesthetic tastes of their customers. This is the starting point of a pilot project carried out by Federal Institute of Vocational Training (Germany) and the Düsseldorf Chamber of Handicrafts. In cooperation with the Department of Education of the city of Moscow, the Chamber will convert one of the vocational institutions into a craftsmen school. The main forms of vocational training which already exist in Russia will be developed to ensure modular training courses leading to craft trade qualifications corresponding to the German standards of skilled worker and, later on, master craftsman's qualification.

More and more Russians need advice and psychological help. In 1994 more than one million students appealed to vocational orientation centres for advice in choosing profession. More than 40,000 adults were given necessary consultations. It should be noted that every second person who had appealed to the centre was in a state of psychological stress (4.1).

The Law of Employment allows to direct those jobless without necessary profession to the courses (from two weeks to one year) to improve skills or get a new profession at the expense of the State Fund of Employment. 30,000 jobless were trained in new professions at the expense of the Fund in 1992, more than 120,000 in 1993, approximately 250,000 in 1994. So the number of trained persons increased by 7 times.

Moreover, part of the jobless was engaged in public works. While 50,000 people participated in public works in 1992, in 1993 their number increased to 150,000, in 1994 to more than 200,000.

The State is still for the most part controlling vocational education, and is not transferring its functions to the private sector in spite of the development of various forms of property. There is no ideal and self-regulating market and there is no such market in today's Russia either. If the government reduces its role in determining the education policy, we may face the same negative result as with the diminished role of the state which brought in the collapse of the Russian national economy and constantly growing inflation.

The situation become more complicated after the adoption, on December 12, 1993, of the new Russian Constitution which reduced the minimal required educational level from secondary level (12 years of studying) to the general level (9 years of studying). This results in the increased number of young people leaving school after 9 years of studying.

In 1993 their number was 200,000, in 1994, more than 500,000. It sharply increased the load on vocational schools. Moreover many of the gradu-

ates of general educational school at the age of 15-16 have no desire to go to vocational schools. The facts already exist when adolescents leave school at the age of 9 to 10. For the first time in this century a new child labour market is being formed in Russia.

### 3.1 Unemployed Youth

Besides, approximately 300,000 of secondary school graduates and 150,000 of vocational school graduates do not work and do not study anywhere. In fact 1.7 million young people are outside any kind of employment. "Dead souls" appeared in schools, i.e., those formally registered but not attending school. But the labour market has responded to that by increasing the number of youths among the jobless: from 16% in 1993 to 38% today.

### 3.2 Social Consequences

This kind of situation leads to the growth of crime among the young people, the rate of which in the last few years increased by 15 times in comparison with the adult crime rate. The social problems like the economic ones have become more acute. The State has established special vocational schools for juvenile delinquents.

The expenditures per person in such schools is 12 times higher than in ordinary ones (11.7)

The new Russian Constitution has made a step back from the previous achievements of vocational schools. The Constitution does not provide the possibility to obtain the first profession for young people free of charge as the former Constitution did, though such provisions are typical for the majority of civilized countries. As a matter of fact, vocational school, which annually trains more than 1 million graduates, was thrown into the market without any state support. (It should be noted that recently the state authorities have realized this danger at last, and measures are being taken to ensure the minimal state financing of primary vocational education.)

Expenses for education in the Federal budget have gone down sharply to the above mentioned reduction of social guarantees. In 1994 it was 1.3% of

the gross national income. But this sum was not enough to accomplish the tasks declared by the Russian government. The real decline of Russian vocational school level in 1995 will be deeper.

According to the World Bank, in the 1960's and 1970's, Russia, for ideological and other reasons chose to work out an ambitious education program. It is very hard to agree with this conclusion. A strong social policy was one of the former system's important achievements and its reform should not be done at the expense of reducing the State support of education. Current trends in the education crisis will have a postponed effect: the slowdown of economic development. Like the USA of the 1960's, we can say "The nation is in danger!" That is why, in April 1994, while discussing "The primary measures to support education", the Russian government had to allocate some money for supporting schools from the Federal Emergency Fund. This decision confirmed the critical situation in the Russian education system.

The sharp reduction of the budget financing leads to vocational schools' excessive commercialization. While the educational institutions of advanced countries, as a rule, are not involved in business, for the Russian schools now it is the main way to survive and to provide the minimum level of instruction.

Wages in the educational sector of Russia constantly lag behind and for the last three years have been 65-75% of the average wage in industry. For example, the level of school teaching staff's wages stands next to last among 13 socio-economical sectors in the Kostroma region (5.21). Though in 1990, according to the Decree No. 1 of the President of Russia it was subjected to progressive indexation.

Budget financing mainly provides scholarships to the students and wages to the teaching staff. So, 95% of the federal budget allocations was spent last year for these aims. There is no money to support other elements of school activity. For example, in 1994 many vocational schools did not receive the necessary funds to pay for municipal services and there was no money to print the text-

books previously provided to students free of charge.

The wear on the fixed assets has increased. 22% of the school buildings need reconstruction, 11% already cannot be used, despite the 6 m<sup>2</sup> norm per student, 50% of vocational schools have even less. The share of modern benches and equipment is only 26% of the total. Half of courses are not provided with textbooks; in the last three years no visual teaching materials have been made. Some vocational schools cannot afford free meals for the students. It should be noted that even during the Second World War the Soviet government did not allow that.

During the parliamentary debates in the State Duma on June 14, 1994, the situation in Russian education was characterized as being in a state of a very deep crisis.

The main reasons which have led to this crisis in the vocational education system are:

- decentralization of vocational education management has no legal basis;
- constant reduction of financing for education;
- lack of social guaranties for the system, personnel and students;
- inferior condition of many school buildings;
- threatening health conditions of children;
- almost complete feminization of the teaching staff.

On the other hand, we cannot help seeing some positive aspects in the transformation of vocational school in the process of their adaptation to the new market conditions. There are positive points, such as competition-based admission of students to vocational schools and variable content of education. The federal and regional components have appeared in the education content, the order of school financing has changed and is diversified. After these steps were the introduced, relations between the centre and the regions also changed.

The sphere of paid services in vocational education has risen 10 times in the last 4 years. While in 1990 at the expense of non-budget resources 9,000 people were trained in vocational schools, in 1991 the number reached 69,000, in 1992 - 98,000, in 1993 - 130,000 in and 1994 - more than 200,000.

It provided a 15% addition to the budget of vocational schools.

Entering the difficult conditions of market economy has caused the need for principal changes in the structure of professions being taught. From the simple method of the labour force reproduction, the vocational system is slowly becoming a source of revival and growth of the social groups which were almost wiped out during so called "class struggle". First of all, it concerns the revival of peasantry (farmers, communal) and also small and middle-size business. So, instead of the faceless working class and peasants who had no property, no rights and no incentive to work, vocational schools are starting to form a "middle class" of people who can provide economic and social stabilization. As a rule, these people are owners or joint owners and are interested in the effective use of property. These sections of occupation include some professions such as farmers, businessmen, salesmen, owners of enterprises, of small and family business and so on. In a word, the strategic aim of the modern Russian vocational education system is connected with training personnel for small business and self-employment. On this basis, a new Standard Regulation for institutions of primary vocational education has been adopted by the government of the Russian Federation (see Annex 5).

The results of public polls in Kostroma region show that 88% of agricultural vocational school graduates are satisfied with the quality of their training (fully - 14%, partly - 63.4%). Among the heads of agricultural co-operatives and enterprises these figures are higher: 92% (fully - 27%, partly - 65%) (5.17-19).

#### **4 The State Standard as the basis for a new model of vocational education**

The tendencies towards coordination and closer interaction between separate regions and the centre are faced with decentralization processes leading to the disintegration of a uniform educational system without which it is impossible to ensure the labour force migration and social protection of the population. For this purpose the State educational Standard has been designed.

The attitude toward the educational standards is not similar throughout the world. There are no standards in some countries, some believe that it is enough to control vocational education through the customer. In some countries educational standards exist as standard curricula and standard testing of knowledge.

For Russia with its millions of forced migrants and refugees from the Republics of the former USSR the State educational Standards are very useful and important. The State must help its citizens to accommodate themselves to competition in the labour market, protect them by means of a profession of an appropriate level and a diploma which would be respected at the new place of their residence. It corresponds to the interstate agreements on the creation of an Economic Union on the territory of the former USSR. In October 1993 the ministers of Education of the CIS signed at their meeting in Minsk an agreement on mutual recognition of qualification documents.

The State Standard of vocational education is considered in Russia as a means of competition necessary for the labour market and as an incentive to raise the employee skills. At the same time it serves as a social guarantee of Russia's citizens' successful competitiveness on the national and world labour markets. For this purpose the State Standard would be suitable for all regions and subjects of the Federation; it could combine harmoniously the interests of the federal, national and regional specifications and rights of educational institutions, rely on the existing resources of society, and be compatible with foreign educational standards.

The State Standard must serve as the basis for outlining vocational curricula and certification of vocational institutions. Finally, the State Standard has to provide mutual recognition of vocational diplomas in the whole Russian territory and their identity with other countries on the basis of agreements.

The Law of Education of the Russian Federation declares that the State educational Standard is a sum of the three components:

- 1) minimum content basic curricula;
- 2) maximum study load of students and

### 3) graduate training requirements.

The State Standard's starting point was a new State List of professions. The Notion of Profession includes the whole complex of knowledge and skills which can allow the individual to have enough professional potential, intellectual ability and legal right to carry out certain operations.

In the process of preparing a new List of professions the specifics and traditions of Russian vocational schools and the world experience were taken into account too.

In April 1994 the Russian government adopted a new List of Professions, reducing their number from 1,200 to 257. But within any profession the division of labour creates new occupations within the limits of which any person can obtain one or the other qualification. Thus, side by side with the traditional notion of 'profession' the List introduces the notion of 'speciality' which is considered as a concrete sphere of labour activity in the framework of profession. There are about 600 such specialities in the List.

In the process of outlining the requirements for the content of new professions in Russia, the European system of five stages of vocational education was adopted as its foundation. The new List includes professions of the second, third and fourth levels of qualification, which would be regulated by the State.

Professions of the first level are not included in the list, because their teaching can be conducted by various forms of accelerated education.

It is enough to have the general school education to learn a profession of the second level of qualification and it is enough to have a secondary education to learn a profession of the third and fourth levels. The second and the third levels correspond in this case to primary vocational education. And the fourth - to secondary or higher vocational education.

The documents which certify vocational education will reflect the levels of vocational qualification in accordance with the Law of Education.

The education of the fourth level of qualification is confirmed by a diploma, the education of the second and the third levels of qualification - by a certificate, that of the first stage - by a special document. The official forms of the documents are approved by the Ministry of Education of the Russian Federation.

In addition to the new List of professions, the Federal model of curriculum for vocational institutions has been approved and introduced. It defines the subjects which are a part of the federal component of the State Standard as well as the minimum teaching time for them.

However the specifics of vocational education do not provide for a universal standard, because the content of education for each profession reflects the objective division of labour in the economy. Therefore, the vocational standards are worked out in the framework of each profession on a common methodological basis.

The State Standard consists of a professional description and the federal component of vocational education.

The professional description is a detailed model of a particular profession; it defines its role in economy, content and conditions of labour, requirements for vocational training and student contingent. The professional description provides information to define the content of training. Its structure and limits ensure equivalent requirements for the quality and level of vocational training all over Russia.

The Federal component of vocational education determines the amount of knowledge and skills which provide vocational training of an appropriate level and quality.

The content of professional education of the federal level is reflected, in detail in standard plans and curricula which are not included in the State Standard but they are part of its methodological provisions and are worked out by the federal authorities. The structure and methods of the curriculum are oriented towards their use in any form of training of specialists.



The State Standard of vocational education contains the following types of study blocks:

- vocational block is the foundation for training specialist and contains a curriculum necessary for learning a profession;
- industrial block contains a curriculum which shows the place and role of an industry branch in the economic system, the perspectives for the development of the branch and of a profession, including retraining and upgrading;
- special block includes a curriculum necessary to obtain one of the specialities in the framework of a given profession.

This system of blocks incorporates all stages of workers training, proceeding from the contents of a certain profession. Besides, the State Standard includes the natural science and humanity blocks.

The State Standard must become the main tool in raising the quality of vocational education on the state level. That is why it includes all essential components combined within the notion of the quality of vocational education.

The method of four levels is used to estimate the quality of vocational education on the basis of the State Standard. As a rule, the State Standard requires from the students to master the first level, i.e. the capacity for activity in accordance with instruction. The second level of mastering means the capacity for activity without instruction, by memory.

The third and the fourth levels of mastering mean the capacity for creative activity.

The assessment of the levels of mastering is the main didactic element. The State Standard cannot exist without it. That is why, the State Standard is worked out simultaneously with the curriculum and test-based supervision of educational quality. Vocational school graduates can receive a State diploma provided their vocational training is successful.

An independent council of experts has been created for the state accreditation of vocational schools. The representatives of the Russian League of Industrialists and Entrepreneurs, of the Trade Union, the Federal Employment Service, the

Ministry of Labour and experts in education and science comprise this organization. By this Council's proposal the Ministry of Education issues certificates to vocational schools for their educational activity.

But the Russian government has not allocated sufficient funding to design the State Standards of vocational education. The financing covers only the first steps of Standards creation. There is no money for publishing necessary materials on the Standards, retraining teaching personnel, accreditation of educational institutions. This can transform the process of creating the State Standards into the formal act which will have minimal effect.

## **5 Vocational education as a means of revival of Russian economy**

Today the defects of the previous system of vocational education are evident. The main defect was the lack of correlation between the mass training of workers and the changing labour market's requirement. There is an opinion, that the previous system should be immediately changed. However, such a drastic change probably will not be possible and can cause negative social consequences. Three factors should be considered here:

1. The vocational school is objectively conservative, due to the former practices, profile of training, character of its educational and material basis.
2. The change of the vocational profile requires the retraining of teaching staff.
3. It is necessary to accomplish the whole complex of research and methodological measures to provide the training of students in new professions. That is why the State, which is carrying out the policy of transition to market relations, has to direct its efforts toward keeping the youth in the school framework and to do everything to seek funds for this purpose. In this case the social role of educational institutions moves financial and other reasons into the background.

Of course, it is necessary to develop the staff's training through closer contacts with enterprises. At the same time, it is necessary to stimulate educational institutions whose graduates are in demand on the labour market.

The World Bank's recommendations about the need to find new forms of apprenticeship instead of practical training at enterprises can be very useful. It is hardly possible to advance immediately to the dual system used in Germany. But, it is evident that vocational institutions should find new forms of interaction with enterprises to train workers and specialists for them.

It is necessary to develop a market of private and other non-state forms of vocational training, to stimulate their growth. Finally, all these measures should create a saturated labour market where profession determines the major value of a person.

Professionalism is becoming a means for survival of the national economy and every Russian citizen. Only the level and quality of vocational training and no other factor can be an instrument of selection, determine job opportunities and promote individual career.

The character of the present reforms in Russia allows to set the priorities of vocational education's development. There are 10 priorities in this area:

1. It is necessary to prove to the parliament and the government of Russia that there is a need to preserve the state guarantees for the youth to get the first profession free of charge. Otherwise it would be very difficult to ensure normal competition between citizens on the labour market and provide free flow of the labour force.
2. The existence of the system of vocational education administered only from the centre is not compatible with the market economy. A new model is required to provide a balance of forces, a system of close cooperation between the state, private business, trade unions and educational institutions. It will help to attract new investments into vocational education and raise the quality of training.
3. Russia remains one of the few countries where the assessment of the quality of vocational training is done by the school itself, not by the end user. Such an approach does not conform to the conditions of market economy. It is necessary to create a certification system for educational institutions and for their graduates involving businessmen, trade unions and other parties interested in this activity.
4. The necessity to strengthen the Russian statehood requires to supplement the slogans of decentralization of the vocational system with the search for new mechanisms of coordination and interaction between the Federal and regional authorities. The State Standard becomes the main tool providing a uniform vocational system. But its elaboration should be done on the basis of competition and with substantial financing. The mechanism providing the fulfilment of the State Standard requirements and, first of all, the didactic potential for the appraisal of the quality of instruction and universal methodology of licensing, accreditation and certification of educational institutions is badly needed also. It is necessary to work out the norms and define diversified sources to finance vocational education. A Law of Vocational Education should provide a motivation for a high quality of personnel training for enterprises, to guarantee the right for everybody to obtain the first profession free of charge and provide other forms necessary to support the youth.
5. It is proposed, in view of the refusal of the State to finance the publishing of research, methodological and teaching materials, to establish a fund or a bank to finance these activities. Otherwise Russia's vocational schools will have no textbooks next academic year. It is necessary, along with the free distribution of textbooks, to introduce textbooks for students that parents can afford. Calculations show that about 30% of parents have such possibility.
6. It is required that the system of vocational education statistics which is now ruined be restored. Of course, it is not necessary, as before to concentrate all data in Moscow and to rule the whole system from there. The regional authorities themselves are interested in comparing their situation with that on the national scale as to the level of development of school facilities, qualification of personnel, professional structure of graduates and other issues.
7. It is required, taking into account the growth of unemployment, to conduct a profound study of the methods of its prevention. Extensive poly-



technic training which allows one to master new professions within short terms (two or three months) is becoming important. That is why, it is necessary for Russia to turn to vocational education, designed to train students corresponding to future demands of the market, and introduce extensive vocational training.

8. The new model of vocational institutions should correspond to the new market conditions. The model of the multi-stage and advanced educational institutions, such as technical lyceums is flexible, corresponds to the market demands and is very promising. Nowadays one out of ten vocational schools in Russia has the status of a vocational lyceum.
9. The present system of armed service in Russia, as in some other countries, plays a destructive role in professional careers of the youth. The educational institutions of primary and secondary vocational education have no right to respite from the army service. The students are conscripted at the age of 18 regardless of the

year of studies. After serving in the armed forces, about 50% of them do not return to their schools and change their profession. A more realistic policy is needed in this area.

10. Russian vocational education needs development of contacts with foreign partners and integration into European and world structures. This process has begun, but is going on very slowly.

## **6 Conclusion**

The attempts just to imitate other countries' experience have not been a success either in the economy or in the social sphere of Russia. Market culture as well as education cannot be imported. They should develop as a product of traditions and specific features of Russian society. That is why Russia is still building its own national system of vocational education, carefully studying foreign experience, and using its most valuable aspects.

## References

1. Russian enterprises: the process of adaptation. The Report of the Expert Institute of the Russian League of Industrialists and Entrepreneurs. Moscow, 1995.
2. Employment of the population in the Russian Federation. The Information Bulletin of the Federal Employment Service. Moscow, January, 1995.
3. Law of Employment of the Population in the Russian Federation. April 19, 1991 (with amendments of July 15, 1992). Moscow, 1993.
4. The Situation in the Social-Labour sphere. (Official Report of Press-Service of the Minister of Labour of the Russian Federation). Solidarity, 1995, No. 1.
5. Vocational Education and Labour Market. The Results of Sociological Investigations in the Kostroma Region. Kostroma, 1994.
6. The dynamics of industrial production in Russia. The Expert Institute of the Russian League of Industrialists and Entrepreneurs. Moscow, 1995
7. The Reform of Russian Education. The report by E. Tkachenko, Minister of Education of Russia. Moscow, 1994.
8. The Traditions of Russian Vocational School and its Distraction. Report by C. Castro. - Expert, International Bank of Reconstruction and Development. Washington, 1994.
9. Federal Program of Development of Education. (Adopted by the Government of the Russian Federation. March, 31, 1994.) Moscow, 1994.
10. Life and School: Educational Curricula for Senior students. Informational Bulletin of the Federal Institute of Sociology of Education. Issue No. 2. Moscow, 1995.
11. Sociology and We.- Digest of Sociological Information of the Federal Institute of Sociology of Education. Issue No. 4. Moscow, 1994.
12. The Vocational Orientation and Employment of Youth. Omsk, 1994

**Annex****1 Development of Vocational Education 1985-1994****Main indices of development of vocational education 1985-1994**

<b>Main indices</b>	<b>1985</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>
Number of general educational schools	67,100	67,000	67,891	68,270	68,062
Students	18,600,000	20,000,000	20,427,000	20,503,000	20,564,000
Number of primary vocational schools	4,196	4,328	4,321	4,269	4,273
Students	1,987,000	1,867,000	1,842,000	1,773,000	1,773,000
Number of secondary vocational schools	2,566	2,605	2,609	2,609	2,607
Students	2,500,000	2,200,000	2,202,000	1,993,000	1,993,000
Number of higher vocational schools	509	519	535	548	549
Students	3,000,000	2,763,000	2,638,000	2,543,000	2,543,000

**2 Students****Number of students entering vocational institutions in 1994**

	<b>Number of students</b>
<b>Total</b>	<b>867,700</b>
<b>Term of study:</b>	
up to 1 year	225,000
over 1 year up to 2 years	173,100
over 2 years up to 3 years	433,800
over 3 years	35,800
with educational level below 9 grades	66,700
with educational level of 9 grades	563,500
including those who left school this year	427,600
with educational level of 11 grades	237,500
including those who left school this year	167,000
retired from the armed service	17,300
having no parents	12,700
invalids	6,800
Including from rural areas	275,800

### 3 Graduates

#### Status of graduates of primary vocational institutions in 1992-1994

Graduates that:	1992		1993		1994	
	<i>number</i>	<i>%</i>	<i>number</i>	<i>%</i>	<i>number</i>	<i>%</i>
• got job	672,040	84.5	561,800	73.9	493,700	66.9
• entered higher and secondary vocational institutions	12,710	1.6	14,020	1.8	16,730	2.3
• were conscripted into the armed forces	63,060	7.9	53,800	7.2	66,470	9.0
• became self-employed	29,730	3.8	54,840	7.2	45,230	6.6
• remained unemployed	17,820	2.2	75,920	9.9	112,480	15.2
Graduates (total)	795,360	100.0	760,380	100.0	734,610	100.0

### 4 Personnel

#### Personnel at primary vocational institutions in 1994

Category	Teaching staff	Level of education		
		high vocational education	secondary vocational education	general education
	<i>Number</i>	<i>%</i>	<i>%</i>	<i>%</i>
<b>Total</b>	<b>159,069</b>	<b>53.1</b>	<b>37.5</b>	<b>9.4</b>
Directors	4,174	97.1	2.7	0.2
Deputy directors	10,457	94.4	5.3	0.3
Senior instructors	3,713	43.5	54.2	2.3
Instructors	82,901	21.6	61.8	16.6
Tutors	4,542	52.2	35.3	12.5
<b>Teachers</b>	<b>53,282</b>	<b>93.8</b>	<b>5.8</b>	<b>0.4</b>
of humanitarian subjects	6,405	97.1	2.3	0.6
of general educational subjects	21,837	97.9	1.8	0.3
of vocational subjects	18,497	87.7	11.8	0.5
of physical culture	6,543	77.0	19.3	3.7

### 5 Standard Regulation

#### The Standard Regulation of the Institution of Primary Vocational Education

Approved by the government of the Russian Federation, 5 June 1994.

(An extract of the main provisions of the "Standard Regulation")

#### 1. General Provisions

The institution of primary vocational education of the Russian Federation is a state, municipal or non-state educational institution aimed to train skilled workers (workers and specialists) in all

main spheres of social activity, according to the List of Professions (specialities), approved by the Council of Ministers, the Government of the Russian Federation.

The main task of the institution of primary vocational education is to create necessary conditions to meet individual requirements to obtain primary vocational education, a concrete profession (speciality) of an appropriate level of qualification and to give students an opportunity to raise their general educational level for those without the secondary education and acquire labour skills needed to perform concrete operations.

The institutions of primary vocational education include:

1. Vocational schools (technical, construction, electrotechnical, rural etc.) based on the primary vocational education curricula. It helps students to master a concrete profession at an appropriate level of qualification with (or without) a secondary education.
2. Vocational lyceums (technical, construction, commercial, agrolyceums, etc.) in which the integral curriculum of primary and secondary vocational education is realized. It provides students with a concrete profession of a higher level of qualification.
3. Training vocational centres, technical schools, evening institutions of vocational education, enterprises, firms and other organizations where vocational training, retraining and upgrading of workers (specialists) is carried out.

The institution of primary vocational education, in agreement with the authorities of labour and employment services, enterprises, offices, firms and other organizations, can carry out crash courses of professional training, retraining and upgrading of workers and specialists. They conduct day-time and evening forms of study, the combination of these forms and also individual or external studies.

The institutions of primary vocational education may offer courses for the vocational training of persons at their own expense or at the expense of the enterprises, offices, firms and other organizations, which have sent these persons to study.

The institution of primary vocational education is set up by the initiative of the founder. It is registered according to the legislation of the Russian Federation by the appropriate state authorities and from the moment of its registration can provide its own financial and economic activity, and have its own balance, bank account, settlement account, current account, etc.

The institution of primary vocational education has the right to exercise educational activity and has some privileges which are given to it at the moment of the receipt the state license. These

include control norms, maximum number of students and term the license.

The institution of primary vocational education has the right to issue the diploma of the state model to the graduates, to be included in the pattern of centralized state financing, to use the stamp with the National Emblem of the Russian Federation after its state attestation.

The certification of the institution of primary vocational education is carried out once in five years.

The institution of primary vocational education can receive its public accreditation in Russia, foreign and international organizations, with research and industrial structures. It should not lead to any additional financial obligations on the part of the state.

The institution of primary vocational education elaborates its own Statute on the basis of the Law of Education of the Russian Federation and this "Standard Regulation".

This "Standard Regulation" is an example that may serve for private institution of primary vocational education.

## **2. The Content and Organization of Instruction**

Instruction at the institution of primary vocational education is based on age and individual distinctions of the students, on the principles of democracy and humanism.

The content of instruction and its organization are regulated by the curricula and syllabi worked out on the basis of the state educational standards.

Teaching process includes theoretical and industrial instruction and practical training of students.

The instruction load in the institution of the primary vocational education cannot be more than 36 hours a week. During practical training the instruction cannot be more than a working day for a worker of an appropriate profession. The total term of vacation should not be less than 10 weeks a year.

The duration of classes is defined by the statute of the educational institution and with regard to the recommendations of the health authorities.

The institution of primary vocational education is independent in choosing levels, forms, order, and frequency of current control over student performance.

Practical training is carried out at industrial training workshops, laboratories and at enterprises, factories, plants, in fields, on farms, construction sites, etc.

The order of practical training is defined by a bilateral agreement.

The students of the institution of primary vocational education are organized in study groups according to their professions (specialities). The number of students in a group at theoretical lessons should be no less than 25.

Smaller study groups, but not less than of 8-10 students are also possible at rural vocational institutions (lyceums) with the permission of an appropriate department of education.

The composition of groups is not restricted by the number of students, neither at the state nor at the non-state institutions of primary vocational education when the training and retraining of workers are financed at the expense of the customer.

Practical training in all professions is carried out in groups of 12-15 students; excluding some professions implying the use of advanced technology and hazardous operations (8-10 students).

At the theoretical and practical lessons of the special (physical culture, etc.) subjects, study groups can be divided into two subgroups.

The mastering of vocational curricula can be carried out on a step-by-step basis. The number of stages depends on the concrete conditions and the customer's requirements.

Each stage of the teaching process is professionally completed with the obligatory certifi-

cation of students and with issuing an appropriate diploma of primary vocational education.

The admission of students to state and municipal institutions of primary vocational education is carried out on a competitive basis, the order of which is established by the founder and the Statute of the institution. The conditions of the competition should guarantee the right for vocational education to every citizen.

Instruction process at the institution of primary vocational education is carried out in the language determined by the founder or the statutes of the institution.

The training of skilled workers (specialists), retraining and upgrading at the state institutions of primary vocational education are carried out on the basis of professions (specialities) according to the State List of Professions.

The institution of primary vocational education can realize some additional vocational curricula and render some additional educational services.

The institutions of primary vocational education undergoing state accreditation and fulfilling their vocational and general educational programs, award the graduates with a diploma of the state standard which shows the level of the education and qualification in accordance to their profession (speciality). But, the graduates who have passed only professional certification are issued a diploma which shows the level of qualification.

The institutions of primary vocational education without any accreditation issue a diploma of a non-state model which shows the level of qualification (according to the license) with the stamp of this institution. The form of these diplomas is defined by the educational institution itself.

### **3. The Students of the Institution of Primary Vocational Education**

The rights and responsibilities of the students of the institution of primary vocational education are defined by statute and the agreements between the institution and the student and by the present "Standard Regulation".

The students have the right to obtain vocational education according to the state educational standard through both individual study syllabi and short-term courses of instruction; to get additional educational services including paid study; to participate in student self-administration; to exercise freedom of conscience, information and freedom of expression of their own views and convictions.

The students should in no way be forced to take part in any political organizations, movements or parties.

At the state and municipal institutions of primary vocational education, young people who obtain the first profession study free of charge. Vocational education for children who have no parents is carried out on the basis of full state maintenance.

#### **4. The Teaching Personnel of the Institution of Primary Vocational Education**

The relations between the teaching personnel of the institution of primary vocational education and the administration of the institution are regulated by contracts (labour agreement) concluded for a term of no more than 5 years in accordance with the legislation of the Russian Federation.

The teaching staff has the right to a 6-hour working day, and to longer and paid leave.

The teaching staff of the institutions of primary vocational education receives every month an

additional compensation amounting to 10% of the teacher's salary to provide them with teaching materials, books, and periodicals.

#### **5. Management of the Institution of Primary Vocational Education**

The general management of the state or municipal institution of primary vocational education is carried out by the Public Board. The order of election of this Board is defined by the statutes of this institution.

The institution of primary vocational education is responsible for the fulfilment of functions within its competence, implementation of curricula and syllabi, quality of vocational training, and the life and health of the pupils.

#### **6. Financing Institutions of Primary Vocational Education**

The financing of institutions of primary vocational education is conducted by the founder on the basis of state or local regulations of financing.

The training, retraining and upgrading of the unemployed is financed from a special fund of the Federal Employment Service or by enterprises, firms and other organizations, and citizens' individual funds.

The institution of primary vocational education can become private only by the decision of the founder and in line with the legislation of the Russian Federation.