National Report of the Republic of Belarus

CONTENTS*

Section I. PRINCIPLES, GENERAL OBJECTIVES AND TASKS OF THE NATIONAL EDUCATION SYSTEM. . . . . . . . . . . . . . . . . . . . . .

Section II. PRESENT PRIORITIES IN EDUCATION. PROBLEMS AND DEVELOPMENT TRENDS . . . . . . . . . . . . . . . . . . . . . .

Section III. LEGISLATIVE AND NORMATIVE REGULATION OF ACTIVITIES IN THE FIELD OF EDUCATION IN THE REPUBLIC OF BELARUS . . . . . . . . . . . . . . . . . . . . .

Section IV. CONTROL OF THE EDUCATION SYSTEM . . . .

Section V. STRUCTURE AND ORGANIZATION OF THE EDUCATION SYSTEM
   5.1. Pre-school education . . . . . . . . . . . . . .
   5.2. Elementary education . . . . . . . . . . . . . .
   5.3. Secondary education in schools of general education and vocational schools . . . .
   5.4. Post-secondary and higher education . . . .

Section VI. FUNDING OF EDUCATION . . . . . . . .

Section VII. FUNCTIONING OF THE EDUCATION SYSTEM . . . .
   7.1. Pre-school education and instruction . . . . . . . .
   7.2. Primary education . . . . . . . . . . . . . .
   . 7.3. Secondary education . . . . . . . . . . . . . .
   . 7.3.1. Vocational technical education . . . . . . . .
   7.3.2. Special secondary education . . . . . . . .
   7.4. National system of assessment of students' educational attainments . . . . . . . . . . . . . . . . . . . . .

Section VIII. HIGHER EDUCATION . . . . . . . . . . . . . . . .

Section IX. SPECIAL EDUCATION . . . . . . . . . . . . . .

Section X. NON-STATE-FUNDED (PRIVATE) EDUCATION . . . .

Section XI. MATERIAL AND TECHNICAL INFRASTRUCTURE OF EDUCATION. EDUCATIONAL BOOK PUBLISHING . . . . . . . . . .

Section XII. ADVANCED TRAINING AND RETRAINING OF STAFF. ADULT EDUCATION . . . . . . . . .

Section XIII. TEACHING PERSONNEL . . . . . . . . . . . .

Section XIV. EDUCATIONAL RESEARCH
* The structure and contents of this report are based on the UNESCO questionnaire on the preparation of national reports of countries participating in the International Education Conference.

The realization of the policy of economic and social change in the Republic of Belarus depends to a considerable extent on the human factor and, by that token, on our nation's educational level. The need for spiritual revival is great. We must raise the level of our people's general and professional culture. Our citizens must be able to partake, one and all, of the nation's and the world's material and spiritual attainments. Reform of the country's socio-economic and political life demands that, even under difficult crisis conditions, education be treated as a priority area of our Government's policy. The leading role of education will ultimately be decisive in effecting the transformation of the Republic of Belarus into a technologically developed democratic State. It will become the guarantor of stability and the source of social and economic development.

SECTION I. PRINCIPLES, GENERAL OBJECTIVES AND TASKS OF THE NATIONAL EDUCATION SYSTEM

The Republic of Belarus bases its State policy in the field of education on the creation and improvement of a national education system of high quality and on State and public support being given, on a priority basis, to that system's development as a decisive factor in the achievement of scientific, technical, cultural and intellectual progress and the affirmation of national sovereignty. The development of the national education system is based on the following main principles:

- priority status of universal human values;
- national culture as the basis of education;
- scientific approach;
- orientation towards world levels in education;
- humanism;
- linkage with public practice;
- ecological orientation;
- continuity and consistency;
- elimination of contradictions between teaching, on the one hand, and physical and moral education on the other;
- democratism;
- laicity;
- encouragement
of talent and culture; compulsory basic education. The principal aim of the national education system is to reproduce and constantly enrich the nation's intellectual, creative and cultural potential, to instil humanist ideals in our children and young people, and to supply our production sector with highly qualified and competitive specialists and workers.

Further important general objectives of the national education system are:

to ensure full accessibility of all forms and types of tuition and education, to release the creative possibilities of people in all age brackets;
to create conditions for the exercise of free choice of forms of tuition and education and for combining main and subsidiary subjects at different levels of in-depth study;
to develop and support non-State-funded (publicly supported, cooperative, private) forms of instruction;
to provide welfare funds for the education of children from low-income families, orphans, disabled children, and children deprived of parental care; to provide State support for the education of specially talented children;
to create the conditions necessary for mastering the national language and other languages; to ensure the attainment of ecological, economic, legal, computer and psychologico-pedagogical literacy by everyone living in the Republic;
to promote respect and socio-psychological readiness for family life;
to achieve a sound correlation between practical experience, school learning and individual opinion;
to develop scientific, technical, industrial, commercial and cultural activities of educational establishments (EE);
to promote respect for political pluralism and democracy as forms of government and statehood, for a world order founded on the recognition of political, economic and social human rights, and for other countries and peoples and their cultural differences;
to promote humane and compassionate relations within our society;
to promote the shaping of harmonious and rounded personalities capable of further development and of rising to new social and political challenges;
to support self-education, self-instruction and the intellectual and spiritual aspirations of the individual;
to preserve and expand the intellectual property and the cultural and historic values of the Belorussian people and of the Republic's other national communities;
to support and develop popular lore and folk crafts, national traditions, rituals and customs, to preserve and enrich the life of the mind.

The main principles and goals of the national education system determine its immediate and long-term tasks, the most important among which are the following:

- to create an independent national education system of our own;
- to shape its national-cultural foundation;
- to integrate it within the world education area;
- to develop an appropriate legal and normative basis for education and a set of basic concepts defining the strategy and tactics of educational reform;
- to develop and implement national and regional educational programmes;
- to give practical expression to the priority status of education; to develop an appropriate socio-economic mechanism, confirmed at the legislative level, defining the respective responsibilities of the State, civil society, local government organs, market structures, the family and the individual with regard to the status and development of instruction and education;
- to reform and rationalise the system of control over education, to ensure its decentralisation, humanisation, democratisation, regionalisation and autonomisation, to expand public forms of control, etc.;
- to amend the system by which education is funded in our country;
- to develop and introduce new educational techniques based on integration and continuity of the contents and forms of education at all levels, to enhance their fundamental and logical nature, to provide variable multi-purpose programmes and teaching aids, to ensure broad differentiation of education and establish new types of EE, to introduce computerisation, to ensure equivalence with education in other countries, etc.

SECTION II. PRESENT PRIORITIES IN EDUCATION. PROBLEMS AND DEVELOPMENT TENDENCIES

The main priorities of the national education system in the Republic of Belarus are: to revive the national-cultural foundations of our education; to orient education towards the development of free creative and moral personalities; to strengthen the physical and mental health of the nation and of every individual; decentralisation, democratisation and humanisation of education; interaction between education on the one hand and science, industry and the social and spiritual spheres, on the other; regionalisation of education; economic orientation of instruction and
education; integration of the national education system in the world education area.

The as yet unresolved contradictions of the old Soviet secondary-school system, compounded by the socio-economic and political difficulties of the transition period, are, however, giving rise to a great number of problems, the chief among them being the following:

- excessive study loads leading to a marked deterioration in the health of the rising generation and a rising disease rate among children against a background of population decline and a general worsening of the nation's health in the wake of the Chernobyl disaster;
- a low learning factor and a limited ability to assimilate the whole curriculum - in other words, a situation in which the majority of students are incapable of achieving success in all subjects and cannot assimilate the complex and extensive curriculum in a genuine rather than a purely formal sense;
- excessive standardization of the curriculum, which in the past has given students few opportunities to develop their individual talents and inclinations and has created serious problems for students and parents in choosing a specialisation that fits in with their plans for the future;
- insufficient attention given by schools to civic education and to the social adaptation of students to an increasingly complex social environment, leading to a rise in juvenile delinquency and other negative phenomena.

Another unsolved problem is the humanisation of schools and what we call the "humanitarisation" of education, that is to say, combining education with general culture and placing emphasis on the personality of the student, who must become the chief object of pedagogical activity. Talented children, in particular, have often needed special help because schools have failed to provide incentives for continuous development or to stimulate demand for continuous education and self-improvement. The need was felt to establish firm links and genuine continuity between all units of the education system - schools and higher educational establishments (HEE), schools and technical colleges, vocational schools and industry - and to coordinate the efforts of all concerned in developing the intellectual potential of our society and educating our young people. It was felt necessary to make education less school-centred, to establish links with broad social practice, to share the monopoly of education and instruction, which in the past had been held exclusively by schools and schoolteachers, with other elements of society - the family, cultural institutions and public organizations. School reform presupposed the adoption of urgent steps to improve the financial and social-security situation of
teachers and to raise their professional and pedagogical level. Thus school reform became unequivocally and irreversibly a factor in the transformation of our society as a whole. Education had to become not just a declared but a real priority of State policy.

On 4 January 1996 the President of Belarus issued an order "On preparations for the implementation of reform of schools of general education in the Republic of Belarus", which entrusted the Ministry of Education and Science with developing a concept and programme of school reform that would meet present-day requirements while preserving the most valuable aspects of the Soviet schools system. On 21 August 1996 the Cabinet of Ministers adopted a Decision "On the Concept of reform of schools of general education in the Republic of Belarus", approving the concept of reform developed by the Ministry and scientific institutions and EE under its control and recommending that all ministries, departments and administrations concerned should adopt the reform programme, which provided for carrying out the preparatory work and the actual reform in separate stages.

According to the Concept, the main objectives of the reform are to bring the national education system up to a level corresponding to the finest world models and to enhance the prestige of education, making the priority status of education a practical reality for the State and society.

The main areas of reform are to be as follows:

- optimisation of the duration of the course of schools of general education (SGE);
- adoption of new educational contents and definition of a core component of general education with the aim of ensuring the harmonious development of the personality;
- modification of the organizational structure of secondary schools so as to make them better adapted to present-day conditions;
- introduction of specialization in the final stages of general secondary education;
- elaboration of a mechanism for self-development within the framework of the SGE, timely and adequate response to changing conditions, making an effort to achieve the school's rapid development.

The central principles of the reform are:

- accessibility of education, equality of rights of all citizens to receive education irrespective of national, religious or social status, place of residence or financial status;
- combining the national-cultural and regional basis of education with orientation towards assimilation of the finest attainments of national and world culture;
humanisation, humanitarisation and democratisation of education;
conformity of the objectives of instruction, on the one hand, with those of education, on the other;
use of variable educational methods;
protection of the health of young people;
consistency of education and continuity between its various stages.

The concept of reform is based on the principle that the central tasks of SGE are to prepare the young for a full and active life in society, to acquaint them with the fundamentals of national and world culture, and to assist the harmonious development of the personality.

The question of the contents of education is of paramount importance. The answer to it depends on specific developments as regards the introduction of new school subjects, the modernisation of existing ones and the elaboration of new textbooks, curricula and syllabuses. This work must meet the following requirements:

- optimum combination of basic and practice-oriented knowledge; practice-oriented nature and natural science study in the basic school;
- elimination of study overload through the definition of a core component within the framework of standards approved by the State; introduction of integrated courses of study, optimisation of teaching techniques;
- priority status of the individualised approach to tuition - a personality-oriented paradigm that facilitates a flexible response to the student's educational needs;
- modernisation (in the sense of humanisation) of the system used to assess the student's attainments;
- the educational effort must proceed on a culturological basis. National and world culture must be treated as the contents of education; education must have a civic, patriotic and ecological character.

The proposed 12-year structure of general education meets the demand for an integrated educational system; it is oriented towards creating optimum conditions for the socialisation of the individual and for his/her intellectual, moral, creative and psycho-physical development. It presupposes the introduction of compulsory 10-year basic general education and of a 5-day school week.

The primary school (years 1 to 4, ages 6 to 10) pursues two objectives:

- that of stimulating and developing a steady interest in learning and knowledge and the acquisition of basic study habits ("learning to learn");
- that of developing a basis of general literacy which will enable the child to continue receiving education.
The 1st year syllabus can be taught either in the elementary school or in kindergarten.

The basic secondary school (years 5 to 10, ages 10 to 16) is principally responsible for carrying out the tasks of the SGE and for preparing children for life in society. The basic school's curriculum is characterised by its logical completeness - in other words, a full range of subjects is offered within the framework of State-approved standards. The secondary school leaver must have acquired knowledge which he/she will use in later life irrespective of the trade or profession chosen and of whether he/she opts for further education or vocational training. The school must make the student aware of available possibilities, equip him/her with the means of exercising a choice, help him/her to discover and develop his/her capabilities and show different ways in which those capabilities can be applied. Education in civics, transmission of knowledge about the State and society, and preparation for fulfilling one's civic duties are a special task.

The realization of these tasks is achieved on the basis of the students' assimilation of the core component of secondary education. Students can receive instruction at different levels (with in-depth study of certain subjects) from year 7 or 8 onwards and can specialize (in the natural sciences, the humanities, technology, the arts or sports) in year 9 or 10.

Students successfully completing the 10-year course and obtaining the State certificate of secondary education earn the right to continue their studies in the form of combined vocational and general training at a vocational-technical or special secondary EE (VTEE or SSEE), or else they can continue their general education in gymnasium or lyceum classes.

Lyceum or gymnasium classes (duration of course: 2 years) offer a continuation of general secondary education and prepare students for higher education. The following organizational forms are envisaged:

- lyceum or gymnasium (grammar school) classes incorporated in a secondary SGE;
- lyceums offering courses in natural sciences, technical sciences and humanities as independent educational establishments (sixth-form colleges);
- lyceums attached to HEE with classes corresponding to the establishment's special subject or subjects (such lyceums will also provide social support for young agricultural and industrial workers in a manner similar to preparatory courses).

12-year gymnasiums will serve a similar purpose to that of lyceums.
Successful completion of the lyceum or gymnasium course (in any of the organizational forms listed above) confers the right to enrol in an HEE.

**Vocational technical education** (elementary-level vocational schools) offers the possibility of obtaining the qualifications needed in order to practise a trade. Completion of a secondary vocational technical school (2 or 3-year course) will correspond to a full secondary education on the same footing as a lyceum education, and will confer the right to enrol in an HEE. Higher vocational technical schools will offer extended study courses and will issue diplomas of equal value with those of technical colleges.

**Polytechnics and colleges within the special secondary education system** offer 3 or 4 year courses for middle-range specialists who have completed the general education curriculum. Graduation from a polytechnic or college confers the right to enter an HEE (for a shortened course of study if the student continues to specialize in the same branch); students of higher technical colleges will qualify for the first academic degree (B.A.).

The educational reform strategy, including its legal, organizational, administrative, scientific, methodological, staff and equipment aspects as well as its main subprogrammes and stages of implementation, are reflected in the programme of reform of SGE.

The programme of implementation of the reform of secondary SGE, developed on the basis of the Ministry of Education's concept, is divided into the following sections: main stages of reform; organizational and administrative aspects and resources; main areas of development of general secondary education at all levels.

The structure and contents of the programme are determined by the main goal of the reform of SGE, which is to put our schools on a qualitatively new personality-oriented, humanist level while preserving the finest attainments of the Soviet schools system and making creative use of world-wide experience. They are also determined by the need to resolve the following practical problems:

- adoption of a 12-year school system, which presupposes school entry at age 6 and the introduction of a new structure for secondary SGE;
- development and introduction of a new curriculum ensuring a high scholastic level while reducing pressure on the student;
- transformation of the contents of schooling based on an optimum combination of fundamental and practice-oriented study;
introduction of variable, multi-level schooling (streaming) taking account of the individual student's capabilities and gifts;

extensive differentiation (specialization) in the 3rd (senior) stage of secondary education;

development, testing and introduction of a new system of assessing students' attainments;

creation of an education system based on the promotion of patriotic and civic sentiments in children and young people.

The reform of Belorussian secondary SGE is to be conducted by evolutionary methods, which will be determined by the length of time needed to elaborate and develop the means, forms and methods of developing a national system of education and the mechanisms for the renewal of the contents and techniques of instruction and education, to test the new model of the educational process and gradually to introduce a set of new educational principles. The process of implementing the reform is also predicated upon the solution of problems of our educational system's integration in the unified educational area of the union of Belarus with Russia, the Community of Independent States and the international community.

The new model of the SGE will have three levels: years 1 to 4 (preparatory year and grades 1 to 3), primary general education; years 5 to 10 (grades 4 to 9), basic general education; years 11 and 12 (grades 10 and 11), complete secondary general education (diagram 1).

Diagram 1 (p.15 of the original)

Draft

New structure of education in the Republic of Belarus (according to the Concept and programme of SGE reform)

1. Professional activity
2. HEE
3. Vocational technical school
   1 to 2 ½ years
4. Polytechnic or college
   2 to 3 ½ years
5. Complete secondary general education, lyceum classes
   (grades 10 and 11)
   (ages 16 to 18)
6. Basic secondary school (grades 4 to 9)
   (ages 10 to 16)
7. Elementary school (preparatory grade and grades 1 to 3)
   (ages 6 to 10)
8. Kindergarten (ages 3 to 6)
The activities and objectives at each level of education reflect, on the one hand, the organization and structure and, on the other hand, the conceptual basis of the national education system.

The contents, study load, standard and quality of schooling at pre-school, elementary, basic and complete general secondary education levels will be determined by an integrated and continuously interconnected system of State standards and curricula.

In order to renew the objectives, contents, methods, forms and means of education and to introduce the principle of continuity between different levels of the educational process, we must first rid the system of the following shortcomings:
- discrepancy between the information, work habits and skills acquired at school and the demands of practical life;
- lack of ability and preparedness on the part of school leavers to adapt rapidly to changing socio-economic conditions;
- excessive curriculum requirements which fail to take account of individual needs and capabilities;
- study overload, with all its negative consequences in terms of students' health and development;
- obsolete teaching techniques based on authoritarian pedagogical principles;
- an inefficient system of assessing attainments and of developing the individual's qualities and capabilities.

The following are key issues in the elaboration of a new school curriculum as a basic State instrument forming an integral part of the national standard in education:
- definition of the composition and structure of the basic curriculum, the State component and the time allocated to its variable part - the school component;
- determination of the optimum correlation between fundamental and technical education at each stage of the schooling process;
- ensuring that the curriculum reflects an integral approach to the three main purposes of education - transmission of knowledge, inculcation of work habits and skills, and development and education of the personality;
- definition of the significance of each subject and course of study in the context of general education;
- defining the relationship between separate levels and cycles of schooling; defining the optimum relative share of each discipline in the light of existing educational traditions, paradigmatic changes in the national educational sphere, and world-wide tendencies;
- determination of the overall duration of schooling (preparatory grade plus a certain number of years in at each level);
definition of the weekly study load and the maximum study load per student, taking account of the school component of the curriculum;

definition of the total number of study hours in the State component and of the length of time allocated to the school component.

In the light of the above, and on the basis of recommendations and opinions by educational experts and organizations expressed at various conferences, seminars and colloquia, the Ministry of Education in conjunction with the National Institute of Education has drawn up a draft basic (core) curriculum for the new 12-year SGE. The draft preserves the most positive attainments of the Soviet school system and ensures the continuity of the new curriculum, and especially of its core element, with those used in the past.

The new curriculum makes practically no change in the study loads of the existing 11-year school curriculum, while at the same time resolving the main problems through the elimination of study overload and the introduction of the 5-day school week from year 1 (preparatory grade) to year 12.

This is borne out by the information on the basic curriculum for 12-year SGE contained in Table 1.

Table 1 (page 18 of the original)

Draft

1. Basic syllabus for 12-year SGE (5 study days, 6 school attendance days per week)

2. Teaching language: Belorussian, basic level (duration of the school year: 34 weeks).

3. Study courses and subjects

4. Number of hours per week, grades*

5. Total

6. 1. Belorussian language

7. 2. Belorussian literature

8. 3. Russian language

9. 4. Russian literature

10. 5. Foreign language

11. 6. Belorussian history

12. 7. World history

13. 8. "Man and the world"

14. 9. Mathematics

15. 10. Data processing

16. 11. Physics, astronomy

17. 12. Chemistry

18. 13. Geography


20. 15. Art

21. 16. Technology

22. 17. Physical training

23. School component
24. Maximum study load per student
25. Total number of hours funded
26. "For the sake of convenience, the preparatory grade is designated as "0".

The new basic curriculum contains 17 study courses and subjects instead of the present 24-27. This was achieved by integrating the contents of the subjects taught, structuring them according to their fundamental or secondary nature, rearranging lesson contents in a structurally logical way in accordance with the new objectives, tasks and functions of instruction at each level, designing open-ended study courses on the modular principle, etc.

The maximum study load at the basic and senior levels is 30 to 34 hours of lessons per week, which is in line with world-wide models. We regard the 3 hours allocated to physical training in each grade as a very important way of lightening the study load at all levels of schooling.

Thanks to the school component and the 5-day study week (6-day school attendance week), the new curriculum offers extensive opportunities for taking account of students' individual needs and interests, the particular features of each specific EE and the socio-cultural environment in each region.

SECTION III. LEGISLATIVE AND NORMATIVE REGULATION OF EDUCATIONAL ACTIVITIES

The main legislative documents which regulate activities in the field of education in Belarus are the 1994 Constitution (as amended and expanded) adopted by referendum on 24 November 1996 and the Education Act, the Languages Act, the Rights of the Child Act, the Rights of Minorities Act, the Act on General Principles of State Policy on Youth, and other instruments.

Articles 49 and 50 of the Constitution provide as follows: "Everyone shall have the right to education. Access to free general secondary and vocational-technical education shall be guaranteed. Secondary special and higher education shall be accessible to all according to the capabilities of each. Everyone can, on a competitive basis, receive education free of charge at an appropriate State EE. (... The State shall, in accordance with the law, guarantee freedom of choice of the language of education and tuition".

The Education Act, adopted by the Supreme Council on 29 October 1991, has 6 sections and 41 articles. The main sections of the Act are: General provisions; The national education system; The functions of the education system; Rights and duties in the field of education; Material basis
and funding; International cooperation in education. In the preamble to the Act we read: "As a sovereign State, the Republic of Belarus has its own system of education and guarantees to each of its citizens the possibility to develop his/her personality, receive education in accordance with his/her needs and capabilities, and partake actively of the cultural and historical heritage of the Belorussian people and of the Republic's other national minorities. The Republic of Belarus guarantees the development of education on a priority basis, the appropriate social and economic conditions for the functioning of the education system, the rights of citizens to receive general and vocational schooling, the transmission of general cultural values, and the protection of intellectual property, talent and culture".

Section I "General provisions" states that the law on education in the Republic of Belarus consists of the Education Act and other legislative instruments adopted in accordance with the provisions of that Act; the Act regulates the principal mechanisms governing educational processes, as well as the activities of governmental and non-governmental educational organizations. Articles 2-13 of this section list the main objects of legislation and the principles of State policy in the educational field; enumerate the goals of education; describe the rights of citizens with regard to education and to the language of tuition and education; and show the legislative linkages between education and culture, science, ecology, public health, the production sphere, and political activities. In section II "The national education system", articles 14-23 define the structure of the system (diagram 2) and the objects and contents of its various levels (pre-school, general secondary, extra-mural, vocational-technical, secondary special, higher, teacher-training and training of scientific and technical personnel, advanced training and retraining of senior staff, adult education). Section III "The functions of the education system", articles 24-29, describes the functions of the education system and the status of its institutions, including non-governmental ones, and defines the mechanism of management of education, the contents of education and the organization of the study process. Articles 30-35 (Section IV, "Rights and duties in the educational field") define the rights and duties of all participants in the education process - schoolchildren, students, parents and teachers. Articles 36 and 37 (Section V, "Supply and funding of the education system") describe the system's material and technical infrastructure and the mechanisms used for funding the system. Section VI (International cooperation in education), articles 38-41, is
devoted to matters of external economic activity and international cooperation.

Diagram 2 (p.22 of the original)
1. Structure of the education system in the Republic of Belarus
2. Further education
3. Higher schools (universities, academies, special HEE)
4. College
5. Polytechnic
6. Higher vocational school
7. Vocational-technical school
8. Incomplete secondary school (basic school)
9. Elementary school
10. Grades
11. Ages
12. Kindergarten
13. Nursery school
14. Level III
15. Level II
16. Incomplete special school
17. Special elementary school
18. Level I
19. Special kindergarten
20. Elementary level
21. Complete secondary school
22. Lyceum
23. Gymnasium

One of the Act's most important articles defining the contents of instruction and education is article 16, which is devoted to general secondary education. In particular, it states that general secondary education is the central unit of the continuous education system and that its object is to develop all the creative possibilities of the individual through the assimilation of knowledge relating to the main areas of life, the acquisition of essential mental and physical work habits, and the forming of aesthetic tastes and moral principles, combined with the requisite level of physical development. According to the Act, the general secondary education system includes the following cycles: elementary (4 years, ages 6 to 9), basic (9 years, ages 6 to 15) and secondary (11 or 12 years, ages 6 to 17 or 18), which can exist separately or as part of a basic or secondary school. Education begins at age 6 or later in the light of medical indications and with the consent of the parents. The Year 1 syllabus can be taught in kindergarten. The State, as represented by the relevant executive organs, defines a set of minimum standards for the contents of general secondary education, including a list of compulsory
subjects and an indication of the minimum amount of tuition in each subject. School curricula, syllabuses and textbooks take account of differences in students' interests and capabilities. Individual syllabuses, extra-mural activities and optional subjects are introduced with a view to meeting students' individual needs and developing their creative abilities, and schools, gymnasiums and lyceums offering in-depth study of specific subjects are established.

Orphan children attend secondary SGE attached to children's homes, including family-type homes, or boarding schools with all expenses covered by the State. Basic and secondary schooling ends with final examinations, basic-school leavers receiving an attestation and secondary-school leavers a certificate according to their examination results. Together with the certificate, graduates of secondary schools, gymnasiums or lyceums who have achieved excellent results are awarded a gold or silver medal or a special mention for excellence in a particular subject.

The 1994 Constitution in its amended and expanded form reflects the major changes currently taking place in the socio-economic and political life of our society. Our orientation towards the development of a socially-focused market economy and the realization of individual rights and freedoms has entailed the reform of the education system as a whole. Major changes introduced over the past few years include the creation of EE of a new type; the emergence of a non-State sector in the field of education; new structures - the baccalaureate and the master's degree - in higher education; and the adoption of the 12-year secondary school system as from the school year 1998/1999, with the school entry age set at 6 years and other important structural changes. Active work is in progress within the framework of the union of Belarus with Russia and the CIS towards the creation of a unified educational area and the standardisation of education laws. Practical results have been achieved with regard to the integration of our national system of education in the world-wide and European educational areas.

All these developments mean that we must bring the existing legislative norms into line with new practices and amend and expand the Education Act at present in force, which does not sufficiently take account of the priorities of the new State policy on education.

The draft of the future Act "On amendments and additions to the Education Act of the Republic of Belarus" provides for the following new elements: modification of the main principles of State policy in the educational field; expansion of conditions for the enjoyment of citizens' educational rights; proclamation of the equality of Belorussian and Russian as the two main languages of
tuition; recognition of the need to develop a national system of standards in the sphere of education; introduction of a new structure of the education system (with the addition of education in the family and of special education for children or adults with physical or mental handicaps); redefinition of levels of general education in conformity with the Concept of reform of SGE; definition of the multi-level character of higher education; definition of various educational levels and of procedures for the award and issuance of educational certificates of all kinds; delimitation of the respective jurisdictions of various State organs, public associations and educational institutions; definition of general requirements as regards the organization of the educational process and general procedures for the exercise of State control over the quality of education; definition of procedures for funding the education system and for supplying it with technical and other materials.

The Languages Act of 1990 provided the legal framework for the adoption of Belorussian as the national language and gave Russian the status of the language of communication between the Republic's various nationalities. By a referendum held in May 1996 the people expressed its will to confer the status of national language on both languages. The Languages Act in force therefore no longer fulfils the function of regulating the utilisation and development of Belorussian, Russian and other languages used by our people and needs to be amended and supplemented as appropriate. The draft Act "On amendments and additions to the Languages Act" enshrines the use of both national languages on an equal basis in all spheres of public life, proclaims the exercise of the right to choose to be educated in one of the national languages, and guarantees the right of persons belonging to the Republic's other nationalities to be educated in their mother tongue.

Work is currently under way on the preparation of new Acts "On minimum State standards", "On higher education", "On vocational education", "On textbook publishing", etc.

An important component of the educational system's legal infrastructure consists of Cabinet decisions and Presidential decrees.

In the last few years the Cabinet of Ministers of our Republic has adopted a number of decisions and other instruments aimed at improving the operation of the educational system at all levels, viz., "On payment for the care of children in pre-school establishments", "On further education for workers", "On student grants by the Cabinet of Ministers of the Republic of Belarus", "Model decision on leading EE within the national educational system", "On the Concept of SGE reform" et al.
The President of the Republic, recognizing the great importance of the efficient operation of educational organs and institutions, has also issued a number of decrees and orders, viz.: "On the adoption of the National Plan of Action on the Protection of the Rights of the Child for 1995-2000", "Decision on a Special Presidential Fund for assistance to gifted schoolchildren and students", "On priority steps towards the implementation of the national youth policy", "On measures to improve the work of and the conditions in children's boarding schools and special institutions", "On preparations for the implementation of secondary school reform", "On the Belorussian State University", "On grants to students attending State HEE" and others.

The Ministry of Education is also contributing towards the establishment of a normative infrastructure for the education system. In the past three years it has drafted and adopted more than 300 normative documents, decisions, instructions, letters and recommendations aimed at improving the education management system (EMS), reforming all sectors and levels of the national education system and improving the social status and social security situation of schoolchildren, students and school and university teachers. They include decisions of the Ministry's Board "On the status and development prospects of university education in the Republic of Belarus", "On meeting the educational needs of national minorities", "On the certification of teaching staff employed in EE and other organs of the education system", "On the results of audits of the use of funds for the development of science within the education system of the Ministry of Education and Science", "On the results of entrance examinations to State HEE in 1997", "On the structure and contents of the training of teaching staff for HEE and special secondary EE", "The status of aesthetic education in schools and steps taken to enhance it", "Results of the education system's operations in 1997 and objectives for 1998". In the last few years the Ministry has adopted some 150 decrees and decisions, including, in particular, the following: "On the adoption of new educational contents in SGE", "On the procedure for the certification of teachers and research workers", "On the adoption of a Standard Decision on the certification and accreditation of EE", "On the adoption of a Standard Decision on a Study Centre for the training, retraining and advanced training of senior staff", "On the adoption of a Decision on training specialists for special purposes on a contract basis", "On the adoption of a Model Decision conferring the title of "leading higher educational establishment within the State education system", "On steps to improve the work of and conditions in children's boarding
schools and special institutions", "On organizational measures in preparation for the reform of SGE", "On SGE curricula in the 1997/98 school year" and other normative documents and instructions.

The Ministry's scientific departments have drafted concept documents on "Education and instruction", "State school education", on the education, instruction and preparation for life of children with mental and physical handicaps, on the secondary school reform, on the contents of general secondary education, on educational standards, on the Belorussian national school, etc. The main object of these documents is to create a national education system that meets international standards and present-day requirements and is capable of autonomous development in accordance with the needs of the individual and society.

SECTION IV. MANAGEMENT OF THE EDUCATION SYSTEM

Education in Belarus is placed under the control of State organs: the National Assembly (Parliament), which makes the laws, and the Cabinet of Ministers, the Ministry of Education (with its subordinate institutions and organizations), and local government organs which implement them.

The management of the educational system in Belarus is the responsibility of the State and society.

The Cabinet's duties in the educational sphere are the following:

- to define the requirements of the State in respect of education and to establish procedures for monitoring the manner in which these requirements are met;
- to approve model decisions concerning educational institutions and organizations and to define procedures for their establishment, reorganization and closure;
- to approve model documents relating to education and the procedure for their issuance;
- to define procedures for funding educational institutions and organizations, providing them with technical and material supplies and keeping accounts, procedures for paying staff salaries, and standards and procedures for the provision of social security to schoolchildren and university and other students and staff employed within the education system.

The Ministry of Education:

- implements State policy and conducts State monitoring within the educational field;
- approves standard curricula and other requirements in respect of SGE and special schools, organises the preparation and publishing of textbooks, teaching aids and methodological study materials;
defines standards for funding EE and providing them with material and technical supplies subject to budget appropriations and resource availability;
establishes, reorganizes and closes down State-managed EE and institutions and registers their status;
takes decisions on matters relating to extra-mural education in HEE and special secondary schools;
supervises the methods and coordinates the activities of all EE and educational organizations in the territory of the Republic.

**Local (regional) councils and their executive organs:**
ensure the development of education, taking into account the national particularities of the region and its social and economic development prospects, and define requirements in respect of the level and structure of the training of teachers and specialists;
establish, reorganize and close down schools and other educational institutions in accordance with established procedures, and register their status.

The education management system (EMS) of the Republic of Belarus is characterised by internal and external components. The structure of EMS is shown in diagram 3.

Diagram 3 (page 30 of the original)

1. **Structure of the education management system in the Republic of Belarus**
2. Ministry of Education
3. Sectoral ministries and departments
4. Level 1
5. HEE and their research institutes, experimental farms, print shops, sanatoria, associations. Polytechnics and colleges. National-level EE and methodological and data processing support organizations.
6. Level 2
7. Regional educational institutions
8. Minsk city education management board
9. Level 3
10. Municipal education departments
11. District education departments
12. Vocational-technical educational establishments (VTEE)
13. Pre-school establishments (PSE), schools
14. Extramural educational establishments

The internal component includes management organizations and institutions which directly belong to the education system. They can be subdivided as follows:
institutions directly participating in management;
institutions providing management support; and the EE themselves. This component is made up of organizations and
institutions of the national educational system and its instruction and education institutions. It is a complex, widely-ramified structure of the hierarchical type with external links at all levels. It consists of interconnected structural subdivisions which exchange and transmit large amounts of information.

The internal component can be divided into three levels. The **top level** is formed by the Ministry of Education, the higher educational establishments (HEE) under its control and their research institutes, experimental farms, health institutions, print shops, etc., as well as national-level schools and organizations providing various kinds of support to the education management process.

The **second level** is formed by regional education boards, the Minsk City education board, and the EE under their control. These education boards report to the Ministry of Education, each of them being responsible for applying the unified policy at its own level.

The **third level** includes district and municipal education departments and the PSE (kindergartens, nurseries, children's homes, etc.) and schools under their control. Education departments at this level report to the regional or Minsk City education boards.

The external component includes institutions and organizations outside the State education system which provide various forms of support to the central EMS but do not directly belong to the national education system. They include various legislative, executive and supervisory bodies, foreign scientific and methodological centres and non-civil service institutions and organizations dealing with educational matters.

The structure of the external component, which consists of institutions and organizations outside the State education system interacting with the Ministry in organizational matters, can be represented as having two levels.

Two bodies - the National Assembly and the Cabinet of Ministers - exercise direct control over the Ministry of Education, the most important unit of the EMS.

The Minister of Education is nominated by the Cabinet and appointed by the President; his deputies are appointed by the Cabinet with the President's consent. In this way the National Assembly, the President and the Cabinet jointly provide the legal basis for the activities of the education system as a whole. The Cabinet also approves the structure, staff complement and payroll of the Ministry's central apparatus and the membership of the board established by the Ministry to deal with matters of first importance.

The Ministry of Education collaborates with many governmental and non-governmental structures, national
corporations and banks, the National Academy of Sciences and various private funds in matters pertaining to the development of educational projects and programmes of all kinds, questions of funding, the definition of priority areas in education, and international cooperation.

Ideas and approaches concerning the management of the education system in our Republic are at present undergoing major changes. Processes of democratization are taking place, with many management duties being transferred from higher to lower ones, EEs being given more independence, and forms of joint management by the State and public associations being expanded. Traces of the old totalitarian system of centralized command are being eradicated. We are endeavouring to create more harmonious personalities by reviving national historical roots and promoting dialogue between the Belorussian and other ethnic cultures as the basis for the spiritual and civic self-awareness of our people. At this time of rebirth of our statehood, we are trying to create an educational area within which character formation and instruction in science, culture, history and economics will form a single organic whole.

SECTION V. STRUCTURE AND ORGANIZATION OF THE EDUCATION SYSTEM

According to art. 14 of the Education Act, the national education system comprises pre-school education; general secondary education; extra-mural forms of education; vocational-technical education; secondary special education; higher education; teacher training and specialist training; retraining and advanced training of senior staff; and adult education.

Education at these different levels is dispensed in many types of State and non-State educational establishments - children's pre-school establishments (PSE) (nurseries, kindergartens) and schools of general education (SGE) (complete and incomplete secondary schools, gymnasiums, lyceums); extra-mural, special and boarding establishments (children's homes, boarding schools, corrective labour colonies for juvenile delinquents, etc.); technical-vocational schools, polytechnics, colleges, specialized higher educational establishments, universities and academies; retraining and advanced training institutes; and organs of management of the educational system and various scientific and methodological institutions under their control.

At the start of the school year 1997-1998 the education system included 4,511 PSE, 4,820 SGE, 249 vocational-technical schools, 151 State secondary special schools, 59 State and non-State higher educational establishments (HEE) and over 100 institutions for the retraining and advanced
training of senior staff. In the school year 1997-1998 there were over 2.1 million students and some 200 000 teachers within the education system (not including institutes of advanced training). The total number of specialists employed within the system is about 400 000, or 10% of the country's total actively employed population.

5.1. Pre-school education

At present there are 4 511 PSE in operation in the country, including 2 852 managed by the central education system and 1 659 under departmental management. A breakdown by type of establishment shows 2 756 general and 1 027 special PSE, 13 infant development centres, 27 sanatorium-type establishments, 28 establishments for children with physical or mental handicaps, 497 combined-type establishments and 163 kindergarten schools attended by 444 200 children. 51.8% of all PSE are attended by 75 children or fewer, 20.9% by up to 150 children, 12.1% by up to 225 children, 12.5% by up to 300 children and 12.1% by more than 300 children. 75.8% of all pre-school establishments work a 5-day week and 24.2% a six-day week; 0.4% of the kindergartens and nurseries open round the clock. 61.2% of the country's 5-year olds (71.5% in towns and 48.7% in rural areas) attend senior kindergarten groups. The overcrowding rate is between 4.2 and 9.4% depending on the size of the PSE. The number of children per teacher is between 8 and 10.

Pre-school education employs 55 500 teachers, 99.9% of whom are women. Their educational qualifications are as follows: 35.1% have received higher education, 22.7% incomplete higher education, 59.2% special secondary education and 3% general secondary education. 12.3% of the total number of college-educated staff, 1.5% of staff with incomplete higher education and 41.5% of staff with special secondary education have obtained a special qualification in pre-school education. Compared with the 1993 level, the proportion of staff with higher or special secondary education has increased by 1.8% and that of staff with secondary general education has diminished by 0.3%. The proportion of staff with higher and special secondary education possessing a special qualification in pre-school education has risen by 1.1% and 1.4%, respectively. 2.6% of all pre-school teachers are classed in professional category 1 and 38.8% in category 2, while 41.8% are unclassified. 18.1% have been in the profession for less than 5 years, 26.5% between 5 and 10 years, 22.4% between 10 and 15 years and 33% for 15 years or longer.

Training for pre-school specialists is provided at 3 pedagogical universities, 1 pedagogical institute, 3 colleges and 8 teacher training schools.
The development of the network of PSE and of the numbers of children attending them, as well as of the number of teaching staff employed in them in 1990-1997, is shown in Table 2.

Table 2 (page 35 of the original)
1. Development of the network of PSE, numbers of children attending them, and numbers of teaching staff in 1990-1997
2. Year
3. Number of PSE under all forms of management, thousands
4. Number of children, thousands
5. Number of teaching staff, thousands
5. [...] no data available

5.2. Elementary education

Elementary education, together with education in the family and pre-school education provided by the State, lays the foundations of general education. It begins at age 6 (7) and goes on for 3 (4) years in grades 1 to 4 of schools of general education (SGE).

At present the elementary schools network includes 760 schools with 20 600 pupils and 2 763 teachers, most of whom are women. The development of the elementary schools network and of the numbers of pupils and teaching staff in 1990-1998 are shown in table 3.

Table 3 (page 36 of the original)
1. Development of the elementary schools network and numbers of pupils and teaching staff, 1990-1998 (irrespective of form of management)
2. At the start of the school year
3. Number of elementary schools, thousands
4. Total number of pupils, thousands
5. Teachers (both sexes), thousands
6. Women
7. Men
8. [...] no data available

5.3 Secondary education in SGE and vocational schools

Besides elementary schools, the general secondary education system in the Republic of Belarus includes Level II schools (grades 5-9) and Level III schools (grades 10 and 11), which are attended by pupils between the ages of 10 (11) and 16 (17).

Level II schools are basic and compulsory for all children except those exempt on medical grounds. Their task is to transmit the systematic knowledge, skills and work habits the child will need in order to continue its general
education or to embark on a vocational education; to integrate the individual in the life of society; and to develop his/her creative capabilities and instil national self-awareness and the principles of universal human morality. At this stage of education, the pupil's typological personality traits are identified and his/her gifts, interests and qualitative orientations are developed. The school identifies and, where necessary, actively corrects these traits in order to assist the pupil's self-expression and choice of further study or occupation.

**Level III schools (grades 10 and 11) complete the secondary general education process** by providing pupils with the knowledge, skills and work habits necessary in order to become fully-fledged and responsible citizens prepared for living in a system of social, family and production relations and capable of self-instruction, self-education and harmonious interaction with the natural environment.

Study in Level II and Level III schools is concluded by final examinations on the basis of whose results basic-school leavers receive a certificate and secondary-school leavers an attestation.

**General secondary education is obtained in SGE, gymnasiums, lyceums or, as the case may be, vocational-technical schools, polytechnics and colleges. Their development in 1990-1998 is shown in tables 4-10.**

At the beginning of the 1997/1998 school year, the Republic of Belarus had 4 820 daytime SGE, including boarding schools, attended by 1 579 400 pupils. The system under the management of the Ministry of Education had 4 709 daytime SGE (including boarding schools but not schools for mentally or physically handicapped children), 760 of which were elementary schools (15.1%), 1 076 basic schools (22.8%), 2 776 secondary schools (59%), 71 gymnasiums (1.5%), 24 lyceums (0.5%), 249 vocational-technical schools and 249 special secondary educational establishments (SSEE), including 2 colleges.

Table 4 (p.37 of the original)
1. **Secondary education (basic + secondary, irrespective of the form of management)**
2. At the start of the school year
3. Number of schools, thousands
4. Total number of pupils, thousands
5. Teachers (both sexes), thousands
6. Women
7. Men
8. [...] not available

Table 5 (p.38 of the original)
1. **Network of daytime SGE** (at the start of the school year)  
2. School year  
3. Total number of pupils, including  
4. In elementary schools  
5. In basic schools  
6. In secondary schools  
7. In schools for children with physical or mental handicaps

Table 6 (p.38 of the original)  
1. **Evening (shift system) SGE** (at the start of the school year)  
2. School year  
3. Number of schools  
4. of these, independent schools  
5. Number of pupils, thousands

Table 7 (p.39 of the original)  
1. **Number of pupils in daytime SGE** (at the start of the school year, thousands)  
2. School year  
3. Total number of pupils, including  
4-7. (as in table 5)

Table 8 (p. 40 of the original)  
1. **Basic-school leavers, breakdown by type of further education received, thousands**  
2. Year of leaving basic school  
3. Number of basic school leavers having completed the basic school course and received a certificate of completed basic education  
4. Of these, the following numbers continued their education in:  
5. Grade 10 of a daytime SGE  
6. Grade 10 of an evening (shift system) SGE  
7. a vocational-technical school  
8. a special secondary educational establishment (SSEE)  
9. [...] no data available

Table 9 (p.41 of the original)  
1. **Gymnasiums, lyceums, colleges and numbers of students attending them** (at the start of the school year)  
2. School year  
3. Number of EE  
4. Gymnasiums  
5. Lyceums  
6. Colleges  
7. Number of students attending

Table 10 (p.42 of the original)
1. **Number of students attending gymnasiums, lyceums and colleges**
2. Gymnasiums
3. Lyceums
4. Colleges

Counting children attending PSE (444 200), students attending vocational-technical schools which also provide a general secondary education (90 000) and those attending SSEE which offer a 9-year general education course (49 600), our general education system covers 2 182 000 persons, or one in five of the population as a whole.

In the school year 1997-98, 140 500 children completed the compulsory basic school, the majority (62.2%) going on to Class 10 of a daytime SGE, 1 330 (0.9%) entering SSEE and 35 500 (25.2%) entering VTEE. Of the latter, 31 500 (or 88.7%) also took general secondary education classes. 21 800 basic-school leavers attended evening classes or took correspondence courses of various kinds.

The majority of our students (88.2%) are attending secondary schools; 5.1% are attending basic schools. 5.3% of the total number of secondary school students are attending gymnasiums and colleges.

The average school capacity in 1997-98 was 330.2 students per school. This figure, which was 304.4 in 1993, is steadily rising as a result of reorganization and closures of smaller schools.

67.8% of students leaving daytime schools of general education received certificates of secondary education, 5.8% of them being awarded a gold medal and 6.1% a silver medal.

Our 249 vocational-technical schools were attended by 123 900 students, 90 000 of whom followed the general secondary education curriculum.

The 151 State SSEE, of which 74 are polytechnics, 28 are colleges and 49 are schools, were attended by 128 600 students.

### 5.4. Post-secondary and higher education

The post-secondary education system includes SSEE (polytechnics, colleges, schools) and HEE (academies, universities, institutes). SSEE courses (for students admitted on completion of basic secondary education) take 3 years 10 months in technical special secondary colleges and schools and 2 years 10 months in non-technical ones; for those admitted on the basis of completed secondary education, the duration of the course is, respectively, 2 years 10 months and 1 year 10 months. Courses of study in university-type HEE generally take 5(6) years.

After completing his/her studies in an SSEE and passing a diploma test, the school leaver obtains a diploma and is
awarded the appropriate professional qualification. On completing studies at an HEE and passing State examinations in the subject chosen and/or presenting a diploma paper, the student obtains a diploma and may also be awarded the appropriate professional qualification and the degree of baccalaureate (B.A.).

SECTION VI. FUNDING OF THE EDUCATION SYSTEM

The funding of the education system has its legal basis in the Act "On the budgeting system of the Republic of Belarus", the national and local annual budgets and other legislative acts and normative documents, and the Education Act.

Art. 37 of the Education Act is entitled "Funding of the education system" and defines the governmental and other sources and means of funding educational and research establishments. They include, first of all, funds from the State budget and local budgets, income derived from fee-paying educational services and from research and other scientific activities, contract-based staff training fees, and contributions from enterprises and sponsors. National and local funds are apportioned in accordance with a procedure established by the Cabinet of Ministers. The Act categorically prohibits payment for tuition (except extra tuition) and other State-funded educational services in State EE. Fees may be charged if a student repeats a course or decides to specialise in a second or third subject or branch of study, and this is duly spelled out in the relevant Government documents. The Act provides, in particular, that, with a view to preserving and enlarging the nation's intellectual potential, not less than 10% of the national income shall be set aside for funding the education system, with the possibility of supplementing this amount out of non-Plan and extra-budgetary funds.

In addition to the Ministry of Education and its local organs, which control some 85% of all budget funds, there are today 24 other ministries and departments exercising control over the main sector of State education funding. In addition to this main sector, funds are also derived from the State programme for the liquidation of the consequences of the Chernobyl disaster, the State fund for the promotion of employment, the social welfare fund, enterprises, organizations, the population, trade unions and other extra-budgetary public and charitable funds. There are also acts of law and normative documents regulating specific financial matters relating to taxes and privileges in the field of education.

Our whole system of laws and norms, including those governing education, is currently undergoing systematisation and refining. Our legislative bodies are completing the
consideration of a new draft Education Act in which the new standards regulating the economics and funding of education are amply reflected.

According to figures supplied by the Ministry of Statistics and by the Planning and Economics Department of the Ministry of Education, as well as to calculation results, the main indicators used in world-wide comparisons to assess the share of national resources devoted to education systems have steadily risen in Belarus from the mid-eighties until recently.

**The development of total education costs as percentages of GDP and of the State budget and a breakdown of the structure of budget expenditure by management level are shown in tables 11 and 12.**

Table 11 (p. 46 of the original)
1. Development of total education costs (per cent)
2. State spending on education as a percentage of GDP
3. State spending on education as a percentage of the national budget
4. Total education costs as a percentage of GDP
5. [...] no data available

1. Structure of budget expenditure on education, by management levels
2. Total budget expenditure on education, including:
3. National
4. Regional
5. Million roubles
6. Billion roubles
7. as a percentage

Using conventional methods of comparison, these figures and their development can be said to show that, on the whole, the situation with regard to the funding of education in Belarus corresponds to world tendencies as observed in the majority of developed countries.

The traditional structure of State budget expenditure on education has changed little in the 1990s. Slightly over one-fifth of the funds is redistributed by the central budget and about four-fifths by the consolidated budgets of regional and local organs of government. The central budget takes care of the whole of higher education, the nationally-controlled polytechnics and colleges, and an insignificant proportion of SGE and departmentally-managed PSE. Practically all SGE (99% of funds), PSE (over 90%), all teacher training colleges and all vocational-technical schools are funded out of local budgets. Other items of expenditure are generally funded at more than one management level.
In the 1990s, and especially in the last few years, the formula used for apportioning national budget funds has begun to change. A functional approach has come to supplement the traditional principles of ownership of funds. For some years now the Government has assumed responsibility for acquiring textbooks for schools and for dealing with the problem of teachers' pay rises and the rising cost of school dinners. The 1998 budget will include a separate item on the funding of activities connected with SGE reform. The Ministry of Education, acting in pursuance of a decision of the First Congress of Teachers and of an instruction issued by the President of the Republic, has elaborated programmes relating to some of the most urgent problems facing our schools - "The role of the teacher", "Computerization", "English language teaching", "Teaching aids", "School materials and supplies" - which have been approved by the Cabinet of Ministers. The programmes included in the budget reflect the Government's desire not only to increase funding out of supplementary State resources but also to mobilize local budgets and other funding sources in order to meet the problems facing our schools.

State budget funding also reflects a tendency towards the gradual diversification of higher and secondary education and towards developing new and different ways of offering support to educational establishments.

Education is the most important item of expenditure in the country's local budgets. The percentage share of education in the overall structure of local spending rose sharply in the 1990s from 19.4% in 1991 to 32% in 1997.

The mechanism as it exists at present makes local budgets very dependent on donations, subsidies and transfers from higher levels. The smallness of local budgets is a serious problem. Local authorities are increasingly faced with the problem of welfare for the most vulnerable sectors of the population. Relative increases in the size of local budgets therefore do not always mean a corresponding increase in education spending, which continues to be maintained at subsistence level.

The last few years have seen developments in regional approaches to the funding of the education system. The regions are beginning to have ideas of their own about what should be the priority areas for development and funding and to determine their own levels of expenditure per student; regional differences in terms of funding are becoming more pronounced. One of the areas in which our funding policies are being refined is the creation of a mechanism for the reapportionment of funds from different budget levels to educational purposes. Another important policy consists in making greater use of extra-budgetary funds and of
introducing incentives for the expansion of fee-paying educational services.

The relative share of extra-budgetary funds in the funding of State HEE and SSEE is steadily rising, with the result that their financial situation is improving. In the period 1994-1997 the share of extra-budgetary funds in total spending on education in schools controlled by the Ministry of Education rose from 7.8% to 18%. The same tendency is observed in schools controlled by other ministries and departments. The share of extra-budgetary funds is at its highest in the funding of higher education, where it accounts for 20% of the total.

Fees, paid mostly out of citizens' private means, represent the chief and still developing source of supplementary funding of education as a whole and especially of HEE and SSEE. Tuition fees paid to HEE accounted for over ¾ of all supplementary funds in 1996. The percentage of fee-paying private students entering State universities has already reached a level characteristic of higher education in the US in the latter half of the 1980s.

In vocational-technical schools, the chief source of funding is income derived from workshop and shop-floor products, produce from experimental farms, and services to the population. This source corresponds to about 10% of the budget expenditure.

The possibility of introducing compulsory fee-paying in State SGE was thought promising in the early 1990s, but owing to the low income level of the population as a whole it has not developed into a significant source of education funding. Contributions by enterprises and sponsors towards the development of SGE are highly personalized and account for only a small share of the budget as a whole. The structure of State budget spending on education by type of educational establishment and by area of expenditure, and the level of State appropriations as a percentage of GDP, are shown in tables 13 and 14.

Table 13 (p. 50 of the original)

Structure of State budget spending on education by type of educational establishment and area of expenditure, %
1. State budget spending on education, including:
   2. SGE, total
      2.1. Pre-school establishments (PSE)
      2.2. Daytime SGE
      2.3. Establishments using other systems of tuition, education and residence
   3. Vocational establishments, total, including
      3.1. Vocational-technical schools (VTEE)
      3.2. Special secondary schools (SSEE)
      3.3. Higher educational establishments (HEE)
3.4. Other establishments for the training of senior staff
3.5. Advanced training
4. Purchase of textbooks
5. Extra-mural activities
6. Methodological activities
7. Investments
9. Other expenditure

Table 14 (p.51 of the original)
1. **Structure of State appropriations by type of educational establishment and by area of expenditure as a percentage of GDP**
2. Year
3. Percentage of GDP, of which
4. PSE
5. Schools
6. Schools using special tuition systems
7. Vocational-technical schools (VTEE)
8. SSEE
9. HEE
10. Other EE
11. Purchase of textbooks
12. Extra-mural activities
13. Methodological activities
14. Investments
15. Other expenditure
16. Estimate
17. [...] no data available

After an adverse situation lasting several years, the tendencies which had begun to develop in 1993 were maintained in 1996. With more money being spent on education, actual spending on PSE rose by 45.1% over the 1990 level (by 4.9% over the 1994 level) and that on daytime SGE by 8% (5.2%). Expenditure per student was the same as in 1990. As a percentage of per capita GDP, expenditure per student rose over 7 years from 10% to 16.4%. The period from 1991-1993 saw an absolute as well as a relative increase in running expenditures on vocational EE of all types. In real terms, appropriations in 1993 rose by 8.6% over the 1990 level in VTEE, by 3.8% in SSEE and by 3.3% in HEE.

The level of appropriations for SSEE showed an increase in real terms by 33%; for primary staff training courses it rose by 53% and for advanced training courses and institutes by 44%.

The naming of education as a priority area in Government policy also calls for an early review of the State's spending policy. This applies first and foremost to spending on SGE and HEE, to the State's investment policies, and to the question of taxation privileges intended to
attract private investors. Policy changes in school funding call not only for mobilizing additional State resources but also for the adoption of new techniques of allocating them where they are most needed on the basis of a system of special-purpose programmes. The level of funding for such programmes presupposes the implementation of the programme of SGE reform on the basis of purpose-oriented allocation of national and local budget funds; raising teachers' pay to the level of the national average wage; the implementation of a programme of production of teaching materials and equipment that will ensure the availability of the necessary minimum to students at all schools within the next few years; the replacement of the present generation of computers and a general rise in the level of school computerization; and the creation of conditions enabling teachers to develop their creative potential and upgrade their skills.

The investment policy for the coming years envisages considerable increases in investments by the State as well as maximum involvement of other investors. Between 1997 and 1999, on the basis of the Ministry of Education's budget alone, 36,300 new student places are to be created in schools, 4,700 in PSE and 320 in boarding schools for children deprived of parental care.

Other possible funding sources for the education system could be found by reducing the cost of maintenance of the State apparatus, reducing Government inputs into the economy, discontinuing support for non-profitable enterprises, cutting down subsidies to natural monopolies, and making more efficient use of funds allocated to education.

It is expected that, as the economic situation improves and solutions are found to the problems mentioned above, the State will steadily expand its funding of education, which it regards as one of the most important spheres of social life.

SECTION VII. FUNCTIONING OF THE EDUCATION SYSTEM
7.1. PRE-SCHOOL TUITION AND EDUCATION

According to the Education Act, the object of pre-school tuition and education is to develop the child's natural desire to learn and to familiarize itself with the environment, and to assist the child's physical and mental development. The leading role in pre-school education is played by the family. PSE educate the child by introducing it to the language, culture and traditions of its people and to the culture of other nationalities living in the territory of the Republic. Nurseries, kindergartens, kindergarten-nurseries and play groups with flexible, daytime or round-the-clock hours of attendance, family-type
children's establishments and boarding homes of various kinds are established in the light of the requirements of the family and of society at large. State organs, enterprises, public associations and individual citizens give financial, psychological and pedagogical assistance to families in raising their children.

Apart from the Constitution and the Education Act, the main legislative and normative documents governing the activities of the pre-school education system are the following: the Rights of the Child Act; the Concept of development of PS education in the Republic of Belarus; the Model decision on PSE; the Model decision on child development centres; the Model decision on PSE specialising in a specific area of activity; the Model decision on sanatorium-type PSE; the Model decision on "kindergarten schools"; and other decisions and instructions.

The main tasks of pre-school education as the first stage of continuous education are the following:

- to teach the skills and work habits necessary for the child's orientation and adequate performance in the world it is learning to know;
- to identify and develop individual capabilities and gifts, to form the personality and to develop its creative potential;
- to protect and strengthen the child's health and to instil basic habits of a healthy lifestyle;
- to facilitate the child's timely and trouble-free transition to the next stage of the education system - the school.

Given these tasks, the activities of PSE are focused on the following objectives:

- to meet parents' wishes with regard to their children's instruction and education (parental right to choose the form, type, operating conditions and educational contents of their child's pre-school establishment);
- to involve parents in the pre-school education process;
- to create a model of an open and flexible kindergarten;
- to overcome the authoritarian model of interaction between adult and child, to promote the personality-oriented model of pre-school education in the family and the PSE;
- gradually to transform the PSE from a closed unit isolated from the rest of society into a public centre of activity involving young children and their parents.

At present we have State and non-State alternative PSE using different types of programmes. Some children do not attend a PSE at all. Many do not start school at 6 years and repeat the last year of the PSE instead. The PSE and the school do not make the same demands on the child. The possibility of taking the first year of general education in kindergarten has created additional problems for the
kindergarten authorities. PSE are experiencing financial and material difficulties. As a result, our pre-school education is clearly failing to do its job in an adequate manner.

Since not all children of older pre-school age attend a PSE, and since, for that reason, not all children are properly prepared for starting school, we need to try out different systems of coverage of this particular age group so as to ensure equal opportunities for all school entrants. Today, in contrast with previous years, our PSE are free to choose from different tuition and education programmes, all of which are drawn up by the National Institute of Education and the State Pedagogical University with the help of research specialists. These programmes, which have titles such as "Harmony", "Enchantment", "The family", etc., are based on the personality-oriented model of interaction within the "child - parent - pre-school teacher" system. The most interesting and effective programme, called "First Steps", is still in the draft stage. With this programme it will be possible to continue the transformation of pre-school and elementary education in our country into a system that incorporates the latest attainments of national and world practice in that field, to develop and introduce new forms of cooperation between the kindergarten, the family and the social environment in bringing up children of pre-school age, to establish centres for work with families in different parts of the country, and to develop and support new alternative methods of teaching and bringing up infants.

The programme has four main components: education (of children, parents and teachers); involvement of parents in the education and instruction process; health (physical and mental); and the provision of socio-psychological services to all participants in the pre-school education system (children, parents, teachers).

The first national experience-based programme, "Praleska", does not set out to regulate teachers' activities but only to guide them in their work and to help them to refine the methods used to assess and correct the child's physical and mental development. At the same time it also encourages the teacher to provide each child with its own development programme, which must then be adjusted and correlated with the common programme. Work done on the basis of "Praleska" has demonstrated the need for consultant psychologists to work in PSE side by side with specially trained teachers on the preparation of such individual development programmes.

The tendency is towards developing variable programmes, methods and teaching aids from among which the teacher can choose when carrying out different activities with the children. A new model of PSE - the "open" kindergarten, where parents participate directly in the tuition and
education process by acting as assistants to the kindergarten teacher or play-group leader - has been developed with the same end in view.

The further development of the pre-school education and instruction system within the context of the general school reform presupposes the following:

- preservation of the existing system of State PSE (funded out of national or departmental budgets);
- guaranteed parental right to choose the form and type of pre-school education;
- adoption of a personality-oriented model of the pedagogical process;
- elaboration of State standards for pre-school education and a system of licensing and accreditation of PSE;
- different possible scenarios of receiving elementary education: from age 6, the first (preparatory) year being taken either in school or in kindergarten (provided the latter is properly equipped for the purpose), followed by three years of elementary schooling; from age 7, the child entering school at the Year 1 level provided it has reached the required standard;
- elaboration of flexible and variable multi-level elementary school curricula that will prepare the ground for the exercise of a genuine choice of the further educational trajectory in accordance with the wishes and capabilities of each child and will take into consideration any special area of activity accentuated during the child's pre-school education;
- improved cooperation with the family, involvement of parents in instruction and education processes as observers, volunteer assistants or collaborators; development of various forms of assistance to the family in shaping the child's personality, as well as of a network of home education and tuition services;
- coordination of the work of medical, pre-school, school, psychological, social and legal services; creation of the posts of "social pedagogue" and "practical psychologist";
- improved training of pre-school teaching staff, including the introduction of new specializations; changing the structure and contents of psycho-pedagogical training;
- modification of the amounts and forms of State funding of PSE;
- establishment of the necessary conditions for the introduction of compulsory pre-school education from age 5.

7.2. Elementary education

The objectives and tasks of elementary education must not be reduced to the "three Rs" - reading, writing and arithmetic. Education in the broader sense, development of the child's personality, acquisition of elementary knowledge
about nature, man and society, of basic work and study habits, of fundamental ideas about interpersonal relations, correct speech, personal hygiene and a healthy lifestyle are of particular importance at this stage. Continuity, which is of the utmost importance in the transition from play to study, is established in the first years of school and in PSE of the "kindergarten-school" type. Differentiation is achieved principally by varying the teaching process itself, i.e., the rate at which a subject is studied, offering a wide choice of activities, adapting study requirements to individual capabilities, organizing remedial groups on the basis of psychologists' and doctors' recommendations.

Reform of the elementary school presupposes the definition of its role and place within the education system as a whole and the identification of its main structural components, which must be filled with fresh contents. Elementary education must not be seen as a closed, self-sufficient unit but, rather, as part of the pre-school and basic education systems. The Concept of reform of SGE defines the main tasks at this stage of general education as follows: to develop further the individual child's physical and mental capacity and moral and spiritual instincts, to instil a steady interest in study and to impart basic reading, writing and numeracy skills, the rudiments of social behaviour and study habits, thus laying the foundations for the child's understanding of the real world and enabling it to proceed to the next level of education.

The main areas of linkage between different levels of the educational process are:

- correlation of the contents and techniques of preparatory-level education with the pre-school education system (acquisition of the elements of reading, writing and numeracy);
- at the early stage of elementary school training, preservation of the system of traditional educational cycles as the basis for teaching separate subjects;
- gradual unfolding of the contents of elementary education in step with the development of the child's cognitive abilities.

Elementary school teaching is adapted to the stages of the child's intellectual development and the growth of its cognitive activities. It begins with an integrated course based on an integral, figurative concept of reality, that being the way in which children of this age perceive the world around them. The predominant form of tuition at this stage is didactic play. Subject teaching, which presupposes the child's ability to identify separate components of the surrounding reality (subject definition stage) as well as specific phenomena (subject teaching stage), is introduced in the next phases of elementary general education. The
transition to subject teaching is an essential precondition for cognition and for the satisfaction of the child's nascent interest in study.

Elementary education may thus be structurally represented as follows: development of practical reading, writing and numeracy skills and habits (preparatory year); laying the foundations for subject study (language, literature, nature study, mathematics) (grades 1 and 2); preparation for the transition to systematic subject study (grade 3).

The changes introduced in the objectives, tasks and contents of elementary education call for modifications of the structure and size of the curriculum and for the development of new educational techniques that will provide the child with an integral world picture based on the assimilation of the universal principles and laws of nature and human life.

To this end, the Ministry of Education and the National Institute of Education have elaborated a new elementary school curriculum, details of which are shown in table 15.

Table 15 (p. 60 of the original)
1. Working curriculum for elementary schools (stage I of the 12-year SGE, 5-day week, language of tuition: Belorussian, level: basic)
2. Subjects
3. Number of hours a week, grades
4. Preparatory
5. Total hours
6. State component
7. 1. Introduction to school life
8. 2. Belorussian language
9. 2.1. Reading and writing (literacy)
10. 2.2. Literary reading
11. 3. Russian language
12. 3.1. Literary reading
13. 4. Mathematics
14. 5. "Man and the world"
15. 5.1. "My motherland, Belarus"
16. 6. The arts
17. 6.1. Visual art
18. 6.2. Music
19. 7. Technology
20. 8. Physical training
21. Total
22. School component
23. Maximum study load per pupil
24. Total hours funded
The tuition, education and development aspects of elementary school activities, as represented in the specific subjects taught, are aimed at awakening and developing a sustained interest in study in the mind of each pupil and at imparting the skills and work habits required for study.

Thus the elementary school lays the foundations for the acquisition of knowledge, skills and work habits in the non-variable (core) areas of education, accustoms the child to the learning process, and forms the qualities which will largely determine the individual's character and mental, moral and physical development.

Like the elementary school of today, the reformed elementary school, oriented towards school entry at age 6, will provide a four-year course consisting of a preparatory year and grades 1 to 3.

In view of the population situation in our country, as a result of which the load on PSE will be considerably reduced in the coming years, the use of PSE to prepare 6-year olds for school entrance at grade 1 level will not require any special arrangements and, at the same time, will help to overcome a certain psychological resistance on the part of parents. In terms of the main parameters of the educational process, the preparatory year will correspond to the present grade 1. Children will be able to take the preparatory year either in a PSE or in a SGE provided these establishments meet the requisite conditions from the teaching and educational points of view.

7.3. Secondary education

Two elements - basic and differentiated - are to be found in the contents of general secondary education at all levels. The senior grades of SGE and gymnasiuums, lyceums and colleges are becoming progressively more divided into sections, preparing their students for entrance to a specialised HEE or SSEE. In the school year 1997/98 the country had 701 State schools attended by 80 200 students offering in-depth study of certain subjects; 308 schools with a bias towards a certain area of study (87 000 students); and 152 "inter-school training and production kombinats", offering work training and vocational orientation, attended by 83 700 students, including 68 100 in grades 10 and 11 (12). The breakdown of students of daytime SGE by sections was as follows: social and economic studies, 4 640; languages and literature, 16 974; chemistry and biology, 9 558; physics and mathematics, 27 564; natural science and geography, 3 654; polytechnical studies, 2 584; economics, 6 505; teaching, 2 173; and technology, 5 570.

Reform of our secondary SGE is taking place in two main areas: that of developing a new normative basis and that of introducing fresh educational contents.
On 24 June 1997 the Ministry of Education issued an Order "On the curricula of SGE in the Republic of Belarus for the school year 1997/1998", which served as the normative basis for the gradual introduction of new educational contents and for changing the number of hours allocated to each subject, and which also specified the length of the school year, including school holidays. The Level I, II and III curricula approved by the Order will be found in Tables 16-18.

Table 16 (pages 62 and 63)
1. Basic curriculum for SGE Grades I-IV
2. Subjects
3. Number of hours a week, grades
4. Total hours at basic level
5. I. Core component – compulsory subjects
6. Introduction to school life (Grade I, September)
7. Belorussian language
8. Russian language
9. Language of the national minority to which the student belongs
10. Foreign language
11. Mathematics
12. "Man and the world"
13. "My motherland, Belarus"
14. Arts and crafts
15. Visual arts
16. Practical training
17. Music
18. Physical training
19. Total hours at core level in schools of all types
20. II. Differentiated component – optional subjects
21. 1. Foreign language
22. 2. Eurhythmics and dancing
23. 3. Rudiments of linguistic culture
24. 4. Theatrical games
25. 5. Design and decorative crafts
26. Swimming
27. Total
28. III. School component: defined and allocated by the school board on the basis of the difference between the total prescribed number of hours and the number of hours included in the core and differentiated components.
29. Total number of hours for all three components in SGE

Table 17 (pages 64, 65 and 66)
1. Basic curriculum for SGE grades V - IX
   (items 2 to 5 as in table 16)
6. Compulsory subjects
7. Belorussian language
8. Belorussian literature
9. Russian language
10. Russian literature
11. Language of the national minority to which the student belongs
12. Literature, ditto
13. Foreign language
14. Mathematics
15. Data processing
16. Belorussian history
17. World history
18. "Man and society"
19. "The world"
20. Geography
21. Biology
22. Physics
23. Chemistry
24. Technical drawing
25. Visual arts
26. Music
27. World artistic culture
28. Physical training
29. Practical training
30. Special training
31. Total hours at core level
32. II. Differentiated component - optional subjects
33. 1. Second foreign language
34. 2. Literature in the foreign language studied
35. 3. Country of the foreign language studied
36. Technical (or literary) translation
37. Typing (in the foreign language studied)
38. Astronomy
39. Introduction to economics
40. Rudimentary business studies
41. "Nature and society"
42. Rudiments of choosing a profession or vocation
43. Total
44. III. School component (as in item 28 of table 16)
45. (as in item 29 of table 17)
46. in SGE
47. in schools offering in-depth study of certain subjects
48. Work practice
49. days
50. hours

Table 18 (pages 67 and 68)
1. Basic curriculum for SGE grades X and XI
   (items 2 to 5 as in tables 16 and 17)
6. 1. Belorussian language
7. 2. Belorussian literature
8. 3. Russian language
9. 4. Russian literature
10. 5. Language of the national minority to which the student belongs
11. 5. Foreign language
12. 7. Mathematics
13. 8. Data processing
14. 9. Belorussian history
15. 10. World history
16. 11. Man and society
17. 12. Geography
18. 13. Biology
20. 15. Astronomy
21. 16. Chemistry
22. 17. World artistic culture
23. 18. Physical training
24. 19. Practical training
25. 20. Special training
26. Total hours at core level for all types of schools
27-30 : as in table 17, 32-37,
31. 4. Technical drawing
32. 5. Introduction to economics
33. 6. Rudimentary business studies
34. 7. Rudiments of law
35. 8. Rudiments of criminal law
36. 9. World artistic culture
37-43: as in table 17, 44-50
44. Military field training (camp)
45. days
46. hours

Analysis of the Level I curriculum shows that the core component includes 13 compulsory subjects; the weekly number of hours for grades I-IV is 20, 22, 22 and 23, respectively; and the total number of school hours at core level is 87. The differentiated component at this level offers 6 optional subjects for grades I-III (2 hours in each grade). As stated in the table, the school component is defined by the school board on the basis of the difference between the prescribed total number of hours and the hours set aside for the core and differentiated components. The total prescribed number of hours for grades I-IV is 23, 26, 27 and 28, respectively.

The basic curriculum for SGE Level II (grades V-IX) already includes 24 subjects in its core component, the total number of study hours per week being 30/31, 34/35, 34, 35 and 35 for grades V to IX, respectively. The differentiated component includes 8 optional subjects, to which 2, 2, 2, 3 and 3 hours per grade are allocated. The school component is determined by the usual procedure. The
total number of lessons for all three components is 37, 39, 40, 40 and 40 per grade (196 hours aggregate) in SGE and 38, 40, 41, 41 and 41 hours (201 hours aggregate) in schools with in-depth study of a particular field. Work practice occupies 5 to 8 days depending on the grade; in terms of hours this makes 15, 15, 15 and 32 hours for grades V-VIII (there is no work practice in grade IX).

The basic curriculum for Level III (grades X and XI) includes 20 compulsory subjects in the core component (65 hours aggregate) and 9 optional subjects in the differentiated component. Total hours in all three components are 40 in each grade (aggregate 80 hours) in SGE and 41 (82) in schools specializing in a particular subject or subjects. Work practice takes up 7 days (42 hours) and military field practice 3 days (18 hours).

The school year begins on 1 September for all grades and lasts 34 weeks; holidays take up a total of 30 calendar days. The school year ends on 25 May; school-leaving examinations at Level II (grade IX) are held from 1 to 10 June and at Level III from 1 to 25 June.

The school-leaver's entrance into independent life presupposes his/her complete readiness to pursue self-education and purpose-oriented self-development and the ability to function within a system of social, legal and production relations and to participate in the development and improvement of the State and society.

The future school will offer extensive possibilities of specialization at grade X and grade XI levels. Pupils will begin to prepare for the new system in the basic school at the level of grades 6 and 7 with the introduction of preparatory classes in special subjects, including multi-level instruction (internal and external "flexible" differentiation, options), followed by separation into "branches" in grades 8 and 9 in areas such as natural sciences, humanities, technology, the arts, sports, etc.

At SGE Level III (grades 10 and 11), external differentiation of instruction will be practised in lyceums, schools of general education, lyceum classes (sixth-form colleges) offering a general education course and those attached to HEE, vocational-technical schools, higher vocational schools, and polytechnics and colleges offering a complete secondary general education course.

9th grade school leavers wishing to continue their education will be able to choose from 3 scenarios: (1) Level III SGE (grades 10 and 11), (2) vocational-technical school, (3) polytechnic.

Level III SGE is to be called the lyceum level. Lyceums or lyceum classes will offer 2-year courses corresponding to grades 10 and 11. They will facilitate far-reaching differentiation in secondary education. There will be five
types of lyceums: general, humanities (gymnasium), natural sciences, aesthetics (the arts), and polytechnical. Certificates of completion of lyceum studies irrespective of the type of lyceum will have equivalent legal value; the lyceum graduate will be entitled to enrol in any HEE. It is anticipated that, as time goes on, 40-45% of pupils completing the 9th grade will enter lyceums or lyceum classes; the same percentage will enter vocational-technical schools, and 10-15% will enter polytechnics or colleges.

A most important development in late 20th century education which was also taken into consideration in the formulation of our approach to school reform is the tendency towards the establishment of a unified education area. Our chief task in this respect is to define the fields that are to be unified and the place of core disciplines in the contents and structures of basic curricula of SGE and vocational schools within the union of Belarus with Russia and other CIS countries, and to elaborate, on that basis, a unified set of standards for all types and levels of education. The definition of an invariable component of educational standards for all types and levels of education, taking account of the new 12-year school, will facilitate the establishment of a unified education area while making it possible to vary the forms and structures of education in the light of specific features of the national education system.

7.3.1. Vocational-technical education

The main aim of vocational-technical training is to train senior personnel for our country's industries and to equip citizens with work habits and professional skills combined with a general education and mental and physical development. The educational requirement for entering a VTEE is completion of secondary general education, basic 9-year education (in which case the VTEE must also provide a secondary general education course), or practical experience in a trade. Citizens can receive vocational education in vocational-technical schools (VTS), training and production kombinats, centres and other EE, or directly at the workplace. Training is concluded by examinations. Persons who succeed in passing the examinations are awarded the appropriate qualification (professional category) and receive a formal document of the established type.

Vocational-technical education is one of the most important components of the national education system. It determines the qualitative structure of our senior production staff and provides its most highly qualified element.

In Belarus there are at present 249 vocational-technical EE (VTEE), including 241 with a student body of over 122 000 which are controlled by the Ministry of
Education. They include one higher technical school, 26 higher vocational schools and five regional centres of vocational education. The vocational-technical education system provides training in 400 industrial trades.

Statistics on the system of vocational-technical education in 1990-1998 are to be found in table 19.

Table 19 (p.72 of the original)
1. VTEE*
2. Year
3. Number of EE
4. Number of students, thousands
5. Student intake
6. Number of qualified workers trained, thousands
7. *The figures shown in the table are for VTEE controlled by the Ministry of Education.
8. **Nation-wide
9. [...] no data available

There are 226 daytime VTS, 192 of which also offer general education courses. The situation with regard to technical supplies and equipment is good. In the last few years the student intake has stabilised at around 52 000 a year, including some 16 500 at the complete secondary education level and some 35 500 at the basic secondary education level, 31 500 of whom attend VTS offering the general education course. The intake figures testify to a steady interest in vocational-technical education on the part of SGE leavers. The competition for VTS places is approximately 1.3 applicants per place (1.37 full secondary school leavers, 1.26 basic school leavers). The number of young people in special need of social protection - those without a basic education, the physically or mentally handicapped (over 700), the disabled (about 300), orphans (around 2 000) and those from problem, single-parent or very low-income families - entering VTS is rising year by year.

The VTEE possess the necessary potential in terms of teaching staff. Tuition and education are being provided by 13 951 specialists, including 3 906 teachers and 7 363 holders of the "master of production training" diploma. 7% of all teachers on the engineering side are in the top category, 25% are in category 1 and 37% in category 2.

The VTEE are changing over to a system of training industrial workers for a range of integrated trades, with specialization in a particular trade or trades in the final stage of training depending on the needs of industry and of the students' own wishes. The practice of training in only one trade is losing ground. In 1996, 33% of VTEE graduates (as against 45.9% in 1993) obtained a qualification in one trade, 42.5% (36.6%) in two, 24% (12%) in three and 4.2%
(0.9%) in more than three. The 1998 figures are even higher. Since 1996-97 some VTEE have been training qualified workers who also receive a general education with in-depth study of certain general-education subjects; in other words, these VTEE are beginning to introduce lyceum classes.

Organizational conditions are being improved with a view to enabling successful students to proceed to a higher level of vocational education (secondary special or higher). A higher technical school and 26 higher vocational schools providing integrated vocational-technical and secondary special education have been established and are operating within the continuous education system. Ten associations between VT and secondary special (SS) schools have been established, allowing the most successful graduates from either type of EE to take a shortened course at a polytechnic. 18 schools have concluded agreements with HEE to admit their graduates to shortened courses. A system of continuous education in agricultural subjects, with general education subjects being taught at the specialization level has been evolved by VT and SS schools and HEE.

A methodological service has been set up for the purpose of providing EE with the necessary teaching and methodological staff. The service is operated by the National Institute of Vocational Education, the regional and Minsk City educational methodology centres and some key VTEE. A new register of the trades taught is being drawn up; new standard curricula are being drafted and models produced. The new register will include broader groupings of existing trades as well as more than 10 new trades oriented towards the labour market and new types of activities in the service sector.

In order to obtain a professional qualification, students are offered several general education scenarios: based on completion of 9 SGE grades; without previous secondary education; vocational training combined with general secondary education (3-4 years); based on general secondary education (1-1.5 years); secondary special education (polytechnic) following 9 years of SGE (4 years); or following completion of general secondary education (2 years).

The vocational school curriculum has three components: general education, general vocational and special.

The general education component includes a range of humanities subjects, a range of science and mathematical subjects, and physical training.

The general vocational component ensures the breadth and fundamental character of the vocational education the student receives. It also involves the study of the objects, subjects, nature and contents of his/her future vocational activity.
The special component ensures the assimilation of specialized knowledge, habits and skills and incorporates special theoretical disciplines as well as two forms of practical training – production training and production practice.

Each component includes a time reserve which can be used in the light of regional particularities, the special features of the EE and the student's chosen trade, the qualifications to be obtained and the individual student's anticipated chances of obtaining them.

The relative share of each component in the VTS curriculum for students having completed 9 grades (basic secondary education) is shown in table 20.

Table 20 (p. 75 of the original)
1. Relative share of different components of the curriculum in VT schools, per cent
2. Component, %
3. Based on completion of basic school (9 grades)
4. With secondary education
5. Without secondary education
6. 3 years
7. 4 years
8. 1. General education
9. 2. General vocational
10. 3. Special (including practical training)
11. 4. Optional subject
12. 5. Tests
13. Total

In addition to the main components mentioned above, pupils are offered supplementary extra-curricular educational services in the form of optional classes and vocational counselling.

7.3.2. Special secondary education

The activities of special secondary schools are determined by the need for middle-range specialists felt in sectors of the national economy and other areas. Special secondary education forms a distinct stage in the continuous education system. It is offered by EE of several kinds - polytechnics, schools and colleges.

The activities of special secondary educational establishments (SSEE) are governed by the Constitution, the Education and Rights of the Child Acts, presidential decrees and cabinet decisions, the Model Decision on SSEE, and a number of general legislative acts relating to labour, employment and youth policy which came into force between 1991 and 1998.
At present we have 149 State SSEE (74 polytechnics, 26 colleges and 49 schools) and 4 higher colleges, as well as 8 non-State SSEE. The total number of students enrolled in State SSEE is 125 000, including 99 600 attending daytime EE, 1 300 taking evening classes and 24 100 taking correspondence courses. In addition, second-level training of specialists having completed the secondary special education course is being provided at 25 higher vocational schools and 1 higher technical school. The SSEE offer special training in 154 trades.

The annual student intake of SSEE is 34 000, including: students with basic education, 16 000 (47%); with general secondary education, 15 000 (44%); with completion of VTS, 3 000 (9%).

Daytime SSEE have a student body of 101 500, including 200 students aged 14, 8 900 aged 15, 15 100 aged 16, 24 800 aged 17, 27 600 aged 18 and 23 200 aged 19 or over.

The development of the SSEE network between 1990 and 1998 is shown in table 21.

Table 1 (page 77 of the original)
1. SSEE network (at the start of the school year)
2. School year
3. Number of EE
4. Number of students, thousands
5. Type of course
6. Daytime
7. Evening
8. Correspondence
9. [...] no data available

One of the areas of SSEE reform is the preparation of a new register of special subjects, branches and qualifications. The underlying principle consists in broadening the special subjects and grouping them together into several branches so as to make it easier for school leavers to find employment or to switch to another speciality or qualification. The revised register includes special subjects which, although included in the old USSR register, were not previously taught in Belarus, as well as some entirely new ones. More than 20 new special subjects have begun to be taught in the Ministry-controlled SSEE over the past few years. For the most part they are subjects in the humanities and economics field. In the last three years 25 higher technical schools have started offering training in such new subjects as business studies, banking, environmental studies, biochemical production, design, social work, etc.

The further development of SS education entails the creation of new types of EE, such as colleges and
educational/scientific and educational/scientific/industrial associations involving various combinations of VTS, SSEE and HEE.

The elaboration of standard national curricula for SSEE is proceeding on the basis of the following principles:

- SSEE must ensure a unified level of general secondary education (at the level of 11 grades of general secondary school) in accordance with national standards;
- they must provide the future specialists with general fundamental training by supplementing the teaching of grouped specialized vocational and professional subjects, with teaching the rudiments of general science, economics, law, management, computer and data processing techniques and industrial safety;
- the contents of education must be differentiated in the light of specific features of the student's future professional/vocational activities;
- the most comprehensive linkage possible must be established between subjects; sequential and logical continuity in the study of specific subjects, as well as rational correlation between practical and theoretical studies, must be ensured;
- the mental and physical particularities of the students' development, as well as health and hygiene standards, must be taken into consideration in planning the intensity of study and the length of theoretical and practical courses, examination periods and school holidays.

SSEE training includes theoretical instruction, production practice, and tests designed to evaluate the results of training at the end of each term and at the end of the whole training period.

The final training stage is planned depending on the specialization chosen and can take the form of presenting a diploma project, passing State examinations in certain subjects, or passing a State examination in an entire branch of study.

During the practical training period students can obtain a qualification in one or several working trades within their chosen branch of study.

The structure of theoretical training in SSEE by components, cycles and subjects is shown in tables 22-23, which indicate the allocation of study hours and examinations by subjects and years as well as the time allocated for practical studies and tests.

Table 22 (p.80 of the original)
1. Model structure of a standard curriculum for an SSEE, percent
2. I. General education component
3. 1. Social studies and humanities cycle
4. 1.1 Philological subjects
5. 1.2 Historical subjects
6. 1.3 Rudiments of social and human sciences
7. 1.4 Optional subjects
8. 2. Natural sciences and mathematics cycle
9. 2.1 Mathematics
10. 2.2 Physics (including an "Astronomy" section)
11. 2.3 Chemistry
12. 2.4 Biology
13. 3. Physical training
14. 4. Special training
15. 5. Time reserve
16. II. Professional/vocational component
17. 1. General vocational cycle
18. 1.1 Basic general science subjects (in line with the specialization branch)
19. General technical
20. Electrotechnical
21. Chemical-biological
22. Natural sciences
23. Mathematical economics
24. Psycho-pedagogical
25. Social-economic
26. 1.2 Core (compulsory) subjects
27. Industrial safety
28. Ecology
29. Economics
30. Management
31. Law
32. Computerisation
33. Computer software
34. 2. Special cycle
35. 2.1 Techniques in the special sector or industry
36. 2.2 Equipment
37. 2.3 Techniques and organization of production processes (in the professional/vocational activity chosen)
38. 3. Specialization cycle
39. Time reserve
40. Total

Table 23 (p.81 of the original)
1. **Model time allocation in a standard SSEE curriculum, %**
2. Total duration of the course
3. Theoretical training
4. Practice
5. Tests
6. Holidays
The SS education system is currently engaged in resolving problems of integrated continuous education by setting up educational/scientific associations of SSEE and HEE with the object of ensuring continuity of the tuition and education process and opening the way to higher professional and educational levels. This development will help to reduce study overload and all its negative consequences in terms the students' health and all-round development and will also facilitate the rapid adaptation and application of practical knowledge acquired at earlier stages of the educational process. The cost of training specialists at the higher education level will be reduced and more efficient use will be made of both SSEE and HEE teaching staff. In the preparation of student admission plans and the introduction of new subjects, the requirements of each region are being taken into account; duplication in the training of specialists for different economic sectors, including growth industries, is being eliminated and a flexible system of training is being introduced.

Our SSE are currently employing 11 260 teaching staff, including 94% with complete and 4% with incomplete higher education (2.1% with complete special secondary education). The breakdown by qualifications is as follows: 22% are in the top category, 41% in category 1, 18% in category 2 and 19% have not been assigned to any category.

The standard workload for SSEE teachers is 720 hours a year; hours of actual teaching correspond to between 1.3 and 1.43 times that figure.

Practically all SSEE are fee-paying on a contractual basis. Contracts are of different kinds - bilateral between EE and private citizens or EE and enterprises (State-owned or privately owned), or trilateral between EE, citizens and enterprises. Special-purpose admission and training of specialists for specific enterprises and institutions is practised.

7.4. National system of assessing the attainments of schoolchildren and students

Assessment of the study activities of schoolchildren is an essential precondition for improving their general education training.

Standards developed to assess the knowledge, skills and work habits of school pupils serve as the basis for defining the level of each pupil's attainments in each subject of the curriculum. The standards are based on the syllabus for the respective grade and are designed to ensure a unified approach to the pupil's degree of assimilation of the study material and his/her skill in making practical use of the knowledge acquired. Four marks (5, 4, 3 and 2) are used and written and oral tests are given. Effective monitoring is assisted by the use of different forms and methods of
assessment; in addition to examinations of the traditional type, the use of term reports, spot checks, dialogue-type tests, etc., is recommended. In organising the monitoring process it is essential to keep in mind the essential requirements of regularity, objectivity, comprehensiveness and a differentiated approach. All forms of assessment - continuous, thematic, result-based - are used. The knowledge, skills and work habits acquired by the student in the course of each term are evaluated by means of a result-based assessment which relies on oral and written tests, considerable importance being attached to written end-of-term papers.

Section VIII. HIGHER EDUCATION

The main goal of higher education in our country is to train high-level specialists for the production and social spheres. The specialist must possess an in-depth knowledge of general science as well as specialized knowledge in a particular field, combined with training in the humanities and social, political and economic sciences, and must possess the necessary practical knowledge of his/her chosen area of activity.

Such specialists, who must have completed a full course of general secondary or secondary vocational education, are being trained in more than 200 subjects at universities, academies, institutes and other HEE. Lyceums, colleges, schools, preparatory classes and courses and other types and sub-types of EE are being created in order to select and prepare suitable young people for higher education. Teaching at our HEE is based on the achievements of modern science and technology and the study process is closely integrated with the scientific, practical and creative activities of both students and staff. To this end, research institutes, laboratories, industrial research companies, design, project and technological bureaux, workshops and other types of organizations and enterprises are being created within or under the control of HEE in line with their specialization. The study course at an HEE generally lasts 5-6(7) years and is concluded by State examinations and/or the submission of a diploma project. Students successfully completing the course can, in the light of their examination results, be awarded a master's degree and/or the appropriate professional qualification; they also receive a diploma corresponding to the established form.

The legislative and normative basis for the activities of HEE is provided by the following Acts, decisions, regulations and instructions: Education Act; Model Decision on HEE; Decision on the multi-level system of higher education in the Republic of Belarus; Decision on HEE
boards, faculties, faculty boards and chairs; instruction and methodological recommendations on the attestation and accreditation of EE; Decision on end-of-year examinations and tests at HEE; temporary Decision on the procedure for awarding bachelor's and master's degrees to graduates of HEE; Decisions on contract-based special-purpose training of specialists, on the award of academic degrees and titles, on the training of senior staff with top-level scientific qualifications; Methodological Instructions on the procedure for the preparation and registration of HEE curricula, and other documents. An important element of the normative basis for higher education is the system of standards, in particular the Concept of standardization in the field of education in the Republic of Belarus, the draft higher professional education standards elaborated by the National Institute of Education, and the general model of an educational standard elaborated by the State University's Institute of Higher Education. This model outlines a set of principles and a structure for the elaboration of standards in specific human sciences disciplines, as well as draft educational standards for HEE in 12 human sciences subjects - philosophy, culture science, logic, ethics, human rights philosophy, political science, sociology, Belorussian history, economic theory, psychology, etc. The standards are accompanied by model syllabuses and methodological documents. They define the terminology used in education, the requirements as to the contents and length of training of senior staff at various levels, requirements as to the professional qualifications of specialists, and the assessment system to be used. They serve as the basis for documents on the attestation and accreditation of EE and for those relating to the equivalence status of our diplomas outside Belarus.

Our higher education system currently includes 39 State and 17 non-State HEE, as well as the Academy of Management Studies attached to the office of the President, which retraining university-educated specialists and trains students on a fee-paying basis. At the start of the academic year 1995-96, our State HEE was employing 15 100 teaching staff (not counting teachers who combined this activity with another post on the civil service payroll) and had 174 200 students. The number of students attending non-State HEE was 23 100. In 1996 there were 175 students attending State HEE per 10 000 of population; counting non-State HEE, the figure rises to 203 students per 10 000, which is the highest in recent years.

Admissions to fee-paying study courses at State HEE are showing a noticeable upward tendency: 4 796 (13%) in 1993, 5 967 (16.4%) in 1994, 7 512 (19.5%) in 1995 and 2 410
(28.3%) in 1996. (Translator's note: can the last figure be correct? Perhaps 12 410?)

The main statistical data on the activities of the higher education system in the academic year 1997/98 as compared with previous years will be found in tables 24 and 25.

Table 24 (p.86 of the original)
1. Network of HEE (at the beginning of the academic year)
2. Academic year
3. Number of EE
4. Number of students, thousands
5. of which by type of course
6. daytime
7. evening
8. correspondence
9. ** figures for non-State HEE
10. [...] no data available

Table 25 (p.87 of the original)
1. Number of students at State and non-State HEE at the beginning of the academic year, thousands
2. Years
3. Number, total
4. of which
5. State
6. non-State
7. of which attending daytime courses

The number of applicants for student places in HEE of all types is also rising. Thus, in 1996 there was an average of 2.5 applicants for a daytime student place (1.9 in 1995), 1.7 for a correspondence course place (1.5 in 1995) and 1.6 for an evening course place (1.2 in 1995).

Rules governing admission to HEE define the procedure for the admission and matriculation of SS or VTEE leavers who have received a gold or silver medal or a special mention, winners of country-wide or international "Olympiads" in general education subjects or professional skills, and winners of "Olympiads" organized by HEE. Thus, for example, 5 796 of all students admitted to daytime courses in 1996 (19.1%) were secondary school medallists, 1 320 (4.4%) were graduates of SSEE or VTEE who had obtained diplomas with a special mention, and 1 478 (4.9%) were winners of an Olympiad in a particular subject.

Women account for 51.2% of all daytime students at State HEE and for 48.6% of all HEE including non-State ones. Studies at State HEE are organized in 8 main sectors or branches. 48.7% of students admitted to non-State HEE, chose the economics sector and 50.3% the humanitarian sector. The
non-State HEE do not offer specializations in science, technology, medicine or agriculture.

In 1996, the number of graduates from State HEE was 31,718 (as against 31,877 the previous year), including 23,298 (20,424) daytime students and 10,314 (10,899) and 531 (554) students taking evening classes and correspondence courses, respectively.

In 1995, 627 out of the total number of HEE graduates obtained a B.Sc. and 46 an M.Sc. The development of admissions to State and non-State HEE by specialization branch and of the number of graduates having attended daytime courses between 1990-1998 is shown in tables 26-28.

Table 26 (p.88 of the original)
1. Admissions to State HEE by specialization branch
2. Branch
3. Natural sciences
4. Humanities
5. Pedagogical
6. Medical
7. Economics
8. Technical
9. Agricultural
10. Military
11. Total
12. No data available

Table 27 (p.89 of the original)
1. Admissions to State and non-State HEE at the start of the academic year, thousands
2. Year
3. Student intake, total
4. State/non-State
5. of which daytime students

Table 28 (p.89 of the original)
1. Numbers of HEE graduates (daytime courses), 1993-1995
2. De facto number of graduates (having taken daytime courses)
3. Percentage entering employment
4. Country-wide
5. Ministry-controlled HEE only

The reform of the national higher education system, begun in September 1994 (date of the introduction of a the new subject register) and based upon the principles of the national education policy and of the UNESCO international classification, was aimed at renewing the contents and structure of the national model of specialist training. That
is also the chief goal of our higher education reform today, and we are working towards it by introducing a multi-level system of specialist training based on a new generation of curricula and syllabuses being developed by our central HEE together with other interested organizations and EE.

The structure and contents of the new generation of curricula and syllabuses take account of the particularities of our national higher education system and of the need to integrate it in the world-wide education area. The structure of the curriculum includes human and socio-economic disciplines (25-35%), general science and general professional disciplines (35-45%), special disciplines (25-35%) and specialization disciplines (10-15%).

The rapid changes taking place in our country in the past few years have created a number of new problems that need to be resolved in the process of reforming the higher education system. The achievement of national sovereignty, the transition to a market economy, the introduction of new forms of ownership and changes in the social and economic fields call for a new model of training of high-level specialists, and this in turn obliges us to review the whole structure of higher education and to bring its contents into line with our society's need for economic and spiritual development.

Our reform of higher education is therefore due to the following causes:

- the growth of higher education in our country and the need to bring it into line with new demands;
- the steadily growing range of economic, social, cultural and other needs which higher education is being called upon to meet;
- changes in the system of acquiring and distributing knowledge, as a result of which all forms of study are expanding and the number of people involved in them is growing. This means that curricula and syllabuses are becoming obsolete more quickly than in the past, which in turn makes it necessary, among other things, to create new structures that are not enclosed within particular faculties or university departments and to give greater attention than hitherto to the economic and ethical problems inherent in scientific activities.

The reform of higher education is proceeding in three stages. The first began in 1993-1994 and saw the elaboration of a new national system of education; the second, lasting two to three years, is devoted to establishing a new legislative and normative basis and analysing the effectiveness of separate parts of the system; and the third stage, due to be completed around 2001, will see the integration of our national system in the world system of higher education. During the first and second stages,
multiple scenarios of new structures are used with a view to analysing their adaptability to present-day conditions and evaluating them on a comparative basis. The third stage ought to confirm that our new system corresponds to its international analogues. At that stage the Ministry will work together with international associations towards making our diplomas in the majority of subjects homologous with those issued in other countries and towards the unconditional fulfilment of the requirements of the UNESCO international classification.

All three stages of our higher education reform are coordinated with the general educational reform process taking place in the Republic.

SECTION IX. SPECIAL EDUCATION

Special education occupies an important place in the development of our education system. According to statistical data, 10.9% of children in Belarus - i.e., every ninth child - belong to the category of children with abnormalities of physical or mental development, and therefore require special education. They include children with sensory handicaps - the hearing-impaired or deaf-and-dumb, the vision-impaired or blind; children with problems of the locomotor system; the mentally or psychologically backward; children with serious speech defects; and those with complex combinations of handicaps.

In the school year 1997/98 the Ministry of Education's system included 27 children's homes, 31 boarding SGE (18 of which were orphanages), 25 sanatorium-type boarding schools, 80 boarding schools for the mentally or physically handicapped, 22 family-type children's homes, 27 centres for diagnosis and rehabilitation, 707 defectological centres and 417 special classes attached to SGE. These 185 establishments are attended by about 26 000 children, and a further 2 059 handicapped children are being educated at home.

The main documents regulating these establishments' activities include: the Rights of the Child Act (1993), the Social Welfare for the Disabled Act (1994), the Supreme Council decision "On the prevention of disablement and the rehabilitation of disabled persons" (1994), the Cabinet of Ministers decision "On steps to improve the work of special EE for physically or mentally handicapped children and adolescents" (1991), the national plan of action for the protection of the rights of the child in the years 1995-2000 (1995), the presidential order "On steps to improve the work of boarding and special EE" (1996), the Decision on special boarding SGE for mentally or physically handicapped children (1993), the Provisional Ruling on defectological centres

In recent years the status and activities of all our boarding establishments have taken a substantial turn for the better. Funding has increased and funds are being allocated on a priority basis. More and more of these establishments are of an open type, with conditions approximating those within the family. Funds for the provision of financial assistance to students have been set up in all boarding schools other than those specifically intended for orphans (who receive assistance in a different form).

Thanks to the normative basis which has been created, the handicapped children's right to education irrespective of the extent of the handicap can be implemented, as can their or their parents' right of choice of EE. The network of establishments for the diagnosis and correction of handicaps and for the education of handicapped children continues to develop. Standards governing special school education are being elaborated. A network of PSE for handicapped children is being developed and conditions enabling handicapped children to receive secondary and higher vocational education are being created. From the 1995/96 school year onwards, special EE have begun to introduce new educational contents. A national compendium of educational and methodological materials, including syllabuses, textbooks, methodological recommendations, teaching aids and special textbooks for the blind is being prepared, and model group and individual systems of tuition are being developed.

SECTION X. NON-STATE (PRIVATE) EDUCATION

Non-State EE in the territory of Belarus are subject to the Education Act, whose art. 29 provides: "Non-State educational establishments may provide education of all types and at all levels ...".

The description "non-State EE" attaches to privately owned educational establishments. These include EE established by organizations, public associations and trade unions. Their structure and organization follow the standard patterns applicable within the State education system.

The management of these EE is in the hands of the individuals or entities responsible for establishing them, the actual process of tuition and education being directed by the head of each establishment. In the case of establishments which are branches of a larger EE, some management duties - in particular, the introduction of new
subjects, curricula, syllabuses, etc. - are performed by the parent HEE or SSEE.

In order to carry out their activities these EE must first obtain a special licence from the Ministry of Education, which issues the licence in the light of the curricula and syllabuses proposed, the potential availability of staff and of technical and other supplies, the current demand for school-leavers or graduates, etc. In conducting their work they must ensure the harmonious development of the student's personality, open up his/her potentialities, and promote the development of scientific, technical and cultural activities in accordance with the needs of society.

At the beginning of 1998 there were 41 non-State EE, including 16 HEE, 9 SSEE and 16 schools and gymnasiums (sixth-form colleges). Their student body totalled 99 085 persons, 921 of whom were enrolled in schools and sixth-form colleges, 3 667 in SSEE and 34 497 (or 18.2% of the total number of students in higher education throughout the country) in HEE.

Of the total student body of non-State EE, 16 913 were enrolled in daytime classes, 16 913 in evening classes and 133 in correspondence course.

In the main, the non-State HEE and SSEE provide specialized training in economics and finance and in social, commercial, legal and culturological studies. Their relative proportion in the total number of EE has tended to increase over the past few years. Thus, whereas in 1995 there had been only 5 non-State SSEE, by 1998 their number had risen to 9; similarly, the 6 schools and sixth-form colleges existing in 1996 had grown to 16 by 1998, and so forth.

Fees are determined by the EE themselves depending on the public image of the EE and the prestige of the specialization offered. Fees have risen over the past few years and today average US$ 650-1200 p.a. in HEE, US$ 450-500 p.a. in SSEE and US$ 250 in schools and sixth-form colleges.

Some non-State EE (HEE and SSEE) have set up regional branches, faculties or educational counselling centres in various parts of the country. This helps to reduce tuition costs and ensures that specialists are available in the regions where they are most needed. Staff can retrain or change their specialization without having to leave the region. These branch activities are also subject to licensing. There are currently 15 branch HEE and 5 branch SSEE.

Teaching staff is appointed on a competitive contractual basis. Often these appointments depend on the possibilities of the region in which the EE is located.
Thus, there are many more qualified teachers to choose from in the capital and the regional centres than in the regions themselves. For example, the average proportion of teachers with academic degrees or diplomas at non-State HEE is 54% in the capital, while elsewhere it averages less than 30%. The lack of highly qualified teachers is particularly strongly felt in correspondence courses for students in higher education. Teachers at schools and sixth-form colleges are generally members of the permanent staff, while those at HEE and SSEE often combine these jobs with other employment. For example, 263 of the 415 teachers employed at non-State SSEE have jobs elsewhere. In the majority of cases this means that the teacher works only part-time. Most of the teachers are aged between 30 and 56, although older specialists are also employed.

The tuition and education process in non-State schools follows the standard curricula and syllabuses. There are also individual curricula based on the standard ones for HEE and SSEE. These curricula have to be tested and approved by the Ministry of Education.

The syllabuses in use are either the standard ones or are prepared directly by the non-State EE itself, in which case they require the approval of the Ministry of Education. Subject syllabuses are approved by the director of the EE concerned. In general, they correspond to the curricula and syllabuses in use in the State sector of the education system.

The intensive growth of the number of non-State EE seems today to have come to a halt. Five non-State EE (4 HEE and one SSEE) were closed down in the past 2 years.

The main causes for such closures are: failure to achieve the requisite level of specialist training, declining student intake due to high tuition fees, insufficient profitability, failure of the EE to correspond to the status assigned to it, etc.

With the aim of regulating the activities of these EE, the Ministry has drawn up a "Decision on non-State EE" and a model document of "attestation of non-State education".

SECTION XI. MATERIAL AND TECHNICAL INFRASTRUCTURE OF EDUCATION. TEXTBOOK PUBLISHING

The law in force defines the material infrastructure of education as consisting of the land, buildings, machines and equipment, vehicles and other property used for instruction, education, child health and other education-related purposes. It may be the property of the EE or may be used by them on leasehold or other terms. The objects forming part of the material infrastructure of education and the enterprises and organizations which develop the material and
social basis for education and provide opportunities for work practice and training enjoy tax privileges or are completely exempt from taxation. State organs, enterprises and organizations of education, as well as EE and other educational institutions, are responsible for the renewal and development of the material infrastructure in the light of increasingly stringent requirements as regards the level and quality of education. The necessary material resources are allocated to them and investments in the form of State commissions are made for this purpose. Land, buildings, structures, equipment and materials are ceded on favourable terms. The law prohibits any action that may cause the material infrastructure of education to diminish or deteriorate.

With the disintegration of the Soviet Union and the worsening of the socio-economic situation, the material and technical infrastructure of education, especially of SGE, declined steadily. Schools built before 1987 had no classrooms for 6-year olds and no computer rooms and other premises essential for the purposes of modern education. More than half of our rural schools had a weak material infrastructure, lacking running water, central heating and drainage systems.

Between 1989 and 1995, construction of SGE declined steadily. Only 6,990 new student places were created in 1995 as against 63,600 in 1989. No major repairs of school buildings or transfers from unsuitable buildings were undertaken. The upshot is that today we have 1,644 school buildings (33.8%), 500 more than in 1993, in need of major repairs.

Classroom and laboratory floor space is inadequate, especially in the capital. The current floor space allocation per daytime HEE student is 9.2 sq. m as against 10.6 sq. m in 1990, despite the fact that the recommended average allocation is 14-18 sq. m per student. In other words, our HEE have only half the floor space necessary for study and research purposes.

As of 1 September of the school year 1997/98, the Republic had 4,820 SGE and 4,511 PSE. Of these, 3,532 schools and 2,189 kindergartens are located in the countryside; 329,724 children in 1,366 schools, or 27%, attend the second shift and 3,698 children in 22 schools the third shift. 3,124 of the schools have running water and drainage, 1,968 have central heating, 2,566 have classrooms equipped for computer studies, and quite a few have swimming pools.

An upward trend in terms of opening of new SGE began to be observed in 1996, 9,180 student places being created that year. New schools with capacity for 13,400 student places were opened in 1997 and for 18,700 places in 1998. Local
authorities are also, despite shortage of funds, building annexes to existing schools, carrying out repairs and providing furniture and other school equipment.

The Government is devoting special attention to schools in radiation pollution areas. Today we have 811 PSE, 911 SGE, 19 boarding schools, 44 VTEE, 20 SSEE and 4 HEE with a total student body of 483,869 located in such areas.

An important problem with many as yet unresolved aspects is school computerisation, i.e., the provision of computer equipment and instruction in data processing. More than 30 types of computer equipment which are mutually incompatible in terms of both hardware and software are currently in use in our schools. Only 12.3% of the equipment is IBM-compatible. The average computerisation level corresponds to 0.48 computer per SGE. Almost all computers are to be found in secondary schools; in basic schools there are practically none at all. All our computers are physically and conceptually obsolete and there is no money to overhaul or replace them. The Ministry of Education has recently approved a standard register of teaching aids, techniques and equipment for SGE, SSEE, PSE and VTEE in the school year 1997/98, and has embarked upon the gradual computerization of schools in accordance with this register. The number of classrooms equipped with computers rose from 2,096 in 1995/96 to 2,122 in 1996/1997.

The SGE reform programme now in progress presupposes the parallel elaboration of an integrated programme of school computerization, which must provide for the following:

- gradual (year-by-year) provision of up-to-date computer technology capable of dealing with all present-day computerization problems and suitable for training data processing instructors;
- the acquisition, adaptation and bringing into use of standardized software suitable for teaching new data processing techniques;
- the development, adaptation and bringing into use of software for specific subjects, electronic textbooks, data bases, etc.;
- training of instructors with a view to incorporating data processing techniques in the teaching of computer science and core subjects, in management operations, etc.

An important precondition for the successful realization of our educational goals is the supply of the necessary modern teaching aids, especially textbooks, to pupils and teachers at SGE and special schools.

Before the collapse of the USSR, over 80% of the textbooks needed by our SGE were provided through the centralized services of all-Union ministries and
departments. Only textbooks and teaching aids in subjects specific to our Republic (Belorussian language and literature, Belorussian history and geography) and translations of textbooks for schools which used Belorussian as the language of tuition were published in the Byelorussian SSR. At the beginning of the 1990s this system virtually came to a halt. For this reason, and also because of the change-over to new educational contents, the problem of supplying schoolchildren and teachers with textbooks and teaching aids of our own has become extremely acute.

To deal with this problem, the Ministry of Education set up in 1993 the **Scientific and Methodological Centre for Textbooks and Teaching Aids**, whose main duties are:

- to analyse the supply of textbooks to all types of educational establishments, to select authors and groups of authors and commission them to produce textbooks and teaching aids, to review and approve these following theoretical and practical tests, to conclude contracts with publishing houses on the publication of textbooks, teaching aids and methodological literature, to direct the marketing of these publications, and to organize their delivery to SGE and other schools and institutions.

In the past few years over 250 authors' collectives have been set up in order to produce textbooks for SGE, and 860 textbooks, including 450 new ones with contents substantially different from those of existing ones, have been published. Seventy-one titles of textbooks and teaching aids were published for the start of the 1997/98 school year alone.

The total number of titles of textbooks and teaching aids in use in Belarussian secondary SGE today exceeds 1000, 860 of them having been published in the Republic. The number of textbooks being published is steadily increasing. Thus, 527 titles were published between 1995 and 1997, including 259 for elementary schools and 268 for secondary SGE.

The adoption of new curricula has led to the publication of nationally-produced textbooks in geography, history, Belorussian language and literature and data processing. Experimental maths textbooks for grades 5-8 are being published. Cartographic materials for history and geography classes are being produced. Grades 1-10 have been fully supplied with textbooks on Belorussian language and literature. Textbooks are being issued in Polish for grades 1-11 of schools where Polish is the language of tuition. The publication of books in the "School Library" series continues. Over the past years, 162 titles of literary works included in the curriculum have been published. For the first time, books in this series are being published for elementary schools.
In the field of human rights, the following publications have been produced jointly with UNESCO: "Rights of the child", "100 lessons on the rights of the child", "Orphanhood as a social problem". An educational video film entitled "I and my rights", the script for which was prepared by our Textbooks and Teaching Aids Centre, has been produced with the help of UNESCO funding.

In the production of national textbooks and teaching aids, extensive use is made of the high scientific potential of teaching staff at HEE and the National Institute of Education and of the experience of our best teachers and educational methodologists.

All the above testifies to the active growth of textbook publishing in Belarus and to the fact that Belarus is becoming self-sufficient in the production of textbooks. Production of textbooks for use in elementary schools occupies an important place in our textbook publishing. Of the 236 titles currently in use, 204 were published in Belarus. The supply of nationally-produced textbooks to children in grades 1-4 of elementary schools with Russian as well as those with Belorussian as the language of tuition is practically assured. A characteristic feature of these textbooks is the predominance of the developmental over the informative aspect; the child's development, founded upon universal values as well as national cultural values and traditions, is given pride of place. In 1995/96 textbook publishing for SGE, including elementary schools, was funded out of the State budget. Publishing of textbooks for both elementary school and SGE enjoys tax privileges.

In 1995, 122 titles of elementary school textbooks were published with a total print run of 13 588 580 copies for a total cost of 90 473 430 roubles. The corresponding figures for 1996 were 100, 7 605 040 and 52 385 010 and those for 1997 79, 3 811 450 and 64 086 4500. The overall cost in US dollars was 12.4 million according to the weighted exchange rate of the Belorussian National Bank. Seventy-four titles of new and adapted textbooks and teaching aids have been prepared as part of the initial stage of the SGE reform now in progress.

Supplying textbooks and teaching aids to special school pupils and teachers is another important aspect of our textbook publishing effort. In the Soviet era our special schools were supplied from Moscow, but since 1992 this system has been gradually phased out; of 67 titles ordered from Moscow, only 5 were received between 1994 and 1996 and none at all in 1997.

Upon instructions of the Ministry of Education, the National Institute of Education has been engaged since 1993 on preparing curricula for all types of special schools with a view to developing a national system of special education.
On the basis of these curricula, the Textbooks and Teaching Aids Centre has set up groups of authors to prepare the Republic's first-ever teaching aids for handicapped children. To date, sets of textbooks for grades 1 and 2 have been published for children with severe speech defects, those with retarded psychological development, the hearing-impaired and the intellectually backward. 276 titles have been produced for grade 1 and 17 titles for grade 2 pupils. The first nationally produced textbooks in Braille were published in 1997. In 1997/97 special schools will receive 13 titles of textbooks for blind children.

SECTION XII. RETRAINING AND ADVANCED TRAINING OF STAFF.

ADULT EDUCATION

The abandonment of the centralized command system of management has made it necessary to review the role and place of our system of post-diploma training of senior staff and to bring it into line with the new socio-economic reality. The object has been to adapt the existing system to the demands of the market in the light of our national economy's development prospects and to ensure the system's effective operation on that basis.

Between 1995 and 1997, 15 EE for the retraining and advanced training of senior staff - one academy, 4 institutes, 5 university departments and 5 training centres - were established. During the same period, licences were issued for 21 new non-State (private) EE or branches thereof serving the same purpose.

As a result of the reorganization of regional "teacher upgrading institutes" into EE of a new type, the level of the teaching provided has greatly improved in terms of both scientific content and teaching skills. The old institutes, which had been set up in the 1940s, had not been subdivided into departments or faculties, and this lack had been reflected in the quality of their work.

Twelve normative legal documents were drafted and adopted between 1995 and 1997 with the aim of improving the organization and operation of post-diploma training of senior staff. The role of higher and secondary special schools and of the vocational-technical education system in retraining teachers in market-oriented subjects has been strengthened. Practically every EE now offers retraining and advanced training courses to its own teaching staff.

The years 1995 to 1997 saw the accreditation of 130 EE of the retraining and advanced training system.

A special programme entitled "Development of the system of retraining and advanced training in the Republic of Belarus in the years 1998-2000" was drawn up in 1997 with the aim of enhancing the effectiveness of post-diploma education. On the basis of our Republic's present state of
socio-economic development, the programme provides for the following:

- the establishment of an organizational infrastructure for the implementation of State policy in the sphere of post-diploma education, the development of cooperation between Ministries and local organs of management of educational activities in ensuring purpose-oriented development of the retraining and advanced training system;
- special measures designed to enhance the motivation of specialists employed in enterprises, organizations and in the regions to seek retraining and to upgrade their qualifications;
- study of the real demand for further education and elaboration of a mechanism that will enable the State to influence the market in educational services;
- improvement of the supply of textbooks, methodologies and computer programmes to the post-diploma education system in the light of development tendencies;
- creation of a developed system of advisory services to assist Belorussian specialists at all stages of professional activity;
- expansion of international cooperation in the field of post-diploma education with the aim of ensuring our participation in the process of internationalization of the labour and education markets.

A "Council on problems of retraining and advanced training of senior staff" was established by a Decision of the Cabinet of Ministers dated 15 August 1995 with a remit to ensure the application of a unified policy in the field of post-diploma education, coordinate all aspects of work being done in that sphere, and strongly enhance the Ministry of Education's influence on that work.

In the light of the real situation obtaining in our Republic, the decision was taken to create within the education system a number of EE that will focus their attention on specific areas of education, the provision of scientific and methodological materials to those areas, and the training and advanced training of senior teachers and educationalists. The Republican Institute of Professional Education and the Republican Institute of Innovative Techniques attached to the State Polytechnical Academy were established to this end.

At present we have 130 advanced training EE which retrain some 450 000 persons a year. About 40 000 persons a year receive training in the 23 EE of this kind which are controlled by the Ministry of Education; these persons belong to over 100 categories with the educational service and specialize in 120 different subjects or branches. These EE employ 3 700 teachers, 72% of whom hold academic degrees or titles.
The parent organization of the advanced training system is the Academy of Post-Diploma Education. Its duties include the organization, scientific direction, coordination and methodological guidance of purpose-oriented training of teaching and research staff for regional retraining and advanced training institutes. The Academy operates a data bank of advanced innovative teaching methods and experience, with the help of which it provides advisory and methodological services to regional and other institutes and to the teaching profession in general. The Academy's computer system is linked to the Internet.

The State policy on post-diploma education is based on the following principles: to meet as fully as possible the needs of our EE for highly qualified teaching staff; to develop an operational strategy for the development of the staff training and re-training system; and to provide economic, legal, organizational and other guarantees in this area.

According to art.23 of the Education Act, citizens are entitled to independent self-education. To this end we have people's universities and schools, including evening and correspondence courses run by SSEE and HEE, extra-mural courses and many different adult retraining and advanced training courses, national cultural centres, etc. Adult education enjoys the assistance of libraries and other information centres, public associations and the media.

SECTION XIII. TEACHING STAFF

The size and socio-demographic structure of the teaching body in the Republic of Republic have developed in the following manner:

In 1996 there were 54 196 teachers working in PSE, including 37% with higher, 2% with incomplete higher, more than 58% with secondary special and 3.5% with secondary general education. The level of qualifications of teaching staff working in PSE was as follows: 3.2% in the top category (as against 2.9% in 1995), 22% in category 1 (18.2% in 1995), 40.2% in category 2 (40.2%) and 34.6% unclassified.

In grades 1-4 of daytime SGE there are 32 200 teachers, including elementary school head teachers, of whom 62.9% have higher, 3.5% incomplete higher, 33% secondary special and 0.6% secondary general education. Of the teachers employed in grades 5-11(12) of such schools, 87.9% have higher, 2.8% incomplete higher, 8.3% secondary special and 1% secondary general education. Among the total number of teachers teaching special subjects, 5.3% have no special qualifications in the subject taught. The qualification
level of teachers taking grades 1 to 4 is as follows: 6.7% top category, 24.4% category 1, 41.9% category 2, 27% unclassified. The corresponding figures in the 1993/94 school year were 6.2%, 23.8%, 39% and 31%. The figures for teachers taking grades 5-11(12) are: 11% top category, 31.6% category 1, 36.2% category 2, 21.1% unclassified, the corresponding figures for the school year 1993/94 being 10.3%, 31.7%, 35.4% and 22.6%.

The number of teachers employed in SGE of all types totals more than 144 000, including 80% with higher, 16% with secondary special, 3% with incomplete higher and 1% with secondary general education. The 1993 figures were, respectively, 79.4, 15.4, 3 and 2%. As for the qualification level, 11 % of all SGE teachers are in the top category, 29% in category 1, 39.2% in category 2 and 20.8% are unclassified. In the school year 1994/95, the corresponding figures were, respectively, 9.9, 29.9, 37.7 and 26.6%. In the school year 1997/98, 79.2% of SGE teachers had top category or category 1 or 2 qualifications as against 73.2% in 1993/94 and 75.2% in 1994/95.

There are twice as many teachers in the top category in urban schools as in rural ones (12.7 as against 5.9%). The figures for grade 1-4 teachers are, respectively, 9.2 and 3% and for grade 5-11(12) teachers 11.2 and 7.9%.

Women account for 82.2% and men for 17.8% of all teachers and head teachers of daytime basic SGE. Of the women teachers, 30.3% are under 30, 55.4% between 30 and 50, 8.9% between 50 and 55 (the official retiring age for women) and 5% over 55. Of the men, 22% are under 30, 61.4% between 30 and 55, 10.8% between 55 and 60 (the retiring age for men) and 4.8% are over 60.

42.1% of all head teachers of daytime secondary SGE are women and 57.9% are men. The age patterns in this group are comparable to those of head teachers of daytime basic SGE.

The total number of teachers of pensionable age employed in all types of SGE is 7 700. They account for 4.9% of the total teaching staff. There are also 800 teachers who are students in their last year at HEE.

In terms of university-educated specialist teachers employed in schools, Belarus is ahead not only of its closest neighbours (Russia, Lithuania, Poland) but also of many countries further afield.

The staffing problem in schools has been more or less resolved. We have practically all the staff we need to teach physics, mathematics, chemistry, biology, Russian language and literature, as well as elementary grade teachers and pre-school educators. In the past 3-4 years the 7 universities, 2 pedagogical institutes, 10 pedagogical schools and 8 teacher training colleges which train our teaching staff have expanded the range of subjects on offer.
by 20-25% or, in some cases, even more, especially for student teachers taking two special subjects. Secondary school leavers from areas affected by the Chernobyl disaster and those from rural areas are admitted on a priority basis.

We do, however, have a shortage of specialists in foreign languages, physical training, Belorussian language and culture and social sciences, although sufficient numbers are being trained in HEE and SSEE. The main reason is that foreign language and physical training specialists can get better pay in other sectors of the economy and on the commercial market.

The Republic's VT schools employ 1 921 teachers of general education subjects, whose professional qualifications are as follows: 13.2% top category, 37.9% category 1, 35.4% category 2, 13.5% unclassified. These teachers include 97% with higher, 0.7% with incomplete higher, 1.4% with secondary special and 0.1% with secondary general education, which makes them the best educated group. The total number of staff (including administrative as well as teaching and technical staff) in the Ministry's VTEEs is 13 000, of whom 3 900 are teachers and 7 100 are "masters of industrial training". 7% of the teachers are in the top category, 29.5% in category 1 and 37.5% in category 2; 48.9% of the teachers are women.

In spite of difficulties, the professional skills of teachers in our VTEE are, on the whole, improving. For purposes of comparison, here are some figures for the school year 1993/94: 5.1% of all supervisory and professional-level technical staff and 11.4% of teachers in general education subjects were in the top category, 26.2 and 38.7%, respectively, in category 1, and 38.0 and 39.7% in category 2. However, some 60% of teachers in VTEE have received no special psycho-pedagogical training, and the existing schools providing training for VT teachers (3 industrial teacher training SSEE and 3 HEE) can meet only a minimally small part of the schools' requirements, and that only in a very limited number of subjects.

SSEE employ over 11 000 teachers, 93% of whom have higher, 4% incomplete higher and 2.1% special secondary education. The qualifications level is as follows: 65% top category and category 1, 26% category 2, 9% unclassified. The level of professional qualifications among SSEE principals is high.

At the beginning of the 1996/97 academic year the State HEEs were employing 15 400 teachers, including 6 252 (or 41.3%) women. This total included 843 with doctorates and 6 889 with masters' degrees, of whom 101 and 2 312, respectively, were women. 917 held the academic title of professor and 5 047 that of lecturer. Private HEE were
employing 626 teachers, 32 of whom held the title of professor and 148 that of lecturer.

In the last few years the relative percentages of lecturers, M.A.s, professors and Ph.D.s employed in education has evolved considerably. For example, in 1990 lecturers employed at HEE within the Ministry of Education's system accounted for 68.4% of the country's total number of masters of arts or science, whereas in 1997 the corresponding figure was 81.1%. Professors working in HEE in 1990 accounted for 90.1% of all Ph.D.s, while in 1997 the figure had risen to 105.3% owing to doctorates honoris causa being awarded massively to experienced M.A.s and M.Sc.s.

The age pattern has changed considerably. The number of teachers aged between 30 and 40 declined from 32.2% in 1990 to 23.8% in 1996. On the other hand, the percentage of teachers aged less than 29 rose from 7.9% in 1990 to 8.9% in 1996 and of those above the age of 61 also rose (from 6.2% in 1990 to 8.4% in 1996).

The main statistics relating to the Republic's teachers will be found in table 29 to 37.

Table 29 (p. 110 of the original)
1. Number of teachers employed at different levels of the education system: breakdown by level of school and type of qualifications, thousands, 1996/97
2. Levels and types of school
3. Class I diploma, m/w
4. Class II diploma, m/w
5. Class III diploma, m/w
6. Total
7. including with teacher training
8. Pre-school education
9. Elementary education
10. Secondary general education
11. Vocational-technical education
12. [...] no data available

Table 30 (p.111 of the original)
1. Number of teachers: breakdown by gender and age groups, thousands, 1996/97
2. Age groups
3. Elementary schools
4. Secondary schools
5. men
6. women
7. under 30
8. between 30 and 50
9. between 50 and 55
10. 55 or over
11. Total

Table 31 (page 111 of the original)
1. Educational level of teachers at pre-school establishments, Ministry-controlled and other, 1994/1995
2. Educational level
3. Number of teaching staff, thousands
4. Higher
5. Incomplete higher
6. Secondary special
7. Secondary general
8. Total

Table 32 (p.112 of the original)
1. Teaching staff of daytime and evening SGE and boarding schools, including special boarding schools for physically and mentally handicapped children: breakdown by level of education
2. School year
3. Total number of teaching staff
4. Type of education received
5. Higher
6. of which higher pedagogical
7. Incomplete higher
8. Secondary special
9. of which secondary special pedagogical
10. General secondary

Table 33 (p.113 of the original)
1. Teaching staff of daytime and evening SGE and boarding schools, including special boarding schools for physically and mentally handicapped children: breakdown by category awarded
2. School year
3. Total country-wide
4. Category awarded
5. Top category
6. Category 1
7. Category 2
8. Unclassified

Table 34 (p. 113 of the original)
1. Level of education of all teaching staff within the vocational-technical education system of the Ministry of Education, school year 1997/98
2. Total number, thousands
3. Type of education received
4. Higher
5. Total
Table 35 (p. 114 of the original)
1. Teachers employed by daytime polytechnics and colleges within the secondary special education system of the Ministry of Education: level of education received, school years 1995 to 1998
2. School year
3. Total number, thousands
4. of whom
5. higher education
6. including
7. total number
8. pedagogical
9. percentage of total number of teachers

Table 36 (p. 115 of the original)
1. Professors and other teaching staff in State higher educational establishments: breakdown by academic qualifications and titles
2. Years
3. Full-time staff
4. including
5. other teaching staff
6. with academic titles
7. Ph.D.
8. M.A. or M.Sc.
9. Total
10. including women
11. staff holding another post or posts within the system
12. staff working half-time or quarter-time
13. Professor
14. Lecturer
15. [...] no data available

Table 37 (p. 116 of the original)
1. Teachers in higher educational establishments: breakdown by age groups
2. All HEE teachers
3. Ph.D.
4. M.A. or M.Sc.
5. 29 or younger
6. 61 and over
Specialist teachers (those with a "pedagogical education") are trained at teacher training schools and colleges if they have basic or general secondary education and at pedagogical institutes or universities which admit secondary school graduates on the basis of the "Standard Rules for Admission to EE in the Republic of Belarus" and of their own admission rules.

**An approximate breakdown of teachers employed at different levels of the education system by the type of studies completed is shown in table 38.**

Table 38 (pages 117 and 118 of the original)

1. **Training of teachers and educators at various levels of the education system, academic year 1997/98**
2. Level and type of education
3. Type of EE
4. Conditions of admission
5. Breakdown by syllabus taken
6. Qualification/type of diploma
7. Pre-school education
8. Teacher training school or college, pedagogical university (institute), level 1
9. Competitive examination - applicant must have incomplete secondary (9 grades) or secondary education
10. Social studies and humanities 20-22%, natural sciences and mathematics 10-12%, psycho-pedagogical studies 12-13%, special subjects 40-45% of hours of study
10a. Social studies and humanities 20-25%, general science 35-45%, special cycle 25-30%, special subjects 10-15%.
11. Diploma of secondary special education, qualified as teacher or educator
12. Incomplete general secondary education
14. Pedagogical university (institute), level 1
15. Competitive examination - applicant must have completed secondary education
16. Qualified as "basic school teacher"
17. Complete general secondary education
18. Pedagogical university (institute), level 2
19. Diploma of higher education, qualified as secondary school teacher
20. Technical and vocational secondary education
21. Industrial-pedagogical polytechnic
22. Competitive examination - applicant must have completed vocational-technical or secondary school
23. 36 hours of study per week
24. Diploma of secondary special education, qualified as master of industrial training
25. Higher education
The curricula and syllabuses introduced in the last few years place special emphasis on training in psychological disciplines. In teaching educational methods, attention is focused on psychological aspects with the object of equipping each graduate with a professional grasp of psychology which will help him/her to find the right individual approach to each student.

The system of certification of teaching and schools management staff is an important aspect of the staffing issue. The idea underlying our system is that the professional skills and management abilities of graduates of teacher training establishments must be assessed not only by persons from the world of education but also by representatives of other sectors of the economy which the candidate may enter after training. Here a distinction must be drawn between the State system of certification of teacher training college graduates and the systems used on the open market. The former is governed by specific legal regulations, while the latter may apply more stringent criteria than the legal norms in force. What is needed is a normative system with certificates specially designed for each category of teacher training establishments that will take account of the interests of the graduates' potential future employers and of the whole of society.

The rights and duties of teachers and the main socio-economic parameters of their activities are set forth in articles 33-35 of the Education Act, the Trade Unions Act and the relevant articles of the new draft Act amending and expanding the Education Act which has been prepared by the Ministry of Education, the National Committee of Educational Trade Unions and the Cabinet of Ministers.

Teachers in Belarus have had to face many social, economic and professional problems in recent years. These problems include the teaching profession's loss of social status and prestige, low pay and an inadequate system of wages payment, poor housing and other living conditions, heavy and sometimes excessive work-loads which entail the deterioration of teaching quality and of the teachers' health, and insufficient use made of the socio-economic and professional privileges available to teachers.

Teachers' pay continues to be the greatest problem, although Belarus is the only CIS country to date where workers are being paid on time. In the first half of 1997 the average pay of all persons employed in education was 1.64 million roubles (US$ 69.6 at the average weighted National Bank rate), or 74% of the average monthly wage in
all branches of the economy. During the same period the average teachers' pay was 1.96 million roubles, or 74% of the average earnings of industrial employees, a lower figure than in the first half of the preceding year. Young trained teachers and pre-school staff on a monthly wage of 1.3-1.5 million roubles, which corresponds to only 60% of the minimum consumer budget, find themselves below the official poverty line.

Information on the average wages of persons employed in education and industry in 1994-1997 and on pay rates for teachers in schools, boarding schools, VTEE, SSEE and HEE will be found in tables 39-41.

Table 39 (p.121 of the original)
1. Information on wages of industrial and educational workers in the Republic of Belarus in 1994-1997, 1000 roubles
2. Year
3. industrial workers
4. average wage
5. workers within the education system
6. teachers
7. all educational workers
8. as a percentage of the average industrial wage
9. professors and other teaching staff in State SSEE and HEE
10. in 1000 roubles
11. in US$
12. first half

Table 40 (p.122 of the original)
1. Pay rates of teaching staff in schools, boarding schools, VT schools and SSEE, 1000 roubles
2. Posts
3. Higher education, including seniority
4. Special secondary education, including seniority
5. less than 1 year
6. 1-5 years +5%
7. 5-10 years +10%
8. 10-15 years +15%
9. over 15 years +20%
10. Teachers, lecturers, educators
11. no category
12. category 2
13. category 1
14. top category

The figures given in table 39-41 are in current rates and can be converted into US$ at the official National Bank rates, which were 4652 Belorussian roubles per dollar in 1994, 11525 in 1995, 13608 in 1996 and 12627 in the first half of 1997.
The pay rates of staff within the education system are determined depending on the education received and the professional category awarded, and are supplemented by up to 20% depending on seniority (5% after 1 to 5 years, 10% after 5-10 years, 15% after 10-15 years and 15% after 15 years in the special field).

The teachers' pay system was established in the 1930s and is based on a mixed form of piece-work and time rates. Hours of work within the standard work-load are paid by tariff grade and professional category, which are determined on the basis of certification results, professional training and seniority. Higher tariff rates are paid to staff working with physically or mentally handicapped children, those requiring special education, and orphans. Extras are also paid for quite a number of tasks forming part of the teacher's obligatory duties (correcting written work, being a class teacher, running a laboratory or a class library, etc.).

The weekly work-load is at present established at the following levels: for a teacher in a school, gymnasium or lyceum, 18 hours; for a teacher of music or elocution, a teacher of children with speech or other defects, a musical accompanist, cultural organizer, etc., 24 hours; for an educator in a boarding school, children's home or extended
day group, 30 hours; for a pre-school teacher, 36 hours; for a school psychologist, social pedagogue or pedagogue-organizer, 40 hours per week.

The work-load of elementary school teachers was reduced from 20 to 18 hours on 1 October 1997.

**Standard work-loads and pay rates for educational staff** are determined by the Cabinet of Ministers on the basis of the Unified Tariff Grid for workers and employees in the State service. The grid has 28 groups, pay rate increases from group to group being calculated by the following coefficients: groups 1 to 4, 16%; 5 and 6, 10%; 7-17, 7%; 18-23, 5%; and 24-28, 4%. As of 1 March 1998, the pay rate for tariff group 1 was fixed at 500 000 roubles or, counting statutory extras, 650 000 roubles a month.

Teachers are at present placed in tariff groups 10 to 15. When a teacher is promoted to the next highest professional category, his/her pay increases by only 72 000 to 149 roubles, or US$ 2.8 to 5.9 by the current National Bank exchange rate. The maximum pay rise for a teacher promoted to the top professional category, as compared with the starting pay rate, is 28.6% or 301 000 roubles (US$ 12).

The average monthly pay rate for teachers calculated in accordance with the Unified Tariff Grid in September 1997 was 1 134 700 roubles or, at the rate of exchange applicable at that time, US$ 45.7. Even with extra pay for seniority, work in the countryside or poor working conditions, this corresponds to only 73.4% of the minimum consumer budget.

These pay rate levels were arrived at essentially by increasing the teachers' hourly work-load, which in the school year 1996/97 represented, on average, 0.97 of the standard for teachers in PSE, 1.27 of that for teachers in SGE, and 1.45 of that of teachers in VT schools, lyceums, gymnasiums, colleges and SSEE.

Information on the average standard and de facto work-loads of teachers in various types of EE will be found in tables 42 and 43.

Table 42 (p.127 of the original)
1. **Standard work-load of teachers in the State education system, school year 1995/96, hours**
2. Level and type of education
3. Average number of teaching hours per week
4. Average number of hours worked per week (all activities)
5. Pre-school education
6. Elementary "
7. Secondary "
8. Total
9. of which
10. (a) general secondary  
11. (b) vocational-technical  
12. (c) teacher training  
13. Higher education  
14. (a) universities and assimilated institutes  
15. (b) other institutes  
16. (… per year)  
17. [...] no data available

Table 43 (p.128 of the original)
1. Average de facto work-load of teachers in relation to pay rate, school years 1995/96 to 1997/98
2. Average work-load per teacher
3. Elementary, incomplete secondary, secondary schools
4. Boarding school (general type)
5. Boarding schools for physically and mentally handicapped children
6. Extra-mural (non-school) EE
7. Evening (shift system) SGE
8. Vocational-technical EE, secondary VT schools
9. Special secondary EE
10. Lyceums, gymnasiums, colleges, higher VT schools

The Ministry of Education considers that the present pay system fails to take full account of the special nature of the work of teaching and does not allow sufficient room for adjustments of pay rates for staff in different tariff groups and categories. The system is incapable of responding adequately to social change or to innovations in teaching practice and does not encourage the teacher to be creative or to strive for better results. This inevitably undermines the social importance and prestige of the teaching profession.

A new system has been developed by the Ministry and was introduced on an experimental basis from 1 September of the 1997/98 school year in four EE at different levels of education, some located in the countryside and some in towns.

The issue of teachers' housing is another important and as yet unresolved problem. On 1 January 1998, 18,000 educational staff - about 10% of the total number of such workers - had no homes of their own or were living in accommodation in need of repair.

Low wages, poor housing, inadequate welfare, loss of privileges, heavy work-loads, a negative demographic pattern within the profession, declining motivation, reduced social status and prestige - all these factors are inducing large numbers of teachers to take up jobs in private education or switch to other occupations. The fact that these problems remain unresolved reflects an insufficient appreciation of
the very real contribution being made by teachers to our country's social and economic development.

SECTION XIV. EDUCATIONAL RESEARCH

In a period of transition to intensive methods of development of socio-economic systems, the problem of making the most effective possible use of the country's scientific potential and limited financial resources is becoming more and more important.

In 1996, the work of the Ministry of Education and of the HEE controlled by it was aimed at resolving this problem. Guided by the legislative and normative acts adopted over the past few years with the aim of promoting the development of science and technology, the HEE have striven to achieve substantial improvements in their activities and to enhance the effectiveness of research and experimental design.

The results of this work show that progress has been made towards realizing the country's scientific potential, focusing the efforts of scientists and scholars on resolving major scientific, technical, social and economic problems, achieving new and significant results in the sphere of research and experimental design, strengthening links with industry, making use of the work of HEE in the national economy, and expanding international cooperation. Of a total of 3,310 research projects in progress at 5 research institutes, 21 Ministry-controlled HEE and other scientific organizations, 1,610 were completed in 1996, work on programmes at all levels accounting for 12.8% of the activities these establishments. Ministry-controlled HEE participated in the completion of 124 national scientific projects, with funding in the amount of 26,486 million roubles, and acted as the chief executing agencies in the case of 5 of these programmes. Research was also conducted on 16 inter-HEE fundamental research programmes, which were allocated 13.4% of total funding under the national budget.

The effectiveness of the work of Ministry-controlled HEE and research institutes was reflected in the publication of 152 monographs, 141 textbooks and teaching aids and 10,816 articles and the award of 79 patents. In 1996, 2,613 of the projects completed by the Ministry's HEE were brought into practical use, 1,923 of them in schools. The proportion of work carried out on a contractual basis by HEE and research institutes rose by 10% over the 1995 level, accounting for 33.1% of their total funding (as against 21.5% in 1995). This testifies to stronger links being forged between the HEE and the production sphere. Thirty Ph.D. and 105 Master's theses were accepted in 1996.
Great attention was devoted to expanding international relations. More than 900 articles and monographs were published abroad. 218 grants from international funds were received in 1996 by our HEE and research institutes. In the same year, 77 international events and 39 exhibitions were held and 20 contracts concluded with international firms. The number of Belorussian scientists travelling and working abroad and of foreign scientists visiting our HEE has risen, and many research projects in the field of education have been carried out.

Most of the research projects are being conducted at the National Institute of Education, the Institute of Vocational Education, the Institute of Higher Education attached to the State University, the Academy of Post-Diploma Education, the "Maxim Tank" State Pedagogical University at Minsk, and other teaching EE.

The advances achieved in the past few years have created favourable conditions for resolving many of the problems facing research activities in our higher educational establishments.

BIBLIOGRAPHY


Conceptual foundations of the 12-year secondary school of general education. Report delivered at the international

Papers of the international scientific-methodological conference on "Advanced staff training in a developing educational area: innovative models of the study process" held in Minsk on 19-21 November 1996. Institute of Advanced Training and Retraining of Senior Staff, Minsk 1996.

Papers of the nation-wide scientific-practical conference on "Today's youth, the senior staff of the future". Academy of Management Studies, Minsk 1995.


The path to school reform: the structure and contents of education. Minsk 1996.


The social and professional ambitions of female graduates of State and private secondary and higher educational establishments. Institute of Sociology, Academy of Sciences of the Rep. of B., Minsk 1995.