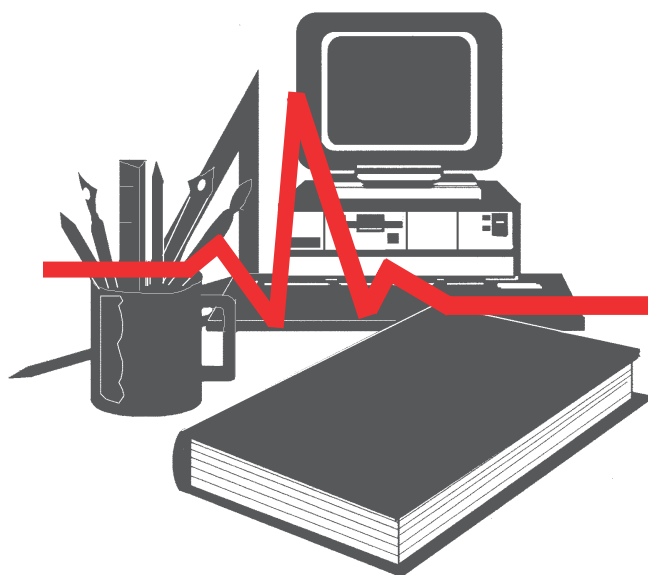


**REVIEWS  
OF  
NATIONAL POLICIES  
FOR  
EDUCATION**

**RUSSIAN  
FEDERATION**



OECD Centre for  
Co-operation with Non-Members

OECD CENTRE FOR CO-OPERATION WITH NON-MEMBERS

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NATIONAL  
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**RUSSIAN FEDERATION**

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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## **FOREWORD**

The ongoing transition of the Russian Federation towards a pluralistic democracy and a market economy has been marked by economic, social and political changes of extraordinary breadth and depth. The talents, skills and knowledge base of the Russian population are crucial in this process; hence, the ambitious scale and urgency of the reforms being advanced for education.

This review of education policy in the Russian Federation identifies key directions for the reinforcement of the reforms in light of the challenges faced by officials, communities, enterprises, educators, parents and students under very dynamic and uncertain conditions. Recommendations are offered for education goals, access and opportunity for all; curriculum and assessment; teachers and teacher education; reforming vocational and technical education (VOTEC) within a changing economy; and management, finance and the role of government. Tertiary education and research policy is the focus of a separate publication.

The OECD review team presents its analysis of the most recent trends and reform initiatives for development and provides detailed recommendations. The conclusions and recommendations were discussed at a special session of the Education Committee, convened on 16-17 June 1997 in Moscow. This document incorporates key points raised in the course of that two-day session.

Twenty-seven experts from 16 countries formed the OECD review team; their names are provided in an appendix. The report of the review team was drafted by Mr. John Coolahan (Ireland), General Rapporteur, with the assistance of Mr. Gregor Ramsey (Australia) and Mr. Douglas M. Windham (United States). Overall co-ordination and substantive support were provided by Ian Whitman and Alan Wagner of the OECD Secretariat. The review effort was made possible by substantial financial support from the governments of Finland, Germany, the Netherlands and the United Kingdom. The World Bank and the European Training Foundation participated in the review.

This volume is published on the responsibility of the Secretary-General of the OECD.

Kumiharu Shigehara  
Deputy Secretary-General

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# INTRODUCTION

## THE CONTEXT

The Russian Federation is undergoing profound political, economic and social change. This is an experience of major historical importance since the country is in a process of transition from a totalitarian political system with a centrally controlled and state-owned economy, to a pluralist, democratic society with a more open market economy. The transition began some eleven years ago with the start of perestroika policies introduced by Michail Gorbachev. Recent years have been marked by political uncertainties and turmoil, including the disintegration of the Soviet Union, and continuous political reforms that have profoundly changed the foundations of society. These political and economic transformations have acquired powerful momentum since 1991. The society has set out with courage and determination towards democracy and a market economy despite considerable economic difficulties during the process.

The Russian Federation covers a territory of over 17 million square kilometres including a vast range of geographical, natural and meteorological conditions, and enormous natural resources and economic potential. Its population of 150 million people includes a large number of ethnic minorities speaking over eighty languages. It is comprised of 89 subjects or regional authorities which include republics, *oblasts*, autonomous *oblasts* each with its own regional cultures and community identities, but all part of a greater whole. The government of the Russian Federation seeks to preserve the unity of this greater Russia. The national dimension is emphasised in certain provisions of the constitution, in predominant language, which is Russian, and such national symbols as the flag and the anthem. Russia's great achievements in the arts – literature, music, dance, painting, architecture – its impressive scientific and technological achievements, and its sports achievements are perceived as a common, unifying heritage for all Russians.

Education is regarded as a powerful force in helping to maintain federal unity and in building the new Russia with different political, economic, social and cultural values. Education seeks to harmonise national aims with regional concerns so that people may take pride in their national and regional identities

and feel a sense of commitment to shaping their future society. Educational reforms are essential for the success of Russia's transition to a market economy. Small and large enterprises, modern farming, federal and local administration, and political organisations all need qualified personnel with appropriate skills who can work in the new social and economic environment. Providing its citizens with an educational system that can help them to meet the challenges of the new, emerging democratic society is an important goal.

The assessment of both the ends and means for shaping the evolution of education must also be seen within the wider economic context best characterised as volatile and uncertain. Statistics developed for the *OECD Economic Survey* of the Russian Federation, demonstrate the continuing decline of gross domestic product (GDP), which was down 6 per cent in 1996, although the rate of inflation improved, down from 84 per cent in 1993 to 22 per cent in 1996. For 1997, budget projections anticipate a slowing both in the decline of GDP, down 3.3 per cent for the year, and in the rate of inflation down 10 per cent for the year. Improvements notwithstanding, considerable economic turbulence continues. The declining trend in GDP has been accompanied by growth in recorded unemployment, estimated at 9 per cent, in the International Labour Organisation (ILO) terms. Official employment statistics fail to track trends in either under-employment or in productive, remunerative involvement in activity outside of the formal labour market. Interest rates remain high, and some 500 banks continue to incur losses. Tax revenues lag because it is difficult to collect them, although improvements are expected once a set of measures, instituted in the second half of 1996, take hold.

In this period of transition, the position of domestic enterprises – both state and private, with or without foreign partners – is uncertain. Foreign investment has grown and is expected to increase and should be expected to play a role in supporting the transition. However, the impediments to that transition are evident. The regulatory framework and, importantly, the perceptions and dispositions of both managers and workers, are based on prior experience and arrangements in the command economy. There is a considerable margin to the official economy where buyers and sellers come together in a largely unregulated market place for goods and services. Conditions for efficient and fair market functions requiring minimum levels of disclosure and information and providing for the establishment and enforcement of contracts, including agreed terms of employment, are still being put in place. In addition, given the high degree of uncertainty about the pace and nature of economic development, any decisions about which products and services to provide, at what scale and with which employees and means are risky.

This environment makes it difficult to determine a strategy for human resource development. Market signals influencing development are unbalanced,



if not uncertain. The former state enterprises have few resources to invest in re-skilling and are reluctant to do so given the possibilities for those who are trained to leave the firm. Domestic enterprises and foreign investors continue to exploit international comparative advantages in skilled, but relatively low-cost workers and natural resources. Joint venture experiences, which require particular skills, have a mixed impact on the development of the qualifications profile of the national, regional, or local labour force or on the reform of local education and training provision. And while many of these activities include training elements, these do not appear to draw on or influence local education and training provision. Long-term development might be built on an evolution in the composition of economic activity, and therefore call for the development of a different skill mix. A strategy for education reform and development which takes into account labour needs that are often provided through joint ventures is needed, but this strategy must also ensure that such training complements rather than replaces or directs education and training provision as a whole.

At the same time, as we note below, school-enterprise links collapsed following the political change in 1991 and new forms of linkages appropriate to the transition have yet to be established. Some schools of vocational and technical education (VOTEC) do appear to be “adapting” programmes and offerings for emerging demands in new sectors, and small, private providers of education and training are growing in numbers. These are perceived by the individuals who pay course fees to be highly responsive to the new skills in demand on the labour market, such as information technology, foreign languages, management and marketing.

Together, these circumstances and developments suggest a rather broader approach to human resource development that emphasises the need to encourage all young people and adults to acquire the knowledge, attitudes and skills to be flexible, adaptable, self-reliant and self-learning. Such transferable skills and competencies would serve as suitable bases for refining and upgrading specific skills and thereby position trainees to assume new responsibilities and tasks as the structure and content of jobs evolve during the transition.

The review team (see Annex 2) wishes to acknowledge, at the outset, its appreciation of the proud heritage of significant educational accomplishments in Russia, including, for instance, very high literacy levels. The challenge that faces the Russian Federation today is to retain the strengths of the past while establishing new structures and processes required for the future. The challenge to the education system is especially great because so many other social structures are undergoing transition and reform simultaneously. In meeting these challenges, the Russian Federation will be able to call upon the intelligence, dedication, and wisdom of its own people and on the support of the international community. Throughout the review, the team records its admiration for the commitment,

ingenuity and positive motivation for change which it encountered in the great majority of the personnel it met with on site visits. The challenges are real and often severe, but there also is justifiable optimism that these challenges can be met and that education will continue to be a major resource for personal and societal development into the new century.

## **THE REVIEW PROCESS**

Due to the scale and complexity of the education system of the Russian Federation, the approach taken in this review differs from other OECD country reviews. A large team of experts was assembled, including representatives of the European Training Foundation and the World Bank. It worked with authorities of the Russian federal government and OECD officials with whom it met at a two-day meeting at OECD headquarters in April 1996 to clarify and agree to the terms of reference for the review. The experts were later divided into teams with wide-ranging experience and expertise in education and training and with direct experience of educational developments in Central and Eastern Europe. A comprehensive international perspective was therefore provided for the analysis of issues during the three site visits to different regions of the Russian Federation: to the North-West in May 1996; to Central and Southern Russia in June-July; and to the far-East in September. Each team also included experts who spoke Russian, and skilled interpreters.

During its three missions, members of the review team visited many cities and public and private educational institutions, and met with a great variety of politicians and management personnel from the central, regional, and local authorities, and many institutional leaders and teachers from all levels of the education system and some students and parents. The review team owes a substantial debt for the insights gained into education to the Russian colleagues with whom it worked, and wishes to record its deep appreciation for the interlocutors' courtesy, co-operation, and generosity with their time. The hospitality, warm welcome and entertainment extended by many agencies was very much appreciated and reflected the richness of traditional Russian culture. The review team owes also a large debt to authors of the Background Report, *The Reform of Education in the New Russia*, prepared by Deputy Minister Bolotov and his editorial group in 1996. Team members also benefited greatly from various reports and articles on aspects of Russian education made available for study and reference.

From the outset, the review team saw itself working in partnership with Russian personnel in a spirit of constructive assistance, as they grappled with the exciting, but daunting task of a major reform of the education system at a time of great political and economic change. While the success of this great undertaking is of prime importance for the future well-being of Russian society, it is also of major

importance to the international community. International solidarity with educational reform in Russia is highly desirable. The review team was struck by the ambitious scale of the reforms being attempted and by the sense of urgency with regard to achieving them. Great stumbling blocks need to be overcome but great strengths can nonetheless be drawn upon, not least of which is the quality of the personnel operating in many parts of the Russian education system and the hope they have of realising a better Russia for the present and future generations, through education. It is the unanimous wish of the review team that its report will help them to realise their vision.

## **SCOPE AND STRUCTURE OF THE REVIEW**

The review team was asked to report on key aspects of education policy and practice as they are developing and being implemented in this transition era: education goals and the transition; management and governance; learning effectiveness, involving curricular and assessment policy; vocational education and training; teacher education and work conditions; and the financing of education. Aspects of higher education are addressed in Chapter 3, but this sector did not form part of the specific terms of reference. The team considers that the issues involved in higher education warrant a specific review to begin in 1998.

The key purpose of an education system is to promote high quality teaching and learning. The balanced development of students of all ages within the system must be a priority. The well-being of a society is built on the quality of its people. In approaching its task, the review team has kept these considerations firmly in mind. It is hoped that its concern with structural and administrative issues will lead to improvements so that the needs of the Russian people are better served.

The review aims to examine issues in a logical, sequential manner so that a coherent analysis of the overall system may emerge. The opening chapter identifies and treats the educational goals which have been set for this new era in Russian history. Chapter 2 examines the new plans for the management and administration of the education system. In particular, it focuses on decentralisation policy and the relationships between governance tiers – federal, regional, municipal and institutional. It draws attention to the need for better statistical data and reporting in the system. In Chapter 3, the forms of educational provision are clarified and the patterns of student progress through the system are tracked, with an eye to the underlying objective of equity in education. This leads naturally to an analysis of curricular policy, school effectiveness and educational outcomes, core issues in the process of education (Chapter 4). Educational standards and their evaluation are given particular attention. Traditionally, vocational education and training have played a significant role in the Russian system of

education and Chapter 5 examines the challenges facing that sector and how vocational education can best be directed.

If the educational goals and new curricular, pedagogic and assessment policies for all sectors of the school system are to be realised, the teaching force represents the crucial agency for implementation. Thus, Chapter 6 is devoted to the recruitment, education and training, and teachers' working conditions in contemporary Russia. Finance underpins all the ambitious goals and plans for education in the new Russia and constitutes a major challenge to the Russian people in this transition era. Chapter 7 is accordingly devoted to issues involved in financing education. Interwoven throughout several of the chapters are issues relating to human resource development. This, again, emphasises that the goal of human development is the guiding principle for the entire educational enterprise.

In interpreting and analysing the issues, the review team bore in mind the economic, political and social context of the complex agenda for general reform. Its recommendations are interspersed throughout the text as it addresses specific issues, and the more significant ones are given at the end of each chapter. The conclusions draw together a number of strategic policy recommendations (Chapter 8). The authors have been keen to ground their proposals in concrete historical reality and they focus largely on the ways and means of more effectively realising the goals set out for the system. No dramatic or radical new proposals are made. Rather, it is hoped that the analysis may help the appropriate Russian authorities to pinpoint problems, to determine new guidelines for assistance, and to define pragmatic proposals for their realisation. The review team is conscious that some of its recommendations coincide with Russian perspectives on the issues and with ongoing initiatives. Where this occurs, such a consolidation of viewpoints can be a strength in the reform process. The key concern is that correct policy decisions be made, that the reforms be carefully charted and that the best advice possible be drawn upon to sustain their progress.

This document focuses on what remains to be done, rather than on what has been accomplished. However, the team's overarching conclusion was that, working under great hardships, the Russian Federation's educational system continues to have much of which to be proud. Nevertheless, the ability to recognise the need for improvement is a key characteristic of a mature system, and the comments that follow are offered in the spirit of collegial support to further strengthen Russian education to help individuals and their society in the future.

## **EDUCATION GOALS AND THE TRANSITION**

### **THE TRANSITION ERA**

The Russian Federation is experiencing an era of profound and historic change. While operating for most of the twentieth century under a communist system of government, it now seeks to develop into a democratic, free market society. This entails very significant changes in its political, economic, employment, social, cultural and educational way of life. The Russian Federation has been seeking to grapple with the major adjustments involved through peaceful, non-violent processes. The challenge of coping with the upheavals of transition in the government, in communities and for individuals should not be underestimated, particularly given the scale of the country in terms of population, geography, and cultural diversity. Charting the way forward and leading the process of transition to a successful conclusion is a major challenge that deserves the understanding and support of the international community.

In re-shaping the character of its society, the Russian Federation is keen to preserve valuable features of its educational achievements, and the traditions and wealth of its cultural heritage as a great nation. These will provide continuity within changing political and social configurations. As they forge their democratic future, the Russian authorities have particular expectations of the education system. It is to play a leading role in the transition. The education sector must be part of the reform and be committed to the goals of the transition if education is to serve as a foundation for the broader social changes sought by the new Russia. This chapter provides a short review of the educational goals being put forward and of their context and associated consequences.

### **EDUCATIONAL GOALS**

Statements of educational goals are made in various official documents and legislative measures, some of which are drawn upon here. The 1992 national report of the Russian Federation, "Development of education", outlined the ideological basis for the reform of education, founded on two major principles

that clearly acknowledge the central role of education for realising the historic reshaping of Russian society:

- Establishing a new society necessarily entails changing education ideology, content, and techniques.
- Education is not only the leading factor for human development but is also a key determinant of social development and the driving force behind efforts at reform in all phases of life.

Three major activities were therefore identified for the reform:

- A dogmatic approach to teaching and learning should be replaced and barriers to the development process eliminated.
- A new, ideal educational system should be defined to: incorporate management that facilitates rather than directly administrates, and introduce new techniques, technologies, and textbooks, and staff development at both pre-service and in-service levels.
- Conditions for making it relatively easy to implement this new education ideal should be created.

Attempts to achieve these reforms are evident in the greater emphasis on humanistic values and on meeting the needs of individual students. One result has been an increased differentiation within and between educational programmes and institutions, in part to reflect the diverse learning needs of individuals and groups.

The amendment to the Law of the Russian Federation on Education adopted by the Council of the Federation in January 1996, in its statement of principles of state policy clearly reflects the new values espoused for education. Article 2, "The Principles of State Policy in the Field of Education", establishes the basis for national education policy:

- A humanistic approach to education, the priority of universal human values, human life and health, free development of a personality. Children should be educated and raised in the spirit of citizenship, diligence, respect to general and human rights, love of environment, home country, family.
- A unified federal, cultural, and educational space. The education system should protect and develop ethnic cultures and regional cultural traditions and identities in a multinational state.
- Universal access to education, adaptability of the educational system to the levels and specific features of student and trainee development and training.
- State, municipal educational institutions should provide secular education.

- Freedom and pluralism in education.
- The democratic, state-public nature of education management. Autonomy of educational institutions.

Article 5 guarantees the right of all citizens to free primary, basic and complete secondary and initial vocational education, and provides free secondary vocational education on a competitive basis. It is also noteworthy that, while Article 6 specifies the study of the Russian language as the state language of the Federation in all state accredited institutions, all citizens nonetheless “have the right to get basic general education in their native tongues”. A commitment to the goal of multi-cultural education is clear. Article 14 emphasises gearing the content of education to promote “the personality’s self-determination and the creation of conditions for self-realisation” and to “help students implement their rights to free choice of views and convictions”. The legislation sets out new goals for curricular matters and a three-tiered structure for federal, regional and municipal educational administration. Openness to the international arena is evident in Article 57: “Educational authorities of all levels shall be entitled to make direct contacts with foreign enterprises, companies and organisations.”

The goals and aims for education set out by the Russian Federation, when viewed cumulatively, clearly show a new and very different direction from that which went before, in terms of values, processes and administrative patterns. These are in line with democratic traditions and with the type of society to which Russia aspires in the transition era. Management and administration are considered in detail in Chapter 2; goals for the coherence of education system and for citizens’ engagement with it are treated in Chapter 3; and curricular and evaluation policy is addressed in Chapter 4. This chapter deals with the general goals, and focuses particularly on the development of the individual and on the promotion of social cohesion.

## **GOALS FOR THE EDUCATION OF THE INDIVIDUAL**

The legislation uses phrases such as “free personality’s self determination”, “his or her self realisation”, “adaptability of the educational system to the levels and specific features of students’ development and training”. Teaching techniques are to be directed towards developing a student’s personality and individual capacities, including the capacity for self-instruction, and towards individualising education. Students and their families are to have greater educational choice of alternatives in programmes and institutions. The goals set out in the Background Report by Russian experts have high aspirations:

- Training should be differentiated and individualised so that children’s development matches their interests and abilities.

- The democratisation of education, primarily in instruction. Students should be able to choose their own developmental path and participate in the management of all educational processes.

These sentiments emphasise that the goals are rooted in a child-centred, or progressive ideology of education. The “humanisation” drive is based on the desire to change from a knowledge-centred school to a child-centred school concerned with personal development. This is explained not exclusively by the change in the political system, but also by the fact that in a rapidly changing society “simple skills and factual knowledge easily become outdated”. The new child-centred education is activity-based and emphasises the need to adapt teaching to individual needs and abilities, to promote independent learning, and to develop creativity. The goals regularly stress the value of individual self-development, successful self-realisation and self-determination, in marked contrast to older inherited traditions. Whether such pedagogic goals are viable in current circumstances is questionable, and a more moderate, gradual and organic perspective is necessary so that somewhat grandiose expectations are not inevitably disappointed. If the dynamics of educational change and its time frame are not well understood, disillusionment could result. If the stress on individualism is understandable as a reaction to conformism, there is also a danger of undervaluing the importance of co-operation, mutual help, group work, sense of responsibility to fellow pupils, etc. When individualism is allied to an implied educational goal of a high regard for competitiveness and individual achievement in the silver and gold medal competitions, it may counteract other goals stressing civic and social responsibility. The desired goals need to be grafted on to what has been positive in the curricular content and methodology of traditional Russian education. There is an evolutionary process involved here. Without sophisticated planning strategies, the reforms may be seen as the imposition of new and “foreign” approaches which may not take hold. In other words, many of the goals may be desirable and correct but the strategy to achieve them is the key.

Management is being reformed from the central to the local authority levels. A special management concern is the need to provide appropriate conditions for teachers so that they can fulfil the critical role assigned to them during the transition. The problems facing the teaching force are addressed in Chapter 6. Individual educational institutions will be expected to create conditions that facilitate greater freedom and initiative for both teachers and students. The goals set for reforming individual and social education make great demands on the knowledge, skills, attitudes and commitment of the teaching force. Teachers are pivotal in nurturing the new civic policy and in applying the curricular and pedagogic policies which are intended to underpin it. A realistic understanding of the character of the existing teaching force and of the professional conditions needed



so that teachers can fulfil their new roles must accompany the articulation of desired goals.

## **SOCIAL AND CIVIC EDUCATION**

Education legislation seeks to promote a “spirit of citizenship, diligence, respect for general and human rights, love for one’s environment, home country, family”. It also seeks respect for the rights of others and a pluralistic acceptance of difference.

The goal of building a new civic culture is highlighted in the Background Report:

“It is by now obvious that the principal and most difficult public and state implementation requirement concerning the education system is to teach Russian citizens to understand and accept the values of a civil society (...). The issue of civic education was also of utmost importance.”

This is indeed a vital objective of the new Russia but one that is difficult to achieve. The demise of the Soviet Union has left something of a vacuum regarding a sense of national identity, pride and purpose that give a sense of urgency and direction to the education system. It is in the long-term interests of any state to promote the development of a coherent civil society where citizens willingly identify their own interests with it. Since the state can only be secure if its members are generally good citizens, it has a *prima facie* compelling interest in ensuring that all are prepared equally to subscribe to a set of core norms or values agreed by common accord.

It is this that gives education such a potentially powerful role, not only in building national identity, but in creating a national “climate” in which people willingly and proudly accept civic duties as well as rights. For schools that are charged with the intellectual development of young people, creating such a climate demands far more than fostering pride in national symbols, such as flags, anthems, or the success of a national Olympic team, relevant as these may be. It demands a sound intellectual basis linked with a coherent, intellectually defensible system of shared values.

If participatory citizenship is necessary for the mutual, long-term benefit of the state and the individual, it is also in their common interest to make those norms and values explicit, and to delineate the extent of the state’s right to impose them and the individual’s duty to learn them. This forms the philosophical and political foundation for the formulation of national educational standards. Russia seeks to develop education for a democratic state regulated by law, with a pluralistic approach that respects diversity within unity.

Given the current circumstances, an enlightened approach to civics education may offer the best and least value-laden or controversial role for schools in forming the desired attitude toward nationhood. As a school subject, Soviet *politinformatsiya* civics acquired a bad name as being dull, preaching, and irrelevant to students' real interests, an image difficult to overcome. Nevertheless, a number of initiatives have been taken in the teaching of "civics". These are usually interpreted to include the rights and duties of the citizen in a participatory democratic society and the respect for ethnic, linguistic, gender, and minority cultures and rights, both at basic school and secondary levels.

Non-governmental organisations such as the Soros Foundation, have played a significant role in the preparation of civics syllabi and materials, including textbooks. International projects on the theme of "Russia in the World" have been launched with support from the United States and the Netherlands. The Joint Eastern Europe Centre for Democratic Education and Governance in Budapest, the National Institute for Civics Education in the Law (NICEL) of the United States, and the Citizenship Foundation in London, have done extensive work in civics and human rights education in Russian schools, and their materials are well designed. Such initiatives support a way forward and can be drawn upon to disseminate good practice and to energise teacher pre-service and in-service training in civic education.

Teachers need particular assistance through solid courses on concepts and content, pedagogy and good materials in order to treat civics in an enlightened and engaging way. Students seem to be very apathetic about politics in general, and to their own role within it. Those who care are more likely to join non-school clubs or debating societies, but they will be the brightest and most articulate. It is vital for a healthy democracy to curb indifference or cynicism regarding political and civic engagement. Russia is not alone in its concern about a largely alienated and socially excluded population. The promotion of good quality civic, social and political education is an international concern and the lessons of the past show that approaches based on large amounts of factual data and indoctrination in its various forms are counterproductive. Civic issues, however, should not be limited to a specific subject area, but should pervade the curriculum and extra-mural programmes as an integrating theme. Civics is not just a subject area but is more a way of engaging in social living and relating with fellow human beings.

In fostering civic pride and engagement within the Russian Federation, subjects such as the Russian language and literature, history and artistic achievements can also promote an appreciation of Russian culture and society. The Russian education system instils in its students an awareness, appreciation and pride in their great heritage, in the richness of its human and physical resources, and in its contributions to modern science, technology and society. It also seeks to instil a sense of responsibility for civic participation and for developing and

preserving democratic traditions. The new Russia should not repeat the mistakes of the Soviet regime of altering history and denying the achievements of the past. A mature democracy needs to come to grips with its full history and endeavour to appreciate its accomplishments in a balanced way and within a broad context.

The young person in Russia belongs to several communities, some of which affect the individual's life more intimately than others. The structures or universes closest to the pupil are the family and the school. More broadly, the young person is a member of a village, a municipality, a region, and of the Russian Federation. Each of these provides a framework within which identity and allegiance are forged. As in other countries, values of the home can have an enduring influence. The pressures for survival put great constraints on some families at present, which inhibits the formation of sound civic attitudes. Civic education should not focus exclusively on youth, however; the adult population must handle the difficulties of the transition era. Appropriate forms of civic education need to be incorporated into continuing and adult education activities, in a style relevant to adult learners; some international models could be drawn upon for this.

The school as a community provides formal civic education but it should also try to act as a model for the exercise of civic rights and duties, for example, through the election of a student council, the involvement of students in formulating the school's code of conduct, and the self-enforcement of that code through a mixed student and staff discipline committees. Older hierarchical patterns need to be modified. The review team did not observe any significant discipline problems in the schools visited, nor were there signs of defacement or vandalism in school precincts. Reviewers were impressed with the neatness and good order observable within the schools. They do not know if this is the universal practice, but the indications were that the sense of the school as a harmonious community existed at the sites they visited. This was a good omen for healthy civic education within the institutions. School is a most important agent for social cohesion and change in a community.

In preparing citizens for their new roles in society, the education system is being transformed in three ways: content, teaching techniques, and management strategies. The educational content is being revised and updated to reflect a combination of central, regional, and local concerns. The humanities are receiving greater emphasis as are individuals' civic responsibilities. There is now an opportunity to incorporate locally devised inputs into the curriculum content which can help to foster a sense of local identity and inform pupils about valuable aspects of the local heritage and institutions. Links between the school and local village or municipality can occur in a variety of ways and sow the seeds for civic engagement which will be a crucial basis for adult civic involvement. The region has the scope to contribute about 30 per cent of the curricular content focusing on such regionally distinct areas as ethnicity, language, history, folklore, crafts, etc.

Radiating out from the region, federal authorities prescribe a main core curriculum that reflects the great Russian national heritage, values and concerns. Young people's engagement with the different tiers of their cultural heritage and civic tradition will vary as they grow up, but their link with their local culture will be more intimate earlier on in their education.

### **MAINTAINING ESTABLISHED GOALS**

In seeking to achieve new goals in education attuned to the needs of a changing society, it is also important to preserve the comparative strengths of Russian education which traditionally enjoyed high priority among social values. Indeed, significant achievements have been recorded. The Russian educational traditions and achievements which the government will attempt to retain include:

- effective and accessible kindergarten educational activities;
- high literacy levels;
- provision of free textbooks;
- a largely free education;
- strong performances in the sciences, including special programmes for gifted students in physics and mathematics;
- the availability of a broad variety of extra-curricular and supplementary education;
- free meals for children from low-income families.

The ability to manage and finance these programmes concurrently with other educational reforms of the transition will pose a major challenge to the Russian Federation. However, each of these programmes represents strengths of the former system and their loss or attenuation could reduce public support for other reforms and impede their implementation.

### **GOALS REQUIRING MORE EMPHASIS**

The statement of goals is not sufficiently comprehensive; it includes neither adult education nor general human resource development. For a society undergoing a major transition, these areas require much greater priority. Furthermore, the statement of goals focuses on the education system largely in isolation whereas it should give closer attention to links with social partners, and particularly with employers. In recent years, the industrial sector has been very preoccupied with its own restructuring. Nevertheless, it is vital to define targets and set processes in motion to involve the business and industrial sectors more closely as partners. In vocational education and training, mutually satisfactory links of a type suitable to the new economy must be built. In a society undergoing such wide-ranging

industrial, manufacturing and commercial changes, it is essential that adult education and re-training and the promotion of human resource development in many areas of the society permeate policy concerns in the years ahead.

Preparing school leavers for life in a market economy is another goal which should be more directly articulated in educational policy during the transition. Economic education will include increasing economic awareness of both information and understanding, adapting to market incentives, linking training in schools and vocational institutions to labour market requirements in a flexible and effective manner, and preparing a new generation of economists and other specialists in business skills.

Many goals still need greater attention. There needs to be a mechanism for the normative financing of education, using formulae or other input standards, analysis of programme costs, and identification of opportunities for programme-based financing alternatives including multiple-source financing, systemic monitoring and evaluation procedures linked to redemption and reform, and an integrated system for staff development, including identification, training, recruitment, retention, and further professional development. These same goals also exist for educational development in many countries. It also should be understood that this special opportunity for the education system to develop new and better programmes comes at a time when many unique constraints on human resources, finance, and infrastructure also exist.

## **THE NATURE OF EDUCATIONAL CHANGE**

Russia should be open to international trends and developments and able to draw on external assistance and advice. However, the fact remains that it needs to analyse its own needs and possible ways forward in the light of its traditions, culture, social fabric, economic circumstances and capacity of its people at this time. Russia has done admirable work in a short time in charting a new educational course as it seeks to move from a traditional to a progressive education system; from strong central leadership to substantial local self-government; from conformity to self-exploration. This is a very demanding agenda. International experience has shown that even with more favourable school and teacher circumstances, large scale educational change is very difficult to achieve. Deeply ingrained habits, beliefs and conservative values, characteristic of most education systems, can be barriers to change. However, educational conservatism can also have its advantages. Ironically, the long-ingrained habit of looking to the state for detailed direction on curricular content and the desired form of teaching may be an important force for motivating school leaders and teachers to adopt new federal education standards, which presents significant challenges in terms of teaching styles and teacher-pupil relationships. However, educational change

cannot be mandated in Russia or elsewhere; mandates are important for change but they are not sufficient.

At certain stages of history, much can change in a short time, and recent Russian experience has demonstrated this. The propulsion for macro-political changes can sweep much before it. Legislation can also grapple with complex issues and, in a short time, provide a new framework for developments whereas in the more localised, day-to-day working contexts of citizens, change may be more gradual and incremental. Significant changes require changes in skills, behaviour and understanding or beliefs. People do not make these changes by being told to do so. The process is much more complex. It would be important for policy-makers to be familiar with the international research literature on implementing educational policy and achieving genuine educational change. The Background Report referred to a tendency in the Russian tradition of conforming outwardly to new ideas without changing anything in practice. Action on a variety of fronts, discussed throughout this review, is required to root the reforms as an integral part of the new system. Even with enlightened action and satisfactory resources, new approaches require a good deal of time to become the new norm. While the pressure for change needs to be sustained, those who make the changes need continuous support and development. In order to avoid disenchantment and disappointed expectations, which can undermine the realisation of necessary policy, politicians need to accept that investment for educational change focuses on interim and long-term dividends rather than on immediate outcomes. Reporting on the achievement of interim outcomes can help them justify educational investment. The key strategy is to devise goals that are integral to the way the government envisions social development, and then consistently sustain the reform effort. While much has happened during these transition years, it should be borne in mind that this is a very short time span for laying the foundations of a new educational order.

The psychological motivation of those who implement change is important. It is vital that they establish a sense of ownership of and commitment to the new goals, which are best devised as a combination of “top-down” and “bottom-up” initiatives. Teacher confidence needs to be sustained so that in moving towards new practices, past work is not denigrated. Encouraging new styles of teaching should not entail a disrespect for much valuable work conducted over decades. Change is a slow process and progress must be incremental. The dedication observed of teachers and administrators towards their students is a powerful resource that can be set in the service of the goals of the transition. However, to sustain teacher morale and commitment, support measures such as those set out in Chapter 6 are needed.

The reality of educational change in most, if not all systems differs from the original blueprint and may be indirect. This is not necessarily a problem when

incremental changes are satisfactory and in harmony with the general policy thrust. The social and cultural traditions of Russia will also shape the realisation of various objectives or roles. The outcomes may not always be identical to those of other cultures. Regional differences and diversity will also be reflected in their achievement of educational goals.

## **COMMITMENT TO ACHIEVING GOALS**

The Russian Federation's commitment to defining operational goals for the transition and to working with the personnel of the education system to prepare for its new responsibilities will be an essential determinant of success. Government commitment to major educational reforms must be real and not just aspirations. The current context of strains and pressures raises a real threat that short-term policies and areas, perceived as giving some tangible outcomes, take priority over longer term investments, in education for example. The principles espoused in "Development of education" (1992), and in later legislation, will only be rhetorical if their full import is not clearly and continuously endorsed by government.

If these principles are to become the animating forces of policy, a number of concomitant issues need to be realised. First, the Ministry of General and Professional Education (MGPE) needs to have a status within the government commensurate with the responsibilities of its mandate. The internal organisation of the ministry has to have a cohesive and co-ordinating framework and a unified sense of purpose. It needs a strategic policy unit (see Chapter 2) which is in a position to draw on appropriate policy-related research and qualitative statistical data. The education agenda is very demanding in itself but it also has other associated features, such as health, custodial concerns, and family welfare, etc., which impinge on other governmental concerns. The approach to education therefore requires inter-ministerial support within government. One of the great responsibilities of government – the current and future educational well-being of citizens and the quality of the civic life of the state – is at stake and is reflected in the way citizens interact with it.

A discussion of goals necessarily entails a consideration of resources. The Russian Federation inherited a large infrastructure of educational institutions and bodies from the Soviet system, which prided itself on its educational achievements. This infrastructure was designed to achieve the goals of a differently structured social system. The work of these agencies is now being redirected. As a great power, the Soviet system was long able to subvent its educational institutions whereas federal Russia, as a transition economy, faces difficulties in maintaining the large inherited infrastructure. It also has new educational goals which, although benevolently devised, are more costly and more difficult to achieve than

those under the command economy. In addition, achieving democratic legitimacy is more costly and difficult than achieving dictatorial or authoritarian legitimacy which foregoes genuine election. Expenditure goals based on a realistic analysis and on a set of priorities among educational goals need to be set and sustained. Maintaining what was good in the older system while endeavouring to lay the foundations of a new era in education at a time of great strains in the transition economy is a daunting task. The government of the Russian Federation needs to give education a higher priority. The first statement under Article 1 of the legislation approved in 1996, "The Russian Federation proclaims the educational sector a priority" needs to be kept to the forefront of the government's consciousness.

A fundamental goal of the government is to preserve the integrity of the Russian educational experience through a common general educational policy and by a sustained, common curriculum and teaching that will promote horizontal and vertical mobility of students within the system. The specific policy goals represent an attempt to moderate between the extreme centralisation of the past and the unguided and fragmentary decentralisation which could result in the future. Indeed, it can be argued that education is a primary vehicle for preserving Russia as a coherent whole, after the upheavals of recent years. Much is at stake in the realisation of the education goals which will draw on qualities of commitment, optimism and pragmatism.

## **RECOMMENDATIONS**

The Russian Federation has set out a number of goals to guide its educational reform. Many of these strongly contrast with those which prevailed under the previous regime. While the review team endorses the goals, it cautions about the difficulties of their realisation. Achieving major educational change is a complex process and it is not made easier by the prevailing circumstances in Russia. The goals require a long-term, strategic commitment to their realisation by government, and sustained efforts to build the capacity of the relevant agencies to achieve them.

### **Administrative organisation**

To enable the MGPE to fulfil its role in promoting its goals we recommend that it:

- be granted a higher status as a ministry within the government;
- develop a more cohesive internal organisation;
- establish a strategic internal policy unit;
- benefit from more inter-ministerial support for social protection purposes;
- operationalise its goals.



### **Civic education**

- the strongly emphasised individual self-realisation should be balanced by stressing values of co-operation, teamwork, and mutual assistance;
- civics and values education should continue to be supported strongly as part of the total curriculum, with international assistance. Teacher education and adult education generally should promote civics;
- schools should be encouraged to exemplify good civic practice through their policies, practices and relationships.

### **Articulating specific goals**

- in addition to endorsing the government's goal of preserving the strengths of traditional Russian education, the review team recommends that the broader Russian heritage of language, literature, music, dance, architecture, painting, crafts, folklore, and sport be made available to foster civic commitment, without any historical distortion of the political contexts in which the heritage developed;
- the goals of ensuring equity and efficiency within the system require more attention;
- goals relating to adult education, human resource development and fostering partnerships within the system, particularly with employers, should receive much more emphasis;
- the goal of preparing young people for the skills required in a market economy should be clearly articulated;
- the roles of the different administrative tiers in promoting educational goals need more clarification regarding authority and responsibilities, particularly where these overlap among federal, regional or municipal authorities (see also Chapter 3).

### **Commitment to achieving goals**

- the nature of the new educational goals is such that their realisation will require additional resources. Educational budgets should reflect this in order to improve both programme effectiveness and systemic efficiency;
- policy-makers should draw on international experience and research in implementing educational change.

## MANAGEMENT AND GOVERNANCE

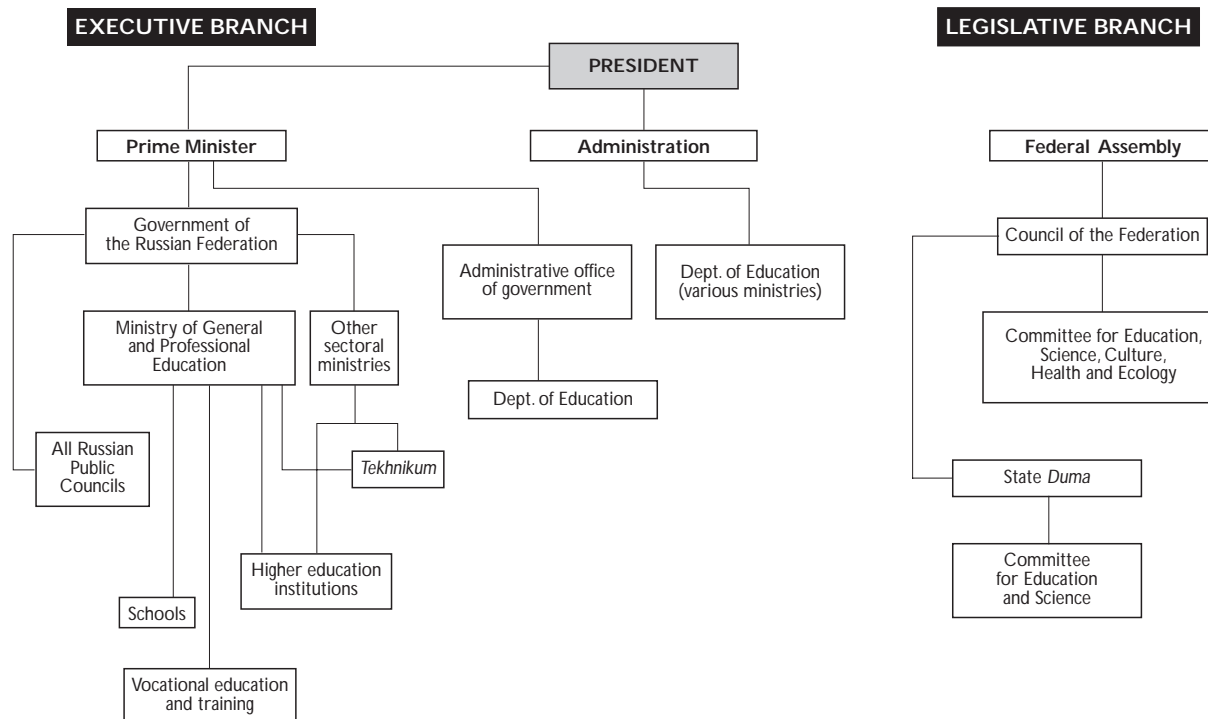
### THE GENERAL FRAMEWORK

Traditionally, the educational system in Russia has been largely inspired and run by the central government. However, as early as 1985, reformers within the public and in the Soviet Ministry of Education advocated more democratic and humanitarian schools. The 1992 Law on Education marked the beginning of significant educational reform when it initiated the transfer of selected administrative and fiscal responsibilities from the centre to the regions. Regions and municipalities were granted greater freedom to change the organisation and content of school instruction in their areas.

Not surprisingly, given the constraints on the central government's discretionary resources, the extent of the educational reform that has actually occurred has depended upon the individual initiative and administrative capacity of the regional and local authorities. The 1992 Law on Education was enacted before it was possible to establish the appropriate decentralised administrative structures for its complete implementation. The hierarchical structures of the previous system can only be modified appropriately once the federal government helps establish greater local capacity for assuming responsibility for those parts of educational management that are to be decentralised.

Russia currently has a three-tiered system of educational management: the federal level, the regional level, and the municipal level. The federal level has an executive chamber and a legislative chamber (Figure 1). The executive is composed of the Office of the President and Administration, the Prime Minister who presides over the Council of Ministers, and the Administrative Office of Government. Educational institutions including universities, colleges and the majority of secondary vocational schools and *tekhnikum* are managed by federal authorities; about twenty different sectoral ministries and agencies have jurisdiction over educational establishments of different levels, mainly higher education and secondary vocational education; the Ministry of Transportation and the Ministry of Agriculture for example, are directly responsible for dozens of colleges and *tekhnikum*. In August 1996, the Ministry of Education and the State Committee for Higher Education (SCHE or GOSKOMVUS) which has direct jurisdiction over most

Figure 1. **System of educational management in Russia**  
Federal level (as of March 12, 1997)



Note: The Russian Minister of Education is V.G. Kinelev. The Ministry of Education has 9 deputy ministers, 21 autonomous divisions and 8 independent bodies (which report only to their deputy ministers). The organisational structure of the All Russian Public Councils is not clearly established. They act as consultative bodies to the Ministry of Education.

Source: Bolotov, MGPE. Revised with the help of Evgeny Polyakov and Yelena Lenskaya to reflect changes brought about by the reorganisation of the Ministry of Education in September 1996.

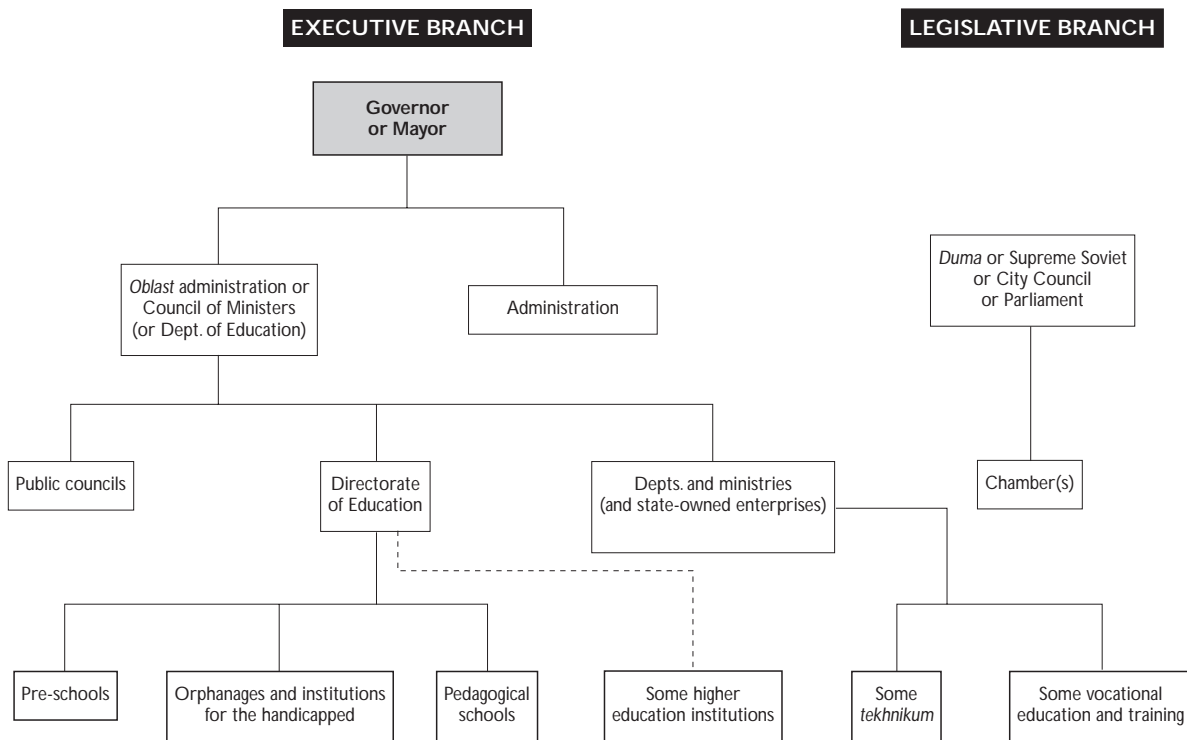
higher education institutions were merged into a single Ministry of General and Professional Education (MGPE). Amendments to the 1992 Law on Education have made federal authorities solely responsible for licensing of higher education institutions.

There are 89 administrative subjects that include *oblasts*, *krais*, republics, autonomous regions, as well as the two major cities (Moscow and St. Petersburg). The organisational structure of regional education varies across them (see Figure 2). The head of a “region” is usually called a president in republics, a governor in *oblasts* and *krais*, and in the case of the cities, a mayor. This person is responsible for the regional administration, known also as the Council of Ministers or the Government. This consists of the sectoral departments, which includes the Department of Education. The regional administration commonly includes the Directorate of Education, other sectoral departments and state and non-government councils. The Regional Department of Education defines regional educational policy taking into consideration all types of educational establishments allocated on the territory of the subject of the Russian Federation, but it manages only few pre-schools, schools (most of these being part of the municipal competence), partly initial vocational establishments, and higher schools founded by the regional administration (other higher schools are mainly under the federal jurisdiction). Concerning pedagogical institutions, when they belong to higher education they are managed by the Department of Education (federal level); when they belong to secondary vocational level they are managed by regions. Some pre-schools and special secondary schools are financed by state-owned enterprises, but these are increasingly being shifted to the regional or municipal authorities.

Urban and rural municipalities have their own educational structures (Figure 3). In urban areas, a City Department of Education presides over the district level (*rayon*) Department of Education. The number of *rayoni* in a city depends on its population. For instance, Voronezh, a city of approximately one million residents, has six *rayoni*. Schools are managed by departments of education within their *rayon*. A principal presides over each school, supported by a school council elected by teachers, staff, and parents. Because rural *rayoni* have fewer schools under their jurisdiction than do urban areas, the educational management system is much simpler.

Urban and rural areas also have non-state schools that are mandated in the amendments on the Law on Education as non-profit institutions run by founding bodies other than governmental institutions. These schools must be licensed and accredited by government authorities and can only receive public funds if they have gained accreditation. So far few have benefited from government funding.

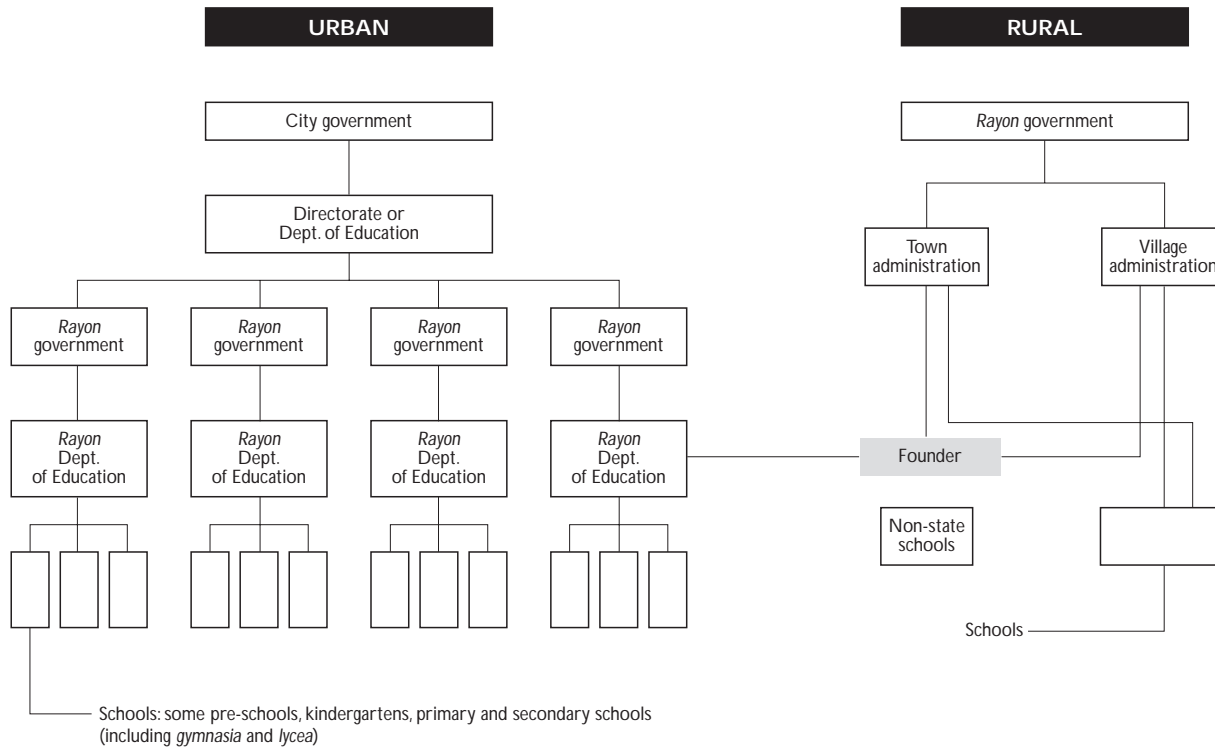
Figure 2. *System of educational management in Russia*  
Regional level



Note: The 89 subjects include republics, *oblasts*, *krais*, autonomous *oblasts* and autonomous *okrugi*.

Source: See Figure 1.

Figure 3. **System of educational management in Russia**  
Municipal level



Note: The name of the *rayon* or *okrug* government varies from city to city. In Krasnodar Territory, it is called the Committee for Education and in the Vologda Region, Office of Local Administration.

Source: See Figure 1.

## THE CULTURE OF DECENTRALISATION

During the late years of the Communist era, and, more particularly since 1991, Russia has sought to move from a highly centralised process of educational governance to a decentralised system. There is a strong theoretical commitment to this as being in the best interest of Russian society in general and of its education system. The 1992 Law on Education and subsequent legislation and decrees have sought to give a legislative framework to this major policy shift. However, such a change in the administrative culture of a large and diversified education system is neither quickly nor easily achieved. The Russian Federation has embarked with enthusiasm on the road to decentralisation, but the process of change itself, its success and its widespread acceptance are so many difficult enterprises that require time and perseverance.

Problems and tensions around this policy are inevitable. In most OECD Member countries, similar uncertainties occasionally erupt, and power struggles arise among different centres and levels of responsibility. The more recent history of the Russian Federation, however, is characterised by a highly centralised state apparatus. No strong tradition or social capacity exists relating to or underpinning what is commonly described as “civil society” in which institutions, habits of mind and behaviour impose accountability upon elected or appointed officials.

Learning to participate in the governance of civil society will not occur overnight, but actively encouraging such democratic processes as standing for election and presenting a manifesto (a list of policy goals and actions) in a student council, school or college, local school board, education committee in a municipality or a region should be actively promoted. The number of candidates available across a wide range of such elections and the replacement of unsatisfactory officials on the basis of their performance, should also feature in such developments. Creating a civil society at “grassroots level” is essential for ensuring the Russian Federation’s transition to a free society and economy.

Fears of “destabilisation” and “uncontrollable fragmentation” as inevitable accompaniments to decentralisation was expressed to the review team at federal level. However, decentralisation and its democratic foundations necessarily include pluralism. This supposes a distribution of powers and a dispersed range of “checks and balances” against undue concentrations of power at any level, and responsiveness to the articulated needs and aspirations of those who require and expect that proximate authorities provide high quality services. The balance between diversity at regional, municipal and institutional levels and common strategic goals, determined at federal level, needs to be evaluated – and regularly reviewed and adjusted – within a framework of such concepts and values.

Similarly, insofar as decentralisation policy counts among its important objectives those of promoting and upholding democratic values and maximum

cost-effectiveness, their close connection should be investigated and debated. “Value for money” should not be confused with educational budget cuts or reductions, but rather, describes an approach which seeks to maximise the value and effectiveness of educational investment. If, for example, ten million roubles are spent on a kindergarten or vocational school, a cost-effective approach would seek to increase the number of students and maintain or increase their success rate, however this is measured. However, if budget reductions are inevitable, then, such an approach would seek to at least maintain existing outcomes (success rates of students) at a lower unit of resource (per capita funding). Nor should value for money be taken as synonymous with a narrow approach to measuring educational outcomes. The goals discussed in Chapter 1, such as promoting civics and more democratic school practices, come within the ambit of this approach, as much as does the performance in traditional subjects such as science and mathematics.

The training and information needs associated with greater managerial delegation or autonomy have to be specified, provided for and costed. It is also vital to ensure that basic financial and management data be transferred efficiently among different levels and centres in a decentralised system. However, these data can only be specified when the basic purposes and philosophy of a decentralised policy have been fully understood and agreed to by at least a large majority of leading politicians, officials and personnel involved.

Political views and opinions concerning the balance of decision-making powers between federal and regional authorities vary widely. The financial pressures on Russia’s education system, however, make it more urgent to clarify and energetically pursue the decentralisation policy since the most cost-effective solutions are likely to be found at the point or level nearest to the particular problem being addressed.

Each level or layer of management in a decentralised system adds complexity and cost. It should also add a value justifying the cost; a layer of administration that makes no real decisions or acts as little more than a post box for the next level is not necessary. Moreover, too much autonomy or self-determination at any one level can weaken the authority of the level above unless there are clear accountability requirements. The important issue is to clarify delegated authorities and responsibilities to ensure that the hierarchy functions in such a way that the level above is responsible for monitoring and quality control for appropriate benchmarks for the level below. A spirit of partnership needs to be the unifying force in promoting cohesion between the levels. There are major areas where it is critical to clarify responsibilities:

- licenses and credentials;
- curriculum development, including texts and materials;



- teacher development and assessment;
- budget development;
- staff appointment and dismissal;
- student assessment;
- statistics and data collection;
- relationships with parents and community organisations;
- co-operation and collaboration among educational sectors, providers, and non state institutions.

Where responsibilities are clear, a devolved system can work well; where they are not, there can be an undesirable redundancy where things are done two or more times, or not at all, with the attendant frustrations. Involving many actors in decision-making and managing a devolved system necessarily entails a degree of overlap, but it must be an acceptable degree. In summary, key issues for creating a climate of decentralisation include the following:

- A clear and well understood conceptual and political commitment to decentralisation and the delegation of rights and responsibilities, especially in relation to two main purposes of increased democratic participation and increased efficiency.
- Establishing information systems that link the different management and cost centres with each other and with lower and higher levels of responsibility.
- Training managers and raising the awareness of elected representatives about these issues.
- Promoting participatory engagement, partnership and capacity-building at each level of the system and encouraging networks which mobilise and share resources and ideas.

## **PROCESS AND PROBLEMS**

No other set of issues has broader implications for education than those concerning the nature of the Russian Federation and the evolving relations between the federal state and its subjects, which are the subordinate regional administrative authorities. Indeed, these issues touch upon virtually every dimension of the education system.

The repeated reference to federal laws and presidential decrees masks the underlying reality that the Russian Federation bears little resemblance to federal systems elsewhere. In Australia, Canada, Belgium, Germany, Switzerland, Mexico, the United States, well-defined constitutional bases exist for debates about the appropriate roles of different levels of government. In each of these cases,

debates are ongoing but the legal foundations and historical precedents are relatively clear. By contrast, in Russia, the authority and responsibility of formal governmental structures and the legal relationships between the state and the 89 subjects (*oblasts*, republics, *krai*, etc.) are uncertain at best. The Constitution of 1993 states that Russia is a federal state with a republican form of government. It defines the “competencies” of different levels of government but leaves a number of ambiguities. Even where the Constitution is unambiguous, significant differences remain between the language of the law and actual practice. The government of the Russian Federation clearly faces a daunting task in maintaining the overall unity and sense of common identity as a federal state while accommodating the pressures from regions characterised by great diversity of ethnicity, language, economy, religion and culture.

The Russian Federation seems to depend heavily on the remnants of the traditions, relationships and expectations of the previous system, newly developing economic and political relationships (not all of which are positive), and a series of negotiated political and economic “agreements” between the state and the subjects. This accentuates the problems faced by the federal government in defining its role. The Federation Agreement of 1992 and the Constitution of 1993 stipulate that all administrative subjects are to be treated equally. But, because the Russian state cannot impose its will upon the regions, the federal government has entered into bilateral agreements with individual subjects. Each subject has been bargaining for greater independence and all have been using their control over resources and tax revenues as leverage (see OECD, 1996, “Russian officer conversion programme”, General Distribution Document, Paris).

During this transition era, legislation and decrees have been relied upon extensively, as if such measures were indicative of the success of the decentralisation policy. Regrettably, some of these measures are contradictory, their application ambiguous, and some are not or cannot be implemented. This situation seriously threatens casting the law into disrepute and raises the issue of the perceived legitimacy of the authority of a central government that passes laws it cannot afford to implement (unfunded mandates). The federal authorities have recently issued a host of unrealisable decrees: a law stating that education will comprise no less than 10 per cent of the federal budget (it is currently at 8 per cent); free full secondary education through grade 11; and the promise to boost teachers’ salaries to that of government employees of approximately 600 000 roubles or US\$110 per month. Although teachers are notoriously underpaid, regional authorities have not been informed about how they are supposed to pay the difference or the additional taxes to the federal government. In 1995, the federal government honoured only about 67 per cent of its own education bill to the regions; consequently, wage arrears were carried over into the following fiscal year. In developing law and policy at any level, the law must

be implementable; sanctions for non-compliance must be clear and be applied; laws cannot contradict each other within any ministry.

The MGPE has been somewhat successful in communicating general policies of reform with values shared by most parties. On the other hand, it has so far been unable to produce financing and working implementation strategies which could inspire trust and confidence at political, regional-administrative and school levels. Moreover, ministry employees seem to have an attitude problem. The review team detected a lack of confidence among some officials regarding the commitment of their regional and local counterparts to implementing national policy. This is a less than ideal basis for co-operation in this extremely difficult era.

The mission consistently found financing to be the area most obviously affected by the uncertainties regarding the roles and responsibilities of each level of government. The federal government is devolving financial responsibility to the regions without sufficient attention to dramatic variations in their capacity to assume them. The review team heard repeated reports of delayed salary payments to teachers and university staff without being able to locate or assign the responsibility for these delays. Part of the explanation can be traced to specific aspects of the financing system:

- There are extreme variations in the economic capacity of the subjects. Only 22 of 89 subjects are self-sufficient, while many of the remaining 67 have severe limitations (Background Report).
- Tax policy is theoretically set by the federal *Duma*, but in reality, the Ministry of Finance determines the taxes applicable to each region by a series of negotiated, non-transparent agreements.
- Tax administration is “bottom-up” – revenue is collected and withheld from below. The regions, therefore, are in a position to bargain over revenue sent to the federal government. With many social obligations being devolved to the regions, there seem to be few incentives to transfer tax revenues to the federal budget.
- The amount of taxes actually collected is a fraction of the amounts upon which government budgets are based.
- The federal government determines wages for all public employees and prescribes the rate of wage increases. These unfunded central spending mandates are then shifted to the regions whose budgetary situations are not sufficiently taken into account.

This complexity makes it hard to know which level of the Federation is responsible for financing each level of education. The federal government has shifted responsibility for general secondary education to the regions. Vocational

education, historically a federal responsibility linked to the various ministries, departments and state-owned enterprises, is the object of some concern as the Background Report indicated, insofar as the Ministry of Finance is seeking to transfer this responsibility to the regions and legislative initiatives in 1996 suggest that it is likely to succeed. Similarly, higher education financing, also theoretically a federal responsibility, is becoming a regional charge, and universities, colleges, institutes and academies are increasingly looking to the regions and to other sources. If the following points reflect what is actually happening, they will have serious implications for education:

- The federal government continues to determine the policy parameters for financing large portions of the education system (*e.g.* wage rates and other social protection for employees, financing higher education). The budget policy is not co-ordinated with funding capacity.
- Because the federal government is unable to pay these mandated obligations, the responsibility is being left to the regions.
- All levels of education are being pitted against each other and against other social and economic demands devolved to the regions.
- Regional inequities will mean growing regional disparities in education adequacy and quality.

Unless the competencies of each level of government are specified for such fundamental questions as taxation and finance, there is no strong basis for developing constructive policies and agreements in specialised areas such as education. The MGPE may have formal legal authority as it enters into agreements with each of the regions, but it can be seriously compromised if it is not supported by the government's decision-making regarding the critical elements of finance and tax policy. The MGPE has little capacity to monitor and enforce compliance across the vast "education space" of the Federation. Consequently, regions and sub-regions, and universities and schools are developing their own policies as they turn to non-federal sources for funding and other forms of support.

In principle, Articles 28-32 of the 1992 Law on Education stipulate the distribution of powers among the educational management bodies at all levels. Article 72 of the Russian Constitution delineates general aspects of educational policy as a matter of joint competency between the Russian Federation and its subjects. However, these laws fail to state explicitly which responsibilities are to be handled at each level. Consequently, accountability for certain specific functions is unclear, and the laws provide no precedent for any systematic chain of command. Articles 28, 29 and 31 of the amendments to the Law on Education, adopted by the Council of the Federation in 1996, are on the right track but further clarification is required.

The federal authority is responsible for developing and implementing educational policy (Table 1). In 1995, the Ministry of Education adopted federal guidelines for state educational standards as a model for evaluating and assessing the quality of basic education. The federal component introduced a basic core curriculum for each level of education, including the number of hours of instruction. A regional component and a school component of the instructional plan are also to be developed at the regional and institutional levels. In addition to educational policy, the Ministry of Education organised and co-ordinated textbook publishing, printing, and distribution. In the future, the MGPE plans to work directly with stakeholders, by training teachers, establishing boards of trustees to help school directors with school management, and promoting the value of education to parents.

Regional authorities, like federal authorities, are responsible for many educational functions, and the two often overlap. The regions also develop and implement educational policy initiatives, design curricula, train teachers, co-ordinate the publishing and dissemination of teaching materials, and provide information to lower level agencies and to individuals. They are responsible for licensing and accrediting both public and private educational institutions under their direct authority.

Curriculum development, teacher training and assessment, textbook provision, and quality assurance are also exercised by municipal authorities which manage the educational budget and oversee the financing of institutions, as well as determining the conditions of school buildings, their maintenance and leasing. Municipal authorities have the right to open and close the schools under their jurisdiction.

Table 2 presents the division of responsibilities for organising instruction, planning and structure, personnel management, and the allocation and use of resources of primary and secondary schools. According to the Law on Education (Art. 52.1), parents have the right to participate in the administration of the educational establishment. Besides, rights of parents in the education process can be fixed in the agreement between parents and the general educational establishment, according to or fixed in the charter of the establishment (Art. 61 of the standard regulations approved by government Resolution of the Russian Federation of August 31, 1994 N 1008, modified on September 9, 1996 N 1058). The federal government still exercises some authority over certain areas although according to the Law on Education (Art. 55.4; 32.2. points 5, 6, 7, 15, 16) and in practice, teaching methods, selection of teaching materials, students' performance evaluation are in the competence of teachers and educational establishments.

From Tables 1 and 2, it is clear that each management layer is responsible for many of the same functions. The Law on Education gave regions and

Table 1. **Functions of federal, regional and municipal levels**

Federal level	Regional level (89 subjects: republics, <i>krais</i> , <i>oblasts</i> )	Municipal level (local self-management in towns, cities, villages via representative administrative bodies)	Municipal level (other management bodies)
Develops policy	Develops regional programmes	Develops local budget and adopts local norms for financing education	Implements federal and regional resolutions
Implements policy	Implements regional programmes	Registers and closes schools	Develops curricula
Develops concept of secondary (complete) education	Develops curricula (national and regional components of state educational standards)	Appoints city school managers	Assesses teachers
Develops curricula (federal components of state educational standards)	Trains and retrains teachers	Constructs school buildings	Monitors continuity of training and supply of textbooks
Develops human resources	Organises supply of data to schools	Exercises control over rental conditions for school buildings	Assists in quality control
Trains teachers	Organises publication of teaching materials		Sets exam dates
<b>Ministry of Education</b>	<b><i>New functions not yet assumed:</i></b> (those delegated by MGPE)		Deals with issues of student enrolment
Implements state policy	Establishes an index of professions in the area of vocational training		
Implements federal programme of education	Establishes contacts with educational institutions abroad		
Forecasts trends in education			
Provides information			
Develops educational content			
Establishes federal requirements			
Defines procedures for approval of teaching materials			
<b><i>To be delegated to regions:</i></b>			
Defines requirements for licensing and accreditation of educational institutions			
<b><i>New functions not yet assumed:</i></b>			
Creates a professional community of experts			
Creates a board of trustees for schools			
Works with parents to promote the value of education			

Source: OECD.

Table 2. **Division of responsibilities**

	Federal	Oblast	Rayon	School	Parents
<b>Organisation of instruction</b>					
Decides what school a child should attend			X		X
Makes decisions affecting pupils, <i>i.e.</i> to promote to a higher grade, to repeat a grade, or to transfer to another stream				X	
Determines number of periods of instruction received by a pupil per year	X				
Chooses textbooks	X	X		X	
Groups pupils (by section, in small groups, by ability)				X	
Provides assistance to pupils ( <i>i.e.</i> tutoring)				X	X
Develops teaching methods	X	X		X	
Develops method of assessing pupils' regular work	X	X		X	
<b>Planning and structure</b>					
Creates or closes a school			X		
Designs programmes in terms of subjects covered	X	X		X	
Chooses range or subject matters taught in the school	X	X		X	
Defines performance objectives	X	X		X	
<b>Personal management</b>					
Hires and fires staff			X	X	
Determines terms of service and duties of school principal		X		X	
<b>Allocation and use of resources</b>					
Procures resources for:					
Capital expenditure		X			
Operating expenditure			X		
Non-teaching staff			X	X	
Allocates within the school:					
Capital expenditure		X			
Operating expenditure			X	X	

Source: Adapted from OECD (1993), "Education finance report", *Education at a Glance – OECD Indicators*, Annex 1, Paris, pp. 241-245.

municipalities greater freedom to undertake educational reform, yet the main mechanism to transfer the actual authority from the federal government to the lower levels is through formal "agreements". According to the law there are some other ways of transferring the actual authority. For example: the law (Art. 33.7) states that license for educational activity can be given by the state or municipal authority responsible for education. The Regulation on licensing (kind of by-laws acts, approved by the government of the Russian Federation), fixes delineation of competence in a concrete way: the Ministry of Education exercises licensing-competence of universities and other educational establishments of federal supervision; regional authorities of all other educational establishments; the regional authority can also delegate this function to municipal bodies. At the same time, there is a great deal of inconsistency in duties across regions. There is

substantial redundancy in some areas and under-development in others. Federal, regional, and local authorities are concerned about curriculum content, but few are developing mechanisms to ensure compliance among themselves and accountability to stakeholders.

## **THE MINISTRY OF GENERAL AND PROFESSIONAL EDUCATION**

### **Structural issues**

In August 1996, the State Committee for Higher Education and the former Ministry of Education were consolidated into a new ministry with restructured leadership, the Ministry of General and Professional Education (MGPE). Such reorganisations inevitably lead to temporary disruptions and require time to be completely implemented. Nevertheless, the increasing diversity and complexity of the Russian education system underscore the need for more effective co-ordination. If the new structure accomplishes this, it will be a significant benefit to students and the education system as a whole.

Unfortunately, some of the confusion and conflict in the federal government are outside the purview of the new ministry. In higher education, for example, the government's role is dispersed across several different entities: the MGPE, the Ministry of Finance, the State Committee for Property, and the other ministries and departments that continue to serve as "founders" of higher education institutions. The policy of the Minister of Education is also shaped – if not superseded – by the complicated political and economic relations between the federal government and the subjects.

Nevertheless, creating a single ministry responsible for all aspects of education and training, and occasionally for employment as well, is a model adhered to increasingly in the world. This results in giving a single administration, usually with many sub-divisions, responsibility for a vast range of issues. Linking educational sectors, schools, vocational education and universities is encouraged because it should assist in sharing buildings, equipment and staff and transferring the functions of current infrastructures to better respond to the new demands of the economy. A single ministry confers a higher status within government on education and should make it possible to treat educational issues across all sectors on their merits.

It is also important, however, to be cautiously optimistic about the success of such consolidated ministries. Greater prestige together with its leaders' connections with influential university rectors, political and other leaders, may lead to an imbalance in which the higher education elements of the newly-consolidated agency dominate the agenda. This can lead to imposing traditions appropriate for a strong higher education system inappropriately on the basic, vocational and secondary systems. The most serious problems for a nation such as Russia could



arise from a tendency to emphasise selectivity and elitism, to assess and allocate resources at the expense of critical commitments to access, equity, and the education of all children through the nation's basic, secondary and vocational and professional systems. In addition, consolidations require considerable attention to internal co-ordination and rationalisation because of the complexity of internal organisational change. The reorganisation must be perceived as benefiting the MGPE's educational leadership role and its partnership with other agencies. This will only happen with the time, effort and skill of the key personnel involved.

It is vital that unity of purpose prevail within the MGPE and that the demarcation of responsibility within its sectors be subordinated to a common role and purpose. It is not at all clear that such cohesion exists. The MGPE needs to organise its internal management structure and mode of operation to fulfil its role in a coherent and convincing way. Issues of structure, staff assignment and training need to be addressed. The review team considers that a strategic policy unit should be established within the ministry with a clear remit to spearhead the implementation of key policy measures in this era of transition. The unit needs to be staffed by trained personnel with the specialised skills required for such a strategic role. Some personnel might profitably be recruited from the regions, even on a secondment basis. International assistance should be available to this group. The strategic policy unit, and the MGPE generally, needs to have the communications and informational technology resources essential for fulfilling its role. The strategic policy unit needs to be able to draw on comprehensive databases and to provide research and analytic capacity to underpin policy.

There is also a need for closer liaison and intersectoral links with other ministries with related education responsibilities. Part of the anxiety expressed about decentralisation by MGPE officials concerned the ability or will of some regions to invest in education. This anxiety and lack of confidence may stem from the lack of knowledge exchange between ministries. The Ministry of Finance, for example, needs to share its information and policies concerning allocation of budgets and finance to the regions. The basis upon which some measure of regional equalisation occurs is particularly important, *i.e.* "subsidising" poorer regions so as to protect and guarantee minimum standards of educational provision. Formulae, it is inferred, are being used by the Ministry of Finance in allocating finance and budgets to regions and universities, but their nature and the development appear to be closed matters. It will not be possible for the MGPE to lead in policy and implementation strategies unless it is privy to this information, due to status and credibility problems.

Similarly, fears about equity among individual students or children appear to have led to recent legislation, generally called "social protection". This affects education in various ways, including the provision of meals and health or social support in kindergartens and schools. An analysis of these impacts and costs

should be undertaken in collaboration with the relevant Ministries of Health and Labour and Social Development. Intersectoral liaison between related ministries regarding the provision of education is promoted in many countries, although not always with great success. The nature of the educational change agenda in the Russian Federation, given the difficult socio-economic context, makes it imperative that the Prime Minister take specific steps to ensure that structures for such inter-ministry liaison be put in place.

### **The role of the ministry**

While differing fundamentally from the mode of operation within the centralised system of the previous regime, the MGPE's role today is very important in ensuring that the overall goals of the education system are realised. An understandable reticence with respect to the former command style should not blur the delineations of key MGPE responsibilities:

- Preparing strategic policy for the education system overall and providing frameworks within which other partners in the system can best fulfil their responsibilities. The process of devising strategic policy should involve consultation with the key education partners, as far as possible.
- Providing a scheme of educational standards (see Chapter 4) and establishing a system of quality assurance in relation to national education standards.
- Working together with the government, the MGPE must ensure that funds are made available in line with announced responsibilities.
- Helping to provide a conceptual understanding of decentralisation in education, clarifying its elements and co-ordinating its application.
- Assist in drafting credible, implementable educational legislation. The MGPE does not bear full responsibility for legislation, but because of its specific knowledge and area of responsibility, it needs to take a pro-active stance in guiding educational legislation.
- Promoting equity within the education system and paying particular attention to the needs of those least able to help themselves.
- Continuing to establish, develop, and help co-ordinate “agreements” with the regions. The policy of entering into agreements with each of the regions was, and should continue to be, an important strategy. It provides a means to respect the extreme diversity of regional needs, conditions and cultures. At the same time, the agreements have the potential of co-ordinating and stabilising these relationships. The newly consolidated MGPE should aim to increase the co-ordination between agreements of the former SCHE and the former Ministry of Education, and the regions.

- Collecting and analysing educational information and data for national purposes. Data collection should enable the MGPE to monitor the extent to which new policies, in particular, are being successfully implemented. It should also be able to identify key trends, including per capita expenditure in different categories of establishment, teacher turnover and recruitment, graduation rates, student choice and destinations at the end of 9 and 11 years of general education, etc. Such information should increase the quality of policy development and advice and shed light on the points that give cause for concern or for intervention in a decentralised system.
- Regulating and ensuring compliance on the basis of data collection activities, monitoring and checking the legal, financial or other probity of the system.
- Engaging in and promoting research and development projects to help the effectiveness and future policy development of the system. Innovative approaches as, for instance, the newer practices in teachers' (and administrators') professional development at the Ryazan Institute of Extension Education should be investigated to see if they have a positive impact on the quality of education provided to students. Similarly, the impact of the Murmansk region's eleven goals, with mainly quantifiable targets for each goal, should be examined. In both cases, good practices and possible limitations and mistakes, when they are identified by researchers, should be analysed, described and more widely disseminated. Likewise, state providers can learn some useful lessons from focused independent evaluation of the alleged successes of non-state schools and colleges.
- Identifying "good practice" (see above), and engaging in their active dissemination to regions and municipalities.
- Setting out general standards for textbook publishers and promoting the publication of high quality textbooks and teaching materials (Chapter 4).
- Providing reports and general policy reflection and advice on the progress of the education system.
- Liaising with politicians and the social and educational partners on educational issues. This is a crucial role in helping to maintain the "Russian space in education", and the MGPE alone has a global vision of the system which it needs to communicate with other stakeholders.

## **REGIONAL AND MUNICIPAL RESPONSIBILITIES**

The review team heard distinctly different views at the regional level about the benefits of consolidating responsibility for education. Given the diversity in the Russian Federation, it will be important to respect these different perspec-

tives. Nevertheless, it is in the interest of the federal government that the regions develop mechanisms for effective co-ordination.

The historic relationships between elements of the system with different ministries and departments in Moscow tend to perpetuate a series of special relationships (e.g. universities to the SCHE, vocational education with several different entities, general secondary education with another). If reinforced by the way the new federal structure functions, these relationships can undermine effective regional co-ordination. The system of agreements is an important means to counter any potential for fragmentation. Co-ordination between the agreements of the former SCHE and those of the former Ministry of Education, if this has not already occurred, should be a priority but it needs not simply consolidation.

Regional co-ordination, under the leadership of regional councils of rectors and the encouragement of the former SCHE, is apparently increasing across the Federation. The OECD mission did not gather detailed information on the issue, but the team had practical examples described in regions such as Primor'ye *Krai*, Krasnoyarsk *Krai*, and Tomsk *Oblast*. These developments suggest that even when co-ordination may be difficult to achieve through formal governmental policy, informal networks, non-public associations and other non-governmental means can play critical roles in achieving it in and between regions and federation-wide. These informal networks seem to be particularly important to higher education reform across the Russian Federation. In the OECD mission's visits to Vladivostok (Primor'ye *Krai*), Krasnoyarsk and Tomsk, the team observed a number of examples of inter-sector co-ordination. Regional priorities did not appear to be shaped by any clear set of public priorities on access, improved education attainment, developing youth and adult skills, or economic development.

Agreements exist between the federal authorities and over half of the 89 subjects stipulating the rights and responsibilities of the respective authorities. These agreements are also intended to take into account the specific features of each region and locality and to provide normative and legal support for the development of education in the regions. The federal Programme of the development of education was approved on the whole by Presidium of government of the Russian Federation on March 31, 1994 (Order of federal government of May 6, 1994 N 661-p). It includes joint work on the development of state standards, the development and implementation of regional programmes of educational development, assistance in establishing ethnic schools and the right of executive bodies to determine enrolment ratios.

The political and economic realities, reviewed earlier, suggest that the regions will have to assume an increasing share of the financing for all educational levels – including higher education. This is positive from one point of view because it will mean that institutions must respond to regional social and

economic priorities (*e.g.* for economic development). Nevertheless, it will also mean that the various entities will be increasingly pitted against each other for extremely limited resources. The regions must therefore assume greater responsibility for promoting co-ordination, resource sharing, and curbing unnecessary duplication.

The review team was impressed by the quality and commitment of personnel which it met in many of the regions that have used agreements to good effect. The agreements have facilitated a number of regional and local initiatives. For example, the regions of Perm, Ryazan, Bryansk, Omsk, Orel, and the Republic of Adygeya have established a computer network management system for education. The city administrations of Voronezh, and Kostroma provide school children with free public transportation. Educational vouchers are being used in Vladimir and Samara regions. Many of the republics are developing textbooks and teaching materials based on ethnic traditions and indigenous culture, such as Buryatia, Kalmykia-Khalmg Tanch, and Adyghe. The Ryazan Institute of Extension Education, where management needs and related training programmes for administrators and school principals were well advanced, offers a good example of a proactive approach by a regional agency. The Institute's capacity to evaluate critically and to select appropriate techniques, concepts and knowledge from foreign sources was highly impressive, especially because it was rooted in a thorough understanding of local circumstances, traditions and variable readiness for change. The Institute's own staffing structure, dynamic flexibility and use of information technology (IT) provided a good example to its "customers" of how an organisation needs to think and learn creatively in order to keep ahead of societal change. Some regions have taken useful initiatives in establishing international contacts.

While there have been a number of success stories of regional and local self-management, there have also been a number of failures ranging from wage misappropriation to bureaucratic conflicts and inertia. The national budget crisis is blamed for lowering the quality of cafeteria food, reducing the number of available textbooks and supplies, for delaying the purchase of much-needed equipment, and contributing to the deterioration of buildings and dormitories. Many schools lack appropriate heating, running water, and sanitary facilities. Occasionally, they cannot pay their utility bills. The press has also reported many managerial conflicts between enterprises and vocational schools over payment of recurrent expenses, such as daily operation and maintenance.

The educational responsibilities of the regions, as set out in Tables 1 and 2 clearly call for skilled staff in the regional education department. The responsibilities include developing regional programmes, curricular design, teacher education, and provision of textbooks. The regions are in a pivotal position for promoting quality in the schools, which concerns support of various services including

in-service training, good teaching materials, and satisfactory infrastructural conditions for teaching and learning. The role of the region's inspectors or methodological staff would seem to have greater potential than is evident at present in promoting and disseminating good practice between networks of schools in the regions. Together with the municipalities, the regional authorities have important supervisory powers over school provision: educational equality should be a priority among these. It should be noted that the restrictions on the closure of obsolete or small schools in the education legislation make rationalising school provision a complex process.

The regions have an important role to play in nurturing a new tradition of links between employers and schools at vocational and secondary levels. In the coming years, they should forge better links between education and other regional agencies responsible for employment, health, the environment, and sports. Regional authorities need to develop a good informational database and report upwards to the MGPE and outwards to the municipalities and general public on educational progress and problems within the region. The regions also have a role to play in establishing educational standards and monitoring trends in student progress (see Chapter 4). It is regrettable that many regions do not currently have the financial resources to fulfil their roles in a satisfactory manner. However, much progress is already in evidence and it is important that the regions be clear about their priorities and establish frameworks that will allow them to make great strides in the future.

Not all municipalities welcome the significant increase in responsibilities that has come with decentralisation, especially when unaccompanied by a concomitant increase in funding. The Law on Education does not provide a mechanism for municipalities to refuse the powers they have been accorded, although state schools can only be transferred with the consent of the municipalities. Municipal authorities may not be able or willing to comply with federal and regional laws; even if they abide by them technically, they may not comply with their spirit.

Local authorities agree that the federal government passed the 1992 Law on Education without first establishing the prerequisite structures and capacities for its full implementation. Municipalities may have inadequate management expertise, little experience in creating and implementing budgets, little familiarity with how to solicit extra-budgetary revenues, negotiate with teachers' unions, define the roles of city and district education heads, or determine the kinds of training and re-training that teachers should receive. In short, some municipalities may simply not yet be in a position to assume some of the responsibilities delegated to them. Of course, municipalities are in widely different situations. Some are clearly more favoured to fulfil their functions than others and some have been very successful. Nevertheless, as noted earlier, neither a well-rooted tradition of civic culture nor pro-active self-reliant communities exist yet to achieve the goals

of decentralisation. Establishing this tradition takes time, training, resources and experience, but policy is moving things along in the right direction.

## **INSTITUTIONAL LEADERSHIP**

At all the higher education institutions visited by the OECD mission, the leaders stressed how important increased autonomy and democratisation of governance have been and continue to be to their institutions. Yet this is the very area where the most significant gaps may exist between the words of the federal law and the day to day realities of university and school leadership and management. It is difficult to assess the extent to which the formal, structural changes are accompanied by changes in educational leadership. In most of the schools and institutions visited by the OECD team, rectors, school directors and others demonstrated that they both understood the significance of the changes and were capable of making them realities within their schools. But, there is a question as to whether this is the reality in the majority of schools and universities. In a nation where following directions from above and complying with strict political directives were the keys to management responsibility, the new freedoms – and accompanying accountability – place extraordinary burdens on school and university leaders.

Sustained change in Russian education at all levels depends fundamentally on the transformation of educational leadership at the “unit” level: the school, the college, or the university. This is inevitably a slow process and it is therefore important to recognise that fully implemented changes, such as new education standards, curriculum, pedagogy and assessment, will be much slower than some of the early reformers had hoped. The continuing anomalies and conflicts in financing policy severely restrict institutional leaders’ management authority and capability. The most recent funding has been limited to certain “protected categories” (payments to staff and student stipends) and no funding is being provided for maintenance, equipment, or other essential elements of institutional operations. Debts to energy suppliers are mounting.

Despite the benefits of the “democratisation” of institutional governance, the experience of many OECD countries is that these can lead to institutional paralysis when it comes to making serious choices on institutional priorities, and restructuring or eliminating programmes. It is not clear whether rectors chosen by their peers possess sufficient authority to undertake the kinds of changes that will be necessary to reform their institutions. The secondary schools visited by the OECD team provided impressive evidence of strengthened school leadership with more democratic, open involvement of teachers in establishing school policy, and of parents in school affairs. These changes seemed most evident, as might be expected, in the *lycea* and more selective schools. As was the case with

the Ryazan Institute of Extension Education, discussions with the Institute for School Management at the Pedagogical University in Krasnoyarsk indicated impressive efforts to develop the leadership skills of school principals. This kind of initiative must continue to be a priority if the hopes of the Law on Education and the new education standards are to touch all the schools and all the children of the Russian Federation.

The review team was impressed by the determination and creativity of school principals they met, in the face of difficult problems. However, their efforts would be even more effective if institutions were more fully responsible for their own budgets and were more clear about the limits of their managerial freedom (*e.g.* teacher deployment) and about the outcomes expected of them by the funding authority (*e.g.* student graduation rates).

The schools' proximity to the problems and opportunities provoked by inadequate budgets, and a context of high and rising student, employer and parent expectations, should be exploited to maximise managerial autonomy while respecting a framework of required standards and outcomes.

The opportunity costs (lost or denied opportunities to improve performance) associated with such a lack of clarity also need to be considered. For example, in Minkino, the new school for children with severe speech problems in Murmansk, the number of teaching and non-teaching staff had been decided and allocated on a formal, traditional basis by the regional authority, with reference, apparently, to federal norms. However, the modern energy-efficient building probably did not need the number or type of "engineers" allocated to it and the principal should have been able to decide how best to spend the total revenue budget so that an agreed number of students in different categories could meet the standards required by the regional authority. He should also have had the managerial autonomy to determine the means to achieve the education authority's ends. In this case, the opportunities for delivering efficient and effective educational service for children, their parents and the local community are not being fully exploited.

## **DECENTRALISATION AND THE INFORMATION BASE**

In the Russian Federation, there is no high quality statistical information system so very necessary in a decentralised system. The current system was developed under a centrally planned economy and is significantly oriented to quantitative education characteristics: numbers of schools, students, teachers, admitted students, graduates, school buildings, boarding facilities, etc. It only provides limited data on the effectiveness and efficiency of schools, the quality of the education process, economic aspects of education, cost effectiveness of the



system, and the education market dimensions that focus on the interface between demand and supply of educational services; it is incompatible with foreign internationally applied standards, such as those of the OECD, EUROSTAT and UNESCO. Any comparative analysis of educational trends is therefore difficult. The information base also suffers from the multi-sectoral character of educational management. The data that is collected is often unusable outside schools or regions. The technical conditions for information gathering are not up to current requirements for data processing. Much data is collected and processed “manually” on paper. Repeated pre-processing of collected data is, therefore, necessary before the partial databases can be developed on computers.

Collecting statistical and descriptive information is urgently needed. Deciding what kind of information should be collected, from whom and for what purposes, is the key issue and will determine, to a large extent, the development of education policy in the Russian Federation. When IT systems are first established, there is a risk that the purposes to which the information will be put have not been sufficiently thought through. Drawing up system specifications is, therefore, the first and most important issue. Part of this process has already occurred, but this fundamental question needs to be asked whenever more information is sought or provided. The MGPE needs to agree upon a data collection process with the regions, in particular, but consistent data collection procedures are required throughout the system.

Bearing this in mind, each level of delegated authority in education and training within a decentralised system needs appropriate management statistics in order to plan. The lower the level, the more fine-grained the requirement, but each level should provide the necessary statistics to assist planning both at its own level and that immediately above. Effective information systems need to be carefully established because they are fundamental to benchmarking and to monitoring trends and changes in cost structures.

As the use of communications technology increases, so does the ability to transmit data in a timely fashion both to other organisations at a particular level, and to the next level. Statistical collection should be simple at first, and designed so that as the ability to collect more detailed information increases, earlier statistics do not become invalid. Many statistical data sets operate internationally, and many of the complexities of defining data elements have already been resolved. These could form the basis for effective data collection in the Russian Federation.

Decentralisation makes the need for better horizontal communications evident. An improved information network is urgently needed for all levels of management, and would facilitate greater participation in the development of education. To date, the reform of management structures in education has been confined to mainly governmental and school authorities, to the exclusion of stake-

holders – teachers, students and their parents, and taxpayers. The rigid vertical hierarchies of the present management structure do not allow for “knowledge sharing” among regions and municipalities. Even schools located in the same city *rayon* often must try to solve problems on their own.

Creating enhanced horizontal and vertical information networks helps to promote legitimate, democratic reforms and can increase and diversify opportunities for participation. Informational networks increase the efficiency of management by enabling teachers and administrators to adopt the best practices, rather than developing their own programmes and practices too much in isolation. Horizontal linkages also give the system coherence by fostering common performance criteria. Linkages and networks are fostered by improved information flows.

The current situation of educational statistics needs a thorough, detailed analysis. Current and future requirements for statistical data need to be articulated in order to draw up a programme for implementing an education information system with a structure of statistical indicators, software and hardware. This process should be able to draw on international assistance. Building up a comprehensive system may take some time, but it is vital to safeguard coherence and consistency among all levels of the governance system. Staff training courses on such processes, at all levels, are essential.

In a more market-oriented society, the unit costs of various activities and enterprises must be known so that their financial value may be assessed along with their educational effectiveness. If the system is to move more towards output-oriented management, it must be able to measure outputs in terms of cost and quality, and that quality must be broadly defined.

The availability of good quality information data is integral to good policy formulation and planning at national and regional levels, but its utilisation is crucial. The data should feed into improved reporting on the educational situation and its progress at each level, from school to municipality, from municipality to region, and from region to the MGPE. Obviously, the reporting style would be different at each level. Systems would need to be in place for processing reports, for extracting significant data from them, and for feeding into policy and improved action (see Chapter 4 for evaluation data on curricular and educational outcomes, central for such reporting). The strategic policy unit of the MGPE would need to be able to distil relevant data from regional reports so that it could fulfil its role. In addition to monitoring progress, evaluating examples of best practice and feeding into strategic planning, aided by the information base and an improved reporting system, the MGPE could issue periodic reports on the development of the system federation-wide. Regional authorities might also issue periodic public reports on the operation of the education system within their regions. These should not just be statistical reports, but should also comment on educational, social and economic aspects that the statistical data illustrate. They should be

written in a style that persuades interested stakeholders that this is another effort to build the culture of decentralisation, so that educational progress and policy issues actively engage public interest in the new democracy.

## **RECOMMENDATIONS**

The Russian Federation is seeking to fundamentally restructure the management of the educational system. The 1992 Law on Education initiated the transfer of selected administrative and fiscal responsibilities from the centre to the regions. A four-tier administrative structure now links the centre, regions, municipalities and local administrations, and institutions so that partnerships are created among the different tiers as they fulfil their particular responsibilities within the overall framework of a decentralised system. The policy of decentralisation is considered fundamental to the greater democratisation of the system and is also an acknowledgement of the political realities involved in the power base of some of the subjects. Decentralisation is a difficult but worthwhile enterprise, and it takes time for a culture of decentralisation and its concomitant responsibilities to take root. From its analysis of the existing situation, the review team makes the following recommendations.

### **Decentralisation**

- There is a need for a well understood conceptual and political commitment to decentralisation, and a clearer delegation of rights and responsibilities among the different tiers of management – MGPE, regional and sub-regional levels.

### **Structural issues**

- The team endorses the consolidation which has occurred between the SCHE and the former Ministry of Education, but it urges special efforts at this time to ensure beneficial internal co-ordination within the unified MGPE.
- A strategic policy unit should be established within the MGPE to spearhead the formulation and implementation of policy, drawing on an improved research, statistical, and information base.
- The MGPE should receive more transparent information on the formulae applied by the Ministry of Finance for educational budgeting since this is intimately connected with the implementation of educational policy.

### **The role of the MGPE**

- The role of the MGPE should be clarified along lines set out above.
- The ministry should be responsible for strategic policy planning for the overall system, with clear frameworks indicated for the roles of regional and municipal authorities.
- The ministry should accelerate the work on educational standards and should put in place quality assurance mechanisms in place for national education standards.
- The ministry should promote and safeguard equity within educational provision.
- The ministry should issue periodic overviews on the progress and problems of educational reform within the Federation. The reports would draw on data from much improved information and monitoring systems.
- The ministry should continue and accelerate the strategy of entering into “agreements” with the subjects.
- The ministry should promote greater co-ordination of the agreements for all education levels between it and the subjects, including:
  - co-ordinating the agreements of the former Ministry of Education and those of the State Committee for Higher Education;
  - respect for regional variations in administrative structures;
  - incentives for regional co-ordination among education sectors and links with regional social and economic priorities.

### **Regional responsibilities**

- A special initiative aimed at strengthening the capacity of regional leaders to improve regional education planning, co-ordination and policy development would be of great benefit. It could include expanded exchanges with other countries with highly developed regional and state education systems operating within a federal legal framework.
- Efforts should be made to further co-operation between regional administrators, preferably in regional clusters; the innovative management styles of progressive regions should be disseminated.
- Enhanced information systems, both horizontal and vertical, should be created and would greatly benefit the system overall, and the regions in particular.
- Regional authorities will need to issue periodic reports on education within their regions, drawing on improved statistical data, and including

commentary of an educational, social and economic character relevant to a review of education.

### **Municipal responsibilities**

- As they receive information from the regions and from individual schools, municipal departments of education should play an important role in school co-ordination and promotion, and developing curriculum and pedagogy. They should also bring marginal schools into contact with innovative schools to strengthen the basis of reform.
- Many staff working in municipal education departments require greater support and training for their new responsibilities.

### **Institutional leadership**

- Leadership and management training for the heads of schools and colleges should be a major priority in the in-service education programme.
- Institutional leaders also need to know more clearly what is expected of them and to have more freedom and discretion to exercise their leadership roles, including school budget planning.
- The process of educational decentralisation has brought about some interesting pedagogical innovations in schools in the Russian Federation. Innovations have been concentrated mainly in schools with established records of scholarship and those which have entered into partnerships with foreign schools and professional associations. Policy initiatives which broaden the base of educational development are needed and the dissemination of good practice should be promoted.

### **Parental involvement**

- MGPE efforts to encourage greater parental and community involvement in educational reform is a step in the right direction. However, this should also be facilitated at the municipal level. Parents are more likely to be knowledgeable and care about issues that directly affect their children. Methods to solicit regular parental input in helping schools meet short-term and long-term objectives are needed.

## **PATTERNS AND PROBLEMS OF EDUCATIONAL PROVISION**

### **INTRODUCTORY NOTE**

The pattern of education provision in the Russian Federation is very complex. Institutions inherited from the prior regime are adapting to the new society and institutions that have emerged alongside them. In addition, as is typical in transitions, new social forces and pressures can occasionally compromise the realisation of official and declared aims concerning participation in the education system. The great shortage of financial resources for underpinning the elaborate infrastructure of the system creates serious problems for institutions and citizens alike. The practical workings of the system and individuals' interaction with it need to be understood. Consequently, this chapter focuses first on the nature and role of kindergartens and on the provision of supplemental education. Next it interprets the increasingly complex pattern of compulsory and other school provision, with particular attention to the processes of pupil participation and transition between the institutions and levels of the system. Higher education is not specifically analysed in this review, but its changing profile is nonetheless outlined and some trends and problems discussed, as are the provision of continuing and distance education. After examining provision and transfer within the education system, issues of unequal access and individual participation are explored. Indeed, the review team sees these as constituting a significant problem for the Russian Federation.

### **KINDERGARTEN AND SUPPLEMENTAL EDUCATION**

#### **Kindergarten provision**

Providing kindergarten education on a widespread basis has been a long established tradition in Russian education. In this era of transition, it remains a cherished area of education and plays a significant role in early childhood care and education. The system cares for the needs of children mainly from age 3 to 7 years. Pre-school educational institutions also take care of children of younger age – from 1 to 3 years of age, in rare cases from 2 months to 1 year of age. Most

kindergartens are financed by the state, the municipality or enterprises, but the latter are in decline as enterprises change their mode of operation. Kindergartens operate under broad programme frameworks within which individual institutions can shape their own emphasises, in accord with their needs and concerns. Most kindergartens are assessed by the municipality and are accredited within several classifications. Private or partly private kindergartens are growing in number but they still comprise less than 8 per cent of the total. Even in municipally-run kindergartens, parents are tending to pay from 10 per cent to 15 per cent of costs. Kindergartens are run on a very flexible basis and parents can choose the type of child participation which suits them best – full-day, part-day, part-week, etc. The relationships between parents and staff are intimate and integrative and these links help staff to learn a good deal about the personalities and individual needs of children.

The review team had the opportunity of visiting a good number of kindergartens and observed them in operation. It was very impressed by the quality and standard of this type of education in the different regions. The teachers and directors are specifically trained for this type of schooling and the motivated and professionally competent staff carried out well-devised plans and intervention strategies with evident energy and enthusiasm, so necessary in this type of work. The review team was also struck by the pastoral concerns of staff as they dealt with individual children. Kindergartens were impressively clean, bright, and colourful, and in some cases, attached gardens had a suitable variety of plants and playing areas.

Staff councils meet to plan the programmes, and networks of directors provide useful fora for exchanging ideas. Records are kept on individual pupils, which helps track their development. The educational programmes followed stressed music, art, dance, speech development, spelling, basic mathematics, story-telling, rhymes and songs that were creative and showed imaginative flair. The materials provided – building blocks, pictures, musical instruments – reflected a concern for an enriched environment. As with all schools, kindergartens are subjected to budget restrictions. However, it was gratifying to note that teaching staff were ingenious in providing some of their own materials and teaching aids. Early childhood education, in particular, requires staff to be flexible and have developed coping skills for dealing with daily problems and unanticipated issues; much depends on the quality of the personnel and on their vocational commitment. The review team formed the view that the staff in kindergartens were confident about the distinctive character of their work and that their morale was high, although there is some evidence that teachers are leaving the profession due to financial constraints. Some must work as many as 36 hours per week to supplement their basic salaries.

It is important to note that many kindergartens are multi-purpose institutions. In addition to their educational roles, they also play custodial, socialisation, health and social protection roles. Widespread child health problems were ubiquitously reported to the review team. Kindergartens provide considerable health and disability assistance for these. A great deal of attention is paid to screening any health impairment and to pupils' intellectual development. Psychologists play a significant role in diagnostic work and in programme design. Physiotherapists are available to help with physical or muscular impairment and some kindergartens have *gymnasium* facilities and a swimming pool to help in remediation. Speech therapists help to resolve speech and swallowing defects. Kindergartens located in areas of grave socio-economic disadvantage play a significant role in assisting such disadvantaged children. They are available to try to compensate for socio-domestic situations where problems associated with alcohol and other drug abuse and mental or emotional instability impede young children's development.

When evaluating the place of kindergarten education in the context of the overall challenges facing Russian education, it is vital to bear in mind that these institutions play a multi-faceted role. Kindergarten or pre-school education costs are very high compared with other developed countries and a review of staff allocation also reveals high numbers of teachers, specialist and support staff in kindergartens (World Bank, 1995, *Russia: Education in Transition*, pp. 15-16). Quite clearly, in a unit cost financial accounting system, the unit costs would be very high in most kindergartens. With the serious financial pressures facing Russian education, there is a temptation to cut back significantly on kindergarten provision. However, the review team urges caution in this regard. We recommend that some pilot studies be done on staff deployment in a number of kindergartens on a cost-benefit basis, as some savings would seem possible here. We also recommend that the health and social protection role of the kindergartens be better explained and understood by the public and the politicians and that the costs not all be set against the education budget. We also favour the growing trend of parents contributing to the running of the schools, where this is possible. There is scope for reform within the budgetary provisions for kindergartens, but it would be a mistake to drastically cut funding. Kindergartens traditionally build solid foundations for further education, and the quality and the variety of services they provide are crucial for families and young children. These are real assets. The international trend within OECD countries is to give greater emphasis to early childhood education in the context of a policy for lifelong learning and social inclusiveness. The kindergartens in Russia could benefit from reforms and a newly articulated policy role, but it would be short-sighted to undermine what is, by any standards, an impressive service.



## **Supplemental education**

Russia has also had a long tradition of supplemental, or extra curricular educational activities. Many “non-school” flexible learning centres, often based in former “young pioneer” institutions, are doing good work. The system of summer camps, too, is encouraged wherever possible, fitting in with the more traditional education system. The state system of extra school education aims to provide children and teenagers with intellectual, physical and creative activities during their leisure time. These centres now answer the needs and interests of individuals rather than the state, as they did in Soviet times. Courses include art, drawing, composition, design, folklore, crafts, hobbies. Activities sometimes focus on supplementing or extending school work. Many of the centres are located in the countryside which allows new experiences for city children. They are seen to support good health, and their recreational activities and games also emphasise this. Formal and informal activities foster good inter-personal communication and relationship skills. Young people at the centres visited by the review team gave the impression of enjoying their experiences and the ease of relationships between children of different age groups was striking. Group singing and drama activities reflected both the skills of the staff and the talents, as well as contentment, of the young participants.

Some centres had innovative schemes for helping talented youngsters from remote areas to attend the residential centres for a few weeks at a time. Links exist with local teachers in these areas who nominate pupils on the basis of their talent and sample work. In recent years parents have been contributing about 10 per cent of overall costs. Other forms of supplemental education include periods on training ships for teenagers seeking careers in sailing and seafaring. The organisational arrangements and sequence of training experiences are well devised. Teenagers are trained to maintain such ships and assist in operating them, supplemented by entertainment and sporting activities. Activities on the training vessels are scheduled during vacation periods but are supported by training in schools and in marine clubs.

As is the case with kindergartens, out-of-school centres serve several functions in addition to their direct educational role. They help in promoting health education, social education, self-reliance and a vacation-type experience. Details were not available on the social profiles of the young people benefiting from these centres. In the interests of equity, efforts should be made to ensure that participation is socially inclusive. It is not surprising that the Russian Background Report provided to the review team by Russian authors states: “This dimension of the educational reform in Russia is of high priority”. The system is maintained predominantly from state budgets of different levels in current economic circumstances, which poses a real difficulty. The centres form a significant part of the quality of life available to many teenagers at a very formative period of their lives

and are supported by a strong tradition of participation and expectation. They provide a valuable infrastructure which, if destroyed, would be difficult and very expensive to replace; they have skilled and committed staff.

Figures on the operational costs of these centres were difficult to obtain. While not available to it, the review team is informed that good statistical data exists on the operation of supplemental education. Together with a clear accounting mechanism, this should help future planning of supplemental education. At a time of growing juvenile delinquency, these centres would seem to be a valuable investment in the culture of young people; however, only a comprehensive analysis of their role, the participation patterns, costs and results could determine their place in the order of priorities in current circumstances. Centres could possibly attract commercial sponsorship in future years to supplement other forms of income, including parental contributions, while remaining free for very needy children.

## **TRANSITION THROUGH THE SCHOOL SYSTEM**

### **Student mobility**

To help understand the opportunities and barriers for pupil transitions between and among sectors of the system, the following data takes information from various background documents and attempts to identify the major school and institutional categories.

The majority of children – 65 per cent – enter schools at 7 and study in primary schools for three years. The remainder enter school at 6 and the duration of their education in a primary school is four years. At 10 children go to basic secondary school: the duration of education at this stage is 5 years. At 15 they complete this stage in accordance with the law. In education the mandatory age of schooling is up to 15. According to state statistical data, 60-61 per cent of graduates of basic secondary school continue in complete secondary (comprehensive) school, 12 per cent enter institutions of secondary vocational education, 26 per cent go to initial training schools, only about 1 per cent of graduates do not continue education. Of those 60-61 per cent who graduate from complete secondary schools at 17, 30-40 per cent continue in institutions of higher education, 25 per cent continue in secondary vocational educational schools, 15 per cent are trained in institutions of initial vocational education and 25-30 per cent do not continue their education. The extent of pupil drop-out from the education system is disputed. The Background Report by Russian experts stated “(...) some 1.5 million school-age children have dropped out. This figure has remained stable for the last three to four years” (p. 11), but this level does not seem to be substantiated by official statistics. The drop-out rate seems to be highest in the vocational sector.

This relatively clear picture becomes blurred as one attempts to follow the increasing diversity of the Russian education system. The picture differs at every level of the system and varies by locations.

### **General secondary education**

The diversity of schools at the basic secondary level has increased dramatically in recent years. All Russian schools are responsible for coping with basic curriculum. The certificate students obtain at the graduation stage is recognised by all regions of Russia and also by Newly Independent States' republics. *Gymnasia* and *lycea* provide for early specialisation of children. The majority of those getting their education in a non-state school do not get recognised graduation certificates (out of 540 private schools of Russia only 169 are accredited, which makes them eligible for issuing recognised state certificates). Competition to enter all kinds of comprehensive educational institutions, including *gymnasia* and *lycea* has been prohibited since 1997. While the World Bank and OECD charts suggest that graduating from a complete secondary school leads to a higher education institution, the reality is that the student trajectories are influenced much earlier. To be admitted to a technical university, a student is well advised to attend a technical *lycea* and preferably one affiliated with the university, and partially staffed by university staff. To obtain admission to an academic university, a student is advised to attend a specialised secondary school (*lyceum* or *gymnasium*) affiliated with that university, if one exists in the vicinity. The same pattern of early specialisation for career choice emerges in the arrangements for training for other careers such as teaching and the naval service. While it is not the exclusive path of entry, such a highly focused system puts pressure on students to enter a specialisation early in their education careers and offers limited possibilities for mobility between and among specialisations later on.

### **Transition from school to university**

The team observed several indications of significant gaps between policy objectives and actual practice with respect to access to higher education. While state education policy is aimed at ensuring equal rights for all individuals who want and can benefit free higher education, the reality is very different. Indeed, many problems arise.

University entrance exams have become more institution-specific. While the general subject matter that a student must master may be the same, the methods of assessment differ among universities. Because there is no clear connection between admissions requirements and secondary education standards, one can assume a high degree of variation in students' preparation across the Russian Federation. Universities continue to administer admissions examinations at the

same time, thereby making it impossible for students to apply to several institutions simultaneously, and the results of one institution's examination have little meaning for admission to another. Failure to gain acceptance can mean a year's delay. The review team heard reports in Krasnoyarsk and Tomsk that efforts are under way, at the *krai* and *oblast* levels, to address the need for a uniform entrance examination system. Rectors are working on an agreement on examinations so that, for example, the mathematics requirements would be valid *oblast*-wide and a universal examination certificate would be recognised by any university. Rectors are at work on a model soon to be implemented. It has also been reported to the team that a growing number of universities and tertiary institutions now accept the examinations run by the National Testing Centre at Moscow State University. The State Committee for Higher Education (SCHE), which is now consolidated with the ministry, is also reported to be seeking to promote more coherence on university entrance examinations. The review team strongly recommends that such work proceed since it is of considerable importance for equity in access to higher education.

As has been noted, universities are increasingly developing special relationships with elite upper secondary schools (*lycea* and *gymnasia*) in which university staff teach. The motivation for these links may be partially economic: university staff salaries are so low that a second teaching position provides supplementary income. Schools are often proud of these links and on the face of it, they appear to be generally positive. Universities ensure that entering pupils are well prepared by sending their own lecturers to teach in the schools, giving them access to highly qualified university teachers and to the prestige they bring; students get better teaching, and are assured of direct access to a university slot provided they fulfil the prerequisites; and parents feel they are receiving good value for whatever they invest in their children's attendance at "good", university-connected schools. There are several arguments against such school-university agreements, however:

- At a time when schools are attempting to increase curricular relevance and effectiveness, and may lose control over their curriculum and their accountability to the MGPE, they lose their purpose as general education institutions and become mere training grounds for universities when both curriculum and teaching methods are geared to university practice. Moreover, they are inappropriate for students who will not go on to university and who have other employment objectives.
- University admissions standards are tending to become *de facto* secondary education standards that displace the new federal standards.
- Equally bright or brighter pupils in schools with no agreement with a university - *e.g.* schools in rural areas or unfashionable working district

schools – have to compete on an unequal basis for a reduced number of remaining slots.

- Universities themselves lose out because they do not choose their entering cohort from the whole pool of available talent but restrict themselves somewhat to their feeder schools.

A more complicated question is whether this system provides public policy support and incentives for students to pursue post-secondary professional or academic education and training relevant to employment opportunities in a market economy. The mission heard repeated reports that student demand is shifting toward programmes in business and law, for example, perceived as leading to potential employment, and away from mathematics, physics, engineering and technical fields. It is possible, however, that access to more popular fields be limited primarily to students with the geographic, financial and political advantages necessary to gain access to special preparatory secondary schools.

### **Transition to initial vocational education**

The review team noted a tendency towards inequality within the Russian education system. This impression raises the questions of what happens to disadvantaged students, and how many students fall between the cracks. Concerns about increasing juvenile and youth crime pose significant, social and educational challenges. This challenge of social and educational exclusion is also shared by many other countries. The review team learned that young people must be 16 years old to be eligible to be registered as unemployed. Presumably, this means that some younger than 16 are unemployed and have no access to the usual social protection. On the other hand, they have the right to attend vocational school. The social and economic situation facing youth places great pressure on the initial vocational education system. The vast system is already seriously out-of-date in terms of equipment, facilities, teaching materials, pedagogy and in the knowledge and skills of teachers. According to the Background Report of Russian experts, one third of the initial vocational institutions are in a very unsatisfactory condition.

Despite serious deficiencies in many initial vocational institutions, the vocational sector has a vital role to play in helping its entrants develop skills and competencies helpful to their individual well-being and to their employability. Initial vocational education faces great challenges in coping with students' needs and in undergoing major changes in very new and volatile employment, social and fiscal circumstances. Many schools have been making valiant efforts to be innovative and responsive to the new situation. Vocational education needs to make timely responses to meet continually changing training requirements. The dramatic shift away from the more traditional areas of vocational training to those

in service-related industries, undertaken in some of the vocational schools visited, was a very positive response. The value of work experience within schooling and traineeship is crucial, and has been well established within the Russian tradition. University education aside, the earlier young people have genuine work experience, the more likely they are to become a part of the workforce. Close collaboration will be needed between enterprises, industries, and employers with the vocational and general education institutions (see Chapter 5).

### **Transitions to higher vocational and professional education**

No clear picture of the evolving Russian vocational and professional education system emerges from the background materials provided for the review team. This may be inevitable, given the dramatic changes and difficulties in the sector. During the site visits, the OECD team heard reports emphasising the changes taking place in vocational education:

- A reduced number of specialisations from 1 200 to 257.
- New standards and curricula are being developed with federal, regional and local components.
- More emphasis is being placed on “fundamental” knowledge and skills as opposed to the more traditional specialisations.
- Attempts to move away from an over-production of engineers.
- More emphasis is being placed on competencies and occupations important to a market economy such as economics, business, management, services, foreign languages.

However, it was difficult to get a picture of the increasingly diverse vocational education scene – especially as this might affect students’ transitions from one level to another. The Background Report describes the move away from the traditional vocational training school and the development of higher vocational training schools such as vocational *lycea* or colleges and Regional Training Centres (RTCs.) These entities broadened the spectrum of programmes in response to the changing demands of the labour market from small business, trades relevant to farmers, bankers, managers, accountants, computer operators, secretaries, lawyers, car mechanics, and owners of small enterprises such as restaurants and retail shops.

There is a multi-stage system of vocational and professional education functioning in Russia which includes:

- institutions of initial vocational education (training of qualified workers), with a duration of 3-4 years on the basis of basic general secondary education;

- institutions of secondary vocational education (training qualified specialists of the medium level), with a duration of 4-5 years on the basis of complete general secondary education;
- institutions of higher professional education (training of specialists of higher level of qualification), with a duration of 5-6 years on the basis of complete secondary education or initial or secondary vocational training.

Currently a multi-level continuous system of training specialists is being developed.

Vocational schools are financed by the federal or regional budgets depending on the subject, or region. Twenty-two subjects now receive no federal financing for vocational education. As indicated earlier, the Finance Ministry has been considering giving responsibility for financing vocational education to the regions – although all would still have to meet federal standards.

To complicate the picture further, technical universities often have contractual relations, financed by the federal and sometimes regional budgets, with secondary vocational education entities for joint specialist training and for more advanced training and reduced study periods for *lycea* students.

The evolving system is spawning multiple levels of training and qualification, thus adding complexity, potential confusion, and costs for students. To the extent that students must compete at a comparatively early age to be admitted to a track, such as a technical *lycea* that will lead to a high-demand technical university, the trend could run counter to the need for broader, less specialised fundamental education and could reinforce the system's elitist tendencies. At the same time, the higher education system is adding levels: partial, basic higher education and complete higher education. As emphasised in the Background Report this complexity – and the reality that many of the levels are not connected – could present significant barriers to students intending to move through the system. A competency-based module system, in contrast, would permit students to move in and out of the system depending on their needs and on those of the changing labour market.

## HIGHER EDUCATION

The treatment of higher education in this section is not an in-depth appraisal, but rather an outline of how it fits within the overall pattern of educational provision and of some trends in higher education. An OECD specialised study of higher education and research is taking place in 1998.

## A changing profile

Russian higher education benefited from policy changes in the 1980s. The reorganisation began in 1986, under the slogan of “more democracy”. These changes significantly strengthened institutional autonomy, de-politicised much of the curriculum, emphasised democratic principles in university life and governance, and introduced a new emphasis on humanities and on creating a “humanist environment” for student learning. Since that time, and especially since 1991, policies have been elaborated through the 1992 Law on Education and various presidential decrees. In January 1996, several amendments to the Law on Education were adopted on a number of issues:

- Constitutional provisions (Art. 43) made it necessary for the Law on Education to redefine more precisely the provisions on free education and competitive access to higher (and other levels of) education.
- Constitutional provisions making selection for higher education competitive among the most capable students need to be reiterated.
- Clarifying but leaving substantial ambiguities in the distribution of competencies between the Russian Federation and the subjects of the Federation.
- Changing the provisions relating to governmental oversight of institutional establishment and management and quality assurance.

Further changes to the Law on Education were made in August 1996 through the Law on Higher Education and Postgraduate Education. These include further delegations of authority and responsibility to individual institutions regarding curriculum development, teaching methods and internal management, and changes in the authority of the former SCHE.

The most significant developments in the framework of higher education have been the development and approval of a “State educational standard of higher professional education” (Resolution of the government of the Russian Federation of August 12, 1994, No. 940). The new standard involved introducing a “multi-level” system of higher education (see Annex 1), consisting of:

- Incomplete higher education of no fewer than two years.
- Basic higher education of four years leading to a Bachelor’s Degree.
- A third level of no fewer than five years, leading to the Specialist or Master’s Degree requiring no less than 6 years of training (preparation included).
- A fourth level of post-graduate studies with a minimum of three years for a Candidate of Sciences (C.Sc.) degree and a further three years for Doctor of Sciences (D.Sc.), for persons already holding a C.Sc. degree.



Scientific degrees can be obtained at higher education institutions, the institutes of the Academies of Sciences, and other research institutions licensed to award them. These new legislative provisions and especially the introduction of Bachelor's and Master's degrees give much greater flexibility to the system of higher education with regard to educational levels, allowing it to be more responsive to individual needs and market demands. This is especially important given the need for additional training, and for further or new qualifications now imposed by the labour market. However, it will take some time to see whether the new frameworks can become general:

- Supporting the new standards of higher professional education whereby 257 specialisations are grouped into 90 trends or orientations of training.
- Developing a new accreditation and quality control policy and process. This is now in the process of being implemented and applies to both public and non-public institutions seeking state recognition of credentials.

Another substantial change that has taken place during the past several years is the introduction of new academic programmes designed to train specialists to meet the requirements of enterprises operating under free market conditions, and the evolution in the service sectors, and the need to produce well-trained high professionals in foreign language, law, administration and other fields. The process of reforms has been greatly helped by the legislation allowing academic institutions the freedom to define and implement education policies.

In some academic programmes, students now have more choices for selecting specific ways of acquiring their degree. They can choose from among many electives and optional subjects during their course of study, depending on their interests and also in relation to their prospective jobs. Some universities – Tomsk State University in Siberia – have introduced general compulsory subjects on market economy and foreign languages for all students.

The profile of Russian higher education is a complicated one. In part, this is due to the extensive overlap between the “upper secondary” academic and professional systems, and higher education. Both the vocational and professional and higher education systems were part of what the 1995 World Bank report (p. 7) called a “vertically segmented training” system in a planned or command economy. Institutions came under the jurisdiction of the ministries responsible for different sectors of the economy including agriculture, light industry, power and transportation, for example. But this has been changing. The SCHE (now within the MGPE), plays a central role in setting standards across all ministries and departments with responsibilities for higher education institutions.

The SCHE has been changing institutional classifications to break up the stratification between the university and non-university sectors and has also sought to break sectoral divisions between the older privileged universities and

the newer “under-privileged” universities. In the non-university sector it was important to end the divisions between and among institutions previously subordinated to ministries or departments. In 1993, the SCHE promulgated a new classification system based on institutional functions rather than previous status or affiliations. This resulted in a new hierarchy: universities, academies, institutes and colleges. Initially new universities and academies mushroomed, although this drift has now apparently slowed.

The background materials received by the OECD review team include several different listings of the numbers and kinds of higher education institutions. Figures provided for 1997 state that there are 566 state higher education institutions and 244 non-state institutions. There are also 2 612 state and 58 non-state institutions of secondary vocational education.

### **Access and certification**

The capacities of the system of higher education have been somewhat extended in recent years, due mainly to the opening of new non-state higher education institutions and also to the introduction of some fees in state institutions. Nevertheless, the overall number of students has not increased significantly. This is due in part to the somewhat conservative position of federal and regional education authorities regarding the number of students accepted in universities receiving state financial support. The competition among school graduates for entry to the universities and some elitist entry tracks have also been discussed. The number of new entrants has increased, reflecting a change in attitude whereby higher education is seen as an avenue towards well-paid and satisfying work. The proportion of students in the relevant age groups has been sinking gradually since 1983 and today, Russia ranks 20th in the world and is facing a downward trend (W. Maslov, 1996, “Forschung, Entwicklung und Technologiemanagement”, in M.K. Welge and D. Holtbrügge (eds.), *Wirtschaftspartner Russland*, Gabler, Wiesbaden, p. 271). Drop-outs are rising and this trend needs to be stemmed. Explicit policies do not currently envisage an increase in the number of students. It can be justifiably argued that accepting more students without improving the infrastructure, information resources and other conditions may result in lowering the quality of education. Yet, keeping student numbers stable strongly contrasts with international trends of rising numbers of students. Student numbers in western European countries have nearly doubled over the last decade, a process linked to the changing social and economic environment. The Russian Federation will probably move to adopt a policy aimed at extending the educational opportunities in higher education. A strategic programme for increasing its capacities should be put in place. There may be scope for a gradual increase in the capacities of some existing institutions.

The capacities of the system can, in some cases, be improved by consolidating specialised smaller higher education institutions into big universities. Such a process, though painful, would enhance institutional capacity to offer interdisciplinary programmes and subjects, and may also help considerably to reduce financial costs. The present number of teaching staff appears to be sufficient to respond to new demands. Alternative forms of education, such as distance learning, could also be introduced to enhance the capacities of the higher education system.

Ensuring access to the higher education system remains one of the major challenges facing the Russian Federation. Mounting real and perceived barriers to student mobility are likely consequences of the continuing proliferation of the numbers and forms of upper-secondary and post-secondary institutions. As the system develops, student mobility occurs primarily within a specialised network. This is likely to be a closed system with few opportunities for students to move between and among specialisations, and with little opportunity for others to enter at a later stage.

The Russian Federation lacks a common “currency” such as the academic credit system in the United States granting students transfer credit for academic work done outside their home university. The initiatives in the last years of the Soviet Union to institute a Union-wide institutional accreditation system stemmed from concerns about significant variations in institutional quality in different regions. Current SCHE efforts to implement an accreditation system across the Russian Federation similarly aim at establishing some comparability among and acceptance of academic qualifications earned at different institutions.

As important as the new accreditation system is, its impact is unlikely to be sufficient to counter the centrifugal forces in the system. Most current conceptions of government’s oversight and regulatory role – in Russia or in any country in the world – are not adequate to the challenge posed by the market forces in post-secondary education. Increasingly, students will want some part of their post-secondary education to take place in different institutions, and to move in and out of the system at several points in their lives. The drive for student mobility between and among regions and countries is accelerating. Increasing accessibility to programmes through technology such as Internet-based, video, etc., is especially important for future policy-making. The situation is complicated by the proliferation of different institutional admissions and examination schemes, the uncertainty of efforts to develop region-wide – let alone federation-wide – assessment systems, and the likely continuing proliferation of formal and informal non-public education and training programmes.

The Background Report makes a point about the increasing importance that employers are placing on competence: not only on what employees know but what they can do. This point is made in the context of changing requirements for

vocational and technical and professional education. In the United States and elsewhere, competency is increasingly a key question related to all post-secondary education students, including graduates of academic institutions. Even more important, assessing competence – performance-based assessment of what students know and are able to do – is becoming the preferred tool for awarding credit and credentials, and for determining whether students are prepared to enter the workforce or to pursue further education.

Student mobility in the future will depend on the availability of independent, nationally recognised certification – no matter how competencies are acquired. Students may have attended many institutions, gained some of their learning from the Internet or during their employment. The challenge will be to determine how to establish and operate such a competency-based system. A series of federally chartered or recognised non-public entities perhaps with international sponsorship, is one alternative. However, this type of nationally recognised certification of competencies is more for the long-term reform agenda. A great deal of work needs to be done in many countries, including Russia, before such a scheme could be operationalised.

### **Research issues**

Modern Russia has inherited a proud research tradition particularly in the sciences and mathematics, and a large scale research infrastructure. This was shaped by the Soviet approach to higher education and research which involved creating a network of specialised institutions in different branches of science, technology and the arts. This organisation also developed an extensive system of research institutes belonging to the Academy of Sciences, other specialised academies, and to branch ministries. Higher education institutes and research structures had only a limited involvement with training professionals. The existence of two parallel big organisational structures – universities and academies – both engaged predominantly in fundamental research, is characteristic of the Soviet organisation of scientific research activities. It is clear that such a model implies neither effective nor focused funding of both education and research. Research resources have been dispersed among higher education institutions, the Academy of Sciences and the military-industrial complex. It would be very desirable to have a gradual but substantial restructuring of the research systems in these three sectors aimed at more effectively used human and infrastructural resources.

The financial crisis and the lowered priority of education have been especially damaging to higher education and research. In 1994, its budget was only 20 per cent of what it had been in 1992. The brain drain has been particularly deleterious to higher education. While accurate statistics on the matter are hard to obtain, the university system has suffered significantly from a brain drain to

other countries over recent years. Moreover, the depletion of faculties by the *internal* brain drain of highly qualified teaching and research personnel taking up better paid jobs in finance and commerce, has done much more damage to scientific research as such than has the external brain drain. Due to consistent funding shortfalls, vital purchases, such as laboratory equipment and scientific journals, have plummeted. Lack of teaching materials and equipment as well as inadequate maintenance are having very deleterious effects on both teaching and research.

In general, research is characterised by high level basic studies while technology transfer and commercialisation of scientific results are not considered a priority. This legacy needs to be overcome, despite the stringent financial conditions. Transfer of qualified personnel and of laboratories aimed at improving higher education will contribute to a substantially improved educational process and will broaden research policies of higher education institutions. It is important that more of research be applied and policy-related and harnessed to the needs of economic and social development. For example, the review team would caution that new research developments in vocational teaching be closely integrated with real problems. The team was interested to learn from the leadership of the Institute for Professional Training and Education in Moscow that of the 10 000 vocational education researchers and methodologists in Russia, 300 are at the Institute in Moscow. One of the recent accomplishments is the creation by statute of a new federal Vocational Education Academy. Aside from whether such an establishment is sustainable in the current economic conditions, the issue is the approach to a subject such as vocational education. In Russia, the issues are defined as intellectual and are consequently to be addressed by highly competent researchers. In most industrialised countries, by contrast, business and industry and other employer representatives are actively involved in shaping vocational education and training policy. This kind of partnership has yet to become a central part of policy development and practice in Russian vocational education.

It is critical to the future of the Russian Federation that its research capacity be sustained, even as its priorities are redirected and more attention is given to applying and to connecting research with resolving the country's economic and social problems. This has already been a major concern of the Russian Federation as demonstrated by the Presidential Decree of September 16, 1993, "On measures to provide material support to the scientists of Russia" (modified by the Presidential Decree of June 14, 1995, N 593) and subsequent initiatives of the State Committee for Higher Education. Philanthropist George Soros has invested millions of dollars to address the problems of Russian scientists. The review team understands that it is now government policy to promote closer ties between research institutes and universities, and it endorses this approach. It

notes also the Presidential Decree of June 13, 1996, N 903 "On state support of the integration of higher education and a fundamental science". The Presidential Decree of December 5, 1996 N 1641 confirmed the state's programme, "The state support of the integration of higher education and a fundamental science, 1997-2000". There is a programme for co-operation and integration of higher education institutes and the Russian Academy of Sciences where many researchers already have joint appointments with universities. Although some oppose this change, the question remains as to whether the research capacity outside higher education can be sustained. Severe cutbacks in research budgets makes it imperative that co-operation and rationalisation of resources become a reality. Nonetheless, the research brain drain seems likely to continue as a haemorrhage.

### **Personnel issues**

The teaching staff in Russian universities is highly qualified. Most academic titles and degrees were awarded under a centralised system of assessment. This system was quite bureaucratic and exceptionally slow in many cases but its unified promotion criteria contributed to the formation of a strong teaching staff, and in many institutions a staff of top academic level. All teaching staff in university institutions are expected to carry out research related to their teaching duties. Currently, many factors may negatively affect the competence of teaching staff in higher education institutions:

- Appointment and promotion is too traditional, and hampers the influx of new blood and new thinking into the system. Competition for academic positions is not strong and, in most cases, internal candidates are promoted to senior positions. Such practices also result from comparatively low academic salaries.
- The salaries of university lecturers and especially of newly appointed young lecturers are much lower than in other professions; an assistant professor earned 70 per cent of the average industrial wage in 1980, 54 per cent in 1991, and 37 per cent in 1993. The salary of a full professor dropped from more than double the industrial wage in 1987 to 62 per cent in 1993. Graduates in law, business management, financial management, accounting, foreign languages and many other fields have little incentive to choose an academic career. The profession is less attractive than it was some years ago.
- Many professors are engaged in teaching or in other professional activities outside their principal duties, largely for financial reasons. While some advantages can accrue from such experience, it reduces the possibilities for student-professor interactions. Teaching staff therefore has much less

time for serious, concentrated research or for contributing to institutional administrative activities.

- The supply of scientific information materials such as journals, books, and software, has been reduced dramatically over the past decade for want of adequate funding. Academic staff thus has no access to information about current developments in the different areas of research or about trends in educational development.
- Research activities are funded at a very low level by the state funding agencies. Under such conditions, the academic level of research and the competence of teaching staff will be gradually reduced over the years.
- The interaction between university teaching staff and industrial enterprises in applied research has always been low, but now it is almost totally absent.

Education authorities at all levels appreciate the seriousness of these factors. The new federal law on higher education stipulates that the salaries of senior teaching staff (professors and associate professors) should be at least eight times the minimal national salary but meeting these provisions through higher education institution budgets is another matter.

Teacher expertise can be considerably improved by introducing specific policies to attract teaching staff from research organisations outside the higher education institutions. Creating long-term policies offering senior academic positions to prominent researchers from the Russian Academy of Sciences or from research institutes associated with the military-industrial complex, could bring much-needed new ideas and competence into the somewhat too traditional atmosphere of many Russian universities.

As regards staff in leadership and administrative roles within higher education institutions, rectors, vice-rectors and deans are always experienced academics. Traditionally, the higher ranking administrators in a Russian university are professors from the same institution. The traditions and policies for selecting top leaders in the higher education system secure high competence in addressing various academic matters. The tasks and duties of a rector and his deputies in the newer and very different social environment require political and managerial experience that cannot be acquired during an academic career. For instance, today, all rectors must find alternative sources of financing. Political and business experience can substantially improve the efficiency of university management.

Rectors are elected by direct vote of university representatives, a procedure that contrasts sharply with the previous practice of selecting and approving university officials by top ruling bodies of the Communist Party. Nevertheless, it is questionable whether rectors elected by their peers have the necessary powers to carry out policies, especially unpopular policies. The situation can be rectified

if provisions are made in the legislative and regulatory documents to stabilise the rectors' position. Establishing a high ranking non-elected administrative position (e.g. secretary of the university, administrative director) could, arguably, improve the management efficiency in higher education institutions, and provide continuity in policies in such matters as finance, business activities, links with enterprises and with local, regional, and federal administrations.

Administrative staff in higher education institutions in Russia has a lower status than their colleagues in Western Europe and North America. The salary scales for administrators are relatively low and a career as a university administrator is not well considered. Academic staff must therefore be heavily involved in purely administrative duties, especially in preparing documents. Programmes and policies for professional development of university administrators should be considered a priority given how important they are for the smooth functioning of higher education institutions. A change in salary scales, especially for senior administrative staff, is also desirable. If such policies were introduced, the operational efficiency of higher education institutions would gradually improve and management would be more stable. This is particularly important in view of the electoral system of appointment of rectors and vice-rectors. Specialised Master's Degree programmes for university administrators can also be developed to introduce modern concepts and practices into the administration and management of higher education institutions.

The technical support staff in Russian universities possess the qualifications and experience to cope with the difficult tasks that arise in the process of teaching and research. It should be realised, however, that highly qualified engineers and technicians may be lured away from the system by much better compensation in the business sector (*op. cit.*, Maslov, pp. 265-281).

## CONTINUING EDUCATION AND DISTANCE EDUCATION

The lifelong learning policy in all OECD countries has made adult and continuing education a more integrated part of policy concerns. This dimension of educational provision needs to become a particular priority in a society undergoing a major industrial and economic upheaval, like Russia. Emphasis on improved education and training for traditional-age students is essential but it ought not to monopolise policy concerns. There is an urgent need to re-train older generations who must adjust and be able to work and live effectively within a changed order, and contribute to the evolving political, social and economic well-being of their society.

Adult and continuing education should be given a legal basis and a clear mandate for its role in educating adults. It is particularly relevant to neighbourhoods and to remote areas where formal education may be difficult to



deliver. Other countries have found it very cost-effective thanks to the extensive use of part-time instructors and rented premises. Adult and continuing education often provide a first step for people who later wish to enter the formal education system, the job market, or to upgrade their skills so that they may gain better employment. This sector could be of considerable assistance in helping the wider community understand the democratisation of Russia and moves to a market economy. It can provide basic computer skills, upgrade language skills both in Russian and foreign languages, basic accounting and service related skills, among others.

Current resources for adult and continuing education need to be greatly expanded. Some secondary vocational schools provide training courses for adults, and have clear views on the importance of this target area. A special programme for retraining the unemployed offers courses organised by vocational schools and *tekhnikums*. Private companies and non-governmental organisations offer a variety of short or longer courses of from one week to several months to train adults with different educational backgrounds. Many courses are offered in computer applications, foreign languages, administration, trading and advertising. It can be expected that the newer enterprises will provide for staff development programmes, and, in the long run, most industries should incorporate staff training as an integral part of their budgeting. The reforms in society and the possibilities for private companies to enter the educational field have opened new opportunities for young school graduates, for the unemployed and for the general adult population. Universities have started to offer two- or three-year professional training courses. These developments were initiated after the new Law on Education was adopted in 1992. Because of the greater needs for training and retraining of the adult population that accompany the process of economic restructuring, these programmes are likely to become quite popular. So far, these courses are offered on a paid education basis. It is also likely that a network of licensed post-secondary vocational training colleges will gradually be developed. Because of budgetary restrictions these colleges will, most probably, be non-state organisations. Nevertheless, a special federal programme outlining the prospects and priorities of this sector would create better conditions for these developments. In the future, budgetary resources can also be used to encourage the development and expansion of this new educational sector.

The changing social and economic conditions and the emerging needs of a new labour market lead to broader demands on the educational system. For many individuals, the only option to continue education is to combine work and study. The arrangements for extra educational experience before 1990 were quite extensive. Great numbers of students have acquired university degrees through the system of part-time studies. The legislation allowed them to take extended paid leave from work to attend classes and prepare for examinations. It is likely

that as the private sector develops, there will be fewer possibilities for individuals to further their education on a part-time basis as in most developed countries. Thus, alternative systems of delivery need to be introduced to satisfy needs. Distance education provides possibilities that would have a considerable positive impact in a country as vast as the Russian Federation. Distance education courses are already provided by some universities (*e.g.* Moscow Economic University) as well as by other institutions. For instance, in Krasnoyarsk, the regional Centre for Educational Development offers a number of qualification courses in the framework of a joint initiative with the Open University in the United Kingdom. A number of other institutions in Russia are also involved in similar co-operation with foreign open and distance learning institutions. Many universities are interested in developing distance learning capacities and have already started to provide shorter-term qualification courses. These developments clearly indicate the positive potential of distance education. Federal educational authorities fully realise this potential, and the review team heard expressions of hope that distance education would be an effective and efficient means to reach populations not served by the current system. It is very possible that special provisions in the legislation will be needed to facilitate the development of distance education.

However, an effective system of distance education requires considerable investment in developing both human resources and the necessary infrastructure. In the course of their visits, the review team received no thorough briefing on the current status of distance learning initiatives in the Russian Federation. Three points were evident, however. First, distance education in Russia is still conceived as making traditional educational programmes available to remote populations without significantly changing either their content or pedagogy. Few resources are available for the kind of fundamental redesign and course-ware development associated with state-of-the-art distance learning. Second, the technology for distance learning, including basic telephone communications, access to the Internet, use of video cassette recordings, CD-ROM and other computer-based technologies, is severely lacking in most regions and remote areas of the Federation. The Russian Federation does possess state-of-the-art technology to support distance learning but it remains largely the exclusive purview of the Russian military. A major challenge will be for Russia to give the civilian sector access to this technology to support distance learning. Third, Russian educational standards presume traditional models of instructional delivery: lecture and classroom instruction. They emphasise content and time. Quality assurance continues to emphasise “input” requirements and it is appropriate to demand evidence that institutional curriculum conforms to standards and their basic resources including faculty, facilities and equipment. Distance learning will require new approaches in terms of course or module development to ensure that students in

remote areas have access to essential support services, that they have the necessary staff guidance and mentoring, and that standards are defined in terms of competency, and credentials awarded based on competency.

It will take some time for the Russian Federation to be able to put in place a comprehensive distance education system. International programmes can lend technical assistance and infrastructural development counsel for introducing distance learning which can also be greatly aided by such co-operative ventures between Russian and international agencies, as mentioned above. A number of technical assistance projects are currently being considered under the Technical Assistance for the Community of Independent States (TACIS) programme of the European Union and there is scope for further exploration of targeted, supported initiatives. The possibilities and potential of distance education to service the needs of the Russian population as it moves towards the new century deserves specific and specialised investigation.

## **EQUITY AND ACCESS**

The significance of this issue for the future of education in the Federation is such that this theme merits specific attention. During the Soviet era, equal opportunity was a high, politically visible priority; it is now at risk and is becoming a source of political disillusionment. Fee-paying students take precedence over non-paying ones, even in state institutions; provision is better in rich regions than in poor ones; universities have preferential agreements with specialised secondary schools; inequities have increased and entrance examinations into higher education remain arbitrary and opaque.

It is rarely the case anywhere that people of equal ability have equal access to educational opportunities; and the USSR, with its command economy, was no exception. Soviet education was designed to promote economic growth by assigning young people to positions in a centrally-planned differentiated occupational structure. Because educational resources are always scarce, schooling patterns in a planned-economy environment were designed to provide only the minimum requirements necessary for each type of work. The "allocative" function led, not surprisingly, to considerable inequality in the length and type of schooling of different groups of Soviet youth; extended and "specialised" schooling were reserved for those best able to compete successfully for places in desirable schools. This competition was and is still not primarily based on academic ability. The mechanism of "self-recruitment" is familiar in any stratified society. Soviet or not, the critical link is the family unit, and its position in the hierarchy of classes and strata. Economic, social and educational inequalities are reproduced across generations even when schooling is "open", compulsory, and tuition-free.

Differences in family socialisation patterns in any society strongly affect children's school performance, their occupational aspirations, the age at which they leave school, and their ultimate occupations. But in the Soviet Union, a certain tension or "contradiction", in traditional Soviet terminology, arose between the allocative structure of the system and the ideological aim of a socially homogeneous society. Moreover, Soviet educational philosophy explicitly rejected the notion that intellectual and "natural" talents and abilities are concentrated in particular social classes. Several steps are needed to correct the perceived disproportion in the relative shares of children from the "leading" or working classes and the intelligentsia:

- Socially regulating student selection to higher education and to specialised schools.
- Promoting a comprehensive system of 10 or 11 years of schooling.
- Steadily increasing the minimum length of general compulsory schooling.

These corrective measures were largely effective. By the end of the 1960s, most urban children – including working-class children with poor grades – continued their schooling in "complete" secondary, meaning the general-secondary school or *tekhnikum*s, thereby leaving open the possibility of later acquiring the status of the intelligentsia. Those whose occupational fates were sealed upon completion of the 8th grade either entered the work force or went to a *proftekhuchilische*, a workers' vocational school including mostly from non-urban, low-skilled workers' families. Only a small minority of such graduates could gain access to the intelligentsia. Even at post-compulsory level, which was after grade 8 at that time, workers' children were a sizeable minority of graduates: 38-48 per cent in cities like Leningrad, Novosibirsk and Sverdlovsk. Strong differences in the educational paths of children from different social groups appear mainly at the point of entry into higher education.

An allocative structure where children are largely placed in schools to suit the needs of the state contradicts the explicitly egalitarian ideals underlying Soviet education. These contradictions can be resolved to some extent by interpreting the egalitarian function to mean "equality of opportunity", and thereby making some inequality acceptable. There are two points being made here. First, the allocative structure often militated against equal opportunity for individual children. Second, over the years, the emphasis often shifted from elitist to egalitarian. The Soviet education system therefore cannot be characterised simply as either. In 1996, many of the same, seemingly contradictory features exist in modern Russian schooling. On the one hand, the policy of universal secondary education has obviously worked to reduce inequalities in the amount and quality of schooling received at the pre-university stage. On the other, new inequalities are being created by trends such as the new emphasis on differentiated upper

secondary, the rise of university-preparatory schools where admission is based on competitive examinations, and the appearance of private schools for children of the affluent “New Russians”.

On the positive side, school provision has become more varied, at least in urban and more affluent parts of the Russian Federation. Minority rights and language rights are better protected now than they were before. About one half of the 89 subjects have sufficiently large minorities to raise questions about the language of instruction, or at least about the place of minority languages in the curriculum. In 1987, students could be educated through grade 10 in four languages other than Russian; by 1993, another four had been added; and by 1996, no fewer than 87 languages were part of the curriculum in some form. Of course, much of this new “freedom” reflects, and in some regions exacerbates, underlying social tensions. Yet, the suppression of cultural differences would be likely to give rise to greater difficulty, in the long run. The worthy aim is that people may be free to develop particular identities, while, at the same time, sharing allegiance to a broader heritage and political entity.

The review team has the following specific concerns about equity and access:

- The “agreements” between secondary schools and higher education institutions (see above).
- Fee-paying students taking places from the normal allocation of free slots.
- The emergence of a small number of private schools, and the new selective type schools such as *gymnasia* and *lycea* within the state system, that drain the better teachers and the better-motivated students, thereby weakening the state school system.
- The level of the so-called sponsorship available in fashionable subjects, especially for well-connected pupils.
- The network of special privileges, which also existed under the Soviet system, for the new *apparatchiks* and their children.
- Education managers and the society at large are not concerned about children at risk who may come from dysfunctional families, live in poverty, or have low or even average abilities.
- State *gymnasia* and *lycea* for high-ability pupils are emerging. Twenty-five per cent of these are concentrated in a few large cities, while only 2 per cent are in rural areas and are often the pride of local education departments whose students are “sheltered” from the harsher realities of resource-starved municipal schools that must, by law, admit children of all abilities residing in their catchment areas.

- “Desirable” schools in a position to choose their students often give slots to children on condition that their parents make some substantial donation to the school such as a computer, or a study trip for the children, etc.
- Special clubs or extra-curricular activities or other informal groupings for children whose parents can afford to pay for foreign travel or special tuition.
- Teachers are tutoring students, including their own, for pay. This practice is becoming increasingly accepted as a school policy.

Under the banner of “increased choice”, all these concerns point paradoxically to diminished educational opportunities for many children, especially those who are rural, less affluent, or less well-connected – regardless of their individual merit. The principle of true educational equity and access is that educational opportunities should be open to pupils based on educationally relevant criteria of giftedness, aptitude, and hard work rather than on the basis of educationally irrelevant criteria such as geography, money, or connections.

As in many countries, there are a growing number of young people in Russia who are alienated and disenchanted with their socio-economic circumstances. The problems are not just educational, but educating young people must be at the core of dealing effectively with these issues. Some of the problems relate to health, to substance abuse, to the lack of recreation activities, to finding work, to the lack of relevant work skills, or to the lack of family infrastructure and support. Young people are the nation’s most valuable resource and if a significant proportion are unemployed or unemployable and have time on their hands, they can quickly become a social problem. Given the opportunity to be entrepreneurial, to start a new business, to gain the skills to become part of the growing service industry sector, to learn what work is, they could become the generation to put the Russian Federation on its feet. Furthermore, if their needs are not met, the future social cohesion of the new Russian democracy will be seriously endangered. The issues facing young people at risk must be seen as having a high priority, and structures are needed at various levels of government to ensure that these students’ needs are met across a range of government departments, and in a co-ordinated manner.

The review team noted and welcomed the fact that in 1995-1996, local governments created new departments within the social welfare agencies to counsel adolescent drug users, school drop-outs, runaways, and young people with psychological problems. These agencies also act as important liaisons between students and schools, or students and families. Traditionally, schools deal with so-called “problem youth” in a punitive fashion. If these social work agencies were established, they could play an important role in changing the way school and

local authorities relate to youth problems, to student retention, and to counselling young people to ensure that they are headed in the right direction.

The Russian Federation, however, does not appear to have a coherent strategy for addressing the educational needs of many “non-elite” and below-average students. Students in the lower quartiles of ability and students from rural and less advantaged areas are in grave danger of losing out on educational provision. The country’s economic future is most seriously threatened by the loss of the full potential represented by this significant sector of the population. Research on student development and learning demonstrates that many potentially capable students do not do well in a strongly theoretical academic curriculum but learn best when practice and “hands-on” experience are integrated with academic work. There is clearly a recognition in Russia of the need to change curriculum and pedagogy in response to changes in the economy. The capacity and willingness to make changes seem to vary widely and to be more of a problem at the initial and basic secondary levels. Curriculum and pedagogy remain focused on content and “coverage”. There was little evidence of attention to key work-place skills such as teamwork and problem-solving.

A new tradition of business-education partnerships has not yet developed in Russia. The collapse of the former planned economy untied the traditional ties between industry and training. New links that provide for practical experience through co-operative education, apprenticeships and other industry-education ties seem to be an isolated phenomena – most often in secondary vocational education. Policy needs to pay much more focused attention to the educational needs of the average and below average pupils if the educational and social needs of the new Russia are to be served.

The review team is very concerned about the plight of schools in poor urban districts and in remote rural areas, in the context of the process of social stratification taking place in Russia. Poor districts are characterised by a lack of household amenities, such as, central heating, running water, and indoor plumbing, and such basic infrastructure as street lights, paved roads, etc. Social welfare workers and school principals also report that alcoholism and child neglect tend to be higher in the housing estates and in rural areas.

The plight of schools in poor neighbourhoods is severe. They cannot afford proper maintenance, sanitation is inadequate, and conditions are deteriorating. These schools also lack school materials and textbooks, and highly trained teaching personnel. Schools on large housing estates often do not have enough surrounding land to sustain a garden plot which could contribute to the cost of school lunches. These poor financial conditions are aggravated by some *oblast* laws prohibiting the schools from engaging in fund-raising activities.

Rural schools and those located in marginal districts receive less financial support than city schools because parents are less able to give private donations and enterprises are less willing to invest in schools with unexceptional students. The main clients of rural and village schools are children whose parents have minimal education, many of whom are marginally employed in farming and barely scrape together a living. Children comprising the traditionally poor – those living in isolated neighbourhoods and villages and those with one or no working parents – are at greatest risk of lagging behind their school mates and dropping out of school after the 9th grade. The creation of social service agencies to handle youth problems and provide career counselling is a step in the right direction.

As noted above, distance education in the form of classes broadcast *via* satellite and correspondence courses can be a powerful tool to give children living in remote areas greater access to education. Yet, the full impact of distance education is likely to be restricted until horizontal linkages are formed between schools. The truth is that those schools needing computers, televisions, and satellite hook-ups the most are least likely to receive them. Remote schools should be given priority in the allocation of equipment necessary to get distance education programmes up and running. By the same token, schools at the margin need to form networks with better-off schools so that they come to see themselves as members of a school system.

New trends within higher education also raise concerns about equity. The trends, described earlier, whereby economics, management, law, and foreign languages are creating high demand for places in specialised schools and university faculties in these subjects contrast with the declining demand for slots in mathematics, the sciences and engineering. Many institutions are adjusting to this shift by accepting paying students in the newly attractive subjects while continuing to give free places in the less popular disciplines. Paid places are added to the number specified by the MGPE's annual *numerus clausus* allocation. This is an appropriate response. However, in some institutions, paying students displace otherwise fully qualified but non-paying students because facilities cannot be expanded, for example, or not enough tutors are available. In addition, especially in the extreme eastern areas of the Russian Federation, fee-paying students are often foreign and are therefore better able to pay higher fees. Moreover, they are selected on a different basis than non-paying, domestic students who are further disadvantaged in terms of merit-based access and opportunity.

A related issue is the sponsorship of popular faculties or institutes by international more than national enterprises and NGOs. Sponsored disciplines have better facilities and can afford to give better staff incentives such as pay, equipment, or travel, and a better learning environment to students (computers, etc.), thus creating islands of relative affluence within a generally impoverished institution. Universities are keen to have such sponsorship, and most manage to use



those additional resources to shore up their less fashionable faculties. But this creates an imbalance in students' studying conditions and opportunities, and also causes a shift in important aspects of quality control such as student entry, curricula, duration of studies, requirements, away from the university towards outside enterprises or agencies.

The following points seek to summarise the key problems concerning a policy of educational equity. As Russian society becomes increasingly stratified in terms of wealth, Russian education is increasingly stratified in terms of opportunity. Educational choice remains limited for most children. Indeed, for many, real educational access and opportunity have diminished:

- Families and the schools that serve them lack financial resources.
- Some vocational schools, especially those directly linked with nonviable enterprises outside urban centres, have been shut down. Furthermore, the closure of residential facilities for students from rural areas and the withdrawal of other social benefits have contributed to a decline of almost 10 per cent in student numbers.
- An "elitist" ethic has gained legitimacy in educational circles, partially in reaction to what was perceived as too much egalitarianism in the Soviet system, which in practice translated into rigid uniformity. This elitism now leads to an emphasis on selective secondary schooling in *gymnasia* and *lycea*, and exclusive school-university agreements.
- A small but highly visible school sector has emerged that caters particularly to the children of the affluent and lays almost exclusive claim to alternative pedagogical philosophies such as Montessori, Steiner, *et al.*
- Mechanisms for selection into higher education are not sufficiently transparent and fair.

The first two of these threats is connected with the transfer of authority to regional and local education authorities accompanied by financial and administrative decentralisation. As educational policy, the notion of moving decision-making powers closer to the school level makes good democratic sense. The reality in the poorer regions and municipalities in particular, is that the federal contribution to state schooling has dwindled while the regional and municipal tax base is too low to maintain a school system already crumbling after years of under-funding. The technical and vocational school sector has been particularly hard-hit; many enterprise-supported schools have closed down along with their enterprises, leaving many children, especially the less academically inclined, without effective choice. Of course, school choice is not just a matter for families: the interests of the state and of the educational community must also be considered. There is a fine balance between individual rights and the interests of the state in the education of its young citizens. Today, both appear to be falling victim to an all but

catastrophic collapse of material support for public schooling in many parts of the Russian Federation.

The remaining three threats, however, are largely matters of education policy, and as such can be changed by educators. School-university agreements, the limitation of educational innovation due to lack of funding and motivation, and restrictive, not to say wilfully arbitrary practices at crucial selection points, are unnecessary obstacles to choice, equity and access to excellence. It may be time to shift the burden of justification from those who wish to remove such obstacles to those who wish to retain them.

## RECOMMENDATIONS

In addition to retaining the infrastructure and types of schools and schools of the previous regime, new school types have been emerging in recent years. New social trends are also manifesting themselves in student participation patterns. Greater individual freedoms and parental choice are bringing about a much more varied profile in schooling practice and creating a much more complex picture of educational provision. Declared values of educational equity are being compromised by some of the emerging developments, and this has implications for policy. The review team offers the following recommendations.

### Kindergarten supplemental education

- Kindergarten has a cherished place in Russian educational provision, and in contemporary Russia it plays a multi-faceted role in the care of children. The review team urges continued support for such education but recommends some pilot studies on a cost-benefit basis and a clearer understanding of the costs of the health and social assistance provided by this service. A review of general kindergarten staffing patterns would be desirable.
- “Supplemental” education centres are seen as fulfilling useful functions for the youngsters who participate. However, their rank in the hierarchy of priorities should be determined on the basis of a comprehensive analysis of their role, participation patterns, costs and outcomes. Such an analysis should clarify to what extent supplemental education is available to the most disadvantaged children. The potential of supplemental education to counter tendencies towards delinquent behaviour should be explored.

### Equity and assessment in general secondary education

- The effects of new forms of elite, socially advantaged schools, *lycea* and *gymnasia*, many of which have agreements with universities, on educational equity. The degree of state support for them may need to be adjusted.

- A system of federation-wide examinations for admission to post-secondary education institutions should be developed and might include the following:
  - Expectations that are consistent with and reinforce the new secondary education standards.
  - Components compelling students to demonstrate competence through performance-based assessments.
  - Links with examination systems on an international basis to increase the chances for international exchanges for Russian students.
- A pilot scheme should be devised for a federation-wide qualification based on assessment of competency to enter the workforce or pursue further post-secondary education and training. This would include:
  - Certification of learning based on competency-based assessments.
  - Awarding a qualification, roughly comparable to the associate degree in the United States, based on assessment of required competencies upon completion of partial higher education. This credential would entitle a student to admission for further post-secondary education without regard to prior learning in institutions, and exempt them from institutional admissions examinations.
  - Accessibility of competency assessments to learners who may have participated in distance learning or other technology-based programmes.

### **From school to university**

- Establishing a strategic programme to increase student numbers in higher education.
- There should be greater co-ordination of research agencies to make more effective use of available human and infrastructural resources.
- Research needs more and carefully co-ordinated financial support and research should be more applied and policy-related.
- It is essential, both for the survival and the well-being of universities, that staff salaries be put on a satisfactory footing and that the system of staff appointment and promotion is reformed.
- Management training should be made available for university rectors and senior officers as in OECD countries.
- The status of administrative posts in the universities needs to be upgraded, and new skills sought in the appointees.

### **Continuing and distance education**

- Adult and continuing education should be given a legislative base and greater priority in policy.
- The review team supports the policy reflection within the MGPE in relation to distance education, but it will require very changed approaches to programme development.
- A comprehensive distance education system does not seem possible in the near future, but international assistance should be solicited to expand targeted interventions in this area.

### **Students at risk**

- Educational policy needs to focus more attention on the educational needs of average and below average pupils.
- High priority must be given to the needs of young people at risk, through co-ordinated, intersectoral government action.
- Schools in disadvantaged urban areas and those serving poor, remote, rural populations should be given priority for providing educational materials and equipment, as their need is the greatest.
- Equality of educational opportunity should be an underpinning principle of policy.

## **CURRICULUM, LEARNING EFFECTIVENESS AND OUTCOMES**

### **CURRICULAR POLICIES IN TRANSITION**

The curriculum of school education is a core feature of an education system. In the context of a society in transition, it is a natural target for reform and renewal insofar as these infuse and disseminate many of the values and goals being set for new generations. Successful thoroughgoing curricular change is difficult and complex and requires sophisticated planning, well-devised implementation strategies, a sense of commitment and ownership by implementers, attention to resources, promotion of re-training and appropriate evaluation processes. Curriculum reform becomes a particularly daunting challenge when it is undertaken in a society where the teaching personnel and the infrastructure have very inadequate resources.

The former Soviet education system was characterised by a rigid, centrally planned common school curriculum emphasising the acquisition of factual knowledge in highly specialised subjects but with a clear bias towards science and engineering. It left little room for individual pedagogical initiatives. Textbooks were produced by a state publication monopoly and were made available to students free of charge. No structured system existed for evaluating educational standards on a national scale. Educational needs, particularly in vocational education and training, were guided by centralised manpower planning.

By contrast, today's reshaping of Russian society, goals and values involves greater democratisation of education, a more humanised process, greater individualisation in the engagement with education and the promotion of new concepts of citizenship. Humanities are being studied more, but are less politicised. New structures have been devised for formulating and designing school curricula and course content have been greatly altered. Schools are expected to reflect the new democratic way of life in their organisation, curricular content and teaching styles which should include the basics of market economics and a concern for the environment. The aim is to individualise teaching and make it more child-centred and to create a more school-focused education system. The link between the education system and the job market has become more

tenuous, and the uncertainties of the market economy are eroding the relative security of knowing that a given type of schooling leads to a particular kind of job.

After decades of central control, regions and municipalities are being given far greater responsibility for curricular policy. The 1992 Law on Education stipulated a three-tier curricular distributed among federal, regional and school authorities:

- The *federal level component* is presented as a common core curriculum that combines the major fields of Russian language, mathematics and informatics, physics and astronomy, and chemistry. This comprises about 60 per cent of curricular time.
- The *regional level component* is conceived to meet education interests and needs specific to the peoples in the 89 subjects of the Federation. Native language and literature, regional history and geography, environmental studies, and the arts are studied, and represent 30 per cent of the curriculum time. Some curriculum overlaps occur in the federal and regional components.
- The *school level component* represents specific school educational input. It is developed both on the basis of the students' compulsory and optional studies. The school decides on how much time to allocate for new subjects or for advanced programmes of study, within the federal or regional matrix. About 10 per cent of curricular time is available for this component, but it is often constrained.
- The curriculum has been structured in relation to what is termed general basic education and full, or complete secondary education.
- General education covers pre-school, primary, basic and comprehensive secondary education for the population from 6/7 to 15. It is provided by different types of schools which share state standards, thus guaranteeing the right to choice of school and student mobility.
- Full secondary education is the last cycle of general education and training (grades 10 and 11). At this level, schools are organised according to principles of profile differentiation to serve students' interest. This cycle aims at providing a solid command of different fields or disciplines, at stimulating the motivation to learn, and developing independent learning skills with an eye to continuing education and lifelong learning.

On its visits to various regions, the review team formed the impression that the regions were responding very actively to new ideas. Some were supplementing the federal curricula beyond the required minimum; others were about to establish a curriculum which integrated the federal requirements with their own demands. In these activities, the regional authorities relied heavily on commissioned work with the help of educational development centres and in-service

training institutions. In some places, co-operation with neighbouring regions or *oblasts* with similar traditions or problems facilitated the work.

Schools demonstrated less evidence of elaborated curriculum materials, but the review team was assured by principals and teachers that they were trying to provide new courses according to pupils' needs and wishes. As in any country, much obviously depends on the ability and professionalism of the responsible teacher. In some instances, plans for new courses had to be presented to the regional authorities for approbation and for subsequent allocation of teaching hours. This may run somewhat counter to the idea of the school being solely responsible for this part of its curriculum and represent a danger of regional re-centralisation. The lack of experience in curriculum development is a major disadvantage, and investment in training for curriculum development is a vital necessity for the system.

## TRENDS AND ISSUES IN EVALUATION

During the communist period, educational authorities strongly focused on input control to maintain educational quality. Making and controlling strict arrangements concerning textbooks, timetables and teacher qualifications were perceived as sufficient to guarantee quality. Output control could threaten everybody: teachers, whose shortcomings could be exposed, and managers and politicians who could be held responsible for the system's failure. Overly optimistic examination results often served to keep everybody happy and to preserve the *status quo*. More effort was put into singling out and nurturing talented students.

The quality and nature of traditional assessment instruments in Russian education leave a great deal to be desired. Other than one or two experimental projects, no standardised tests exist to help teachers track student achievement or diagnose their learning problems. Indeed, these tests are viewed with suspicion and are poorly worded, and have poor content validity, construct validity, reliability and objectivity. In all regions visited, student testing was said to be part of the teacher attestation procedure. These tests are usually administered, marked and analysed by visiting "methodologists". The results are seen as a measure of the teacher's contribution to student learning and are also used by regional authorities as an indicator for regional educational achievement. However, there is no control for other student or school factors that may contribute to these results.

The Law on Education makes the Ministry of General and Professional Education (MGPE) responsible for final examinations in general secondary education. Examinations for all students take place at the end of grade 9 and at the end of full secondary education, which is after grade 11. Students in the 9th grade take examinations in at least four subjects, and those in grade 11 take five

examinations including Russian and mathematics which are compulsory. At both levels, students cannot pass if they fail even in one examination. In grade 9 they can repeat the grade, while after grade 11 they can only resit the examination as “externals”.

The MGPE issues regulations and instructions for administering examinations and awarding gold and silver medals and produces examination papers for maths and Russian Language composition for class 11. It also indicates the assignments for these subjects for class 9 (see above). There are different examinations for the eleven time zones and two variants of each to prevent cribbing.

Mathematics examinations designed for grade 11 are either general, designed for students specialising in humanities, or for students specialising in mathematics and sciences. For written examinations in the Russian language for the 9th grade, students summarise a specific text and are supposed to either write a creative conclusion to it or to express their point of view on the problem it poses. In the 11th grade, students must write a composition.

Although no systematic data collection takes place, the MGPE is aware of how poorly these texts discriminate abilities or knowledge. Frequency distributions of scores are always very skewed towards the right, or in other words, few students fail; according to MGPE statistics, the failure rate is about 1 per cent or less. The *oblast*, city or school may be responsible for examinations in other subjects. The so-called “ticket” system is still widespread. A student draws a card from a box with a subject usually recommended by the MGPE, the regional bodies, or the school itself; after a short preparation, he or she responds to oral questions. Final examinations are developed for certification purposes, but they do not necessarily accurately reflect student cohort mastery of well-defined attainment targets.

Secondary school final examination results do not give access to institutions of higher education. Students have to sit entrance examinations. Obviously, universities are well aware of how poorly final school exams select or predict student achievement. In general, only when the tertiary institution has a special agreement with the student’s secondary school are the final examination results taken exclusively into account. Statistics from the former State Committee for Higher Education show that between 60 and 70 per cent of applicants for higher education pass the entrance tests and about 90 per cent are admitted.

With the exception of mathematics and Russian, and occasionally the sciences, entrance examinations are oral, and therefore time-consuming and labour-intensive. Examination committees may be engaged for a month per year in interviewing and grading applicants. A further disadvantage is that entrance examinations are not usually recognised by all institutions, so passing one does not guarantee acceptance into another institution.



It is clear that many weaknesses exist in the traditional modes of assessment and new approaches are imperative. At present, monitoring the quality of education relies very much on recording input data including teachers' qualifications, identifying outstanding results, and paying less attention to monitoring averages and correlating these with relevant background variables. Valuable information about the large majority of students and the system as a whole is lost in this way. Implementing new standards will require careful monitoring, making use of advanced testing materials, and data collection and analysis. Real practical change is called for. Valid, reliable and objective assessment of students' results is a prerequisite to providing data for proper certification and monitoring purposes. The Russian Federation has no tradition of widescale application of assessment instruments based on research and international experience. Current assessment instruments barely meet psychometric quality criteria and are supposed to fulfil functions for which they are not designed. Many regions have tried to develop instruments that do meet such criteria but unfortunately, their efforts are neither co-ordinated nor in touch with international developments. There is a very real need to create federal and regional assessment centres that employ and train psychometricians and educational experts to provide expert support and the necessary research. It is virtually impossible to overstate the importance of this for implementing the standards demanded by and developed within the framework of the new Law on Education.

In the context of the new educational policies being promoted, educational authorities have become more aware of the need for output instruments to monitor the rapid changes and differences that are developing between educational institutions. Moreover, teachers are realising that they need instruments to compare the results of their efforts with those of their colleagues and with some generally accepted output standards. In the absence of an adequate monitoring and assessment system, the Russian Federation faces a great challenge in bridging the wide gap between international practice and its procedures. However, among administrators and teachers they met with, the review team found an awareness of the need for new approaches and a willingness to face objective assessment of the result of their efforts. It is also noteworthy that in moving towards new forms of assessment, Russian personnel are concerned to preserve a holistic approach to student evaluation and to avoid an overly narrow mode of evaluation. This view is supported by the review team.

## **TOWARDS ESTABLISHING EDUCATION STANDARDS**

### **General compulsory education**

Modern education systems – especially when resources are scarce – must be able to monitor their progress in meeting standards and reaching national

educational goals. For this, they need to measure performance against a set of quality indicators, including national curriculum and performance standards.

The fundamental purposes of national education standards are to protect each pupil's rights to equity and access to quality education, and to ensure that the educational goals set by the government are attained. There are other important purposes:

- Specify what is taught and to what extent.
- Facilitate school and system monitoring and evaluation.
- Ensure continuity in the progression of education from one year to the next and from one school or municipality to another.
- Establish a nationally understood basis for measuring student achievement.
- Motivate teachers and students.
- Provide a frame of reference for gradual change.
- Influence and help define the development of school-based curricula and teaching materials.

The extent to which schools observe and achieve education is a major indicator of education quality.

In the middle of the 1990s, the federal government took steps to move the system towards achieving educational standards of this type. As the system became more complex, and centrifugal forces (reorganisation, decentralisation, privatisation) made themselves felt, it was increasingly difficult and yet increasingly essential to preserve the unity of educational policy and standards. There are many obstacles. Lack of co-operation, poor communications, lack of clarity in legal and institutional relationships made it difficult for policy-makers at the centre to have adequate and reliable information about the performance of the system as a whole, especially in terms of curriculum content and learner achievement. The MGPE was also increasingly concerned about schools that either stopped teaching important subjects or reduced the time devoted to them; made compulsory subjects optional; tracked pupils into narrow specialisations very early; imposed heavy academic workloads; or followed their own paths in student assessment. It therefore, looked for ways to ensure quality without inhibiting genuine innovation and variation in schooling.

Article 43 of the Constitution requires the "establishment of federal state educational standards". In May 1994, the Ministry of Education, in accordance with the Law on Education and a specific governmental decree, launched a competition to develop the federal components of educational standards for general education. Eight proposals, received from a variety of sources, were reviewed by a panel of 90 members. The winning proposal was submitted by a

team of experts at the Russian Academy of Educational Sciences. Their concepts were adopted in February 1995 as a draft set of standards for the core compulsory education throughout Russia. The Academy team has been asked to prepare a final version by 1998. Two major problems arise from the temporary nature of these standards:

- Regions are currently developing their own standards. More than one-half of the 89 subjects have already sent proposals or have signed agreements with the federal ministry, based on this temporary framework, thereby either forcing it *de facto* to become permanent or risking being out-of-step if the 1998 version is significantly different.
- In a narrow interpretation of Article 7 of the Law on Education, federal standards are expressed only in terms of numbers of hours per subject per week and curriculum topics (content) covered by year. They also indicate maximum student workloads and minimum acceptable student attainment in some subjects.

It must be said, however, that the current standards do not stipulate performance levels, they do not set requisite skill levels. As such, they are “input and process” standards, but not “output” standards. They cannot therefore fulfil the important purpose of providing a basis for measuring what students actually know and can do as a result of their schooling. Output standards will also need to reflect the qualities set out in the new goals and values of the education system (Chapter 1).

Evaluation criteria for schools are not explicit in the federal standards. Implicitly, the much weakened school inspectorate will be responsible for ensuring that schools comply with federal requirements. In practice, this task falls to “methodologists” in local education departments who generally evaluate only the work of individual teachers, although this may involve some spot testing of pupils to check that they have in fact covered the required material.

The relationship between the MGPE and the regional administrations of the 89 subjects is, of course, a crucial ingredient in the creation of a coherent system of educational standards. Therefore, the system of “agreements” between the MGPE and the regions is of vital importance. While each agreement is different, they have certain common characteristics, prominent among which is an explicit “joint activity on working out and implementing state standards based on the basic plan, with a purpose of preserving the unified educational space”. In some regions, the development of regional standards has gone hand-in-hand with the formulation of separate, regional Laws on Education – for example, in the Republics of Adygheya, Ingutia, Bashkortostan, Udmurt, Buryatia, Kabardino-Balkarskaya, Khakasia, and Chuvash and in some of the more innovation-minded *krais*. In Krasnoyarsk *Krai* for example, the regional component of the educational

standards is well advanced. There is an agreed list of subjects and teams of subject specialists are working on methodological support and in-service training for teachers; textbooks and materials are being developed, and in many *krai* schools, the regional component has already been incorporated in the curriculum and is being taught.

The review team frequently heard that regional development went faster than the discussions in Moscow. Those regions working with an assignment were accustomed to issuing regulations before even the federal ones appeared. In one instance (Ekaterinburg), the federal standards for vocational education were deemed insufficient and too oriented towards outdated professions, which is why its own components had to be added to make the system workable. The lack of synchronised standards and the provisional nature of the federal standards were considered to be serious problems. Above all, the fact that regional standards for general education were being established before the content of the federal list had been described was pointed to as posing a serious problem.

Standards in the Russian Federation are still in a state of flux. The situation is unlikely to change before the definitive federal standards have been determined and the relationship between them and the regional standards and their local interpretations has stabilised. This is an urgent matter, on which many other aspects of school life depend – notably the provision of appropriate textbooks and teacher professional development. It is well known that the development of a meaningful, coherent and workable set of educational standards requires a great deal of technological know-how and concerted effort, especially if standards must be formulated so that their attainment can be objectively measured – as stated in the concept of the Russian federal standards. Educational development in the regions would benefit greatly if the federal government would quickly and clearly lay out the skills and knowledge that should be part of the subjects in the federal component. At the moment, the curricula for important “federal” subjects like mathematics and Russian language and literature remain virtually unchanged. They are oriented towards rote learning and specialised academic knowledge rather than towards the broad and flexible knowledge, and the problem solving, decision-making and communicative skills that are needed in a rapidly changing society.

There is scope for international co-operation in developing education standards. In the Vologda region, for example, a Dutch-Russian testing centre was established with some 20 staff. Using modern hardware, it is producing and administering examinations for a range of subjects and taking care of collecting and analysing student data. It is providing schools, and municipal and regional departments with extensive information about educational achievement, and correlating it with background variables like gender and geographical origin. Moreover, this centre received permission from the MGPE to organise training courses

for other regions on a commercial basis. The centre has already organised a number of successful workshops for other regions (Kaliningrad, Stavropol, Sakha).

The set of federal standards specifies that assessment system criteria are “to perform diagnostic, didactic and informational functions; to be based on clear and unambiguous attainment targets; to be criteria-oriented and to test student performance by checking whether these targets are achieved or not”, implying a radical change in the way educational assessment has been carried out so far in most Russian regions. There is a general lack of expertise in modern educational testing methods and knowledge about its use and limitations. Educational achievement is sometimes sampled by pedagogical universities for research purposes. More often than not, there is no direct connection between institutions that are monitoring educational achievement and those that are responsible for planning and development (Sverdlovsk *Oblast* is an exception). Obviously, the needed change can only be made if regional institutions or departments can be established to develop professional instruments and procedures for monitoring and measurement so that administrators and schools have the necessary tools to implement the federal and regional standards and monitor achievement. A federal centre for educational measurement that would make use of the expertise now scattered in Ekaterinburg, Krasnodar, and Vologda, for example, should be established as soon as possible to provide the much needed co-ordination and dissemination.

Developing curricular standards is not part of the agreements and is nominally up to each school, but in practice, it is hindered by a number of factors:

- The timetables assigned for the school component are largely needed or used for the federal and regional components.
- Schools resist certain regional or federal compulsory requirements because they consider them incompatible with the profile of the school or class.
- Heads and teachers are inexperienced at planning and developing curriculum.
- Some of the “new” subjects are unfamiliar to teachers. In some regions, efforts are made to help schools through in-service training, conferences and seminars, and pilot programmes in designated schools within the *oblast, krai*, or republic with financial support from the region.

### **Standards in other sub-sectors**

The federal standards so far published comprise the whole course of secondary schooling. All sub-sectors within the education system have some sort of specific standards framework, including standards for pre-school education. They follow the pattern of the federal standards however, in that they are expressed

only in terms of number of hours and types of activities or subjects to be covered, rather than in terms of performance norms. The argument given, “since no certificate is given at the end of pre-school, there should be no performance standards for this level of education”, rather misses the point. Ideally, teachers identify children with possible physical or learning difficulties in pre-school which implicitly requires some norm for pre-school learning, even though this may not be formally expressed. Elsewhere in the set of federal standards, it is said that any assessment should serve diagnostic purposes, but there are no explicit standards against which to make such an assessment. Setting performance “standards” for pre-school is acknowledged as being difficult:

- The whole cohort does not attend pre-school.
- Some children start at 3 or even earlier, while others do not start until 5 or 6.
- Assessment at this level should be focused on overall child development rather than on intellectual development.
- If any assessment of pupil learning takes place, it should be for “school readiness”, before children enter first grade.

In higher education, federal standards were developed after GOSKOMVUZ (former State Committee for Higher Education) organised a “competition” for formulating them, after Resolution No. 73 was adopted by the Russian Federation government in August 1993. An inter-departmental Council on State Higher Education Standards was set up. The federal component must be approved:

- The government approves general requirements, structure, and maximum student workload.
- GOSKOMVUZ approves minimum content requirements, training standards for graduates in various specialisations, and regulations for state-monitoring of standards.

The federal government adopted the state standard for higher education on 12 August 1994. Various specialisations have also had their minimum content and graduation requirements agreed by GOSKOMVUZ which has also worked out – in collaboration with the universities – a monitoring package including the gradual development of outline, “model” curricula for various academic disciplines. However, each university remains autonomous in implementing federal standards. As for quality assurance in higher education, it was not clear during the visits whether and to what extent the accreditation and quality assurance mechanism is actually in place.

The federal components of the State educational standards are approved by the federal Ministry of Education being part of initial vocational education (Decree of government of the Russian Federation, February 28, 1994, N 174). The

standards in initial vocational education follow the same pattern for federal, regional, and local, school components as those for general compulsory education. At the local level, however, education is expected to reflect “local conditions and requirements of the local labour force”.

The great majority of vocational training institutions are funded by the federal budget which might explain why federal standards for vocational education are fairly comprehensive. Thus far, they include a newly revised index of 257 approved (“listed”) trades and specialisations: the compulsory or core components of general curriculum and by specialisation, and a model curriculum plan. Other as yet incomplete components are to include standard quality indicators, examination guidelines, and standard test and examination patterns. The new index has been compiled jointly by the MGPE and the Ministry of Labour, but it has been stipulated that all future additions must be approved by local education authorities together with local labour and employment agencies. Individual schools can establish appropriate levels and requirements for training so long as they comply with the federal minima.

### Issues

- There is a genuine system-wide desire to establish standards, partly because this vacuum is now widely recognised and understood as not being in the students’ or the country’s best interest.
- Pride and satisfaction in the standard of Russian education, often expressed in terms of numbers of gold and silver medal winners in the Olympiads, is traditionally very high.
- There is a danger that the development of regional standards will precede the final version of the federal standards, expected in 1998, resulting in discrepancies and implementation problems that would undermine the very purposes of having national standards.
- Standards are still understood, defined and presented in terms of inputs – number of hours and content to be covered and process, or student workload, but only somewhat in terms of outputs, or minimum acceptable levels of student learning. Even these minimum levels are not set out in terms of student performance – what a student should be able to do. Output standards expressed in those terms are needed.
- The method for developing standards themselves is not designed to bring maximum participation and “ownership” to the process. It was curious, to say the least, to set the development of standards as a competition. This has led to quarrels between the Russian Academy for Education, the MGPE, participating institutions, and regional governments. Effective implementation of standards requires rather broad consensus and

application. Moreover, the review team tried to discover who, in each region visited, was involved in setting regional standards or formulating regional agreements, but it found almost no evidence that the rank-and-file of school administrators and teachers had any significant input into the process.

- The issue of “ownership” and consensus is of prime importance if educational standards are to have any reality in ordinary schools.

## **A FRAMEWORK FOR ANALYSIS AND FORWARD PLANNING**

Education is not about teaching, schools, structures, or systems. Education is fundamentally about children learning. Therefore, to evaluate educational quality, one must find out not only what and how they are being taught (curriculum, books, teaching methods), but above all how much and how well children actually learn. Assessment, taken in this wider sense of monitoring the quality of education, is internationally understood as an integrated system designed to “measure what students learn, what and how schools and teachers teach, and what society values”, for example, in terms of national standards. Data for such assessments must then be collected at the micro-level per student, the middle level, by school, and the macro-level, for the system as a whole.

Educational assessment, including, but not limited to, examinations, may be curriculum-based. In Russia, the foundations for this have already been laid in such documents as the federal standards and the increasing number of complementary regional standards already set or being set. These documents are, strictly speaking, curriculum standards in that they set out the subjects to be taught, the number of hours to be devoted to them at each level, and the maximum workload of students. Unfortunately, they are not learning standards since they do not set out expected levels of student learning or do so in only very sketchy terms. For some subjects, there may be an indication of minimal knowledge or coverage, but there are no performance standards as these are generally understood in other countries. There is no clear indication of what a student should be able to understand or do after a given number of hours with a given curriculum content. In other words, the present standards set out inputs and processes, but not outcomes.

Outcomes, or what students learn, depend on what and how they are taught which in turn depends on national standards, syllabi, course outlines, textbooks, resources, teaching expertise, and traditional expectations of parents, employers, and the community. Many of these are outside influences and are affected by economic conditions, national or regional education policy, or job availability. But as they are implemented in schools, they undergo a number of subtle changes whose evaluation requires a fairly sophisticated system of interrelated measure-



ments. For example, the widely known international studies of educational achievement (e.g. International Association for Educational Achievement) look at three levels of “curriculum” (see Table 3).

In integrated, “monitoring” assessment systems, all three aspects of curriculum – intended, implemented, and attained – are interlocked, and the outcomes of each can be measured. The outcomes of the *intended* curriculum (as set out in the federal and regional standards) are monitored by continuous feedback, for example, using sample-based national assessments that lead to curriculum adjustment and revision. *Implemented* curriculum can be monitored, for example, through school inspection, teacher appraisal and in-service training, and through the evaluation of textbooks and teaching materials. *Attained* curriculum – student learning outcomes – can be assessed through a variety of measurements including but not limited to examinations, school-based tests such as a promotion test at the end of a school year, and less formal assessments by teachers as part of daily classroom routine.

To respond to the Russian Federation’s clear desire to set standards and maintain high quality in education, student assessment should be considered as part of monitoring, rather than being limited strictly to certification or context selection. Secondly, it should retain the strong features of the Russian tradition, specifically the tight, immediate relationship between teaching and learning through school-based often oral assessment which greatly esteems important rhetorical skills, language facility, clarity of expression, ability to present arguments, and similar inter-personal skills not easily measured through written tests.

Considerable strides have already been made in the *intended curriculum*. The Constitution and the Law on Education, have given education standards a firm legal basis that is echoed in regional education laws and in bilateral agreements between many subjects and the Federation. Temporary federal standards exist,

Table 3. **Three levels of curriculum**

Curriculum antecedent	Curriculum context	Curriculum content	Level
System features and conditions	Institutional settings	Intended curriculum	System outcomes
Community, school and teaching characteristics	School and classroom conditions	Implemented curriculum	School or classroom outcomes
Student background characteristics	Student behaviours	Attained curriculum	Student learning outcomes

Source: International Association for Educational Achievement.

and work on a permanent version, due in 1998, is well advanced. Most regions either have or are now working on regional standards. In many of the municipalities and schools visited by the team, evidence of often creative work on local, relevant projects related to the locality and its environment complemented the federal and regional curricula. However, as has been noted above, a number of issues remain:

- The format of the standards is incomplete.
- The standards were constructed so as not to encourage the kind of wide consultation, professional debate, and public scrutiny which is essential for such a basic national education policy instrument.
- The delay in publishing the definitive version further weakens the status of the standards. In the interim, many regions are developing their own regional components often in conjunction with regional education laws. By the time the definitive version of the federal standards is ready, it may be out of step with or irrelevant to regional and local developments.

In terms of the *implemented curriculum*, the new curriculum content and approaches to teaching are being introduced into Russian classrooms as well as resources and teacher in-service allow. Here, too, a number of important issues remain:

- In the absence of new, clearly agreed standards at federal, regional, and local levels, the curriculum as it is actually delivered in most classrooms is not very different from its pre-1990s form. There are, of course, changes in certain subject areas, in particular in social studies, humanities, and languages; and in some better-resourced schools, one sees a wider range of books, materials, and equipment. However, because the curriculum context (see community conditions, social and material environment) has either remained the same or worsened, and because the curriculum content can only be partially delivered due to generally inadequate school and classroom conditions and to a lack of clarity about standards, books, materials, and teacher in-service support, it is not surprising that change in the implemented curriculum is slow. Indeed it is a tribute to the dedication of individual teachers that such change is evident at all.
- The physical conditions in schools, a lack of new materials, and many teachers inexperienced in alternative teaching methods give the implemented curriculum in many classrooms a distinctly old-fashioned feel. Teachers tend to teach “from the front”; much learning is heavily content and knowledge-bound, even when attempts are made to introduce such techniques as group work. Classroom tests and oral questioning also concentrate on memorising facts, repeating passages in books, or routinely answering end-of-chapter questions which are also fact or memory-based.

Pupils are not asked to display other types of thinking or performance skills. This type of teaching, and the rewards it offers for correctly remembering content and facts, strongly affect the curriculum as it is implemented (regardless of the intentions of the standards). Studies have shown that while Russian children tend to know a lot, they lag well behind children in other countries when it comes to applying facts or to using knowledge in unanticipated circumstances. In a market economy, these are the skills that count.

- Formally measuring educational quality by tests needs to be balanced by investing in developing the quality of inspectors and advisers, resource materials and re-training at school level (see Chapter 6).
- The problems relating to textbooks and teaching resources present major difficulties for successful curriculum implementation.

There is simply no way to verify the measurement of the *attained curriculum* – student learning outcomes. Neither federal nor regional standards specify more than a few learning outcomes. There are no systematic ways of gathering outcomes information that can be compared and analysed to give a national or even regional picture of what students actually achieve. Informed policy decision-making including setting priorities for allocating scarce finances is hindered by this lack of information. Worse, because there are as yet few instruments that measure what the New Russia considers to be important skills such as critical thinking, problem solving, communication skills, understanding argument, they are almost never tested and therefore rarely taught. The enormous influence of examinations on what happens in the classroom – the well-known “backwash effect” – can not be used to ensure that teachers teach and students learn, those important skills.

It is true that much attention is now being paid to the way students in Russian schools are evaluated, tested, and examined. Many groups continue to work on testing issues, but, according to a report by Russian experts, “none is capable of addressing the whole range of problems related to the evaluation of education quality”. Educational ministries play no significant role in assessing learning outcomes which is left to unofficial teams from individual scientific and educational institutions. While teams may have excellent professional backgrounds, they sometimes pursue narrow institutional objectives like acting in the interests of textbook authors, or examination commissions of particular universities, etc., instead of seeking ways to assess the output quality of Russian education in general. Each university, for example, has a group of subject specialists setting policy and making tests for entrance exams in that subject. However, these experts are rarely trained in educational measurement. They claim autonomy, and

are unwilling to shed much light on their testing criteria or procedures. Therefore, a number of issues remain:

- No federal structure deals with the examination and monitoring of educational quality. Therefore, the general rule in Russian (schools) is “we teach, and we assess what we teach, on our own”.
- Because the MGPE has no structure responsible for developing and monitoring education standards, it is necessarily left to a range of external organisations, not all of which are free of vested interests or are reform-oriented in the spirit of the Law on Education. Moreover, few of these institutions have the trained personnel and financial resources to produce high-quality measurement instruments, the facilities to produce, distribute, score, and analyse data on a large scale, or to ensure the integrity and security of large-scale test processing.
- At present, no education authority at any level (even within *oblasts*, *krais* or republics) know with any certainty which testing materials are used, by whom, what they measure, and what use is made of the results. There are no systematic data on the quality of education outputs.
- No mechanism exists to ensure that new curricula is developed along with explicit learning objectives (output standards). Few regions are aware of this need. In some regions visited, the team found little (Primor’ye *Krai*) or no (Tomsk *Oblast*) evidence of development work in this area. In Tomsk *Oblast*, the review team was told that teachers were simply “given” the content of a teaching programme and just assumed that learning standards were “implicit” in it. Therefore, teachers considered that it was sufficient to teach what was on the list and to base their classroom tests on “the usual end-of-chapter questions in the textbook” which are almost without exception recall-based. In some *krais*, notably Krasnoyarsk, however, excellent work is being done – but it is done voluntarily by small groups of dedicated people with almost no resources, and therefore ephemeral and unlikely to have the sort of large scale effect on the quality of learning outcomes that is required. People involved in this work are not, as far as the review team could discover, involved in the development work of regional standards or in the “joint activity” required by federal-regional bilateral agreements.
- Measurement of the attained curriculum needs to encompass the new systemic goals and values such as civics and individualised instruction (see Chapter 1).
- Important skills are rarely tested, and are therefore rarely taught. Conversely, because the traditional tests used by most schools and universities emphasise and reward memorisation of facts, teachers and pupils

naturally concentrate on rote learning of large amounts of material rather than on higher-level thinking skills. The skills envisaged in the federal standards including communication skills, and problem-solving among other, are not reflected in the few actual instruments the review team was given. Most questions in tests developed in Vladivostok, for example, still require memory-based (recall) learning. The multiple-choice format does not help here. Setting non-recall-based multiple choice questions is difficult and there are not yet many skilled question setters in the regions, except where specific training in this has taken place, as for example in the context of the Russian-Dutch bilateral project in Vologda and Krasnoyarsk.

- Unless the nature of test questions changes, there is little point in trying to change the skills taught in the curriculum. As in other countries, teachers will continue to teach – and students will continue to learn – what gets them through examinations. Learning to cope with the examinations is more important than learning the subject itself, at least in the eyes of parents who put considerable pressure on teachers and frequently pay them extra tuition to ensure that their children get high marks.
- In some places visited, there was evidence of “entrepreneurship” in examinations; institutions either made their tests available to outsiders for a fee or charged a fee to candidates. Tomsk State University, for example, offers its entrance examinations at various locations within the *oblast* and candidates pay between 150 000 and 250 000 roubles; students from outside the *oblast*, that is, from Kazakhstan, might be charged much more. Students in Tomsk City can either sit their examinations in April for a fee or without charge in July. If they take their examinations early, they have the advantage of knowing their results well in advance of the larger group of entrants. So while April results can be used for university entrance, students can also retake the exams again for free in July if they expect to improve their results. Tomsk State University officials say also that they base their examinations on the MGPE standards, but that they are not very satisfied with these and prefer to emphasise the standards set by the former State Committee for Higher Education (GOSKOMVUZ). These practices may be understandable from the university’s point of view, but they present clear problems of fairness, equity, and access, especially if candidates who are able to pay are allowed to sit their exams early, and if the tests themselves are university-oriented rather than testing what is required under the federal standards. Many schools (and some parents) reported to us that they, therefore, feel obliged to engage university lecturers to tutor their children, so that “they can learn how to pass the examination”. The negative backwash on upper-secondary classrooms is obvious.

When the curriculum and learning outcomes are analysed in such an integrated framework, it becomes easier to understand the interconnectedness of the many factors that determine success. Specifying different aspects of the curriculum make it possible to more clearly identify the elements contributing to the success or failure of intended, implemented or attained curricula. This, in turn, makes it possible to target planning initiatives to ensure smooth operations and a heightened probability of success. In only a few years, the Russian Federation has mapped out a very new direction for its education and has taken significant steps to institutionalise the structures and elements of its new curricular policy. Efforts are being made to make this new policy a reality in schools, but significant obstacles impede full implementation. While some worthy initiatives are under way towards measuring the attained curriculum, a great deal of work clearly remains to be done to establish satisfactory educational standards and to improve the evaluation instruments and procedures. This work is urgent.

## **TEXTBOOKS**

Textbooks and associated teaching materials are intimately associated with the prospects of success in curricular reform. In ideal circumstances, such new materials need to be readily and easily available in line with new curricular programmes, but this is very far from being the case in Russia. There are serious shortages of textbooks and materials and the quality and range of what is available leaves a great deal to be desired. This issue becomes particularly acute when teachers are required to teach new subjects or content with which they may not be familiar. Teachers are also being encouraged to employ integrative, child-centred teaching styles and more active learning strategies rather than an expository pedagogy. Accordingly, issuing textbooks will be a prominent issue in contemporary Russia.

There are several related concerns. These include textbook production, distribution, quality, price, availability and match with the “new” curricula and standards. In addition, the balance between ministry-directed and free-market publishing, the emergence of regional and local text provision based on regional and local curriculum components and standards, and the status of the current federal and approved lists raise general administrative problems, particularly since textbooks are of far greater political, bureaucratic and public interest in Russia than in most other countries, for a number of cultural, social, economic and political reasons.

Textbooks are a high-profile political issue. Russians expect the state to provide free or highly-subsidised textbooks. In the latter years of the Soviet Union, the Ministry of Education supplied books for free in large quantities, using Ministry of Finance advance funding to local authorities. Prior to that, books were

produced by *Prosvescheniye*, the state publisher, and were state-subsidised and sold to parents at very low cost. Now that changes in the supply structure and under-funding have led to real shortages, disappointed expectations make the public unhappy, and the issue is an important vote-loser for the government.

During the 1996-97 school year, the textbook shortage in the basic subjects for grades 1 through 9 was given an unusual amount of public attention. Indeed, the minister himself was quoted as saying that the government had been able to produce only half of the 100 million textbooks needed for basic tuition. He blamed the shortage on shortfalls in federal funding. Five hundred billion roubles (US\$95 million) had been allocated for textbooks, but the money had not been disbursed, and the MGPE had had to borrow money from commercial banks, over the objections of the Ministry of Finance. One of the banks then collapsed in May, days before transferring the promised money. Two other banks provided 130 billion roubles, with another 300 billion promised so that the full quota of basic textbooks should have been available by the end of 1996. This expensive and unsatisfactory short-term measure is not a proper basis for financing such a major educational necessity.

The federal budget for education is heavily in the red and this affects textbook production and distribution. The MGPE's continued supply of books to *oblasts* is under review. *Oblasts* increasingly produce and distribute books themselves which means that the federal and approved lists may lose their national standardising function. While this development is driven mainly by material necessity rather than by political intent, it is still a threat to "the Russian educational space" and should not be ignored.

The other side of the political coin, of course, is that the textbooks issue gets more than its fair share of official attention – perhaps at the expense of other fundamental aspects of educational quality, such as curriculum and student achievement.

Textbooks are a key tool for introducing and reinforcing national core curricula and unified national standards. As such, they are important to the MGPE, which realises that introducing the new basic curriculum will depend on the availability of syllabi, textbooks, and materials. A "federal set" of more than 300 curricula and 200 textbook titles has been developed (2-4 textbooks for each subject in each grade). In the 89 subjects, however, especially in those that are remote from Moscow, the "federal set" is unevenly distributed and regional authorities consider that they have little or no influence over the quality, evaluation, distribution, and choice of books in it. Awaiting 1998 for the publication of a final set of national curriculum standards also means that some regions are formulating their own standards, but lack of the funds or of the necessary mechanisms to generate, produce and distribute regional textbooks of acceptable quality and

price. Thus, central and regional priorities, evaluation mechanisms, funding and timing in textbook “reform” differ and this creates tension.

In the absence of a national examination system, textbooks become the standard curriculum and examination, because most questions, and particularly the tickets for oral examinations, are directly based on them. This is all the more the case because learning remains largely content and knowledge-based. While some written examination papers are set centrally, they are administered and marked by teachers in schools, and all oral examinations are decentralised and school-based. By default, therefore, federal listed and approved textbooks are the main unifying factor in ensuring that curriculum and examination requirements are relatively evenly covered in all schools.

Current methods for evaluating and approving books for schools are unsatisfactory, closed to public scrutiny, and contrary to the schools’ and the public’s wish for a more open system with greater choice. First, the evaluation and approval procedure for new texts in the federal set for grades 1-9 – the A or core, and B, or approved – lists is slow and opaque. For example, in 1995 only about 300 books were formally evaluated, and the lists are neither published nor easily available to schools and teachers. Next, budgetary issues further complicate the picture. Only books that appear on each year’s federal purchase order list can be paid for from the federal budget. If regions or schools wish to use other books not on this list, they must find the money themselves, which is often impossible. Third, even some of the books that are on the federal set were not – “for the first time in many years” – available to all children on the first day of school in September 1996. Fourth, not all the textbooks that are produced find their way into the hands of school children free of charge. A substantial portion is being sold in bookshops, reducing the number of books available to less affluent children in areas where bookshops do not abound. In terms of the implemented curriculum, therefore, the lack of texts that adequately reflect new curricula and teaching approaches creates a considerable obstacle.

The Law on Education states that schools and teachers have the right to choose those books and materials they consider most suitable to their teaching methods and to the needs of pupils. However, there is, at present, no meaningful way for schools and teachers to exercise that right. The federal and approved lists of textbooks, although often mentioned, do not exist as such. The federal, or A list appears only in the form of the MGPE annual purchase order, listing books to be purchased if funds allow, on a year by year basis. Since books are expected to last for four years, only an analysis of four years’ worth of purchase orders would give some sort of an approximate federal list. Resource and reference books, because they tend to be expensive, are not on the A list, and by law, no foreign-published books can be included. The approved, or B, list contains those books and materials that have passed through the expert council’s procedures and have been



approved for supplementary use in schools. This B list is not published and if schools are lucky, they hear about approved titles only through publishers' marketing, and sometimes through piecemeal information from the MGPE. Immediate publication and wide distribution of the full federal and approved lists must now be a priority.

Because few publishers have the means to communicate directly with all the schools in Russia, users have no overview of what is available. Moreover, because the list is not published, teachers, especially in remote areas, cannot check whether a book really is on the approved list. Money also plays an important role. *Oblasts* tend to choose only those books that are on the purchase order because they must fund others through their own resources. Indeed, *oblast* Finance Departments often insist that *oblast* money can only be used for federal List books. Schools that wish to order books not on the purchase order must buy them themselves, and few can.

Procedures for textbook evaluation need to be modernised. School textbooks are submitted in manuscript or finished form to the MGPE and evaluated by the expert council, a nominally autonomous department of the ministry which received its current Charter in 1993 but has been in operation as the Educational and Methodological Council since 1939. The 1993 Order states that the expert council is intended to:

“pursue federal policy in the field of education, improving transparent, independent and competent expert evaluation of educational standards (...) which are oriented towards improving the quality and updating of the content of education in the Russian Federation (...)”.

The council was thus meant to be one of the principal watchdogs of Russian educational standards and to have both the level of autonomy and the powers normally associated with that. It has 15 executive staff and a large list of well-respected consultant reviewers, overseen by 28 voluntary “subject heads” who are also members of the expert council’s Presidium which has a total of 36 members and meets once a year. Each “subject head” directs a team of 15-20 freelance experts appointed mainly through personal contacts. The professional expertise of these teams is high, but they do not receive any textbook-related training. The pay is low; there are no specific criteria for evaluating books or standard form for evaluators or any technical publishing input in the evaluation. No consideration is given to design or pricing. The output is also low. In 1995, the council reported on 309 books and on a further 100 curriculum and other items. Almost all work is done manually; the first computer arrived only in 1995. Because the MGPE makes all final decisions, no lists are published by the council. So although its role is taken very seriously in the MGPE, in practice the expert council is resource-starved and has no autonomy and cannot therefore play the role initially envisaged for it.

Recommendations have also been made to restructure the expert council and give it the autonomy and authority needed to fulfil its “standards watchdog” role set out in the law; to make its operations more transparent, objective and efficient, and more accessible to regional concerns and participation. The transition to a more liberalised textbook market, while maintaining federation-wide standards, will require the council to take on a more pro-active and authoritative role if it is to carry out its national mandate.

At a start-of-year press conference by student journalists in Moscow, complaints were made that the quality of the official textbooks was “so bad that parents were often forced to buy other books”, presumably not on the federal or approved lists. The assumption of a four-year life for official textbooks stumbles on the poor quality and therefore durability of the textbooks due to insufficient funds. Textbooks last one or two years, so in the coming years, shortfalls can be expected, even if the MGPE is able to produce enough books on its regular four-year rotation basis. Textbooks are good if somewhat old-fashioned and academically dense in content and quality. Gradually, they are starting to reflect the new emphasis on less tightly defined curriculum objectives. The absence of an agreed set of federal standards and the emergence, meanwhile, of regional standards in some parts of the Russian Federation, are contributing to increasingly uneven quality of textbooks content. The textbooks problem is pervasive, but at several of the schools visited, examiners were impressed by the provision of computers. It is not however clear how typical this is for schools in general where teaching aids and resources were sparse. When this is linked to lack of school maintenance and often inadequate heating, the circumstances for implementing the curriculum become highly disadvantageous.

## **RECOMMENDATIONS**

Curricular policy forms a central core of educational reform in the Russian Federation. The goals, managerial structures and patterns of provision provide an essential framework, but it is the learning and teaching processes which take place in the classrooms that will provide the cutting edge of change. Curricular content, styles of teaching and learning assessment are the dynamics through which goals are realised, or not. Russian curricular policy has aspirations that contrast strikingly in values, design, structure, and organisational mode with those of the last several generations. Ingrained practice, habits and values are not easily reshaped and it would be unrealistic to expect radical changes in the short-term. The following recommendations on curricular issues, education standards, evaluation issues and textbooks and teaching materials target the desired goals. The older assessment processes are considered inadequate and considerable attention is given to standards and assessment issues, in line with the system’s new requirements.

## **Structure and policy**

- While the tripartite structure for curricular design at federal, regional, and local levels has won a good degree of acceptance, respective responsibilities still need to be made clearer.
- In the light of experience, it may be possible to reconsider the structure of the federal core curriculum, and find ways to give regional and local levels a say in the content of all school subjects.
- Policy on improved evaluation of educational outcomes should be linked to policy on investment in quality-development within schools in terms of human resources and curricular materials.
- It is important that those responsible for curricular policy and for pre-service and in-service teacher education should be trained in curriculum planning and development.

## **Education standards**

- Progress is urged in finalising the federal education standards.
- The entire educational community should participate broadly in the process of standard-setting and debate, with a view to establishing consensus and consistency.
- There needs to be greater specification of learning outcomes in terms of what students actually know, understand and can do. Curriculum and assessment materials need to be based on these.
- Performance standards should place appropriate emphasis on higher-level thinking skills such as problem solving, critical thinking, logical argument, and good communication skills in a variety of media, including information processing and oral skills in native and at least one international language.
- Training in standard-setting is needed at all levels of the system. In particular, more attention should be paid to the difference between curriculum standards, which usually outline everything that might be attempted in teaching and learning, and performance standards, which are intended to set out what students are typically expected to learn.
- Schools and municipalities should be provided with in-service training in standards-referenced, classroom-based assessment.

## **Assessment**

- Once agreed, performance standards need to be empirically validated by assessing actual student achievement. Benchmarks need to be established

against which progress can be measured over time. Monitoring programmes must be referenced to federal, regional or local standards.

- Where authorities or agencies outside the school undertake regional or national testing of whole student cohorts, explicit standards need to be referred to and the testing instruments (examination papers) used must meet basic requirements of reliability, validity, and technical quality. Where only a sample of students is used to monitor system-wide performance levels, this, too, must be done on the basis of proper statistical sampling and analysis of results. In both cases, the issue of results – their form, to whom they are issued, and the uses made of them – must be clearly agreed in advance with the relevant education partners.
- A common examination system is needed, along recommended lines, at the end of secondary education. This would help to counteract the increasing differentiation among certificates from different schools and regions.
- System-wide monitoring of educational quality, as well as reliable and valid assessment of individual student achievements will require a national body such as a National Testing Centre, whose establishment has been under serious discussion at the MGPE for some years. The review team strongly supports such a development.
- In addition to fulfilling the monitoring role, the National Testing Centre should act as a model and support for regional testing centres. It could be a centre for developing, field-testing, and making available testing methodologies to regions and schools; a centre for research and training for assessment specialists; a clearinghouse for ideas, materials, and data; and a unifying institution bringing together the best of current Russian thinking and experimentation in educational assessment.

### **Textbooks**

- Immediate publication and wide distribution of the full federal and approved lists of textbooks must now be a priority.
- Steps should be taken to ensure that at least all core textbooks are available on time to all pupils free of charge. Students are legally entitled to them.
- The procedure for evaluating and approving textbooks should be less centralised and obscure, and efforts made to speed up the process.
- The state should continue to play an overseeing and “educational safety net role” in ensuring textbook quality and supply.

- Efforts should be made to promote a competitive market for producing textbooks, and modern publication technology should be drawn upon to promote regional distribution.
- In the longer term, a policy of decentralisation should stimulate a free market in textbook production. Competition will ensure that textbook publishers are interested in producing stimulating and challenging books for teachers and students alike, in presenting new ways of addressing the learning topics, new methodologies and examples of exercises requiring different kinds of problem solving or competence development.
- Skilled teachers should be encouraged to participate in the planning, writing and field-testing of textbooks.

## VOCATIONAL EDUCATION AND TRAINING\*

### NEEDED CHANGES

The relevance of academic and vocational programmes to the changing demands of the Russian economy is of great concern. Do students come away with the skills necessary to meet the new and rising demands in Russia? As Russia moves towards a parliamentary democracy and a market economy, educational authorities are confronted with a special challenge to adapt the vocational education and training (VOTEC) system to new political, social, and economic realities. Fundamental changes are reshaping the education sector: decentralised decision-making, differentiated curricula, private schooling, freedom of educational choice, and a more student-centred pedagogy. The VOTEC system is also affected by these changes. Unlike traditional education, however, VOTEC is closely connected to the employment system, giving these changes a special cast. They can be summarised as modernisation, structural change, and systemic reform. Any successful long-term reform policy must coherently integrate all three of these.

*Modernisation* means bringing vocational education and training content, delivery systems and facilities up to international levels. The evolving employment system creates the pressure for these changes which affect curricula, school equipment, professional and managerial personnel qualifications, pedagogical approaches, educational profiles and standards, and the relevant assessment, testing, and certification procedures. Modernisation is therefore basically about bringing Russian vocational education and training up to state of the art standards. Decades of under-funding and training for increasingly backward industrial infrastructures have left the system lagging far behind. Indeed, by the end of the 1980s, Russian VOTEC already needed serious modernisation. Many changes are now afoot but further progress is imperilled by budgetary constraints and the absence of significant signals and support from a crisis-ridden industrial sector.

*Structural change* means reshaping the internal structure and decision-making mechanisms of the education system. This particularly concerns the forms of

\* Referred to as Primary Professional Education (PPE) in official MGPE terminology.

qualifications, types of schools, streams and flows of students, relations between types and levels of education, possibilities of transferring from one type of education to another and financing. It also concerns mechanisms for decision-making within the educational system. Although many changes have been initiated since the early 1990s, the present situation would seem to reflect an initial phase of uncoordinated initiatives taken at various levels; the reform process needs more systematic organisation and management.

*Systemic reform* means adapting vocational education and training to the requirements of a socio-economic system in transition. This concerns the underlying rationale of the VOTEC system, and particularly the relationship between training and employment. Where in the past vocational education was based on an administrative logic of guaranteed and stable employment, today it must be able to cope with less secure and variable employment mediated by labour markets. Systemic reform implies organisational and institutional changes, and in particular, having some form of efficient communication between education and employment. In addition, it requires fundamental changes in expectations, attitudes and behaviour. Systemic reform necessarily emerges from an evolutionary learning process for students and for educational authorities. Some authorities appear to seriously underestimate its importance, in the misguided belief that modernising provision and changing the structure of the VOTEC system suffice for adapting it successfully to new market economy conditions.

While some of the issues related to systemic reform are peculiar to the Russian Federation (and to other transition economies of Central and Eastern Europe), modernisation and structural change are also visible in VOTEC systems of OECD countries. In fact, vocational education and training have received far more attention over the last fifteen years in many OECD countries because of the dramatic changes in employment systems and occasionally drastic reductions in public education expenditure. Consequently, policies have been designed to increase both the internal efficiency and external effectiveness of vocational education, but with varying degrees of success. OECD countries were already characterised to a lesser or greater extent by a market economy orientation and their VOTEC policies were designed accordingly. The Russian Federation, on the other hand, must modernise and make structural changes in its VOTEC system while at the same time undertaking a systemic reform of its traditional underlying logic.

Introducing such changes in the VOTEC system is a formidable task further complicated by its history in Russia. Unlike the educational and employment modernisation of the 1960s in western market economy countries that occurred in response to the emerging requirements of a more diversified, consumer-oriented, technology-based economy, and to the heightened educational aspirations of the post-war generations, Russia did not experience a wave of post-war modernisa-

tion. Despite pockets of high technology within the military-industrial sector, its industrial infrastructure is dated, and becoming more so; there has been little external pressure for the VOTEC system to change. Although VOTEC has become more attractive for students since it has been combined with general education, the content has remained largely unchanged and access to higher education has remained restricted.

The conditions in Russian VOTEC at the end of the 1980s, therefore, like those in many other Central and Eastern European countries, largely resemble the situation of the 1960s elsewhere. Training was most frequently directed towards narrowly defined occupations in large government monopolies in basic and heavy industry, and the enterprises themselves were characterised by low level technological production and a strong division of labour. This rigid division was both horizontal, with extremely narrow occupational profiles, and vertical, between manual labour, technicians and intelligentsia. VOTEC simply mirrored the employment structure of the economy. Moreover, since vocational education and training targeted the needs of large state-owned enterprises, their infrastructure determined the placement of vocational and technical schools across the country. Individual regions of the former Soviet Union were merely part of the overall economic planning system which produced a very specialised and unbalanced industrial structure and an equally specialised schooling structure that was increasingly unresponsive to regional economic development needs.

The structural problem of the VOTEC system, therefore, is less the number of vocational schools than their occupational profile. It is no easy task, however, to restructure these schools to train the much more diversified workforce that is now needed. This need is even more critical in the absence of clear signals about required skills; enterprises have slowed down or altogether stopped recruiting new employees, and new private enterprises, with the exception of banking and certain other service sectors, are developing slowly.

The present fiscal crisis and inadequate funding for VOTEC constitute another fundamental obstacle to change. Currently, the great majority of the institutions engaged in initial vocational training are funded by federal budgetary allocations. However, in 1995, the allocation for the vocational training institutions was only 67.6 per cent of the minimum financial need (Background Report). In practice, the education budget only provides funds for payments of so-called "protected items" such as teacher salaries and student meals and stipends. Basic utilities, such as heating, lighting and sanitation, have become highly problematic for some vocational schools. An estimated 30 per cent of pupils attend "adapted" buildings which need to be replaced (Background Report). Low wages create a high turnover of qualified teaching staff in initial vocational institutions; about 11 per cent leave every year while about one-third of industrial training teachers have "a qualifying category equal to or even below the required level of



qualification for the trade they teach". There is a real dearth of suitable textbooks and teaching materials. The review team considered that much of the equipment in vocational training institutions was obsolete and inappropriate for the needs of modern industry. The old networks between industrial enterprises and vocational institutions have broken down and the institutions are largely on their own. The traditional large state enterprises have themselves been undergoing major overhaul or have been abolished altogether, and their own budgets focus on survival strategies. While the old pattern of relationship between enterprises and schools needed to be changed in any case, its disruption has affected vocational schools in several ways: budget, lack of opportunities for practical training, and declining employment opportunities for VOTEC graduates. The structural problems are daunting.

### **APPROACHES TO CHANGE IN OECD COUNTRIES**

Modernisation, structural change, and systemic reform are very much interrelated. In many OECD countries, for example, the need to continuously update curricula to ensure that vocational education is responsive to constant changes in employment systems has led to a series of major reforms. The responsibility for developing curriculum has been decentralised, teachers' roles have evolved so that they now teach and also develop curriculum, "input control" of curricula contents and teaching materials has shifted to "output control" of educational results that have necessitated generally accepted standards for certification and qualification, and social partners are now involved in establishing and controlling these standards to ensure that the labour market recognises them. In addition, teachers and schools are freer and responsible for what happens in a VOTEC classroom.

In several OECD countries, this has also led to discussions about changes in educational structures. Alternating training and work or on the job experience has become more important, and is designed to make vocational education and training more effective and relevant. In order to raise the general attractiveness of vocational education for young people, many countries have also improved possibilities for educational mobility, and, in particular, access to further studies. Several countries first opened up their higher education systems and subsequently introduced or expanded non-academic forms of higher education. Educational systems have become increasingly flexible as well, making it possible for students to transfer between levels and types of education, and to leave and enter the educational system at different periods in their lives. Related to this, many countries are now attempting to integrate initial vocational education and training more effectively with adult retraining and further training, within a comprehensive approach to lifelong learning. In a sense, therefore, a more or less coherent programme of change has been initiated in most OECD countries and

some observers would even argue that this has all the earmarks of a new paradigm or systemic reform of education.

The goal of good VOTEC policy will be to make the present VOTEC system effectively responsive to the employment challenges of the future. An OECD programme comparing VOTEC systems has identified two major policy approaches to the relationship between education and employment. One aims to enhance VOTEC responsiveness to changing labour demands so that education and training markets function effectively. The other looks to preserve and further develop institutional linkages between education and the economy through innovative forms of system regulation. These policy approaches were found to be linked to particular traditions in individual countries. Countries without traditional well-developed VOTEC systems opt for the first approach, and others for the second.

Most countries, however, are combining elements of both approaches although with different emphasises. If countries pursue apparently inconsistent approaches, as for instance when educational policies emphasise regulatory mechanisms such as national standards and qualifications, while labour markets are being deregulated, these changes will not be effective. A related debate asks whether vocational education and training should be reformed in order to produce new and more modern occupational “identities” or enable young people or adults to acquire packages of narrowly defined skills and competencies, as is now more or less the trend in many English-speaking OECD countries. Russia must obviously decide what best fits its own education and employment traditions. The continental European approach, based on better regulating the system and negotiating new occupational identities is more consonant with Russian traditions than are recent Anglo-Saxon approaches of market responsiveness and deregulation.

## **REFORM STRATEGIES**

Consistent policy-making is a major issue. The overwhelming impression is that VOTEC policy-making in Russia has been, at least until very recently, *ad hoc*, eclectic, and, understandably, largely driven by crisis management; survival has been more critical than preparing the VOTEC system for the future. No single successful model can easily be copied. Russian VOTEC, like any VOTEC system, must therefore develop appropriate policies on the basis of its own traditions and strengths. One of the pillars of Russian VOTEC is a strong school-based initial vocational education system. Educational authorities continue to consider that this system plays an important educational and social role, especially given the current high and increasing youth unemployment rate. Rather than letting these vocational schools deteriorate further, it would seem more appropriate to focus policy-making on improving and developing them.

Russian VOTEC combines remnants of the old system with the first visible results of innovations and changes introduced over the past few years. It is full of contradictions. This cannot come as a surprise since educational contents and structures and an inherited infrastructure change slowly, even when sufficient funds are available and the employment system can give clearer signals about the nature and types of qualifications needed in the future. Some of the labour market changes are also so recent and dramatic that it is difficult to say now if they are ephemeral or enduring or to judge their potential impact on the VOTEC system as a whole, especially since there is no system for sharing experiences. Nevertheless, many educational decision-makers at all levels have clearly come to understand the changed VOTEC environment and have clear ideas about what reforms are necessary.

Some of these ideas have already been translated into national and regional legislation and can also be found in the education development programmes of the federal Ministry of General and Professional Education and of various regional authorities. Some of these programmes have become the core of co-operation agreements between the Russian Federation and its subjects. A new draft law on vocational education relating to “primary professional education” was published in 1996 and reflects new policy emphasises; this holds promise for the future. Educational decision-makers now must develop effective strategies for achieving these programmatic ideas. The review team found five particularly crucial issues:

- Developing policy and clarifying the role between the federal and regional authorities.
- Strengthening the co-ordination capacities of local and regional levels so that training institutions increase their educational development and become more responsive to employment opportunities.
- Postponing vocational specialisation as long as possible to allow schools to respond more effectively to their students’ changing interests and aspirations and to the emerging needs of the labour market.
- Linking vocational education and training to potential employers of school leavers to make training sufficiently flexible. Flexible training structures are the best means to offset the unpredictability of the labour market and of the economy. Core competencies and skills should be promoted.
- Providing a regular flow of good quality information and data on VOTEC trends and on the labour market.

### **Developing policy and clarifying the role between federal and regional VOTEC authorities**

In trying to steer VOTEC and its outcomes in a strategically new direction, the federal authorities have been anxious to have coherent guidelines available and

publicised, the national needs of qualified manpower addressed, and maintain comparable approaches and standards among the different regions. On 22 June 1994, Order No. 215 of the Ministry of Education established state standards and the three-tier mechanism for curriculum control between state, regional and local authorities, giving federal authorities control of between 60 per cent and 70 per cent of the curricular policy.

An earlier concern by the federal authorities to retain strong controls over VOTEC has been allayed. Now the federal authorities are making efforts to transfer the VOTEC or primary professional institutions to the jurisdiction of the subjects, or members of the Russian Federation.

In line with the foregoing, the financing and ownership of such institutions are being transferred from the federal level to the level of the regions.

Developing vocational schools is a key policy issue which the policy of decentralisation must clearly outline and implement. Indeed, this is an urgent need. The draft law "On primary professional education" (1996) will, apparently be a considerable breakthrough. It institutes several categories of vocational schools – municipal, schools at enterprises, schools within the competence of the regional authorities and within the competence of the MGPE. Municipalities and enterprises are to finance their own vocational schools, while those overseen by regional authorities and the MGPE "may be financed from the federal budget or from the budgets of the Russian Federation members". The important principle is that institutional classification "predetermines the need to adopt, in duly established order, decisions on the transfer of their management, ownership and financing from the federal to a corresponding level".

It is also noteworthy that State education standards are to be designed, and are to include a new professional qualification structure for vocational education. A monitoring system will be introduced "to supervise the quality of training and adapt the standards to the needs of society". This indicates a much more flexible policy approach. However, it is important that standards specify a range of generic core competencies and skills that emphasise capability and performance criteria.

There is a need to have guarantees of conformity of the level of professional training to the interests of economic development and to ensure equal opportunity in this form of education. The federal government should have a possibility to adequately ensure the system against extremes, not trying to control, for example, the set of professional skills in specialities within the competence of regions. It may maintain the right to occasional interference, when the intention of a region to close a vocational school or change its "main form of activity" becomes known. It may be necessary to further develop the federal agreements with the regions, until the fear of considerable cuts of financing of the network of vocational schools disappears.

Federal authorities might also insist on having the authority to ensure that specific training is available in regions in accordance with the needs of the Federation. Their assessment of overall training needs should be reinforced by structured advice from the social partners at national level. Federal authorities should also focus on ensuring that good regional planning and reporting structures are in place and that good central monitoring procedures exist to satisfy their responsibilities for the nature and quality of VOTEC provision.

A sound statistical base for VOTEC needs to be developed and this should be the responsibility of federal authorities. This database could then be used to monitor the system and provide comparative information. This would be useful at both the national and regional levels. In addition, it could develop benchmarks and make best practice case studies available to assist in improving the system. International comparisons would also be useful.

The review team believes that the region is best placed to review the role, number, and distribution of vocational schools. Moscow cannot resolve the problem of mismatched output of vocational schools and the reality of rapidly changing local economies in the regions. Financial incentives and disincentives should encourage regional authorities and vocational schools to maximise their cost-effectiveness in a generally expanding sector. An effective strategy requires that major employers, businesses and their representative organisations have a more formal role in educational planning. Devolving more authority to the regions in this regard appears to be under way, and the review team supports this.

Designing and publishing regional plans for vocational education and training should be a key element in a region's regular review of its vocational schools. These plans would aim to bring together the inputs and needs of elected public authorities and public and private business enterprises. The relevant federal ministries should require that these be produced, published and regularly reviewed at regional level. Compulsory procedures for formally noting and responding to comments, observations and questions should also be established.

Such plans should be flexible and provide a framework of basic aims and intentions for a region's skill training programmes to reflect its changing economic and social conditions. Such a framework is most useful for the debates and discussions that must occur to ensure the vitality of such changes.

### **Co-ordinating regional and local authorities**

While some regions take an active interest in promoting VOTEC concerns, the initiative is also frequently left to individual training institutions. A great deal then depends on the quality of the local heads of these institutions, some of whom have been strongly shaped by the former system and are insufficiently

trained for their new role. Many individual schools tend to remain excessively reactive rather than pro-active in providing training as they develop survival initiatives necessarily based on their own available resources, including existing teaching staff. Schools seem to respond primarily to current market trends, especially the need for new legal and financial services and management training. Most of these needs may soon be satisfied, although students remain very interested in these new types of studies. The danger is that schools may compete by offering the same types of training and to the detriment of other potential training. Local and regional levels must find some way to co-ordinate better so that training institutions evolve effectively and more responsively to a market in evolution, rather than base their planning on the present-day situation.

Since employment developments are unclear, modernising and restructuring VOTEC will need to be combined with economic restructuring and generating jobs. More is at stake, therefore, than decentralising educational decision-making as such. Some schools have taken initiatives for development, while others have not. Educational authorities in the regions appear to have different policies with respect to VOTEC reform. Some seem to prefer to support certain schools that then receive considerable public support. The idea is to develop "pilot schools" that serve as examples to other schools. However, there are no clear directives for selecting these schools, no strategies for disseminating their experiences, or how non-pilot schools could benefit, and no clear idea of what happens to other schools. In other regions, apparently, there is an attempt to develop the entire network of schools by restructuring them with the help of teachers, but not all teachers are convinced that changes are necessary. The immediate results here are less spectacular although they may be more effective in the long run.

School initiatives have concentrated almost exclusively on changing the education level and expanding it to higher levels. Some vocational schools have been transformed into vocational *lycea*, or have added these to their existing structure. Unless vocational schools change their traditional training and occupational targets, they risk having to cater increasingly to students who drop out of mainstream education, which is increasingly oriented towards preparation for higher education. The traditional recruitment base for vocational schools of 16- and 17-year-olds is now the most vulnerable group on the labour market. Keeping vocational schools available simply to delay their entry into the labour market is a pointless tactic; their real future prospects depend on improving vocational schools. School initiatives to fill gaps in full-secondary and post-secondary vocational education do seem to respond to the actual educational aspirations of young people. Innovative programmes provide an alternative route into higher education and allow young people to postpone entering the labour market until their skills and maturity are more appropriate.

Some vocational institutions visited by the review team demonstrated entrepreneurial initiatives to supplement their inadequate budgets by selling student manufactured products and services, making rental agreements with local user groups, or creating extra courses for paying clients. While this is no substitute for proper federal or regional funding, such initiatives can effectively help meet some part of budgetary shortfalls. The new vocational educational legislation endorses such extra-budgetary means for raising money and also makes it possible for such institutions to receive money from sponsors, students, and parents.

### **Postponing vocational specialisation**

The VOTEC system is still characterised by early vocational specialisation which inhibits flexibility and reduces opportunities of transfer to other sectors of the education system. If vocational specialisation could be postponed, school, while combining vocational and academic inputs, would be able to respond more effectively to the changing interests and aspirations of their students and to the emerging needs of the labour market.

The number of training occupations for workers and technicians has been considerably reduced; the total number of trades listed in the Official Trade Index now number 257 and further reductions are planned. This indicates an attempt to broaden training profiles and make graduates more flexible on the labour market. Regions can add regionally specific occupations to the federal list, however, thereby increasing the total number of training occupations.

In order to make the VOTEC system more flexible, educational programmes and curricula could be developed along the lines of “progressive specialisation”. Basic general knowledge and technical, professional and social skills would be transmitted in broad occupational areas such as engineering, construction, commerce and trade in a first phase. A second phase would aim at an initial specialisation in related occupations, and a third phase would develop broadly-defined, level-specific occupational skills and qualifications with a large practical learning component. This principle of “progressive specialisation” is relatively independent from the overall organisation of the learning process, and could be school or enterprise-based on an annual basis or by modules. The VOTEC system would therefore produce graduates with the skills to cope with evolving occupational identities that differ fundamentally from traditional narrowly-defined occupations. Such broadly designed vocational education also acknowledges that lifelong employment in a single job is no longer the norm; VOTEC would prepare graduates for both occupational activity and recurrent education and training.

Initial vocational education is thus the first phase of a continuous lifelong learning process rather than an end in itself. Vocational education and training institutions have to be redesigned to be continuously accessible. For many

observers, traditional boundaries between initial education and further training or retraining are becoming increasingly blurred. However, in individual OECD countries, it has been difficult to integrate the various sub-systems of VOTEC. In some regions, educational authorities are aware of the need to increase the flexibility of the VOTEC system but find it difficult to implement progressive specialisation given the strong traditions of early specialisation. Attempts to increase flexibility, beyond reducing the number of training occupations, thus take very different forms, but ones which are more in line with Russian traditions.

The review team noted increasing VOTEC diversification by creating different types of schools, especially at the upper end of secondary education. At the same time, this increases variety “between” schools rather than “within” schools and may lead to undesirable variance between students due to different strategies of enrolment in various educational institutions. Vocational *lycea* and colleges, for example, increase the diversity of secondary schooling, but are very selective. They tend to be inaccessible to the traditional groups from which vocational schools have recruited their students. As a result, ordinary vocational schools may increasingly run the risk of serving those who are not accepted for more prestigious forms of vocational education. On the other hand, the vocational *lycea* seek to improve the profile of vocational education. There is a real need for career guidance and counselling to help students adopt the best options given in a system with very few options for change once a particular path is embarked upon.

In another approach, VOTEC has already begun to train students for more than one occupation. This approach is more oriented toward increasing a graduate’s flexibility on the labour market without substantially changing the existing specialisation. It also tends to lengthen studies, and accept current occupational definitions as given; both of which are potential problems. These very conservative reforms continue to reflect the existing structure of employment and will change as technological and work organisation changes are introduced, as experience in OECD countries has shown.

The system would benefit from pilot projects that blur the vertical divisions between different courses and forms of VOTEC establishments. This would establish a basis for a longer-term reform of the very specialised and inflexible VOTEC systems and encourage new forms of partnership. Co-financing mechanisms need to be established such as special federal funds for innovative projects applied for on the condition of regional co-financing. Vocational schools vary greatly in size and physical condition and many regional vocational schools have a limited scope of activities. Consolidation could yield considerable gains. Fewer, better equipped, and larger vocational training institutions would probably be more viable given the difficult economic conditions of the transition. Entrepreneurial schools looking into new ways of securing activity and new customers should be supported.



## **Links with employers**

Changes in vocational and professional education in Russia are often internally generated, without involving employers to any large extent. VOTEC changes can therefore be dominated by pedagogical concerns or understandably by concerns to preserve existing educational institutions. Educational decision-makers in Russia also stress their great social responsibility for young people in schools and training institutions. Preserving and eventually extending educational institutions, therefore, also serve to keep young people occupied under the present difficult conditions of high social insecurity. However, while important improvements are being introduced, training should be more closely linked to potential employment so that it remains sufficiently relevant and future-oriented. Such “negotiated” training structures are the best means to offset the continuing unpredictability of the labour market and of the economy generally.

Experience from OECD countries has shown that in times of rapid economic and technological change, vocational education and training systems are confronted with the problem of developing practice-oriented education without any clear points of reference or reliable future employment perspectives. The only way to deal with such uncertainty is to bring vocational education closer to the existing reality of enterprises and regional labour markets, and to ensure that training programmes and methods are sufficiently attentive to developing both technical and social skills so that their graduates can cope with uncertainty. In addition, vocational education and training has to be made accessible to those who need either further training or retraining. Most OECD countries also face these dramatic problems, and a rich body of national and international experience exists for comparative analysis.

Today, the relatively marginal involvement of employers and industry with VOTEC, and the implications for the VOTEC system, are fundamentally connected to the restructuring of state enterprises. This situation also explains why so many educational innovations in VOTEC are initiated by educators. The planning and organisational role which used to be played by the industrial sector ministries is gradually being filled by the Federal Employment Service (FES). Educational decision-makers at different levels are obliged to consult the FES when they initiate new programmes, or even when they continue old ones. FES thus acts as a kind of proxy for employers and provides some guarantees that VOTEC is aligned with labour market developments. It is questionable whether the FES can play this role for the long term. Employers need to be more heavily involved in VOTEC. FES has to make judgements using only the unemployment data and vacancies they have on hand, and these are insufficient. Experience so far indicates that this leads to rather conservative and restricted approaches. The FES can provide information about numbers of unemployed persons and vacancies

only when they are registered and use standard occupational definitions, but it cannot necessarily provide information about the contents of educational programmes. In addition, in many regions, there are not enough personnel and financial resources for wide-ranging active labour market policy initiatives. Finally, the FES is part of the state administration and, as such is engaged in its own centralisation-decentralisation struggle.

FES is also responsible for financing and organising retraining the registered unemployed. The scope of retraining remains limited but the number of vocational school graduates participating in retraining programmes is relatively high. FES-funded retraining programmes are currently a welcome source of external funding for many VOTEC institutions with which it has concluded training contracts to provide courses. These arrangements sometimes also make it possible for the institution to purchase new teaching equipment such as personal computers, which schools can also use in their regular educational programmes. Similarly, the FES indirectly affects curricular content and teaching methods. However, it has become increasingly clear that adult training is quite different from traditional education and that vocational schools are not necessarily well equipped for it. There are proposals to create FES retraining centres and to develop appropriate adult-oriented training pedagogies.

As they attempt to establish lifelong VOTEC infrastructures, many OECD countries now face tremendous problems in reintegrating vocational education for young people with adult retraining. The two have traditionally evolved as separate sub-systems administered by different authorities. Regional Training Centres (RTCs), established in some countries as part of the development of a parallel system of labour market training, are now also being set up by the FES. These could help realise new forms and contents of training for young people and adults. Experience in retraining and in defining the training needs of developing regional labour markets could be incorporated into the programmes for initial education. Such RTCs should, as much as possible, be multi-occupational, accessible to all regional vocational institutions including the schools which have no other access to practical training places due to limited financial means, and make use of existing facilities and resources, including teaching staff. It may even be possible to locate RTCs on the premises of existing schools. It will be essential to further strengthen and improve the relations between the FES and VOTEC institutions.

In the long run, the FES cannot replace the social partners in VOTEC planning. Indeed, it will most probably evolve from a state administration to a tripartite labour market institution. Other means of involving employers need to be found. One possibility would be a special education tax (see finance section

Chapter 7) that several regions have introduced. Part or all of the revenues could create a special VOTEC fund, managed and administered on a tripartite basis (like the Training Fund in Hungary). This would encourage social partners to take an interest in VOTEC investment decisions. Alternatively, parts of the funds could be used to finance innovative VOTEC projects with explicit co-operation between schools and enterprises. Funds could also be used to support projects combining vocational education with employment creation, examples of which have been developed in many OECD countries as well. The 1996 initiative on changing the legislative basis for vocational education, which clearly envisages a more active role for employers in re-training programmes, also states: "The federal Council for Professional Education may be set up on government decision and it envisages a majority of seats on it going to representatives of employers, trade unions, science and other social partners." If this form of social partnership with vocational education could be established and be well structured, it would open up new possibilities.

Each institution has to take the initiative for involving industry and for increasing the relevancy of VOTEC and these seem to have largely concentrated on internal VOTEC issues. A new active role for VOTEC institutions with employers and the employment system must now be implemented. Some pointers for improving this relationship exist.

The inherited structural problems cannot be underestimated. It is fair to assume, however, that the current barriers between training and employment in the private sector are not only a question of professional profiles and educational quality but also largely a psychological and an attitude problem. Private employers, for example, would rather employ the graduates of non-state schools, and state enterprises normally do not employ staff from private educational institutions however prestigious or internationally recognised. Changing these attitudes and habits is a challenge to policy-makers who should increase the involvement of the social partners in education planning, and openly support the non-state education sector through explicit policies and transparent systems of accreditation. It is important to work at breaking down artificial barriers while developing an open economy, and this should occur by involving employer representatives in planning and curricular committees, as appropriate, at federal, regional and school levels. Some regional and municipal authorities have established co-operation between VOTEC and local businesses, as for instance, in Krasnoyarsk *Krai*. Some schools have also established favourable "attachments" to a particular industry or higher education institution which yield various benefits. Some regions have introduced Annual Labour Fairs, as a means of career counselling and job orientation in which industry and commercial concerns participate. Such initiatives should be encouraged and become more widespread throughout the Russian Federation.

## **Improved information on VOTEC and the labour market**

In line with proposals for an improved information base for the system as a whole (Chapter 2), sophisticated data on VOTEC issues and evolving labour market trends is needed to help policy to remain flexible and adaptable in relation to evolving needs. Such an initiative would also facilitate liaisons with international VOTEC networks and labour market information. The draft Law “On primary professional education”, published in 1996, makes reference to joint work between the Ministry of General and Professional Education and the Labour Ministry on various directions of activity in the sphere of vocational (professional) education and employment. It also defines an elaborate “scientific” role regarding VOTEC for the Institute for the Development of Professional Education that would have a number of planned satellite centres and would appear to be ideally placed to act as a major information and analysis centre for many issues and problems regarding vocational education and the changing employment arena. It is too early to judge whether these initiatives will be successfully realised and satisfactorily financed. However, with the help of such initiatives it is possible to carry out some of the reforms recommended by the review team.

## **RECOMMENDATIONS**

Education authorities in the Russian Federation face a special challenge of adapting the vocational and technical education system to new political, social and economic realities posed by the transition towards a parliamentary democracy and a market economy. The significant restructuring of Russian industry has had particular ramifications for VOTEC in terms of support linkage for its provision and for employment outlets for its graduates. The specialisations are changing significantly, and this will require ongoing attention. The emphasis needs to change regarding skills and competencies that need to be developed. The balance of authority between the MGPE and the subjects needs to be restructured so that the subjects have more authority and budgetary resources, with certain safeguards at federal level. A new and dynamic rapprochement needs to develop between VOTEC and industrial and commercial employers. The plight of many initial vocational education institutions is parlous and the infrastructure for VOTEC, particularly for young people at risk, requires urgent attention. The following specific recommendations are aimed at helping policy-makers to grapple with the many problems affecting VOTEC.

### **Modernisation, structural and systemic change**

- For successful long-term reform, modernisation, structural change and systemic change need to be coherently integrated.

- A strategic policy approach should focus on improving and developing the infrastructure of vocational institutions, allowing for rationalisation where appropriate.

### **Balancing federal and regional responsibilities**

- In relation to the balance of powers between the federal and the regional authorities, the review team considers that the region is best placed to monitor the role, number and distribution of vocational schools; the federal government should have appropriate safeguards and reserved powers of intervention.
- At federal level, the proposed Council for Professional Education involving the social partners should assist in formulating overall vocational education policy.
- Regional authorities should publish regular reviews of the plans, progress and problems of VOTEC in their areas.
- Efforts should be made to establish frameworks to involve the representatives of regional employers and business to become active partners in making and promoting VOTEC policy. Employer representatives should be involved in planning and curricular committees at appropriate federal, regional and school levels.
- There needs to be greater co-ordination between regional and local levels to increase educational development in training institutions and to promote greater responsiveness to employment opportunities.

### **Vocational specialisation**

- Vocational specialisation should be postponed as long as possible to give schools more leeway to respond more flexibly to the changing needs of their students and of the labour market. Flexible, affordable, and sustainable educational programmes will be promoted by modifying current requirements and other incentives for specialisation.
- The review team recommends that the principle of “progressive specialisation” be a guide for action.
- Improved efforts should be made to ensure that work experience is a norm for vocational pupils.
- The review team encourages the entrepreneurial activities engaged in by some vocational institutions since these are useful for training and income.

**VOTEC and employment**

- Vocational education institutions, in conjunction with the Federal Employment Service should be receptive to lifelong learning approaches.
- There is a need for better quality information and analysis of vocational education and training combined with labour market development. The Institute for the Development of Professional Education could be a major agency in this regard.
- The new Regional Training Centres should be multi-occupational and accessible to all vocational institutions in the region.
- The Federal Employment Service and VOTEC should work together more closely.
- A specific part of the funds accruing from the special education tax on enterprises should be allocated to VOTEC and its administration should include employer representatives. Special support should be given to innovative VOTEC projects.
- Concrete projects should promote trilateral co-operation between foreign investors, Russian partner enterprises and schools, especially in regions with defence industries. A part of the investment in industrial projects should be set aside for internships in western firms with employment guarantees after return and completion of VOTEC. Projects should be monitored and once they are cleared, funding should be granted by installment.

## TEACHERS AND TEACHER TRAINING

### TEACHER SALARIES AND WORKING CONDITIONS

Teachers work under very difficult conditions. Their salaries and social status vary greatly across the regions, but in most cases are not conducive to the long-term health of the profession. In many areas, salaries are very low and frequently paid months in arrears. Many teachers therefore work extra hours or have second jobs. In some areas, they find no available housing. Moreover, the actual job of teaching is becoming more difficult as family and social constraints on the behaviour of young people loosen and as unemployment undermines the motivation of some groups of students. There are some indications that the status of teachers within the rapidly changing Russian society is declining. Given this discouraging context, Russian teachers' strong commitment to their students and their profession is remarkable. It is unlikely to be sustained over a long period, however, unless measures are taken to improve salaries and working conditions. There is already evidence of skilled teachers with marketable abilities leaving the profession: modern language teachers, for example, are now in short supply in some areas, especially Moscow; the proportion of newly trained teachers entering and those who remain has fallen as low as a third, despite measures designed to tie students to a compulsory period of education.

The success of the educational reforms set in motion by the government depends, to a large extent, on the quality and commitment of the teaching force. To ensure that the system can continue to function and improve, a safe and reliable system for paying teachers' salaries needs to be set in place. External job opportunities will emerge as the economy develops and these will be attractive; this alternative needs to be faced and be borne in mind when determining the numbers of teachers recruited into high demand subject areas, salary arrangements, and contracts with minimal service obligations set against education and training costs.

Currently, the system depends greatly on vocational commitment and caring for the well-being of children, but in the long run, no system can run on goodwill alone without essential recognition by way of remuneration. Teachers' strikes and other forms of protest have occurred, and if dissatisfaction and alienation become endemic, the results will be extremely damaging to education reform, and could

indeed threaten the system's very survival. The situation is further exacerbated by the daunting new challenges that must be faced without adequate teaching resources and facilities. Teachers' job satisfaction is significantly influenced by the number of real teaching hours, the equipment, textbooks, teaching aids and such basics as lighting, heating and sanitation. Many schools are hard-pressed to provide reasonable working conditions, although the schools visited made tremendous efforts to be welcoming, warm, cheerful and attractive "second homes" for their students. The difficult home and environmental conditions of some students and widespread, serious health problems further strain the pastoral role of teachers. Both federal and many regional governments have recognised the urgent need to establish a proper basis for remuneration: Plan 2000 proposed linking teachers' pay to that of civil servants but this type of indexation would prove costly. The *Duma* has adopted a proposal to double teachers' pay, but the Ministry of Finance has resisted implementing it on the grounds that it would cost over 2 000 trillion roubles. Inevitably, a long-term solution will depend on the satisfactory resolution of the tax collection crisis. In the interim, some urgently needed federal initiatives must be taken to alleviate the plight of teachers in the regions where they are most affected.

One way of addressing the affordability of adequately remunerating teachers would be to re-assess the efficiency of teacher deployment. Very large numbers of people are employed in Russian educational institutions and the number of school teachers has increased by a third in the last ten years (Background Report). In some institutions and regions, student-teacher ratios (STRs) are very low, well below the norm in most OECD societies. A surprisingly high proportion of educational personnel appears to be engaged in work outside the provision of basic education, in pre-school, additional and supplementary education, and other services. With a sharply falling birth rate already affecting pre-school and elementary enrolments, there ought to be room for some rationalisation of the teaching force. Two factors were cited as constraining such a policy: large numbers of small rural schools; and in some regions, the return of large numbers of Russians from newly independent republics of the former Soviet Union. These are important constraints, but a more significant issue is that federal and regional policies are not based on formulas or on such criteria as student teacher ratios or defined subsidy levels for rural schools, which might act as a catalyst for rationalisation. The very high degree of specialisation of teachers and other staff working in educational institutions is another factor that builds rigidities into the system. Policies aimed at increasing the flexibility and mobility of the teaching force might free resources for salaries and retraining. There is also a tradition of providing employment within education when general unemployment is on the rise, but this may come at the expense of a smaller, better paid and more satisfied corps of teachers able to devote itself completely to teaching.



The demise of the command-style planning system that assigned teachers to posts upon graduation from pedagogical universities has clearly left the authorities in a difficult and novel position. There is now no clear sense of planning for the numbers, specialisations and assignments of teachers for the next 5-10 years. This underscores the need for a reliable management information system of data banks, including data on teacher turnover, age and gender profiles, subject and school type variation, or types of graduates and their career development profiles.

Most teachers are women. There are many women administrators, especially at educational institutions, but a disproportionate number of senior administrators are men. This situation could dissuade women from entering teaching and lower morale among current staff. Formal policy and practice at all levels should ensure equitable treatment for women in terms of salary and advancement.

### **INITIAL TEACHER EDUCATION**

The system of educating and training teachers is being reformed to meet the new priorities set out in the 1992 Law on Education. Although some 70 000 new teachers start to teach each year, they represent only approximately 5 per cent of the total teaching force. Reorienting and re-equipping the teaching profession to meet the new educational objectives within a reasonable time frame will also require a massive retraining effort for the over one and half million teachers now teaching. Reforms of both the initial and in-service teacher training systems have been set in train and need to be pursued in tandem, but finding enough trainers with the necessary skills and experience who are also sympathetic to the principles underlying the reform will be no easy matter.

The initial teacher training system is divided into higher and non-higher, or secondary, education levels. Most secondary teachers are trained in higher education institutions and most primary teachers in non-higher educational institutions. In the higher education sector, "classical" universities contribute only approximately 5 000 trained specialists yearly who teach mainly in the upper secondary grades. The bulk of secondary teachers and a substantial proportion of primary teachers are trained in the approximately 100 pedagogical institutes. At the latest count, 33 of these have evolved into pedagogical universities which are developing a wider range of mainly humanities and social science programmes while continuing to focus on teacher training. Their students usually have dual qualifications in a curriculum subject (mathematics) and in pedagogy, for example, leading to a teaching qualification. Taken together, these two types of higher education institutions produce around 37 000 teachers annually.

The approximately 350 teacher training colleges or schools produce about 34 000 new teachers each year, mainly for pre-school and elementary classes. In addition, they are also the principal trainers of music, art, physical education and

some other specialised subjects for all grades of compulsory school. In a situation of fluctuating demand and supply, these non-graduate teachers also teach at all levels up to grade 9, especially in regions with teacher shortages in subjects like Russian that form part of the protected federal core curriculum. In many regions, these college-trained teachers also take part-time courses to upgrade their qualifications. Some of these colleges are located in major towns and cities and have developed links with pedagogical institutes or universities. In this way, a proportion of their more able students can enter the third year of the five-year Bachelor's programme. Most colleges, however, are located in rural areas and are scattered unevenly throughout Russia. They offer a basic two-year programme for students entering after grade 11. Many still recruit students after grade 9 for a three- or four-year programme.

The vast diversity of level and quality of education and training among teachers therefore makes the notion of a unified teaching profession more difficult to realise in Russia than in most OECD countries. The situation is complicated further by the existence of a separate training route for teachers in vocational schools. Moreover, the system is changing rapidly, partly under the impetus of market forces and partly as a result of federal and regional reforms.

Under the old regime, only 60 "classical" universities existed, and in many rural or far-flung areas, the local teacher training college offered the only higher education, particularly in the humanities. Already, at that time, trained teachers were moving into general managerial occupations and this trend has become generalised in the modern languages, for example, which are in demand in the open economy. The federal Ministry of General and Professional Education (MGPE) estimates that only one-third of higher education teaching graduates actually remain in teaching beyond the required period of three years to repay their grants. At the other end of this compulsory period, those – usually poor, rural, and female – young people recruited into non higher education teaching courses at 16, may find themselves trapped in a low paid career for which they may not necessarily feel any vocation. On the other hand, they may also upgrade their qualification through a distance education course of study.

Federal government reforms have focused on the higher education section of the teacher training system, which comes under the same framework as other higher education programmes. They aim both to "humanise" course contents and delivery and to give students more choices. The goals of the old system with its subject-centred approach and its emphasis on teacher conformity and mass pedagogical reproduction have been replaced with a radically different conception of the teacher's role and relationship with pupils. The emphasis is now on developing the teacher's personality and creativity; the model teacher is a thoughtful, thoroughly-trained pedagogue with a clear understanding of the inherent values of education, and willing to participate in the renewal. This "person of culture"

has extensive knowledge of his or her subjects, of psychology and pedagogy, and can master child-centred pedagogical strategies and be motivated for continued personal growth and development. The reform plans emphasise training the autonomous teacher who can define goals, analyse pedagogical situations, plan and carry out teaching, promote communication between pupils and also be able to monitor and evaluate what has been done. The academic content of the teacher training courses is often described as comprising four blocks:

- Cultural subjects such as philosophy, ethics, history, economy, languages.
- Specialisation.
- Studies in biology and medicine.
- Pedagogy and psychology.

Clearly, the profile of the new teacher is idealised, but many impediments exist and will continue to exist for some time before this vision can become reality. It is nonetheless consistent with the overall goals of the new educational policy and with curricular objectives.

To help bring about a new style of teaching, the federal government has developed a “multi-level system of higher pedagogical education”. Students may receive “incomplete higher education”, for example, teaching qualifications, “basic higher education”, at Bachelor’s level, and “complete higher education”, at Master’s level. Some institutions also offer doctoral programmes in pedagogical disciplines. The reforms also aim to reduce the excessive specialisation, especially in the sciences, by grouping all subjects within six “profiles”: natural sciences, humanities, social sciences and economy, professional training, pedagogy and arts. Since 1992, these reforms have been tried out and monitored in several higher education institutions but the government is proceeding cautiously, and avoiding potentially counter-productive “revolutionary leaps”. Educational prestige in Russia has been related to narrow specialisation and this has spilled over into upper secondary where it is not uncommon to find premature specialisation in view of higher education. In practice, except where it is driven by market forces – the proliferation of new courses in economics and modern languages – the reform of specialised higher education has not progressed much beyond the experimental stage so far.

In the past, courses which conferred a teaching qualification were subject to close prescription from central authorities over content, time allocations for each component, and even the mode of presentation. The Ministry of Education issued a detailed curriculum for teacher training institutions every five years and monitored its application. The reforms, conversely, aim to develop greater autonomy and diversity among teacher training institutions. New and less prescriptive state standards have been issued for all higher education teacher training and are being followed in all the institutions visited by the examiners. Standards include

guidance on subject matter and on course structure. The timing and length of school-based teaching practice is set out in detail, for example. Similar standards for the rest of the teacher training system will eventually follow, but for the moment, these non-higher education institutions are mainly accountable to regional authorities. Some regions, and even some cities – Tyumen, for example – have established their own new institutions to meet teacher shortages. Regional authorities seem relatively satisfied with the professional pedagogical training provided by colleges and pedagogical universities but they also give high priority to upgrading their college-trained teachers.

The three-stage secondary curriculum – federal core subjects, regional, and school components – was the starting point for the development of the standards for the Bachelor of Education degree, since most students in this programme will teach one or two subjects at the secondary level. State educational standards consist of four profiles broken down into 41 specialisations. Unlike the process or input standards of the old system, these are output or performance standards, specifying the knowledge and skills required of graduates in the areas of general culture (designed to develop students' personality), psychology and pedagogy, and one or occasionally two academic disciplines. Regional pedagogical institutions have added training in ethnic languages and cultures to the teacher training curriculum in response to local needs. In the Adygheya Republic, for example, courses in Adyg language have been introduced to meet the need for teachers of the indigenous language which the newly autonomous republic has recently declared to have equal status with Russian.

Teaching qualifications are valid throughout Russia although there is little teacher mobility in practice. As elsewhere in higher education, institutions give their own entrance tests, which include written examinations in Russian and mathematics and an interview which focuses on candidates' ability in their field and their aptitude for teaching. The admission procedures follow the federal guidelines set out in the general regulations on enrolment in state higher teacher training institutions. The interview is conducted by a specially-convened commission that includes school teachers and usually sits for a whole week. There were two applicants for each place on average in the institutions visited, but the ratio is declining. Males comprise 23 per cent of the successful applicants. Selection procedures are specific to each institution but are accepted by other institutions for entry into parallel courses. Target admission numbers are set by the federal government for all teacher training institutions: 94 890 in 1994, of whom 63 420 were full-time students.

The system of initial teacher training is complex, and this reflects Russia's vast territory, ethnic diversity and living conditions. The system is undergoing a radical reassessment and rapid development but, for the moment, the basic features remain largely unchanged. Recruitment to teacher training courses is

premature (students are 16 or 17 years old when they are recruited) and rather incompatible with the new emphasis on liberalisation and student choice. Having students enter teacher training only after the completion of secondary education should be a high priority. In general, over-specialisation in teacher training courses continues. The shift away from centralised prescription is widely welcomed in the regions and institutions, some of which are making good use of their new autonomy.

It is understandable that a non-higher education teacher training system continues, given the remoteness of many schools and colleges from major towns or cities. The development of distance learning and the creation of outreach centres by universities are encouraging responses to the problem, as is the network of links which now bind many of the small teacher training colleges to higher education institutions. This should make it possible to develop a strategy for phasing out non-higher education teacher training over the next few years, with the exception perhaps of pre-school educational staff. Pedagogical universities (as distinct from pedagogical institutes) evolved in the post-Soviet era and they may prove to be a transitional stage as teacher training is gradually incorporated into the mainstream of higher education, as is the case in most OECD countries. If so, these universities are destined to become all-purpose. Some have already, for example, the State University of Maicop, in the Adygheya Republic. The universities visited demonstrated encouraging course diversification in response to student demand and to the needs of the local economy more than to strictly teacher training considerations. These developments have effectively reduced the proportion of graduates going into teaching, but this trend should be reversed if the social status of teachers is restored.

If pedagogical universities do become more like general universities, their current highly developed pedagogical courses may be eroded. While there is a case for reassessing the current, somewhat over-specialised provision, it would be regrettable if the professional, school-focused teacher preparation were replaced by traditional university discipline-based specialisation courses. Indeed, classical universities may have more to learn from the pedagogical universities about preparing students for secondary teaching. The goals set for the education system (see Chapter 1) call for teachers who are skilled in curriculum development, who employ integrative teaching styles, are competent in new assessment techniques and are oriented towards collegiality. An over-reliance on subject mastery without sufficient attention to other key dimensions of teacher education will not produce the type of teachers needed for the new era.

## **IN-SERVICE TEACHERS AND THEIR RE-TRAINING**

The successful implementation of the educational reform programme depends on the attitudes and abilities of the teachers currently working in

Russia's schools. A substantial proportion of these, including more than half of all primary teachers, have received no higher education. A minority of those working in secondary grades – 15 700 according to the Background Report – have only a general secondary education diploma, and the qualification level has actually dropped in the last few years. Some concern was expressed in official documentation and in conversation about the quality of teaching, which the examiners found difficult to investigate as they had only very limited access to classes and did not have a good opportunity to observe teachers teaching. It would not be surprising if teachers, who had undergone the kind of professional training which emphasised their role as agents for inculcating a particular ideology, found it difficult to adjust to a very different set of aims and a more open pedagogical approach. Furthermore, teachers must deal with new skill and content requirements for their students, and in some cases, with new subjects to teach. A major aim of federal and regional, and in many cases of municipal administrations as well is to help teachers to adjust to the new tasks facing them, and to mitigate the danger of “change overload”.

Policies have focused in particular on promoting quality by assessing teachers and rewarding them differentially according to their performance, on updating qualifications of non-graduates to higher education level, on re-orienting and on retraining some teachers for new roles. Implementing policies of this dimension necessarily runs into the problem of finding institutions and trainers who are themselves equipped and willing to promote them. The United Kingdom had similar problems in implementing the National Curriculum in 1988; this problem is not unique to Russia. Taken together with severe financial constraints, this inherent difficulty makes the task almost impossible, and there is a tendency to focus on the most urgent priorities. Fortunately, given the opportunity and sufficient autonomy, schools and teachers have a considerable capacity for self-regeneration and the review team encountered several examples of such initiatives, particularly at upper secondary level.

The policy with the greatest impact in the regions visited by the examiners is the new system of assessing teachers and introducing performance-based differential pay scales. Under the old regime, the central authorities accredited schools and assessed and re-certified teachers every five years, as a control mechanism. With decentralisation, the regions have generally assumed the responsibility for quality control and the more advanced among them are looking to develop output measures based on student performance. Some, Sverdlovsk in particular, have developed procedures for assessing teachers which have since been incorporated into federal law. The regional administration in Sverdlovsk wants to use the re-certification process to re-orient teachers to meet the new curriculum and pedagogical requirements. It issued a report in 1991 setting out the new educational objectives and worked with districts over the next five years

to change the attitudes of teachers, parents, students, and administrators. The greatest opposition was found in vocational education where some of the biggest adjustments have had to be made.

According to the regional administration, the system which has developed in Sverdlovsk has been operating for five years and has had a decisive influence on teaching quality. From 1991, a voluntary system of teacher certification took effect. The prospect of being re-classified into a higher pay category was a powerful incentive for teacher participation. The process had two stages. In the first, which operates at school level, the teacher must show evidence of quality teaching, successful student learning and innovation. In the second stage, teachers take courses in educational theory either on a part-time basis at a retraining centre, by distance learning, or a combination of the two. The first stage is judged by a commission including parents, teachers and administrators; the second culminates in a qualification. The results are impressive: a majority of teachers and administrators have at least verbally accepted the new thinking and, in some cases, are actively participating in implementing it.

Federal law establishes a framework for re-certifying teachers in categories with different pay scales. Most regions, including Sverdlovsk, have added higher categories to the three federal categories. The system runs the risk in some regions of becoming simply a device for raising teachers' salaries in an open-ended fashion. A second drawback of this approach, if it is continued into a second stage, is its focus on the certification of individual teachers rather than on promoting a coherent, whole-school approach to professional development. This touches on a more general problem regarding much of the teacher training: emphasis on the individual teacher. Individual classroom autonomy has been a predominant feature of the Russian tradition, as it has been in many other countries. However, the new concept of teacher professionalism, as well as the findings of so much research on school effectiveness, emphasise the need for greater teamwork and collegiality among staff, in the interests of whole-school development and serving pupils' needs. Teachers may find teamwork to be a source of inspiration and a forum for generating new ideas and co-operative planning. Experience in many countries indicates that this is not easily achieved, but unless initial and in-service training in Russia places more emphasis on it and rewards co-operative teachers, teamwork has little chance of taking root. Teachers acting as facilitators among their peers in in-service education can help to sow the seeds for co-operative endeavour.

Educational development centres have been established in many regions, and usually offer incentives for the further qualifications of teachers. The examiners visited some of these education development centres and were impressed by staff enthusiasm and the involvement of participants. However, teacher incentives are geared towards upgrading subject matter areas and the centres have the task

of helping to promote further teacher qualification. There is some danger that the dual function of training for further qualifications and promotion, on the one hand, and for developmental concerns and skills associated with new policies, on the other, may be at cross purposes or be counterproductive. It is also the case that centre staff should be carefully selected and trained in order to provide the pedagogical leadership expected of them. Competence rather than seniority should be the guiding principle. Such staff need to be able to exemplify best practice, and courses should emphasise and include more workshop demonstration and active involvement of the participants and fewer lecture-style presentations. It is vital for in-service teachers to experience new teaching methods, cross-curricular approaches, problem-solving techniques, team learning, and to be oriented to self-directed learning. The examiners were informed that by the end of 1995 "almost half the teachers in Russia had completed re-training courses". This is an impressive sign of action in the in-service training area, but it is important that the retraining be of the right kind.

The degree of independence from regional authorities varied among the centres. They should not be fully independent, of course, but experience in OECD countries shows that such centres can deploy their capacities to the full if they are accorded a fair amount of independence and act as a kind of forum between administrations and schools where opinions can be expressed freely and teachers can feel unsupervised. At the same time, the centres can accumulate a good overview of the problems and concerns at the chalk-face of the education system and should be in a position to discuss these with supervisory authorities with a view to finding appropriate solutions.

Schools are beginning to show their eagerness to develop their own identity within the limits of their new autonomy. In many cases, they are already taking initiatives in retraining teachers to meet the new needs created by such a development. For example, the examiners met history teachers who had taken courses, either locally or in Moscow or St. Petersburg, in order to teach economics or aspects of business studies. Policies on professional development should foster such initiatives, and schools should be able to have access to funds for their own retraining strategies, provided that they can show that these match the school's needs and will be properly monitored. It is not necessarily the case that upgrading teacher qualifications is the best way to promote new attitudes and approaches, especially if the programmes are defined by training institutions with their own agendas. A more client-oriented funding system for in-service courses would also favour those teacher training institutions that are developing courses that are the most relevant courses and attuned to schools' needs.

Experience in OECD countries suggests that retraining or selecting trainers is a crucial stage in implementing reforms. When a whole system is being radically changed, it is particularly difficult to find good models for retraining. Fortunately,



the Russian education system has sufficient strengths to be able to produce innovative experiments, and foreign models are also being put to good use. Several regions have created new institutions dedicated to retraining, or have changed the mission of existing institutions. The Moscow Institute for Higher Pedagogical Qualifications has responded to the specific needs of the capital where one child in three is not of Russian origin by establishing a Centre for Interethnic Education where school principals and other teachers, especially in the humanities, are introduced to teaching methods and materials which respect to ethnic diversity. It also serves as a resource for other regions and for former Soviet Republics, and is a major centre for teacher self-development. The Moscow Institute offers free, part-time courses for specialists who have not received pedagogical training. This is a promising route for engineers and other professionals as well who have been made redundant in the shake-out of Russian industries and who could help to meet the shortages of specialist teachers, especially in Moscow.

The Institute has established links with each of Moscow's ten administrative sectors and is promoting a grassroots approach to change, for example, by supporting up to 100 experimental school projects. In all, over 10 000 teachers are being retrained at any one time. These include 1 500 who are school principals released from their posts for two months. The ability of Institute staff to bring their knowledge of promising developments in Russian schools, of research and of comparative models from other countries to bear on the task of professional development will be of crucial importance. Unfortunately, this work is also threatened by the uncertainty of funding. One approach to securing continued funding or at least an alternative source of funds would be to issue in-service vouchers to schools specifically for retraining. This would have the additional virtue of ensuring that courses remained relevant to schools' needs and of stimulating a market among higher education institutions for in-service provision.

Most of the regions have established retraining colleges similar to the Moscow Institute, many pedagogical universities or institutes have developed retraining courses in addition to their other provision. In Krasnodar, for example, all teachers may try for re-certification according to the regional five-year plan. They must take a course of at least 72 hours which most teachers choose to take during vacations, despite the fact that schools have budgetary provisions for replacing them on in-service courses. The pedagogical institute in Krasnodar offers outreach courses for the more remote areas and also promotes innovation in other ways: hosting seminars for school principals with researchers and outside speakers; having the principals of innovative schools meet regularly with institute administrators and educational staff to discuss educational management.

Conversations with those involved, however, make it clear that there is a gap between the new curriculum content and in-service courses. Trainers find it

difficult to prepare for the new integrated curricula and syllabi for science, for example, because only three higher education pedagogical institutions in the whole of Russia are equipped to teach them. The lack of textbooks and funding for curriculum development generally makes the situation even more difficult. In Krasnodar, textbooks that meet the new requirements have been produced locally, but they need to be supplemented by more student-focused learning materials. Introducing new higher education courses related to the revised school curriculum and developing a wider range of appropriate textbooks and teaching materials are two of the highest priorities for Russian education. Without these, policies aimed at retraining teachers to meet the new challenges will inevitably be hampered. Given greater school autonomy and the school level component of general curricular policy, school leadership and curriculum development are in-service training policy areas that require particular attention. The shift toward school innovativeness and adaptability and the move towards more whole-school planning involve a culture change for many teachers which should not be underestimated. They need sustained support and good guidance to change their outlook and practices, and allocated time for collective, developmental planning. Given the context of financial stringency facing many teachers, pressure is on to use any non-contractual time to increase earnings by extra teaching and other employment. Here again, making the financial rewards for teachers secure and reliable so that teachers can concentrate fully on teaching needs to be a priority. The strong commitment observed by the examiners among the teachers they met is encouraging and should be carefully nurtured.

### **HIGHER TEACHER TRAINING INSTITUTES AND EDUCATIONAL RESEARCH**

In 1995, 33 of the higher teacher training institutes had achieved the status of pedagogical universities. These institutions have a major role to play in providing the personnel and programmes to sustain the large educational reform agenda being undertaken by the Russian Federation. Ideally, they should provide the leadership, expertise, guidance and demonstrated capacity upon which the whole system could draw in the implementation process. They play a key role in initial teacher education, in in-service training, in postgraduate education, in developmental innovation and in educational research. Accordingly, the quality and experience of the staff in these institutions is of crucial importance. They too need the support which staff development programmes provide.

Many of the institutions have been making commendable efforts to make the difficult transition from an era when educational studies were permeated by ideological and doctrinaire considerations. The scientific status of educational studies was tarnished by this, but a reconstruction process is under way. The curricula of pedagogical institutions has been significantly reformed, and courses have been commendably diversified. As in other areas of the educational system,

however, these institutions suffer from economic stringency and insufficient budget allocations. The Background Report put the situation starkly:

“Teaching equipment, technical aids, textbooks and other teaching materials are out of date, both in terms of content and in material terms. The lack of maintenance and equipment resources of the pedagogical institutions has become critical.”

Such severe conditions greatly impede institutions from adapting and carrying through the necessary and continuous reforms. Staff and research salaries are often lower than the national minimum wage which undermines morale and the requisite whole-hearted professional commitment, and leads to a brain drain. In addition, institutions should be given greater flexibility to raise funding by providing training services to a variety of clients and entering into new contractual relationships in teacher in-service training. There is also scope for institutional co-operation and co-ordination of efforts. There is some evidence of this happening and it should be encouraged; certainly greater financial security would make this easier to achieve. The quality and range of client services can be improved, and such co-operative endeavours can help staff development and enrichment. This co-operative trend can also reinforce international links, mentioned earlier.

Educational research in Russia has traditionally tended to be conducted primarily as basic research within academic disciplines. Forty-five teacher training institutions are engaged in scientific research within the Russian Academy of Science programmes, without allocated budget (Background Report). The lack of financial support is a major disincentive for engaging in any large scale educational research projects. During this period of transition, however, there is a real and serious need for educational research in general, and applied research in particular that targets priorities of the reform movement. The pursuit of qualitative research studies close to daily school activities, on school effectiveness, curricular development, educational innovation, guidance and counselling, pupil and system evaluation, attitudinal studies of teachers, whole-school development, economics of education, and on issues of relevance in comparative education, etc., would all enrich the education system, policy formulation, and teacher education itself. An education system engaged in a major reform movement needs to harness educational research more thoroughly and more specifically than has been the tradition in Russia.

## **RECOMMENDATIONS**

Teachers at the various levels of the system are crucial for the success of educational reforms. They are at the cutting edge of the implementation process in the classroom. At present, their salaries are unacceptably low and too infrequently paid, and their work conditions leave a great deal to be desired. While

the vocational commitment of the teachers whom the review team met is very admirable, it is essential to secure a safe and reliable system for paying their salaries. Analysis indicated that teacher deployment should be re-assessed and made more cost-efficient. Pre-service teacher education is being significantly restructured, but there is a large category of trainees whose training needs to be upgraded. The in-service education of the existing teaching force is receiving attention but should have a different orientation. In particular, greater emphasis needs to be given to educational leadership, curriculum development, student assessment, new teaching methodologies and whole-school activities. The work of teachers and administrators needs the support of educational research focused on relevant aspects of the educational reforms.

### **Salaries and information system**

- Teachers must have adequate salaries that are paid on time. This must be a high federal and regional priority.
- A reliable information system is needed on the teaching force.
- It is necessary to re-assess the efficiency of teacher deployment with a view to establishing a better paid profession so that teachers can devote themselves single-mindedly to their teaching duties.

### **Teacher assessment**

- Student results on tests or other assessment instruments are often used in teacher attestations without controlling for other student or school characteristics that may contribute to these results. This is probably not a reliable method of assessing the contribution that teachers make to student learning. New methods of attestation can be developed as part of a full review of the teacher attestation process.
- Female teachers must be treated equitably in terms of salary and advancement. There needs to be more real equity for women at all levels.

### **Teacher training and certification**

- The current development of links between teacher colleges and higher education institutions should be encouraged so that more students can continue their studies to degree level. The quality of new entrants to teaching needs to be protected and all initial training eventually raised to degree level.
- The current system of re-certifying teachers every five years could be a powerful tool for re-orienting the profession. Its current focus on identifying

the best teachers and paying them more can be expanded to include a general professional development programme that emphasises the new curriculum and the current and emerging pedagogical needs of the schools. Retraining will need to shift to building a professional “team” of teachers in each school. Trainees should be able to select the most appropriate courses and institutions within a “market” of retraining course options.

- In-service teacher education programmes should emphasise key areas such as school leadership, curriculum development, student evaluation, and new teaching methodologies. Civics education needs special attention.
- Provision should be made for the training of trainers in the new approaches and techniques. It would be worthwhile to invest in study visits abroad to appropriate centres for some trainers; this project should receive international assistance.
- Educational research, particularly applied research targeting the priorities of the reform movement needs more support.

## FINANCING THE EDUCATION SYSTEM

### CURRENT PATTERNS

A nation's resources and the financing it makes available for developing its educational system have a significant impact on its success in meeting the needs of the society. Public commitment, community support, parental concern, administrative capacity and the professional competence and morale of teachers are also key factors, of course. In the absence of appropriate financial support for acquiring and allocating funds, the effects of these other potentially positive influences will be muted if not directly offset. A critical concern for the Russian Federation is how to mobilise sufficient financial resources for education, given irregular economic growth, a nascent tax collection system, and a host of competing demands for government assistance. The review team has attempted to address both the current situation in educational finance and to explore what will be needed to align educational funding and expenditure practices with the needs of this changing society.

Financial responsibility is divided along various political levels. The federal level is responsible for financing:

- almost all institutes for higher education;
- 30 per cent of all secondary vocational training schools;
- 80 per cent of all initial vocational education schools;
- a limited number of pre-school and secondary education institutes.

Tables 4 and 5 provide basic financial data relevant to the educational system. Expenditure have been variable, owing in part to disbursements from the Ministry of Finance which fell short of the budgeted amounts. As a result and taking into account inflation, estimates provided by the Federal Ministry of General and Professional Education (MGPE) reveal a real decline of 5 to 10 per cent per year. According to the MGPE, education expenditure as a share of GDP declined from 3.8 per cent to 3.4 per cent from 1991 to 1992. Education expenditure rose to 4.4 per cent of GDP in 1994; by 1996, it was 3.7 per cent. These estimates do not correspond with figures provided by the Goskomstat, the

Table 4. **Consolidated education expenditure, 1994-96**

	1994	1995	1996
GDP (trillion Rbl.)	630.0	1 659.0	2 100.0
Consolidated budget for education (bln. Rbl.)	27 528.7	59 356.7	85 282.0
Education as a percentage of GDP	4.4	3.6	3.7
Education budgets of regions (bln. Rbl.)	22 041.4	48 357.7	70 092.7
<i>As a percentage of consolidated budget</i>	80.1	81.5	82.8
Federal education budget (bln. Rbl.)	5 487.3	10 981.0	15 189.3
<i>As a percentage of consolidated budget</i>	19.9	18.5	17.8

Source: Russian Ministry of Education, June 1996.

Table 5. **Federal expenditure for education in 1996 (estimations)**

	1996 (bln. Rbl.)	Percentage of total
Total expenditure for education	33 903.98	100.0
Direct expenditure	15 189.36	44.8
Pre-school education	473.36	1.4
Secondary	378.38	1.1
Initial VOTEC	3 279.40	9.7
Secondary VOTEC	1 945.94	5.7
Higher education	8 685.30	25.6
Miscellaneous	71.42	0.2
Additional expenditure	1 459.46	4.3
Target programmes	435.10	1.3
Summer holidays	214.00	0.6
Printing federal textbooks	500.00	1.5
Russian Academy of Education	36.00	0.1
Investment and research	274.36	0.8
Federal support for regions <sup>1</sup>	7 867.00	23.2
Targeted transfers for coverage of wage arrears	9 388.16	27.7

1. This is an estimated 20 per cent of the re-allocation of federal funds to poorer regions, which is supposed to be spent on education.

Source: Russian Ministry of Education, June 1996.

federal statistical agency; according to the agency, education expenditure as a share of GDP was 0.5 to 1.0 per cent less throughout this period.

In comparison with OECD countries where the average expenditure lies somewhere between 5 and 7 per cent of GDP, education in the Russian Federation has a lower financial priority. This pattern of priorities can endanger the present level of educational services, and imperil both the quality and the access to education. Investments in human resources are vital for the transition of the

Russian Federation towards a market oriented economy and a democratic society. Although, in the Law on Education (Art. 40.2) the Russian Federation strives for a 10 per cent education share, it would be more realistic to define a strategy for raising the expenditure level to average OECD levels by 2005. Since the economy is expected to improve, this level is realistic and would allow public funding to match the priorities and dedication that Russian teachers and parents traditionally accord education.

Educational financing is organised along vertical lines. The central government sends the norms from the previous year down the hierarchy to educational institutions which estimate their costs and send them on to the *rayon* Department of Education, which makes adjustments and aggregates the education budget with the other sectoral budgets. *Rayon* authorities send their budget to the Municipal Department of Education, which follows the same procedure and sends the revised budget to the *oblast* Department of Education which then sends the entire *oblast* budget to the federal authorities. The MGPE adjusts the budget for inflation and sends its allocations back down the chain of command.

A region's federal education budget depends on its past revenues. Regions rich in natural resources therefore tend to receive substantially more on average per student than less well-endowed regions. This contributes to the growing inequality of educational expenditure across subjects. It has been estimated that the top 16 regions spend approximately one-third more per student than the lowest 18 regions.

Government revenues also depend on an *oblast's* ability to negotiate with central authorities. Regional authorities with a strong track record of implementing innovative education projects are often in a better position to solicit federal monies. For instance, school districts in the Tyumen region have coalesced to establish contractual links allowing them to benefit from economies of scale in information technology and equipment. These contracts have greatly enhanced the bargaining power of schools as a unified body with the federal government.

Educational institutions receive funds in the form of a block grant. Wages, student stipends, and utilities are protected, but school administrators exercise discretion over disbursement in all other areas. No money is tagged, so schools are not obliged to channel a designated portion of the funds for projects mandated by the centre. Fiscal accountability is lacking as a result, and funds can be inefficiently used and misallocated. However, it should be borne in mind that in current circumstances, the discretionary budget exists more in theory than in practice. Some regions, such as Stavropol, Novgorod, Murmansk, Tula, and Kemerova, have begun to introduce programme-based funding which allows authorities to monitor educational expenditure and to re-allocate resources. Inadequate fiscal accountability for block-grant funding can be remedied if financing



methods establish minimum standards and incentives for developing methods for quality development and monitoring.

Tax collection is a serious problem at all levels but is especially critical for educational concerns at the regional and municipal levels. In contrast to the tax burdens in OECD countries, Russian enterprises are responsible for 85 per cent of tax revenues, while individuals contribute only 15 per cent. These high levies contrast with low levels of compliance. Enterprises are not very disciplined about their payments and governmental auditing capacity is inadequate at present to monitor proper payments. Tax collection is highly erratic in Russia and individuals and enterprises employ many strategies of tax evasion. Some parts of the post-Soviet economy are tending to revert to non-cash and barter in response to what are regarded as excessive tax pressures. Workers are sometimes paid in kind rather than cash, reducing the payroll as a basis for taxation. Taxpayers also resent high taxes because they feel they cannot control the budgets, and consider that accountability procedures are inadequate.

On the expenditure side, the government occasionally reacts to urgent pressures by the economic equivalent of extinguishing bush fires in an *ad hoc* and unsystematic manner, using up much disposable income, including international credits. This context makes it very difficult to establish a structured and systematic investment policy whereas tax and budget policies are critical for economic reforms and for political stability. The correlation between economic and tax performance, on the one hand, and political support for the government, is obvious. Russian budgets face a gloomy present, but the future also looks grim. The proposed tax reforms – reducing the number and levels of taxes – and the government's effort to promote the settlement of current debt accounts and enhance response to tax obligations by promising a seven-year moratorium in exchange for current amortisation of tax debts, are steps in the right direction. But steeply rising indebtedness from short-term obligation issues (GKO) considerably limits the leeway for spending. Issuing GKO provided a readily available source of finance as tax collection failed progressively, but amounted to a subsidy for commercial banks which sustains the present unhealthy structure of the banking system. In addition, GKO place unbearable burdens on the budget: they yield a staggering 65 per cent interest and their volume consequently increased in 1996 by 1 billion roubles. By August 1996, 4.7 per cent of the GDP (9.6 billion roubles) went to service the debts incurred from the sale of short-term state obligations (*Segodnia*, No. 173, 21 September 1996).

Teacher salary payments may well be the most notable area of concern in the financing of education. In 1996, the cases of payment arrears became widespread and delays were as long as nine months; the problem was most serious for ensuring teachers that their traditional summer salaries would be paid at the end of the academic year. The extent of arrears differs among the regions and educa-

tion sectors, reflecting the general state of the regional budgets and the unequal tax collection results. Given the sums and their political importance, the payment of teachers' salaries has become a major point of conflict about financial transfers between federal and regional budgets. By spring 1996, an effort was made to address the issue. The pending elections made teachers' salaries a high priority for the federal and regional budgets. However, lack of liquidity – no cash was available – made the problem intractable everywhere. Summer vacation payments, usually before the holidays begin, added yet another burden.

The arrears are an alarming sign of the state of Russian education. In addition to the personal problems for educational professionals, the situation creates critical threats for professional motivation and dedication of teachers which is a major asset of the educational system. Repeating the pattern of arrears in the coming years will encourage even more qualified teachers to leave the profession for other jobs. Salary payments to teachers should therefore be the first priority in educational expenditure; salaries should be treated independently of any dispute on money transfers between national, regional or municipal levels. National and regional authorities should guarantee regular monthly payments.

The salary financing system is just one part of the broad decentralisation occurring within the education system. The Law on Education of 1992 has paved the way for a far-reaching process of decentralising responsibilities. In 1993, the government prepared the federal Programme for education development in Russia to implement the new law; it was met by political and practical obstacles resulting in major regional differences. The Law of 1992 was amended in January 1996 to define a more realistic framework for assigning competencies.

The federal government has concluded agreements with 58 regions for the implementation of the law and the decentralisation of administrative responsibilities. No agreement has yet been reached with the remaining 31 regions, but the process is set to continue. It is important that this process be maintained because it more effectively adapts education to local conditions than would a more centralised system. Most regional authorities have shown a great sense of responsibility for preserving the quality of education and their budgetary priorities often reflect this; indeed, the regions give more budgetary importance to education than does the federal budget.

Decentralisation stumbles on the poor alignment of financial responsibilities with the increased responsibilities and competencies at decentralised levels. The regions have an array of funding possibilities to deal with this problem and to shape their strategies that results in budgetary uncertainties for some areas and a generally inappropriate degree of regional variation. The federal authorities will need to specify a clear strategy for accelerating the decentralisation process by linking budgetary responsibilities with decentralised competencies, particularly

in the poorer regions in need of additional targeted financial support to shape decentralised administrative competencies.

The danger posed by unfunded central government mandates concerns sub-national authorities. Prior to the 1996 elections, for example, a presidential decree (June 7, 1996, N 833) declared that teachers should enjoy the same administrative status and salaries as federal civil servants. The federal Ministry of Education and the regional Departments of Education were asked to implement the decree. This implied a substantial increase in teachers' salaries, for which no additional federal funds were made available. Such unfunded mandates create heightened and often unrealisable expectations and should be avoided.

Another systemic concern is the lack of transparency within the budgetary process for education. Budget allocations from the central to the lower administrative levels are markedly opaque. The federal government collects certain taxes on the regional level, the regions collect taxes and those that are donor regions contribute to the regional fund. In December 1996, there were eight donor regions, namely: Moscow, Samara *Oblast*, Lipetsk *Oblast*, Sverdlovsk *Oblast*, Tatarstan, Bashkortostan, the Khanty-Manse autonomous region and the Yamalo-Nenetsy autonomous region. Municipalities collect municipal taxes and contribute to the regional budget. Fund re-allocation among the regions or municipalities is usually based on a number of traditional indicators, and funds are transferred in the form of lump sum payments. Despite the attempts at regulating the relationship between the federal and regional levels, and at providing long-term stability, political and administrative practice still obeys the imperative of expedience. The proceeds from the federal taxes are re-channelled into the territorial budgets according to rules of thumb. Regular subsidies are complemented by the financial flows arising from special federal programmes, which in fact may be politically motivated regional subsidies. In September 1996, there were six unsubsidised regions and the number is expected to decrease since there is no incentive for "sponsoring" regions to share their surplus with the "rentier" provinces. Three years ago, the number of donor regions was still 34 (*Segodnia*, 24 September 1996).

Regional tax proceeds are distributed according to federal priorities, e.g. in Tomsk region, 43 per cent goes to the federal budget, 15 per cent to the *oblast* budget and 42 per cent remains in the municipality. Since tax compliance is very low, some regional administrators employ special tactics in order to ensure their share of the income is not absorbed by the federal budget. In the first line, they encourage mutual clearing schemes and issue promissory notes, a process that the Ministry of Finance opposes since it reduces the Federation's share. Regional administrations are using the consumers' co-operatives (*raipotrebsoiuz viz. kraipotrebsoiuz*) which supply consumer durables or foodstuffs from debtor enterprises to the creditors of the budget (e.g. teachers).

## APPROACHES FOR THE FUTURE

The regions are justified in stating that the round-trip money flows between the centre and the provinces entail unnecessary costs. For example, by transferring payments through bank accounts for state procurement orders and taxes for the producers concerned, the banks profit and the state and the producers lose, especially since budget payments are notoriously late. The Volgograd *Duma* has therefore appealed to the government to eliminate the value-added tax and the profit tax for those producers. The regions are victims of decentralisation because the Federation imposed new tasks on them without providing adequate concomitant funding, and they are now burdened by the transfer of the social institutions of enterprises from below; this alone doubled their budgets. Occasionally, regional budgets finance operations that come under federal jurisdiction voluntarily, when there is no available federal funding for an objective with high regional priority (e.g. salaries of secondary school or university teachers). Thus, in Tomsk *Oblast*, the teachers in the subsidised municipalities receive – or do not receive – their salaries directly from the *oblast* budget, since communal administrators tend to redirect funds, for example to energy supply.

As on the federal level, stipends, salaries, taxes and social security contributions, and school meals constitute four protected areas in regional and municipal budgets. Whether cash payments are made or not depends, however, on real cash flows into the budgets and whether or not emergencies arise. Regional and local administrative good will and benevolence are no substitute for tangible financial resources.

Current budgetary processes lack transparency. This is due partly to complexity and partly to inadequate record maintenance and reporting. The process also remains dependent on budget construction based on “historical” expenditure levels. Inadequate performance in the lower administrative levels has, in a number of cases, had to be resolved at higher levels (for example, wage arrears). This keeps more centralised structures in place and fails to provide incentives for innovation or improved performance among local or regional authorities.

Budget transfers from higher to lower levels should incorporate incentives for improved performance. A more targeted system using formula-based funding, for example, based on principles of accountability and output evaluation, could increase both the transparency of the process and the efficiency of its operation. Improving school performance can be promoted by rewarding schools for innovative initiatives, and by providing matching supplemental funds raised at the local level. Programmes that encourage cost-effective measures should also be initiated. Incentives could also usefully target schools that want to create partnership arrangements with employers and school networks. This kind of system might require additional funds but in the longer run, a more cost-effective use of the

education budget will, in all likelihood, yield savings. Such an incentive-based approach to funding should be set into place immediately, even if current fiscal constraints mean that it can only be initiated on a small scale.

The system of financial responsibilities for the different types of schools is complicated and there is a certain overlap. In initial and secondary vocational education, the budgetary situation is not transparent because ministerial, federal, and regional responsibilities are mixed and some schools receive support from all levels. The current system increases the tendencies towards fragmentation of schools and school types. Decentralisation would shift responsibilities for all institutes below higher education to the regions. Vocational education and training need to be able to respond to local labour markets in a flexible way. Implementing this process can only succeed if responsibilities are redelegated at the same time as agreements are made for transferring budget resources and assets.

There are many forms of private financing for education, including parental assistance to some public institutions. Private schools have been set up throughout the Russian Federation. According to the Law on Education, if these private schools are licensed by the educational authorities, they have the right to funding at least equivalent to that given to state schools (Article 41.7 of the Law on Education, modified in 1996). Some schools are supported by companies and their fees can be substantial. A number of private schools are tending to become elite, and accessible to only a very small minority. The extra available resources are spent on teacher salaries, plant maintenance and equipment. A system of co-financing or matching private funds could make private schools more attractive without spending resources on less urgent educational investments, but equity concerns would need to be safeguarded.

It is also conceivable that churches and religious movements share the burden of school support. State schools are secular, and there is no suggestion that the government should move away from this position. And although the Russian Orthodox Church is dominant, many other religions, like the Muslim religion, for example, are developing their sphere of influence because of the new freedoms in the newly democratic Russian Federation. If such systems were to develop, they could significantly disburden the government.

One cannot help but be impressed, too, by the significant resources being devoted to refurbishing orthodox churches, suggesting an apparently powerful and rich religious system. Many countries have education systems run by religious organisations and churches that are often partly government funded, giving a blend of church, individual or parental, and state financing. Such schools usually adhere to the normal state curriculum, but add a religious ethics and set of values which many parents prefer. These schools usually include some religious instruction in line with the orthodoxy of the church's teachings. Whether such a development should be supported in Russia is for the government to decide, but it could

provide a mechanism for redirecting some of the costs of education without raising the problems of “education for profit” as religious groups usually consider themselves to be “non-profit” institutions.

Another source of revenues for education in many regions is a 1 per cent tax on enterprise payrolls or profits. The way funds are allocated among regions and municipalities varies widely, and they are spent for different purposes. In many cases, they are used to cover regular expenses that could not otherwise be paid. In other cases, the funds are used to stimulate targeted or innovative activities. Although there is a severe crisis in the regular education budget and paying wage arrears and plant maintenance are priorities, it would be advisable for the educational authorities to reserve a substantial part of the special regional education tax fund as an incentive for innovation and development within the education programme, and pay regular expenses funded from other sources. This fund could be earmarked for co-financed innovative projects particularly in curriculum, standards and evaluation (Chapter 4) and could be awarded on a competitive basis. It could also match funds that schools or municipalities have acquired from third parties. These incentives for innovation can encourage schools to adopt new initiatives and to play a more dynamic role in the transformation process.

The search for new and additional funds is recent. In a number of cases, partnerships between schools and state enterprises have been preserved, where in others, new sources have been found, largely by marketing school products or training courses. In addition, student fees are being raised in some schools. These extra sources of income are essential. Article 47 of the Law on Education of January 1996 allows schools to develop such business activities and encourages them to reinvest the income earned directly into the establishment. The need to survive has led educators, administrators and parents to be very ingenious and tenacious in finding new approaches that yield real solutions for many problems:

- Finding sponsors.
- Sales. At Tomsk Polytechnical, 10 per cent of the students are enterprise grant students/*tseleviki*, *kommercheskie* students and 20 per cent of the budget comes from contracted research.
- Concentration and mergers, between village and school libraries, for example.
- Increased self-sufficiency. Having school meals supplied from school garden produce, for example.

It is nonetheless important that regional and district or municipal authorities continue to support schools from traditional tax sources while schools search for additional financial assistance and create their own means of income. The authorities could, for example, bring together schools, local enterprises, chambers of commerce, and others to discuss closer links. The contingency plans of local

administrators reveal that they continue to hold education in high esteem. If financial erosion continues, regional and local budgets will phase out funding for culture, then health, and only last for education.

Changing demographic patterns and declining student numbers in some areas make it possible to save money by closing or amalgamating small schools. As in most countries, there is usually some local resistance to school closures and implementing this policy would require sensitivity and flexibility. Current legal restrictions would make it difficult to pursue a policy of school closure in the Russian Federation yet it should not be shied away from. Educational and economic arguments favour school rationalisation. The quality of education available to children in small and ill-equipped schools can be seriously affected by a *laissez-faire* attitude towards the re-organisation of school provision. The review team was not in a position to examine first-hand small, remote schools with declining pupil populations, but it concludes from the information available to it, that a more productive policy of school re-organisation should be pursued where the circumstances warrant it.

As state funding has plummeted, higher education institutions have also had to search hard for revenue. In many cases this means looking to regional governments. This has the potential to lead to a closer connection between institutions and regional economy. It also means that universities are turning to a wide range of entrepreneurial activities. University units have been created to engage primarily in short-term, contractual training programmes outside the formally structured university curricula. This was evident during the institutional visits made in conjunction with the OECD review of the European Commission/TACIS training centres for Russian military officers. In Krasnodar, for example, Kuban State University is developing essentially a “university” parallel to its formal faculties capable of initiating a wide range of training programmes responsive to the immediate needs of government, schools, and enterprises in the region. Retraining Russian military officers is just one such entrepreneurial operation. By having the benefits of EC/TACIS support to purchase equipment (state-of-the-art computers) and to create special training for instructors, the university can also use these assets to serve other clients and generate revenue. There are also other benefits to this extra-university unit. It can hire faculty staff, which might include some regular staff interested in earning extra income, on a short-term contract basis at substantially below the unit cost of full-time. Where there are minimum external performance requirements, the university can “process” students through these entities on a per capita basis without having to prove to the funder that the student was in attendance or obtained the training promised, for example. In Krasnodar, the university “training” centre clearly had the potential for out-distancing and even replacing the traditional university because it was more responsive to the rapidly changing needs of the region. Ironically, the director seemed

intent on replicating within his “innovative” unit the same staff and prestige structure of the traditional university.

These issues also raise the problem of flexibility. Russian universities appear to have little flexibility to restructure their traditional faculties in response to new demands for example, for disciplines leading to professions in demand in the emerging economy (business, law, humanities and especially foreign languages). They have had to maintain faculties where demand is waning (e.g. physics). Universities have benefited indirectly from the staff exodus to private enterprises and may have been spared the problems associated with reducing staff in low-demand fields.

In the long run, it is advantageous for Russia to develop systems of finance and management so that universities can generate non-public revenues to support their core missions. This will require forms of institutional governance very different from those put in place by the reforms of the late 1980s. As was noted earlier, rectors whose election and authority derive primarily from the approval of their staff will not be well positioned to make the kind of difficult decisions necessary to focus the missions of Russian universities.

It remains to be seen whether an entity as distant from day-to-day university operations as the State Committee for Higher Education (now a part of the MGPE) will be able to provide external guidance, limitations and occasional prohibitions, to channel university entrepreneurial activity in ways that will advance institutional quality. It is particularly important to the Russian Federation that these entrepreneurial activities ultimately serve critical public purposes such as ensuring equity in access, enhancing the population’s knowledge and skills so that it can function and compete in a democracy and a market-driven global economy.

The review team was impressed by the initiatives taken by various Russian agencies to establish links with international bodies or institutions. Such partnerships have great potential. Universities have established useful links and undertaken significant joint initiatives in such areas as management training, teacher in-service training, curriculum planning, assessment and evaluation, distance education and educational technology. The review team very much encourages such co-operative activities; when they are well planned and share a clear and common sense of purpose, and work to a structured process and time-frame, they can yield valuable benefits. Mechanisms should be in place so that positive outcomes can be feasibly implemented in other contexts. Continuous, informed international support for the education reforms should help modernise the system and improve its efficiency and effectiveness.

Many additional topics related to educational efficiency should be mentioned here. For example, the great variety of schools widens the choice for students and can help meet market needs, but it may also cost the system its



flexibility if there are no smooth transitions among the different types of schools. In addition, students can lose time, and increase time to graduation if they have to repeat courses or take less relevant ones because they have changed schools during their studies.

There also are many highly specialised schools. However, if a student wants to specialise in areas other than those offered at the most proximate schools, he or she might have to travel substantial distances. These could be reduced if more generalised curricula existed locally. There are also schools that teach a limited number of specialisations, which occasionally can be very independent from one another: agriculture, welding, sewing and banking, for example. Some educational scale economies may exist among such disparate specialisations and would emphasise the value of school networks and partnerships.

The quality of education has rightly received a very high priority at all levels. Quality is traditionally defined in terms of the attention paid by teachers to students (the better the student-staff ratio, the higher the quality), substantial curricular attention to culture, the amount of services for students (food, holiday camps, etc.), and the scientific research and numbers of prize winners among students and staff. Many schools have tried to preserve features of the previous regime, as much as possible.

Teacher-student ratios are very favourable compared with those of the OECD countries. In the regions visited, they varied from 1:8 to 1:16 for the primary and secondary education sectors. In general, small classes are given priority and are directly related to the quality of education. The ratio is influenced by a tendency to fragment subject area responsibilities among the teaching staff. For example, in a primary school, different teachers might teach drama, dancing, crafts, drawing, and sewing, each with their own classroom. While this may be excellent for students, it may not be the most cost-effective in a time of severe budget constraints. It is socially and politically important to keep teachers employed but the relative over-supply of teachers undoubtedly exerts a negative effect on average salary levels in the profession.

Another potential dis-economy exists in the admissions process to higher education. Students must take two separate exams; the final exam of secondary education makes a student eligible to enter higher education whereas an institution-specific entrance exam regulate selection. Although good arguments may exist for this double exam system, it burdens the students and is not necessarily cost-effective from a macro-educational perspective.

An appropriate system is needed for more effectively using educational resources through school shifts. This would stimulate a more optimal use of buildings, equipment and teaching materials. It might also allow some teachers to increase their incomes and give students greater flexibility during their studies as

well as increasing work-study possibilities. However, the renting of school buildings to private firms should not be allowed to infringe on pupils' school time.

In general, efficiency within the educational sector does not receive adequate attention. Limited budgets make reduced expenditure an important alternative. Economising does not mean accepting lower quality but it does require eliminating wasteful practices. Increasing budget pressure can lead to premature discussions about which activities should be discontinued, rather than engendering a more general discussion on where money could be saved. The result of the present practices will be to maintain some activities, regardless of their level of effectiveness, while sacrificing other, perhaps better, programmes. The first priority should be to encourage innovation and adaptation; only those individuals and institutions that cannot adapt should be considered for funding cuts. A qualitatively and financially sound educational system requires discussion about effectiveness and cost issues at all levels. The question here is whether the system has long-term system viability, which includes programme affordability and sustainability.

While exciting new goals have been set for education in the new Russia the transition era has brought setbacks. The highly motivated teaching personnel, the willingness of parents to invest in the education of their offspring and the problem-solving skills of administrators trained to manage turbulence and emergency situations have been key factors in ensuring the survival of the system, and in some contexts, its progress. Some adjustments are now necessary to lay the foundations for a better future. Education depends on general economic trends, but it is also a prerequisite for a functional economy. Russia must still find its niche in world markets. This strategic decision concerns the economy and education equally and simultaneously. However, major decisions affecting the future of education have to be made outside of education proper. Tax policy for example must be guided by an imperative of reducing the tax burden, especially since compliance levels sink as taxes go up. It is equally important to increase the share of taxes earmarked for regional and local budgets, since local administrators are under the direct pressure of local problems and can respond more adequately. Ironically, Russian unity may be more greatly threatened by increased financial centralisation than by its contrary. Today, Russia is faced with the great dilemma of trying to retain an elaborate educational infrastructure and some of the strengths inherited from the old regime, while seeking to promote new policies and practices seen as integral to building a new society. This historic task is being undertaken in the context of a major financial crisis.

Measures to upgrade Russian education run from short- to long-term. The most important task at this point is to preserve the potential of Russian education until substantial upgrading becomes possible again. Meanwhile, priorities have to be decided among the many worthwhile aspirations for reform. Not all changes

require major funding. Cost efficiencies, restructuring, improved management and some significant new procedures, as outlined in this chapter and throughout the report, can do much to preserve the potential of the system and clearly indicate the way forward. A historic new direction for a great nation is afoot. The realisation of its goals and aspirations for educational reform requires time and better economic conditions. The Russian Federation has set out on a courageous path. It is important that progress to date be carefully analysed, that clear and well informed directions are set for the long-haul process, and that the morale and commitment of those who implement the changes are sustained and buttressed by improving economic conditions.

## **RECOMMENDATIONS**

The difficulty of financing educational reforms is, without a doubt, one of the greatest problems facing the Russian government. No panacea exists. The hope is that, in the longer term, an economic recovery will also bring more satisfactory conditions for financing the system. Nevertheless, intermediate steps can be taken to make improvements. Everything possible should be done to improve the current situation; education depends on general economic trends but it is also a prerequisite for a functioning economy. Education must become more of a government priority; the government needs to spend more on it. The system needs a serious overhaul both in terms of tax rates and, more importantly, in terms of tax compliance. Expenditure needs to be more transparent and less bureaucratic. The decentralisation process is being hampered by the fact that the decentralisation of financial responsibilities has not been sufficiently aligned with increased responsibilities at decentralised levels. The use of the regional tax levy should be improved. Expenditure on various areas of education could be reassessed and made more cost efficient and services can be improved. The review team has specific recommendations for improved financing.

### **Education as a financial priority**

- The government of the Russian Federation must give higher financial priority to education to avoid imperilling the present levels of educational services. It is important not to starve key new developments of the resources they need to take root.
- The implementation of the 1992 Law on Education (modified in January 1996) has not sufficiently promoted the decentralisation of financial resources in line with the increased responsibilities at decentralised levels. This results in budgetary uncertainties and inappropriate regional variations. The federal authorities must specify a clear strategy for speed-

ing up decentralisation by linking budgetary authority with decentralised competencies.

- The current budgetary process of transfers – from federal to regional, regional to municipal and district, and by all levels to schools – is not fully transparent and remains dependent on budget construction based primarily on “historical” expenditure levels. This preserves existing structures and fails to provide incentives for innovation or improved performance. Formula-based funding could greatly advance both budget transparency and accountability within the budgeting system.

### **Reducing the tax burden and increasing compliance**

- The pattern of increasing tax rates is matched by decreasing levels of compliance. It seems imperative to reduce the burden, but to concentrate on improved compliance.
- Current tax laws should be rewritten so as to provide incentives for entrepreneurs to support education and training, particularly VOTEC, language teaching and civics.

### **Balancing efficiency and effectiveness**

- Efficiency has not been adequately attended to or promoted, and this touches programme affordability and sustainability. Existing activities have been maintained regardless of their effectiveness and innovation has not been encouraged. A qualitatively and financially sound educational system requires a discussion of the balance between budget effectiveness and efficiency at all levels of the Russian education system.
- All regions visited have an education tax fund based on either enterprise payroll levels or profits. This creates a capacity for financial assistance to the regular educational expenses or to innovative activities. A substantial part of this fund should be reserved as an incentive for educational innovation and development, and regular expenses should be funded from other sources.
- Schools and universities should be encouraged to continue their efforts at raising alternative sources of funding, apart from public funds. Care should be taken, however, not to disadvantage schools in the most impoverished regions.
- The text of the review has indicated a number of areas where dis-economies seem to exist and the team urges judicious action on such issues to save resources and to improve efficiency.

- Action by the Russian authorities on various recommendations for improvements made in this review would strengthen the case of the Russian Federation for more international assistance as it strives to achieve a better education for its people under difficult conditions.

## **TOWARDS STRATEGIC REFORM MEASURES**

As it charts its way to a new political, economic and social order, the Russian Federation has set out a very ambitious agenda for thoroughgoing educational reform. It recognises that education will play a crucial role in helping to bring about and sustain the new Russia and that the envisaged reforms will affect policy, administration, curriculum, assessment, vocational education and training, participation in education, the teaching profession and teacher education, etc. These changes must be made in a context of significant financial constraint. The review team has been asked to analyse the current state of policy and practice and to recommend possible improvements. It approaches its task with great respect for Russian educational and cultural achievements and with an awareness of the historical significance of what the Russian Federation is seeking to achieve in this transition era. The review team sees itself in a constructive partnership with Russian personnel as they grapple with their problems.

The preceding seven chapters examined many central elements of the education and training system and made recommendations for each theme under review clustered at the end of each chapter. While some proposals could be put into practice in the near future, others will clearly require a longer time frame before they can be fully implemented. Taken together, the recommendations are extensive. It is considered best that the Russian authorities establish a hierarchy of priorities for implementation in the light of their first-hand experience and knowledge of the circumstances. In guiding educational change of this magnitude, it is important that the perspectives of immediate, near-term and long-term needs are borne in mind as integral parts of a comprehensive planning process. Building a new educational future is a “long-haul” process. It is hoped that the many specific recommendations of the review team will be of assistance at each stage of that process.

This final section of the review aims to highlight a number of the over-arching and key strategic directions for the reform. The review team supports the overall policy trends now under way within the Russian Federation and has sought to base its recommendations on a framework of basic guidelines. Some of its recommendations will help to consolidate the ongoing reforms being undertaken by the

Russian authorities while others may draw attention to particular problems and share new perspectives for appropriate action. The team seeks to emphasise practical steps and incremental rather than sweeping systemic change and considers this a timely moment in which to engage in an appraisal of the educational system. In this context, it aims to reflect new thinking, consistent with Russian culture and traditions, about the policy tools most likely to be effective means for the Ministry of General and Professional Education to strengthen a sense of common purpose and coherence across the Russian Federation, while stimulating and supporting widely differing approaches to achieving common purposes. While any reform movement of magnitude must address many specific issues, it is important that the fundamental strategic policy directions are kept steadily in view. This section seeks to emphasise those considerations.

The review team considers that it would be beneficial to shift the policy focus from meeting the needs of providers (institutions and schools) to meeting those of children, young people, students, adult learners, and the communities of the Federation, and that it would be better to reflect a preference for relying on incentives and market-type mechanisms rather than decrees and regulations, to achieve public purposes. It is also desirable to emphasise the use of non-governmental organisations, networks and associations to stimulate and sustain change. The region or subject, is focused on as a principal locus for change, in observance of the diversity in needs, capacities and cultures across the Russian Federation. The team was concerned to seek ways for Russia to recognise, develop and renew its human resources within the education and training system (e.g. teachers, at all levels, institutional and school leaders), and to organise the system towards general human resource development throughout the society.

The team considers that international networks and communication can be very valuable particularly where there is a two-way exchange to support change within the Russian Federation and more importantly, to increase other nations' understanding and appreciation of the strengths and problems of the Russian education system. Education is not, of course, a discrete, compartmentalised entity. The team considers that resolving education issues depends strongly on the capacity of the government of the Russian Federation to address non-education issues such as the relationships between the federal government and subjects, and changes in financing policy to support education reform. The following summarise some overarching, strategic directions for policy, as a conclusion to the foregoing report.

### **EDUCATION GOALS, ACCESS, AND OPPORTUNITY FOR ALL**

While the Russian Federation clearly aspires to shape its education system in the light of new goals, a more co-ordinated and cohesive statement of the principles and values underpinning this new policy is needed. The statement should

give greater emphasis to the goals of extended adult and continuing education, the structure and role of higher education, and the forms of liaison between the education system and the social partners. The welcome emphasis on individual development and self-realisation needs to be balanced by a concern for the goals of co-operation, mutual help, and teamwork. Education will need to play a crucial role in fostering a new civic culture for a democratic society, and international assistance should be sustained for this purpose. The Russian Federation faces serious difficulties in actually realising its goals of equal access and opportunity in education. The review team urges that more attention be paid to average and below average pupils and to pupils at risk of dropping out and being alienated from the system. Unless their needs are addressed and receive more attention in educational policy, serious consequences will ensue for social cohesion. Russia needs to develop and implement broader procedures for identifying and removing barriers to equitable access and progress by students so that they can maximise their abilities within the realistic limits of human and financial resources.

## **CURRICULUM AND ASSESSMENT**

The review team endorses the emphasises of curricular policy and the new structures for formulation and designing school curricula. Sustained efforts are required for the successful dissemination and implementation of a child-centred curriculum with teaching styles appropriate for encouraging the requisite skills for the social, political and economic roles that are emerging in Russian society. Learning outcomes must better stipulate what students actually know, understand, and can do, and curriculum assessment materials need to be based on these. A National Testing Centre, together with regional agencies, is needed to develop and implement monitoring and evaluation procedures that assess individual and group progress, and identify needs for remediation and curricular and management reforms. This centre could develop and test testing methodologies and make them available to regions and schools. It could also carry out research and train assessment specialists. The centre could be a clearinghouse for ideas and data, and bring together the best of current Russian and international thinking and experimentation in educational assessment. The full federal and approved lists of textbooks should be immediately published and widely distributed and at least all core textbooks should be available on time and free of charge to all pupils, who are legally entitled to them. Efforts should be made to promote a competitive market for producing textbooks and teaching materials.

## **TEACHERS AND TEACHER EDUCATION**

The success of the educational reform movement in Russia will largely depend on the quality, skills and commitment of its teaching force. It is important,



and indeed urgent, that steps are taken to protect and support the status of the teaching profession. This entails securing adequate salaries for teachers, which is essential. In addition, a reliable data bank on the teaching force is needed. Teacher deployment should be reviewed with attention to pupil-teacher ratios, given declining student populations. All initial teacher education should be raised to degree level. Initial and in-service teacher education should include a heavier emphasis on curriculum development, assessment, child-centred teaching methodologies, civics education, remedial teaching and collegial work patterns contributing towards whole-school activity. In-service programmes on school leadership and best practice lines are vital. Investment in the training of trainers with international assistance would give rewards. Educational research needs to target reform priorities.

### **REFORMING VOTEC WITHIN A CHANGING ECONOMY**

Because of the close connection between the VOTEC system and employment, the Russian Federation faces a special challenge in reforming VOTEC to meet the realities of a fast-changing economic and social milieu. The review team's analysis leads to the conclusion that successful long-term policy requires that VOTEC be modernised, undergo structural change, and systemic reform. The infrastructure of vocational institutions needs to be improved so that provision can be rationalised. The regional authorities should have more power to distribute and define the role of vocational schools while federal authorities should observe the principle of "progressive specialisation" placing greater emphasis on flexible skills and transferable core competencies. Special efforts need to be made to foster new linkages between the VOTEC sector and employers so that employers actively engage in policy formulation and the promotion of VOTEC. Firms need to become more pro-active in providing continuing education and retraining their employees.

### **MANAGEMENT, FINANCE AND THE ROLE OF GOVERNMENT**

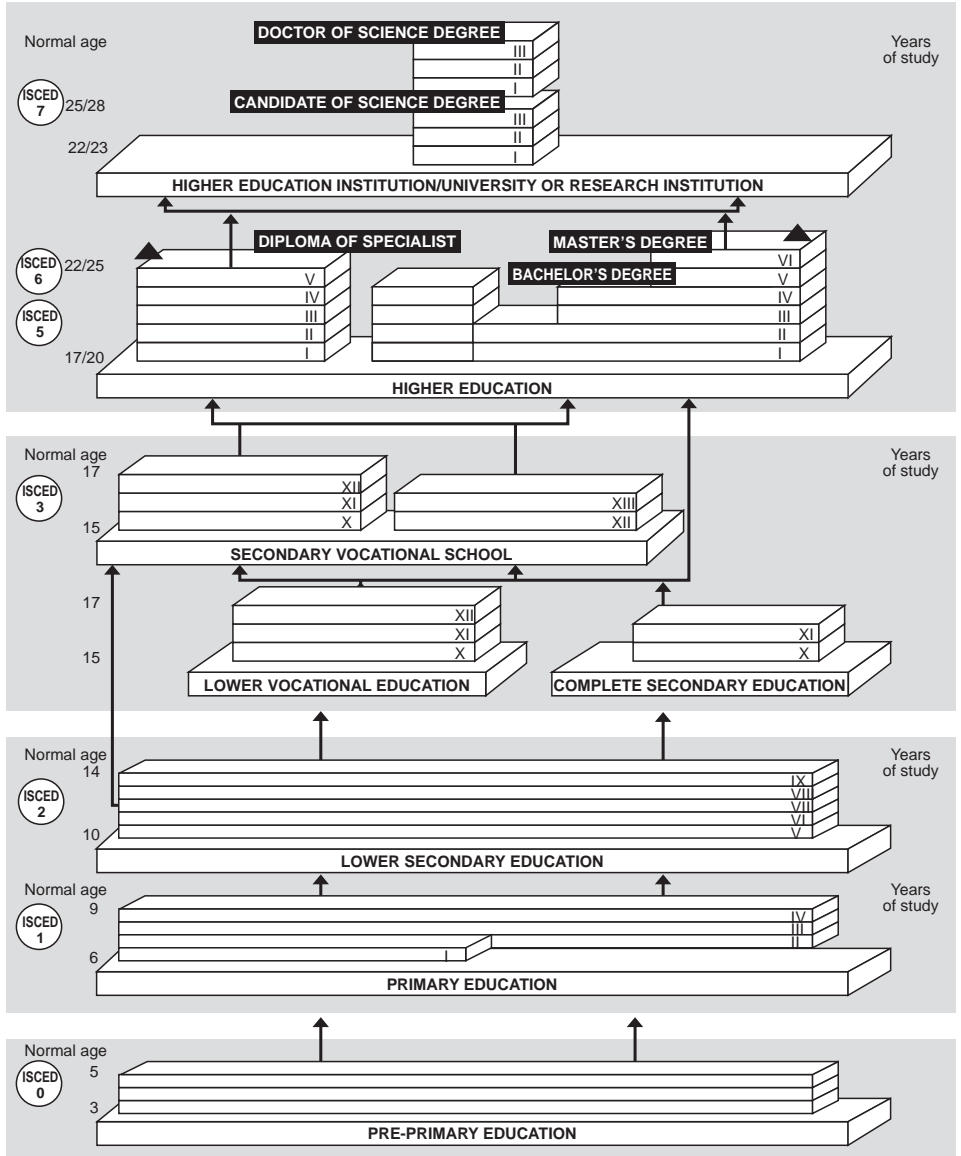
The process of decentralisation should be sustained. Rights and responsibilities should be more clearly delegated among the tiers of management. The review team considers that the status of the MGPE needs to be raised, its internal organisation improved, and closer links established between it and cognate ministries. The agreements between the MGPE and the subjects should be extended and more co-ordination between such agreements promoted. Management training at all levels is crucial for efficiently running education programmes and institutions. In particular, regional leaders should receive management training, including international exchange, to improve regional education planning, co-ordination and policy developments. Horizontal and vertical information and database

systems need enhancement both internally, for the education and training systems, and so that there can be better reporting on educational trends, progress, and problems. It is desirable to reform the financing and budgeting of education and training activities to assure transparent allocation processes and efficient use of educational resources. The percentage of GDP assigned to education should be increased.

*Annex 1*

## **RUSSIAN EDUCATION SYSTEM**

Russian education system



*Annex 2***LIST OF EXAMINERS**

Steven Bakker (the Netherlands), Director International Projects, National Institute for Educational Measurement (CITO).

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Peter Grootings (the Netherlands), vocational and technical education consultant; formerly of the European Centre for the Development of Vocational Education (CEDIFOP); currently based in Poland.

Lubomir Harach (Slovak Republic), Member of the Parliamentary Commission on Education; former Minister of Education.

Hans Georg Heinrich (Austria), Associate Professor of Political Science, University of Vienna; advisor to the Central Electoral Commission of the Russian Federation.

Marc Jessel (United Kingdom), EC-TACIS, Uzbekistan; former Moscow representative of the European Training Foundation and former staff member of the British Council.

Markku Junkkari (Finland), Head, Vocational Education and Training Unit, European Training Foundation; former Managing Director, Finnish Training Partners (FTP).

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Georg Knauss (Germany), former Ministerialdirigent with the Bavarian Ministry of Education; former Chairman of the Schools Committee of the Standing Conference of Education Ministers in Germany.

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