

Target 3:

Ensure that by 2015 children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

The MDG initiative has identified two indicators for the achievement of universal primary education – net enrollment and literacy of 15-24 years olds. The MDG report on Kazakhstan in 2002 establishes the percent of the primary school-age population at the level of 98.8% in 1990 and at 99.5% in 1998. This is interpreted as nearly universal. The same report places the youth literacy rate in Kazakhstan at the level of 99.9% for both men and women. Thus, it was stated that MDG 2 has been achieved in Kazakhstan.

Significance for Kazakhstan

According to the Constitution and Law on Education adopted in 1999, general compulsory secondary education, which is now 11 years, is mandatory for everybody. Secondary education includes primary (grades 1-4), basic (5-9), and secondary levels (10-11).

Government policies are aimed at ensuring universal access to and high quality of secondary education. This is the first aim of the State Program for Developing Education in Kazakhstan in 2005-2010. At the same time, the situation Kazakhstan inherited from being a part of the Soviet Union (1920-1991), as well as many geographical, economical, ethnic, and socio-cultural issues make achieving and sustaining this double goal a complex challenge.

The situation in primary education in Kazakhstan is tightly connected to the overall situation in compulsory general secondary education as primary education is a part of it. While the MDG Goal 2 Target 3 has been achieved, further challenges in the whole system of secondary education remain and newly emerge. The main challenge is to ensure universal access to high quality secondary education for all children in all regions and from all social groups. Monitoring the access to and quality of secondary education will be a basis of ensuring that the achievements in this area are sustained.

Kazakhstan has also joined the UNESCO Education for All process. EFA goals stress quality and access to general education, especially paying attention to girls, minorities, and disadvantaged children. At the same time, quality of education is as important in the EFA process as access. The EFA Global Monitoring Report of 2005 argues that «merely filling places called «schools» with children would not address even quantitative objectives if no education occurred»⁵². EFA Goal 2 is to ensure that by 2015 all children, especially girls, children from disadvantaged backgrounds, and ethnic minorities have access to free and compulsory high quality primary education and are able to complete it. This goal is directly synergetic to the MDG2 as well as with the main aims of the State Program for Developing Education in Kazakhstan in 2005-2010. Achievements in the direction of MDG2 should therefore be assessed on the basis of that complex framework of goals: MDG2, EFA, and the State Program.

⁵² EFA Global Monitoring Report 2005, p. 28-29.

MDG 2 progress in Kazakhstan

Although MDG2 has been achieved as measured by the MDG indicators, assessment on the basis of the broader framework of goals of MDG2, EFA, and the State Program sheds light on remaining issues.

Access to secondary education is unequal and school attendance at basic and secondary levels is not universal, despite the fact that school is compulsory. Due to economic difficulties, there is a lack of about 500,000 study places⁵³. In 1999/2000 the percentage of school attendance in primary and basic education (grades 1-9) was 96% and in upper grades (10-11) 87%. In the following academic year (2000/2001) these figures were even lower in higher grades – 99.8% attendance of primary school (grades 1-4), 92.6% in basic education (grades 5-9) and only 79.1% in upper secondary education (grades 10-11)⁵⁴. According to MoES, in 2003/2004 2943 secondary students did not attend school for 10 or more days. 2341 of these students were brought back to school. However, these figures seem not to cover all the percentage of those who actually do not attend school. Also, according to the data provided by the Ministry of Internal Affairs, there are about 22,000 school-age youngsters with deviant behavior⁵⁵. This is a group at risk of dropping out of compulsory education, if they have not dropped out already. In addition, families living in poverty have only restricted possibilities of sending their children to school (see below). This indicates that there may be different groups who for different reasons are deprived of access to secondary education.

There are also concerns about the **quality of secondary education**. According to the results of the Unified National Testing, which was introduced in 2004 but piloted in 2003, the outcomes show a tendency towards decline. The test results of graduates of rural schools and schools with Kazakh as the language of instruction were comparatively lower than the results of graduates of urban schools and schools with Russian as the language of instruction. This is an indication of disparities in the quality of education.

Access to education

Rural /urban

Access to secondary education in Kazakhstan is significantly different for children in urban areas than it is for children in rural areas, rural children being often in a disadvantaged position.

In the beginning of 2004/2005 there were 8,221 schools in Kazakhstan. Of these, 6,080 (74%) were in rural areas. The rural schools were attended by 47% of the overall number of students⁵⁶. Thus, the problems of rural education affect about a half of the overall student population in Kazakhstan. Among the rural schools were 1,158 primary schools (14% of the overall number of schools in Kazakhstan), 1,154 basic schools (1-9 grade, 7% of the overall number) and 3,741 secondary schools (45.5% of the overall number). There were only 12 schools for children with special needs and 24 schools with curricular emphasis on learning certain subjects in rural areas.

The network of schools does not cover rural areas evenly. In 2002, there no schools in 492 settlements, 593 villages had no primary and 625 villages no secondary school⁵⁷. Those numbers are increasing due to the policies of optimization. In 2003, 101 schools were closed, but only 35 opened⁵⁸. The number of rural schools in 2003/2004 was 1% lower than in 2002⁵⁹. The causes cited by the MoES are migration processes and a decline in birth rates, which result in a lack of school-aged children in an increasing number of settlements. However, the tendency to opt for closing schools negatively affects access to education for the children who still live in these areas. In 2002, more than 30,000 children had to travel between 5 to 40 km to reach school⁶⁰.

Access to education in rural areas is also restricted because of the poverty situation. At the same time, rural schools often operate in premises that need repairs, and the cost of inevitable improvements are to be covered by parents. Parents also buy school uniforms, textbooks, and other learning materials, which are hardly affordable for many low-income families. In 2001, 0.5% of school-age children from low-income families did not attend school, one-third of them because of insufficient resources or health problems⁶¹.

Equity in access to quality education in rural areas is also impaired by the drawbacks in the quality of education. Rural schools are very often small schools with multi-grade teaching, for which the teachers do not have sufficient training and experience. The staffing of rural schools remains a problem; many teachers are forced to teach subjects for which they do not have the necessary educational background.

⁵³ State Program for Development of Education in Kazakhstan in 2005-2010 www.edu.gov.kz.

⁵⁴ The Right to Quality Education: Creating Child-Friendly Schools in Central Asia. UNICEF, Almaty 2002, p. 29.

⁵⁵ Presentation by the research company Sange at the round-table on the drop-out problem organized by the Education Center Bilim-Central Asia, Almaty, February 2005.

⁵⁶ Secondary schools in Kazakhstan in the beginning of the year 2004/2005. Voume 1. Almaty, 2004, p.5.

⁵⁷ Kazakhstan: Achievements, Issues and Prospects. A Perspective by the United Nations. UN, Almaty, 2004, p. 32.

⁵⁸ Education and Science of the Republic of Kazakhstan, 2003 (Informational statistical materials) p. 11. www.edu.gov.kz.

⁵⁹ Living Standards and Poverty in Kazakhstan. Statistical Monitoring. Agency on Statistics of the Republic of Kazakhstan, UN TG on Poverty Alleviation. Almaty, 2004, p. 37.

⁶⁰ Kazakhstan: Achievements, Issues and Prospects. A Perspective by the United Nations. UN, Almaty, 2004, p. 32.

⁶¹ Rural Development in Kazakhstan: Challenges and Prospects. Kazakhstan 2002. UNDP, Almaty, p. 40.

Ways to solve the problems of rural schools are sought at regional (oblast) level. In different oblasts, different approaches and strategies are envisaged to alleviate the situation. For example, in Akmola oblast the education department is conducting a feasibility study for a distance education program for rural schools. In Kostanay oblast a program of boarding schools for children from remote villages is being implemented.

Solving the problems of rural education and ensuring access to quality secondary education in rural areas, however, requires measures at national policy level. The overwhelming remaining issue is a lack of resources at different levels – for school construction and repairs, for inducements to qualified teachers to choose employment in rural schools, and for support to children from low-income families. The Government is carrying out the medium-term program Rural School (Aul Mektebi), under which construction and repairs of schools in rural areas are being financed. To support low-income families, the program Vseobuch (Universal Education) is in operation. It is necessary to make a thorough evaluation of the success of these programs and, based on this, develop further strategies for improving access to education in rural areas.

On the other hand, many schools in cities and towns work in 2 to 4 shifts, which is a significant stress factor and can hinder learning. In the fast-growing capital city of Astana, 10% of schools work in 4 shifts, although the percentage of students in the third and fourth shifts is small (Please refer to the Annex, Table 2.A). The effects of learning in different shifts would be an important topic of further detailed research. It can be expected that not all pupils fully benefit from learning activities in the second half of the day. If the need to conduct schooling in different shifts is inevitable, the schools may need to adapt pedagogy to different learning conditions. To this end, forms of non-formal learning organized by schools may prove effective as complementary to formal lessons. To implement flexible solutions for learning, schools would need less rigid administrative and accountability frameworks.

Vulnerable groups of children

One of the most vulnerable groups of children with regard to quality education is the group with special needs. Currently, there are 101 different specialized correctional institutions for children with different special needs⁶². The total number of students attending these institutions is 22, 800. Still, there are approximately 120,000 school-age children with special needs, and only one-third of them are learning in specialized institutions⁶³.

A strategic question should be asked on how to improve the situation. Should big investments into further development of the network of specialized institutions be made, or should alternative ways to take care of children with special needs be sought? Teaching children with special needs in specialized institutions in fact means segregating a large group of the cohort of learners from their peers. One alternative to this is inclusive education, which is a complex of special policies and tailor-made programs to provide in-service training and support to ordinary schools so that they can retain as big a

number of children with different special needs as possible in the mainstream path of secondary education.

Several steps have already been taken in preparation for the inclusive education approach in Kazakhstan. (Please refer to the Annex, Table 2.B). The choice of inclusive education requires significant efforts and changes in many sub-systems of the education sector. In order to enable children with physical disabilities to attend mainstream schooling, school facilities need to be adapted to their needs. This is possible in the case of new school buildings, but can cause great difficulties, both financial and constructional, in most other schools, which are housed in earlier built facilities that are often in need of significant repairs anyway. An even more challenging need connected to inclusive education is that content regulation, standards, and assessment also need to change. First of all, however, the practice of inclusive education depends on teachers' qualifications in the area of special needs education, in-service training, and professional pedagogical support.

Inclusive education also requires a network of specialized support and consultancy for the children/students with special needs. Such a network of psychological-medical consultancy points, correctional points, rehabilitation centers, and centers for speech therapy is already evolving (Please refer to table 2.C).

Another group of children in need consists of those from poor backgrounds. In Kazakhstan, 57.7% of the working age population and 33.5% of children were poor in 2002, according to the State Agency of Statistics. This means that one-third of children are in a very hard position with regard to their educational opportunities. A vicious circle is thus created since education has been proved to be a significant factor in poverty reduction, and restricted educational opportunities in their turn result in the «transfer of poverty from generation to generation». To improve access to education for children from low-income families, complex measures and significant resources are needed.

A specific group of educationally impaired or vulnerable children consists of the children of oralman, or ethnic Kazakhs who have migrated or re-migrated to Kazakhstan from other countries where Kazakh diaspora is living. According to the preliminary results of a study of the children of oralman in Shymkent, conducted by Kazakh National University, the most apparent problem with regard to access of these children to secondary education is that cultural traditions of some families do not expect that girls will stay in school after they turn 15 or 16.

Also, some oralman families who migrated for example from Afghanistan, Iran, or Pakistan do not speak either Kazakh or Russian and their children can therefore hardly participate in school learning.

It would be very important to address both problems with individualized tailor-made support to the children of oralman. Regarding cultural traditions, a longer communication with the families, in order to integrate them into the cultural values of Kazakhstan, may be needed. Such communication would also serve the purpose of working towards the goal of offering quality education for all, including girls. Concerning language problems, shorter measures may suffice. Developing a strat-

⁶² Secondary schools in Kazakhstan in the beginning of the year 2004/2005. Voume 1. Almaty, 2004, p.9

⁶³ State Program for Development of Education in Kazakhstan in 2005-2010, p.11 www.edu.gov.kz.

egy should be the first step to providing a strategic solution to these problems regarding oralman.

Ethnic minorities and multicultural education

Kazakhstan is a multicultural society that represents more than 100 nationalities. This rich cultural fabric is a powerful asset to the development of the country indeed. Offering different languages of instruction is an essential approach to providing quality secondary education to children from different ethnic backgrounds.

Secondary education in Kazakhstan is provided in five main languages of instruction: Kazakh, Russian, Uigur, Uzbek, and Tajik. As the schools with Kazakh and Russian as languages of instruction are spread evenly throughout the country, schools with Uighur, Uzbek, and Tajik as languages of instruction are situated in the regions where these languages are mother tongues of a considerable percentage of children. In 2003/2004, in South Kazakhstan oblast, 0.158% of pupils in secondary education were studying in Uzbek and 0.005% in Tajik; in Almaty oblast 0.0051% and in the city of Almaty 0.016% of secondary students studied in Uigur; in Zhambyl oblast 0.04% of secondary students studied in Uzbek. (Please refer to the Annex, Table 2.D).

The number of schools with Kazakh as the language of instruction has increased during recent years from 44.3% in 2000 to 45.9% in 2003 (Please refer to the Annex, Table 2.E). This is connected to the policies supporting the development of Kazakh as the state language. At the same time, the number of schools where Russian is the only language of instruction has decreased from 29.4% in 2000 to 26.8% in 2003.

Quality of education

Qualification of teaching staff

About half of the teachers in both urban and rural schools in Kazakhstan have higher education (Please refer to the Annex, Table 2.F). At the same time, 32% of urban teachers and 7% of teachers in rural schools have college qualifications. This indicates that 18% of urban teachers and 42% in rural areas are not properly qualified, which is a serious challenge with regard to ensuring quality education for all. To ameliorate the situation it would be necessary to launch targeted training programs in the mode of distance learning or by correspondence provided by teacher education institutions.

There are 34 higher education institutions and pedagogical colleges offering accredited teacher education following 19 different curricula. As the need for new teachers is growing, the state policy is to offer more grants for free training to new entrants. From 2001 to 2004 the number of grants grew from 5,655 to 6,075.⁶⁴

At the same time, there is a problem with the graduates entering employment in schools. In 2003, the number of graduates with qualifications in school pedagogy was 14,400, but only 6,817 (47.3%) entered employment in schools. The efficacy of teacher education is thus also a problem. Of those who entered employment in schools in 2003, approximately half went

to rural schools, which is roughly in proportion with the overall share of rural schools.

The problem of teacher-trained graduates seeking employment not in schools may have several causes. These most probably start with the selection of students, which does not include testing the motivation and predicting the professional adaptability of new entrants. This makes it easy for students to enter teacher training without actual desiring to become a teacher, but just to obtain a higher education certificate. To avoid this it would be very necessary to introduce complex testing of motivation and professional adaptability as part of entrance requirements. At the moment, entrance to teacher education at the university level is based on the results of the applicant at Unified National Testing, which is narrowly based on school subjects.

The dominating cause, however, is most likely that the teacher training programs are weakly connected to school practice, and the graduates have not been sufficiently introduced to their future job. Student teaching for six weeks (in Kazakh National University) is clearly not sufficient in duration and is, according to some anecdotal evidence, often spent in a formal way, without the student teacher identifying him/herself as a temporary member of the pedagogical community. Also, the courses taught in the education of teachers are overwhelmingly theoretical, with little (or formal) practical assignments. This of course varies to some extent between different universities and colleges.

Improving teacher pre-service training is a major task on the way to ensuring quality secondary education for all, as it is directly connected to the quality of learning and education. Especially considering the prospective changes in content regulation from subject knowledge-centered to development of competencies, it is paramount that the necessary thorough changes in teacher education curricula be made as soon as possible; new teachers entering schools in 2008 should already have skills in competency-oriented teaching.

Teachers' in-service training is provided by regional in-service training institutes and, for educational administrators, at the central institute in Almaty. There is a requirement that every teacher has to pass regular in-service training every 5 years. However, the capacity of the institutes is not sufficient – each year 54,000 teachers should pass the courses, but in 2001 42,784 did so, and 48,157 passed in 2003 (MoES). The other question concerns content and quality of in-service courses. They are mostly as theoretical – or even more – than pre-service courses, and for the most part have a normative-instructive character. As a consequence, teachers who attend these courses get information that today everybody can access through literature and the Internet. In-service as well as pre-service training also model for the (future) teacher how to act in a pedagogical situation, and informational-theoretical courses can only strengthen beliefs that teaching is about conveying information.

In the educational NGO sector in Kazakhstan there is considerable capacity in new child-centered teaching methods, citizenship education, environmental education, and other important areas of teachers' professional development. There is also

⁶⁴ State Program for Development of Education in Kazakhstan in 2005-2010, p. 16 www.edu.gov.kz.

a long tradition of innovative pilot projects in subject teaching and integrative methods in a large number of Kazakhstan schools. A promising way of enriching the possibilities and approaches of in-service training would be to set up certification procedures for the NGO sector and schools.

Content of education

After gaining independence in 1991, Kazakhstan has made continuous improvements in the secondary curriculum. In 2002, a complex description of the content of secondary education, State Standards, was adopted. In their overall approach, the Standards of 2002 still follow the former prescriptive model of content regulation, which defines items of knowledge, skills, and capacities (znaniya, umeniya, navyki) to be obtained in a large number of scientific domains (13-23 study subjects, depending on the level of secondary education).

A Concept Paper approved by the Government as basis for the State Program for Developing Education in Kazakhstan in 2005-2010⁶⁵ admits that the system of education in Kazakhstan is based on out-dated methodology and content. The State Program for Developing Education in the Republic of Kazakhstan in 2005-2010 defines the change of curriculum towards an outcomes-oriented model as one of their main aims. The term «outcomes-oriented» means that the new system will be based on a normative framework of expected outcomes, which substantially differs from the present content regulation, which is input-based (defining what knowledge to learn when, and how much time will be needed). The outcome-oriented model also creates a firm link with assessment and quality assurance, which so far has been diffuse and not reliable as the first results of Unified National Testing show.

The outcomes are at the same time defined not as the remembering of facts and the performing of narrowly defined tasks, but as the developing of general and specific competencies⁶⁶. The competencies will be defined at three levels – general competencies, subject area expected outcomes, and subject-based outcomes. Along with this change, content regulation will concentrate more on general competencies and nine areas of study – language and literature, human studies, social studies, mathematics, informatics, science, arts, technology, and physical education – rather than a much bigger number of subjects.

This vision of further development of content regulation includes many factors, which are essential for ensuring quality education for all. First, it allows for a balanced differentiation of content and quality control as the expected outcomes are defined more broadly and will involve higher order skills like critical thinking and problem solving. This means that content can be differentiated to some extent in accordance with the interests of students. It also allows for school-based curriculum development and community involvement. Further, defining expected outcomes in terms of competencies creates a better link with the labor market as the expected outcomes can be negotiated with employers. Even more importantly, develop-

ment of competencies can and should include development of life skills, which are a crucial deficiency in the present curriculum content.

The implementation of such a model requires, however, great effort, investments, and first of all, the development of new thinking and skills in teachers and education administrators. It would be very important to further involve international expertise in the development of new curricula. If this model is implemented only formally, for example competency-based curricula developed by groups of educators without specific training, the good sides of the model can be impaired and the changes in content will not bring about better and more appropriate learning for students.

Life skills based education

In Kazakhstan, the present Standards of Compulsory General Secondary Education do not include developing life skills. The Standards are oriented to learning facts. Although the vision of changes in content regulation allows for the inclusion of this component in the official National Curriculum, before the new curriculum is developed it is important to find and endorse alternative ways to compensate for the lack of attention on life skills. This can be done in the form of extracurricular activities included in the school development plans, which are mandatory for each school. It should be recommended that international experience in this field be studied and taken into consideration.

Activities for developing life skills can also be connected to community education. There are significant development projects in community involvement in Kazakhstan, which can be scaled up for this purpose.

Use of ICT

In 1997, the President of Kazakhstan initiated a program for the informatization of secondary education. According to the MoES, by 2003 all schools had already been equipped with computers and on average there was one computer for 57 students (the rate ranging from 20 in Atyrau to 85 in the South Kazakhstan oblast)⁶⁷. Moreover, in 2003, already 1,821 schools, 893 of them in rural areas, were connected to Internet. In 2001, the program started to develop electronic learning materials and multimedia programs for the upper grades of secondary school.

According to the report of 2003 by MoES, another specific program of informatization was developed for 2004-2006. Under this program, a national center for telecommunications has been established. Also, a central network of telecommunications connecting all regional education departments has been developed. In addition, a pilot project on distance education for rural schools is being implemented. In 2003, 667 schools in 4 oblasts already participated in the program. With UNESCO, a web-site for pre-school was launched.

Furthering these developments is essential for providing high quality secondary education for all. The next steps could

⁶⁵ The Concept of Development of Education in the Republic of Kazakhstan by 2015.

⁶⁶ Materials for elaboration of the National standard of general secondary education of the Republic of Kazakhstan. MoES, Kazakh Education Academy. Almaty, 2004, p. 24

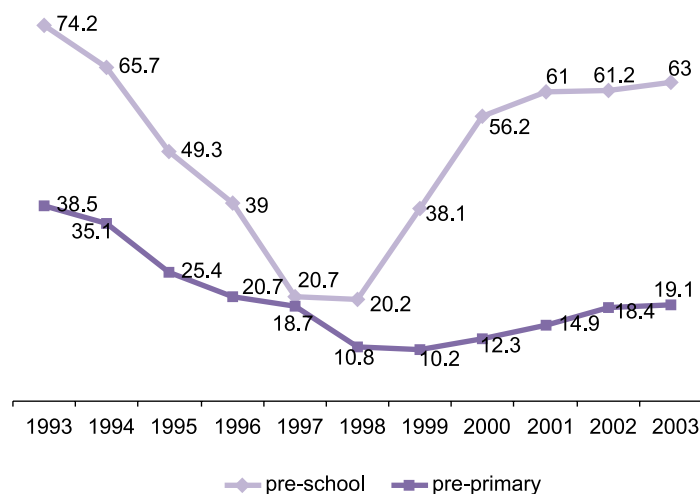
⁶⁷ Education and Science of the Republic of Kazakhstan, 2003 (Informational statistical materials); p. 25-31; www.edu.gov.kz

focus on providing specialized computer-based learning possibilities for children with special needs and on stimulating joint computer-based cross-curriculum learning projects for all levels of secondary education. ICT in schools also opens new perspectives for cooperation between schools and local communities, especially in rural areas. Local schools are often the only information centers in local areas, and finding ways to provide computer access to community members can be a good basis for tightened cooperation. Cooperation with similar centers of excellence in other countries, including the former Soviet Union, can be very productive. Big national programs of school computerization where these aspects are at the top of the agenda are being implemented for example in Estonia and Georgia⁶⁸.

Enrollment in pre-school

The first goal of the EFA, agreed on in Dakar, is to expand and improve comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children. Early childhood and preschool education is considered an issue of importance internationally as there is a growing understanding supported by research evidence that a good and equal start at learning determines significantly the success of children and young people in their future educational careers. Therefore, universal access to quality early childhood and pre-school education is seen as a strategic question of education reforms. In this sector of education Kazakhstan faces probably the biggest challenges with regard to achieving the internationally agreed-upon goals and targets of MDG and EFA as well as the main goals of national policies.

Graph 2.1. Enrollment in pre-school organizations and pre-primary education, 1993-2003



Source: State Program for Development of Education in Republic of Kazakhstan in 2005-2010.

In the second half of the 1990s, the percentage of children attending kindergartens was declining drastically due to a newly introduced financing scheme, which put a heavy burden on parents. In 1999, compulsory 1-year pre-primary school was introduced for 5- and 6-year olds. This was – and remains – a Government policy for enhancing access to pre-school education. Since then, the percentage of children in the age group attending is growing.

⁶⁸ Please, refer to www.tiigrihype.ee and www.htk.tpu.ee/TLG.

At present, 40% of 5-year olds and 60% of 6-year olds are attending this compulsory program. In 2003, a complex of teaching and learning materials was introduced in pre-primary settings. These materials are available to 40% of pre-primary students, and are paid for by local authorities.

Despite growing numbers of attendance, access to pre-school education remains a problem. As soon as possible, it is important to reach the level of universal pre-school education, which is an international practice in developed countries – and also corresponds to EFA goals. A priority should be to ensure that the most vulnerable children – those with special needs, those in deprived situations economically or geographically, and those from different ethnic backgrounds – will have good opportunities to take the first steps in school as this will considerably enhance their future progress. Special programs and financial schemes should be developed for that purpose. According to the State Program, currently 52,000 children with special needs are not attending kindergartens or pre-schools, and the number of special education groups is declining in several regions.

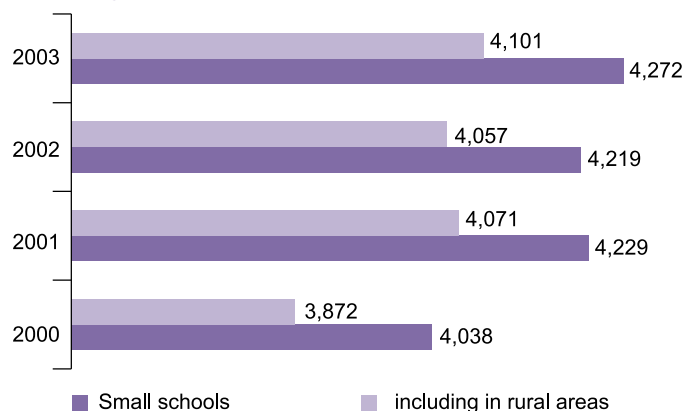
In the beginning of 2005, the new Minister of Education and Science stated the targets of guaranteeing pre-school education to 30% of children of the relevant age group and 1-year pre-primary education for 75% of the age group. As for (primary and) secondary education, the goals are to ensure equal access and raise the quality of education. For these goals to be accomplished, an extended program of building new school facilities will be launched.

Small schools

There is a growing number of small schools in Kazakhstan – according to MoES, in the last five years the percent of small schools (with less than 40 students attending) grew by 4.5%.

The problems connected to small schools include: availability of qualified teachers, availability of learning materials and equipment, school facilities in dire need of repairs due to lack of local financing because of the poverty situation, and poor teacher access to in-service programs on teaching multi-grade groups.

Graph 2.2. Number of small schools in Kazakhstan, including in rural areas.



Source: Education and Science of the Republic of Kazakhstan, 2003 (Informational statistical materials), p. 11. www.edu.gov.kz

There are regions where most of the schools fall into this category – in Northern Kazakhstan oblast 85.6% of schools

are small, in Akmolinsk oblast 77%, in Kostanai oblast 73%, in Pavlodar oblast 72.2% and in Eastern Kazakhstan oblast 59.2%. This poses a national dilemma with regard to quality of and access to secondary education – in small schools it is not easy to ensure a high quality of education, but reducing the number of schools and concentrating them will negatively affect access.

The Government program for developing rural schools *Auyl-Mektebi* concentrates on the construction and repair of school facilities. It would be equally important to develop special programs for teacher training, possibly by correspondence or distance education, and for providing learning and teaching materials and equipment to small schools.

Language of instruction

Different languages of instruction are a challenge to the education system in terms of teacher training, in-service training, and development of learning and teaching materials. The provision of teacher training for teachers in ethnic minority schools (Uigur, Uzbek) is currently not meeting actual needs. The provision of textbooks is also still insufficient. To sustain quality in minority schools, allocation of significant funding is required.

The first results of Unified National Testing at the end of secondary education have shown that, on average, the achievements of graduates of the schools with Kazakh as the language of instruction tend to be lower than the achievements of the graduates of Russian schools. This is certainly an indication of a gap in educational tradition in the Kazakh language, which was caused by the ethnic and language policies of the former Soviet Union. For example, at the end of the 1980s, there were only two schools in the city of Almaty with Kazakh as the language of instruction. The government is paying much attention to the renewal of educational and cultural traditions in Kazakh. However, the actual needs with regard to the quality of education in Kazakh schools suggest that more targeted professional efforts are needed along with promotion of the use of Kazakh as the state language.

A new Government initiative is to pilot trilingual teaching in schools. The declared policy is that in schools in Kazakhstan, Kazakh, Russian, and English should be used equally to ensure the capacity of graduates to communicate both locally and internationally. The methodology of this program needs to be further thought through in order to ensure the quality of learning for all, primarily in mathematics and science, and the knowledge of terminology of mathematics and science in Russian and/or Kazakh, which is essential for further studies in the universities in Kazakhstan.

Monitoring and evaluation in the education system

In Kazakhstan, the concern over the decline of the quality of education has been expressed repeatedly at different levels of policymaking, including the Concept of the Development of Education until 2015⁶⁹. In response to this concern, two policy tendencies are evident – to foster the development of a specialized set of schools for children identified as talented, and to emphasize the reliance on external assessment. Also, the new National System of Evaluation of the Quality of Education, which is under development for all levels of education, foresees heavy reliance on external assessment.

In general, the educational policies of Kazakhstan to date have been based to a significant extent on the categorization of children and young adults into specialized educational paths. This is a feature common to other CIS countries. The Law on Education of Kazakhstan for example defines elite education as a specific type of schooling. Following that legislative policy, a growing number of schools for the talented and schools of a new type, with different biases in the curriculum and corresponding entrance requirements (frequently with selection of the entrants to 1st grade) have been established. On the other hand, youngsters with behavioral problems (deviant behavior) are sent to educational establishments under the control of the Ministry of Internal Affairs, and children with special needs are sent to specialized institutions.

The decision to assign children to different paths (schools) is partially based on medical evaluations and observation of behavior, but partially also on formative assessment of learning outcomes in schools, which makes the stakes high. Formative assessment of learning outcomes is also used in the administrative accountability of schools, which makes the stakes high not only for the learners, but also for teachers and school administrators.

Specialized ‘innovative’ schools for children identified as talented, with an extended curriculum in some subjects, currently have 664,500 students in attendance, which is approximately 22% of all learners in general secondary education. According to the data provided by the Ministry of Education and Science, among these schools, 33 directly specialize in children identified as talented. There are 115 gymnasiums, 62 lyceums, 69 schools with some study groups following the lyceum program, 249 schools with some study groups following the gymnasium program, 45 schools with curriculum profiles stressing some subjects, and 2201 schools with a deepened program in some subjects. This is an extensive system. A question that probably needs to be asked by policy makers is: What are the actual consequences of the separation of a significant percentage of learners in specialized institutions, and how does this help to achieve the improvement of access to quality education for all, which is a national priority and also a goal of the EFA?

The understanding of outside assessment defined in the Concept of the Development of Education until 2015 also includes international assessments, starting with joining international assessments like PISA, TIMSS, and others. So far, no decisions in this direction have been made, however. Thus,

⁶⁹ The Concept of Development of Education in the Republic of Kazakhstan by 2015

the discussions on the quality of education in Kazakhstan still remain without input from international comparisons, which is not fully in accordance with aspirations to join the international educational space.

In 2002-2004, a system of national testing to be administered at the end of secondary education for university entrance was introduced. This system also indirectly influences the first two levels of compulsory education by stressing teaching and learning for tests. The tests are overwhelmingly knowledge-centered and thus orientate the whole school system in a different direction than the development of competences, which is proposed in the draft framework documents. In addition, there is already evidence that the new system considerably raises inequality in secondary education by setting standards so high that private tutoring is necessary for success. There are already centers in each oblast, which provide tutoring for tests for fees.

The State Program for Development of Education in the Republic of Kazakhstan in 2005-2010 approved by the President of Kazakhstan in October 2004 includes a provision for sample-based monitoring of learning outcomes at the end of 4th grade. The tests are to be administered in mathematics and the mother tongue. The Ministry of Education and Science is currently preparing a methodological basis for such an approach to system-wide quality assurance. This is a promising approach, taking into account the best practice internationally, and has the potential to reduce the deeply rooted positive view of assessment for administrative accountability. At the same time, the plan is to introduce school-based tests at the end of every term (4 times a year). Although this is already a wide practice, making it more rigid may again add to the selectiveness of particular schools. It would be important to involve international expertise in the development of this new system.

It is crucial for further improvement of access to quality secondary education that the new system of quality assessment be carefully designed to meet the declared goals. In international practice, there are many examples of how a policy-oriented external assessment system can revert the intended pedagogical practices towards more control of factual knowledge rather than the development of competencies, which is the envisaged approach of the new National Curriculum for 12 years of secondary education. The national system of evaluation and monitoring of learning outcomes should involve assessment at all levels of secondary education; however, the approaches to assessment can be different as shown by the best international practice.

Educational management information system

Steering the education system towards achieving quality secondary education for all educational administration needs high quality and useful data for making informed decisions and preparing policy proposals. Now in Kazakhstan, there is already an ample amount of data gathered from schools each year. Data gathering is based on 9 national and 15 inner system statistical accounts. Filling and controlling the forms is a heavy task for each school principal and educational department at the local and regional level. The exercise of gathering data has taken such dimensions because over the years newer and newer forms have been introduced based on different political and administrative priorities over time and not on proper analysis of informational needs of different parts of the education system and stakeholders in the society.

For effective administrative decision making and steering secondary education at policy level it is necessary to introduce a well planned and designed educational management information system (EMIS). The EMIS is based on careful analysis of informational needs of different functions (players) in the education system and its main role is to integrate different kinds of data for the purposes of management, research, and the planning of education⁷⁰. For the EMIS to function, infrastructure and personnel need to be established at all levels of educational management – school, raion department, oblast department, and central level (Ministry). Responsibilities and information flows in the system need to be carefully planned and coordinated.

To use the gathered data more effectively in policy development, indicators need to be developed on the main policy aspects of the functioning of secondary education⁷¹. A system of indicators makes it possible to easily get a picture of both the current balances and proportions in education and the tendencies over a certain period of time. Getting such a picture from raw statistical data means laborious work for anybody who attempts it and usually neither administrators nor policy makers are able to take time for that. Thus, the ample amounts of collected data stay almost unused. This is also the situation in Kazakhstan.

To enhance policy development and the monitoring of policy implementation as well as for more informed administrative and management decision making it is highly necessary that Kazakhstan establish an educational management information system. This will be the basis for ensuring improved access to quality education for all.

⁷⁰ L. Carizzo, K. Savaggio, N. Bella. Use of information systems for education development plans elaboration and monitoring. Series: Education: policy and strategy 5. UNESCO, 2003, p. 13-14.

⁷¹ L. Carizzo, K. Savaggio, N. Bella. Use of information systems for education development plans elaboration and monitoring. Series: Education: policy and strategy 5. UNESCO, 2003, p. 56-82.

Financing of education

The financing of education in percentages of the GDP has grown during recent years: from 3.1% in 2000 to 3.8% in 2004. The share of secondary education was 2.3% of the GDP in 2000, 2% in 2001, 2.2% in 2002 and 2.3% in 2003 (Please refer to the Annex, Tables 2. G and 2.H).

At the same time, a bulk of the financing is provided by regional (oblast) budgets, which are considered part of state financing for education. In 2000, 86.5% of the financing of secondary education was from regional budgets, and this level has been largely sustained in the following years – 83.3% in 2001; 88% in 2002; and 86% in 2003 (Please refer to the Annex, Table 2.G).

This is an indication of the importance of monitoring regional differences in education financing as the regions (oblasts) have different economical bases.

The dynamics of regional financing for education from 2000 to 2003 is characterized by growing percentages in most regions, the biggest growth reported in East-Kazakhstan (growth by 2.7 percentage points of the GDP), Atyrau, and South-Kazakhstan oblasts (growth by 1.9 percentage points). However, in some regions (oblasts) the percentages have decreased: from 6.9%

to 4.3% in Zhambyl oblast, from 2.6% to 2.2% in Mangistau oblast and from 3.9% to 3.8% in Aktobe oblast.

Increasing education financing is a key to improving access to quality secondary education in Kazakhstan.

The level of state financing for education in order to sustain quality education for all, recommended by the Dakar conference on Education for All, is 6-7% of the GDP. In 2000, the actual total public expenditure on education was 6.1% in New Zealand, 4.7% in Australia, 5.4% in Canada, 4.8% in the US, 4.2% in Chile, 4.1% in Hong Kong, 4.4% in Iran, 6.2% in Malaysia, 5.4% in Thailand, 5.0% in Hungary and Poland, and 4.2% in Slovakia.

Table 2.1. Public expenditure for Education, % of the GRP

Nº	Oblast/City	1997	1998	1999	2000	2001	2002	2003
1.	Kazakhstan	4.4	4	3.9	3.3	3.3	3.2	3.3
2.	Akmola oblast	5.8	4.9	5.2	5.2	-	-	5.8
3.	Aktobe oblast	3.7	3.1	4.4	3.9	-	-	3.8
4.	Almaty oblast	5.7	6.2	6.1	6.1	-	-	7
5.	Atyrau oblast	2	2.2	2.4	1.8	-	-	3.7
6.	East-Kazakhstan oblast	4.4	3.5	3.5	3.3	-	-	6
7.	Zhambyl oblast	7.6	6.4	7.1	6.9	-	-	4.3
8.	West-Kazakhstan oblast	5.6	4	5	3.1	-	-	3.9
9.	Karagandy oblast	3.2	2.8	2.5	2.3	-	-	2.8
10.	Kostanay oblast	3.7	3.3	3.4	2.9	-	-	3.3
11.	Kyzylorda oblast	7.6	8.2	8.1	4.3	-	-	5.2
12.	Mangistau oblast	2.1	2.5	2.7	2.6	-	-	2.2
13.	Pavlodar oblast	4.4	2.1	3.6	2.6	-	-	3.3
14.	North-Kazakhstan oblast	5.5	7.5	5	5.2	-	-	5.8
15.	South-Kazakhstan	5.7	7.1	5.9	5.4	-	-	7.3
16.	Astana city	1.7	4.6	1.5	-	-	-	1.6
17.	Almaty city	1.7	1.6	1.3	1.2	-	-	1.2

Source: Kazakhstan InfoBase. Web-site of UNDP Kazakhstan www.undp.kz.

Non-formal education

In formal schooling as it is organized today, it may be hard to take quick steps towards improving access to and at the same time quality of secondary education for all. Non-formal education can be a helpful approach to enhancing the situation, especially for ethnic minority children, in areas with small schools, and in poverty-inflicted areas.

Non-formal education can be organized in different forms – study circles, computer network based learning projects, extra-curricular activities, and others. It would be most useful in the domains that are essential to high quality secondary education, but which are not focused enough upon the formal curriculum (the Standards). These may include life skills education, environmental awareness, citizenship education, and others.

The development of non-formal education opens up the valuable possibility of enhancing the involvement of civil society, local communities, and NGOs, in achieving the national goal of improving access to quality secondary education. Considerable capacity in different areas, which could be part of non-formal education, already exists in Kazakhstan NGOs. Using this capacity could significantly improve and quicken the process of working towards ensuring quality secondary education for all.

Conclusions

Considering the aim of the State Program for Developing Education in Kazakhstan in 2005-2010 to achieve universal high quality compulsory general secondary education, further strategies need to focus on both access to and quality of secondary education, including universal primary education. A combination of the goals of MDG and EFA forms therefore a good basis for reviewing the needs and options of the further development of education in Kazakhstan. It is also important to find ways to monitor the tendencies in secondary education in order to develop and implement new policies and measures in the course of societal and economic changes. MDG2 and EFA set essential baseline targets to that end.

Universal high quality secondary education can be achieved and sustained when complex targeted efforts are made continuously. Experiences from other countries show that measures at policy level, economic incentives and financial investments as well as improvements in educational administration, teacher training, and classroom pedagogy are essential for the achievement of that goal.

Based on the analysis of the situation from the point of view of the broader framework of goals of MDG2, EFA, and the State Program for Developing Education in Kazakhstan in 2005-2010, it is apparent that Kazakhstan has made good progress in several of these aspects. Designing complex national policies concentrated in the State Program for Developing Education in Kazakhstan in 2005-2010 may prove over time to be the key to further success, provided that the goals and the envisaged changes will be translated into specific well-thought-out activity plans, which are covered with sufficient finances. Once that is the case, ensuring universal high quality secondary education can probably be achieved in Kazakhstan by 2015. The priorities of further efforts to that end should include the following points of leverage:

It is of utmost importance to improve access to quality secondary education for vulnerable groups of children. For children with special needs, inclusive education could be considered as an option, and it would be essential to develop a complex strategy to expand the possibilities for inclusive education

Along with the beginning of the implementation of the State Program for Developing Education in Kazakhstan in 2005-2010, which identifies transfer to a 12-year education with renewal of education content according to an outcomes-based model, it should be recommended that a complex implementation plan including curriculum writing, teachers' in-service training and changes in pre-service teacher training will be developed. As a part of the complex curriculum change, introducing life-skills-based education should be highly recommended.

To improve the effectiveness and efficacy of pre-service teacher training and to involve more schools in innovative work for ensuring quality education for all, the links between higher education institutions and schools need to be considerably strengthened.

The newly introduced system of Unified National Testing is an achievement on the way to ensuring the quality of secondary education. It is equally important to find ways to ensure equal-

ity of opportunities first of all by reducing the need for private tutoring for tests, especially state organized tutoring for fees. At the same time, it is increasingly important to test not only factual knowledge, but also complex competencies like problem solving.

Concerning the use of ICT, Kazakhstan has already achieved much, and, the next steps should be considered and planned. These should involve special attention to children in need. In addition to expanding and updating the technical facilities and continuing to develop electronic learning materials, it should be recommended that providing distance education possibilities for small schools and teachers' in-service training as well as creating computer-based learning networks of students and teachers be considered priorities.

Kazakhstan is making significant efforts to expand pre-school and pre-primary education. To ensure an equal start in education for all children, it is highly recommended that expansion of the network of free-of-charge nursery schools and pre-schools, and necessary measures to ensure quality of learning in these establishments be carefully planned based on the target to provide these educational opportunities for all children of appropriate age group earlier than the year 2015. This will have a considerably positive effect on raising the quality of primary education.

To improve policy development and administrative decision making it is essential that the Educational Management Information System be fully developed at all levels.

It is very important, for ensuring the quality of secondary education, that a national system for monitoring learning outcomes be developed for all levels of secondary education.

Kazakhstan should consider increasing financing for education, paying attention to the reduction of regional disparities.

To improve access to and quality of secondary education, it will be necessary to develop a strategy for non-formal and alternative education. It is recommended that this strategy foresee specific measures for better involvement of civil society, local communities, and NGOs.

Further progress in the direction of providing high quality secondary education for all in Kazakhstan should be consistently monitored. To this end, it is important to develop a system of specific indicators as part of the educational management information system (see also above, p. 14-15). The MDG-2 indicators – net enrolment in primary education and youth literacy rate – do not allow monitoring changes towards meeting the broader framework of goals of MDG, EFA, and the State Program for Developing Education in the Republic of Kazakhstan in 2005-2010. The indicators should focus on potentially sensitive areas like drop-out, settlements without schools and alternative arrangements for school access, special needs education provision, support to children from low-income families, differences in learning outcomes between urban and rural schools and in schools with different languages of instruction, and other. For to be useful in designing appropriate and effective policy response, the indicators should highlight regional differences. Some indicators could be suggested for further consideration and might include for example:

- ✓ School enrolment by levels of secondary education, gender, and region;
- ✓ Percent of students leaving the school they attend not because of relocation of the family (dropping out), by region and cited cause for leaving;
- ✓ Number of study places in boarding schools by region as a percent of the number of school-age children in settlements without school by region;
- ✓ Percent of all children with special needs enrolled in specialized institutions, and in programs of inclusive education by gender, region, rural/urban;
- ✓ Percent of children from low-income families receiving state subsidies for schooling (by region) as compared to the percentage of low-income families in the region;
- ✓ Average results on Unified National Testing by subject, rural/urban location, region, gender, language of instruction.

If needed, the forms of data gathering for statistics should be adjusted to provide data for monitoring the key indicators once they have been approved and finalized by the MoES.

Connection with other MDGs

The MDGs set a baseline framework of goals for human and societal development. MDG2 is one of the keys to overall success as measured against this framework. In Kazakhstan, the most important connections between MDG2 and the other Goals, which are at the stage of interdependence with regard to success, include the following:

- MDG1** Eradicate extreme poverty and hunger: achieving this goal is necessary in order to allow all children in Kazakhstan to go to school. There is evidence of cases in which, due to the poverty situation, school-age children in some rural as well as urban areas are deprived of access to school education. Some of these children may not even be officially registered, which leaves them out of the sight of officials.
- MDG3** Promote gender equality and empower women: this is also one goal of Education for All, which is a part of the broader framework of goals to assess.
- MDG5** Improve maternal health: studies in education show that maternal care is an important factor in school success.
- MDG7** Ensure environmental sustainability: Kazakhstan faces serious environmental problems, which negatively affect the health of a big percentage of children. Ensuring children's health is key to their educational success.