

G.M.Tykezhanova<sup>1</sup>, B.B.Yelshina<sup>1</sup>, K.A.Estemesova<sup>2</sup>

<sup>1</sup>*Ye.A.Buketov Karaganda State University;*

<sup>2</sup>*Karaganda State Medical University  
(E-mail: fizio210@mail.ru)*

## **Prospects, opportunities and challenges of the transition to 12-year education system in Kazakhstan**

The article deals with the transition to 12-year education which is a justified step. Since the negative factors affecting the development of the national pre-school models — old system of evaluation of educational achievements are not able to stimulate students led the transition of the education system of Kazakhstan to world standards. In turn, the 12-year-old system of education makes it possible to take into account more fully the interests, needs and capabilities of participants in the educational process and to more efficiently reallocate training material on curricula.

*Key words:* 12-year education, the education system reform, teaching material development, individual abilities.

The main task of modernizing the educational system of the Republic of Kazakhstan is to provide modern quality education and to bring all the components of the education system in line with current and future needs of the individual, society and state.

In a world on the path of globalization, the ability to quickly adapt to the competitive environment is becoming a major factor of sustainable development. Competitive ability of any developed country associated with the development of its social capital, which is largely determined by the state of the education system.

Reform of the education system, conducted in Kazakhstan, affecting all levels of education, however, the greatest transformation expect senior level secondary school. Modernization of the structure of secondary education is aimed at implementing a 12-year school-based socialization of students with the needs of the labor market, to perfect a flexible relationship with the school institutions of vocational education. This is what determines the competitiveness and sustainable development of Kazakhstan in the XXI century. It was repeatedly said by President Nursultan Nazarbayev. «Enough of us to import education», — said in one of his speeches, the Nation leader noted that we should set a goal aimed at improving Kazakhstan's education to international standards. In addition, it should be noted that in the present conditions are greatly increased requirements for scientific, technological and humanitarian training of young people, which in the future is destined to strengthen the country's position on the world stage [1].

In his message to the people of Kazakhstan «Strategy» Kazakhstan-2050» — a new policy established state» Leader of the Nation N.A.Nazarbayev stressed: «In order to become a developed competitive state, we have to be highly educated nation. In today's world it is not enough to have simple universal literacy. Our citizens must be prepared to continuously acquire the necessary skills to work in the most advanced equipment and the most modern production. It is also necessary to pay great attention to functional literacy of our children, in general, all of the younger generation. It is important that our children have been adapted to modern life».

Going national education system to world standards — a vital topic for parents and teachers. It is no secret that innovation should wear thoughtful character, and the reforms in such a sensitive field — consistently implemented.

At present, significantly increased demands on the quality of training of graduates of educational institutions, which is reflected primarily in their ability to self-consciously make choices and future professional activities, actively involved in solving problems of social and economic development of the country. In connection with this problem actualized improving the educational process in upper secondary school. Its effective solution is primarily due to the construction of educational content based on wide profile differentiation, allowing more responsive to the interests and abilities of students and the needs of society and the state in the formation of socially active and creative personality of a citizen [2].

Go to the 12-year-old school is highlighted in the State program of education development in Kazakhstan for 2011–2020 as one of the priorities of the entire education system of Kazakhstan. This is one of the

key elements of changes in the whole educational sector of the country, which together with other substantial reforms will raise Kazakhstan's education to a new level [3].

According to the Law of the Republic of Kazakhstan «On Education», the State Program for Education Development of the Republic of Kazakhstan for 2011–2020, the structure of the 12-year education includes the following levels (stages) of education:

- primary education (grades 1–4), which ensures the formation of the child's personality, his positive motivation for cognitive processes, the development of their individual abilities and skills in training activities;
- basic secondary education (grades 5–10), which ensures the development of the basic foundations of science, the formation of students' high moral and spiritual culture and the culture of interpersonal, inter-ethnic communication, self-identity and preprofile preparation;
- general secondary education (grades 11–12), providing studying the development of an integrated complete system of knowledge about nature, society and man, the creation of conditions for further intellectual, spiritual, physical growth and development of the individual, the choice for future profession on the basis of differentiation, integration and profiling of content education [4].

Going on 12 years of schooling requires a preliminary study of the basic principles and approaches to the teaching of natural sciences; understanding of the goals of learning the subject, the time sequence of the study of educational material; subject teaching content development, required regulatory documents, in particular, the concept of natural science education 12-year school [5].

The objectives of science education Kazakh school legislation by the Law of the Republic of Kazakhstan «On Education», which states that education should be directed: to ensure the self-determination of the individual, creating conditions for its self-realization; the development of civil society; to strengthen and improve the rule of law. Science education as an integral part of the overall primary and secondary education contributes to the achievement of the overall objectives of the school, providing students mastering the basics of academic disciplines, the development of their mental and creative abilities, forming the scientific worldview. Formation of natural-scientific picture of the world is achieved, provided that the study of natural sciences is primarily a means of ensuring the development of cognitive abilities of the person, expansion of its intellectual capacity, familiarity with that part of human culture, which largely determines the face of modern civilization [6].

Based on the foregoing, the goal of education can be summarized as follows: the formation of a fully developed personality; the development of personal qualities that promote self-identity, creating conditions for its self-actualization, willingness to improve, continuing education, civil society development, strengthening and improving the rule of law; mastering the basics of academic disciplines of educational area «science» of pre-school educational program; study of the main components of natural-scientific picture of the world; the understanding of basic concepts of the scientific method of scientific knowledge and its place in the educational system; development of cognitive interests, intellectual and creative abilities.

Achieving these objectives should be carried out taking into account the age characteristics of students. Each of the defined goals and detail revealed in the subsequent stages of development of normative and methodical documentation of training.

The aims of education are implemented in a particular educational process on the basis of certain didactic principles, forming a system peculiar selection rules for the structure of science education and the selection of the content of educational material. The main didactic principles governing science education, include the following principles: fundamental, availability, scientific, continuity, integrity and consistency.

The principles of education, learning objectives, providing for the formation of multiple personality of the child, the maximum disclosure of its creative potential, allow us to make very specific conclusions about the structure and content of educational programs 12-year-old school [7].

In accordance with the principle of continuity of education study subjects in the 12-year school should be carried out throughout the 12 years of training in the form of three concentrers: at propedeutics in elementary school, systematic, basic school, differentiated, high school, and in high school they The study was conducted taking into account the individual interests of students.

In the first stage, propaedeutic, primary school pupils are introduced to the basic phenomena of the world, studying the course «The world around us». Then, in the first two classes of the primary school (grades 5–6), continued their acquaintance with the basic natural science and natural phenomena such basic techniques of the scientific method as observations, description of what he saw, perform measurements reveal patterns, conducting experiments and predict outcomes [8]. Achieving these goals is possible in the

framework of the integrated course «Natural» and with courses that provide a preliminary substantive specialization in physics, chemistry or biology, where the initial research techniques and skills are formed at the school for an example of science. In the second phase of 7–10 class of primary school it is advisable to study the systematic courses in physics, chemistry, biology, geography compulsory for all students. In the third stage, According to the «Law on Education» in high school, in grades 11 and 12 are studied differentiated courses in physics, chemistry, biology, astronomy, depending on the profile of education (humanitarian, technological, natural sciences and mathematics), selected students and their parents [9].

The transition to 12-year education is a justified step. Since the negative factors affecting the development of the national pre-school models — old system of evaluation of educational achievements are not able to stimulate students led the transition of the education system of Kazakhstan to world standards [10]. Furthermore, under the previous model, there is a lack of personal development, civic and moral qualities of the younger generation, the low level of awareness of their own interests and perspectives.

In turn, the 12-year-old system of education makes it possible to more fully take into account the interests, needs and capabilities of participants in the educational process, as well as more efficiently reallocate training material on curricula. At the same time there are opportunities to create favorable conditions for individual learning.

The introduction of international standards of education will enable Kazakhstan to achieve a number of objectives. First, limit and subsequently reduce available now increase the technological gap with developed countries. Secondly, it will contribute to a comprehensive quality training of graduates. Finally, it provides students with additional opportunities to select individual educational program. Thus will be laid the foundation of becoming competitive person. At the same time, the increase in the period of schooling contributes to the level of general education. It is based on the comprehensive development of the individual [11].

In connection with the transition to 12-year schooling it is necessary to review the content of quality education, school subjects and time spent on their development. In addition, it is necessary to implement a set of measures aimed at upgrading the training facilities of schools, as well as training of the teaching staff. For these purposes MES has developed the concept of a 12-year secondary education in the Republic of Kazakhstan.

According to the approved concept, the 12-year secondary education will contribute to a competitive personality, ready not only to live in a changing social and economic conditions, but also to actively influence the existing reality, changing it for the better.

We welcome the concept, but all training should be ahead of child development or to keep up with him.

Most alarming is the weakness of the mental and physical health of children today. It was found that for almost six years more than half of children have immature psychomotor, emotional and volitional instability, decreased performance, social immaturity, anxiety and aggression. In this regard, for further modernization of education necessary to develop strategic verified and scientifically based directions the organization of all parts of education. Research should be integrated with the participation of psychologists, psychoneurologists, educators, sociologists. Perhaps a certain category can be trained in six-year remedial classes. Unfortunately, it is increasing the number of children with both severe and mild mental and physical disabilities. It is this category of persons should be of special concern, since in terms of attitude towards them has always regarded the level of civilization of the state. Differential diagnosis, forms, methods and content of education, social and labor training, psychological support, employment — this is not an exhaustive list of issues regarding correctional (special) preschool and school institutions of Kazakhstan.

Against the background of environmental and social disadvantage, as well as an intensification of schooling, there is the increasing deterioration of the health of children. This problem is exacerbated in the transition to 12-year education. Most of the children in terms of developmental needs, come to school even in 7 years is not enough ready to learn. School overload that acquire systematic character, are the cause of poor progress or achievement in training gets the price of children's health. Prolonged exposure to these situations cause different behavioral and neuro-psychiatric disorders younger students. What is the way out of this impasse, of this problem of social character and is incredibly growing like a snowball, in anticipation of the transition to 12-year education. Scholars and practitioners need to actively seek effective ways of scientific research protects, gentle children's health, educational technologies. Because the human mind is based on the neurophysiological functioning, it is necessary to pay close attention to these aspects. It is known that the most energy-intensive function at this age is beforehand. That is almost half of the first grade is reduced. Suffer properties such attention as volume, shifting, stability, concentration and fluctuation of attention is a negative factor for kids. Even children with highly motivated school found these features. One of the most common childhood problems is the decline in their performance.

The way out of this situation is to prevent violations of psychosomatic health of students, the foundation, which is the correct dosage of educational tasks and ensuring proper rest [12].

### Conclusion

As a result, Kazakhstan's transition to 12-year schooling will allow to successfully solve the strategic task — to create a new national model of education that can compete with the best foreign analogues.»Enough of us to import education», — said in one of his speeches, the Nation leader noted that in the future will aim to raise the level of the Kazakh education to international standards.

### References

- 1 Конституция Республики Казахстан. — Астана, 1995.
- 2 Концепция развития образования в Республике Казахстан до 2015 года. — Астана, 2004.
- 3 Концепции 12-летнего среднего общего образования в Республике Казахстан. — Астана, 2005. — С. 11.
- 4 Закон Республики Казахстан «Об образовании». Государственная программа развития образования Республики Казахстан на 2011–2020 годы. — Астана, 2010.
- 5 *Омарова Р.С.* Особенности процесса обучения в условиях 12-летней школы: метод. пособие. — Алматы, 2003. — С. 40.
- 6 *Смагулова А.Т., Тулебаева Х.Т. Оразбаева З.Е.* Особенности здоровьесберегающей технологии обучения младших школьников на уроках: метод. рекомендации. — Астана, 2002. — 102 с.
- 7 *Жадрина М.* Поиск условий развития школьного образования в переходе на 12-летний цикл обучения // Педагогика. — 2002. — № 3. — С. 28.
- 8 Проблемы совершенствования структуры и содержания 12-летнего образования в Республике Казахстан: сб. науч.-метод. ст. — Астана, 2002. — С. 36.
- 9 *Ахутина Т.В.* Нейропсихологический подход к профилактике трудностей обучения // Школа здоровья. — М.: Изд-во МГУ, 1995. — С. 160–170.
- 10 *Омарова Р.С.* Особенности процесса обучения в условиях 12-летней школы: метод. пособие. — Алматы: Ғылым, 2003. — С. 40.
- 11 *Павленко В.К.* К проблеме совершенствования содержания обучения в 1-4 классах 12-летней школы: метод. пособие. — Астана: Фолиант, 2004. — 38 с.
- 12 *Садыкова Т.С., Абылкасымова А.Е.* Методология 12-летнего образования: учеб. пособие. — Алматы: Ғылым, 2003. — С. 164.

Г.М.Тыкежанова, Б.Б.Ельшина, Е.К.Естемесова

### Қазақстанда 12 жылдық білім берудің болашағы, мүмкіндіктері мен оған көшу мәселелері

Мақалада 12 жылдық білім беру жүйесіне көшу туралы мәселе қарастырылған, осы жүйеге көшу нақты қадам болып табылады. 12 жылдық білім беру жүйесінің мүмкіндіктері бәсекеге қабілетті және құзыретті, шығармашыл, білімді тұлғаны дамытып және қалыптастыралатын Қазақстанды әлемдік стандарттарға шығаратын жүйе болып есептеледі. Өз кезегінде авторлар 12 жылдық жалпы білім беру жеке тұлғаны жан-жақты қалыптастырудағы жаңа жүйесімен білім мен тәрбиенің ең тиімді мүмкіндіктерін, жолдарын зерттеп, оны ұтымды түрде білім беруге енгізу көкейкесті мәселеге айналып отырғандығын сөз етеді.

Г.М.Тыкежанова, Б.Б.Ельшина, Е.К.Естемесова

### Перспективы, возможности и проблемы перехода на 12-летнее образование в Казахстане

В статье рассмотрен переход на 12-летнее образование, которое является оправданным шагом. Отмечено, что негативные факторы, влияющие на развитие отечественной школьной модели, — устаревшая система оценки учебных достижений, не способная стимулировать учащихся, — обусловили переход системы образования Казахстана на мировые стандарты. В свою очередь, подчеркивают авторы, 12-летняя система обучения дает возможность более полно учесть интересы, потребности и возможности участников образовательного процесса и более рационально перераспределить учебный материал по ступеням обучения.

## References

- 1 *The Constitution of the Republic of Kazakhstan*, Astana, 1995.
- 2 *The Concept of education development in the Republic of Kazakhstan till 2015*, Astana, 2004.
- 3 *Concept of 12-year secondary education in the Republic of Kazakhstan*, Astana, 2005, p. 11.
- 4 The Law of the Republic of Kazakhstan «About Education». The State Program for Education Development of the Republic of Kazakhstan for 2011–2020, Astana, 2010.
- 5 Omarova R.S. *Features of the learning process in a 12-year-old school: Methodical manual*, Almaty, 2003, p. 40.
- 6 Smagulova A.T., Tulebayeva H.T., Orazbayeva Z.E. *Features health of the preserving technology of training of younger school students at lessons: Methodical recommendations*, Astana, 2002, 102 p.
- 7 Zhadrina M. *Pedagogics*, 2002, 3, p. 28.
- 8 *Problems of improving the structure and content of 12-year education in the Republic of Kazakhstan: Collection of scientific methodological articles*, Astana, 2002, p. 36.
- 9 Akhutina T.V. *Health School*, Moscow: MSU publ., 1995, p. 160–170.
- 10 Omarova R.S. *Features of process of training in the conditions of 12-year school: Methodical manual*, Almaty: Gylym, 2003, p. 40.
- 11 Pavlenko V.K. *To a problem of improvement of the content of training in 1-4 classes of 12-summer school: Methodical manual*, Astana: Foliant, 2004, 38 p.
- 12 Sadykova T.S., Abylkasymova A.E. *Methodology of 12-year education*, Almaty: Gylym, 2003, p. 164.