Торайғыров университетінің
ҒЫЛЫМИ ЖУРНАЛЫ

НАУЧНЫЙ ЖУРНАЛ
Торайгыров университета

ТОРАЙҒЫРОВ УНИВЕРСИТЕТІНІҢ ХАБАРШЫСЫ

Педагогикалық сериясы

1997 жылдан бастап шығады

ВЕСТНИК ТОРАЙГЫРОВ УНИВЕРСИТЕТА

Педагогическая серия

Издается с 1997 года

ISSN 2710-2661

№ 4 (2020)

Павлодар

НАУЧНЫЙ ЖУРНАЛ
Торайгыров университета

Педагогическая серия
выходит 4 раза в год

СВИДЕТЕЛЬСТВО
о постановке на переучет периодического печатного издания,
информационного агентства и сетевого издания
№ KZ03VPY00029269
выдано
Министерством информации и коммуникаций
Республики Казахстан

Тематическая направленность
публикация материалов в области педагогики,
психологии и методики преподавания

Подписной индекс – 76137

SRSTI 14.03.07

https://doi.org/10.48081/RHRC7451

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REQUIREMENTS TO THE MODERN LEVEL OF THE EDUCATIONAL PROCESS IN THE FIELD OF PROFESSIONAL TRAINING

The main task of education is to provide students with the opportunity to independently set and implement educational goals, evaluate their achievements. The XXI century is the age of education. Thus, our thoughtful, intelligent and motivated learning through computer technology after higher education contributes to students' interest in learning and their desire for improvement. Modern education is the implementation of quality education, the formation of students' motivation, the development of professional qualifications. To achieve this goal, a set of measures and tools is needed, such as: improving the quality of educational materials, improving the content used in the lessons, and individual work directly with students. Such an education mechanism provides students with the opportunity to work independently, with the help of various learning tools, and encourages students to realize their potential and learn to work in a team.

Keywords: modern lesson, CLIL, STEM-technologies, communicative competence, Internet resources, demand.

Introduction

The main task of education is to provide students the opportunity to independently set and implement educational goals, evaluate their achievements.

The current transition to the standards of the new generation draws attention to the enhanced formation of skills, and the use of acquired knowledge in practice and everyday life. At the same time, there is a need to reorient it to new qualitative results that reflect not only the development of subject content (knowledge and skills, experience of creative activity, etc.), but also the mastery of meta-subject skills (methods of activity applicable both in training and in solving problems in

real life situations), as well as including personal results (system of value relations, interests, motivation of students, etc.).

Research object: educational process in the field of professional training

Subject of the study: Requirements for the modern level

Purpose: It is possible to achieve a new quality of education, i.e. to solve problems not demanded earlier, only in a complex way, having found and applied new approaches to selection of the contents of education, improvement of educational process and updating of system of an assessment of educational achievements and quality of education.

Responsibilities:

– Applies a variety of modern teaching methods and technologies,

– Uses multi-level training in the lesson,

– Organizes search activities for students to independently set educational problems and solve them.

New Kazakhstan standards, both General education and higher professional, define the requirements for the results of the development of basic educational programs and provide for the distribution of responsibility for the results achieved between the education system, educational institutions and students.

In this regard, they establish: – guidelines for the development of the education system, defining the main directions of educational policy, the responsibility for the implementation of which is mainly borne by the education system; – framework requirements for the content and organization of the educational process, the responsibility for the implementation of which are mainly educational institutions; – a General description of the expected individual achievements, in particular students, including-subject and not subject to final certification. Therefore, the main directions of evaluation under the new approach is the evaluation of the performance:

– of educational systems;

– of educational institutions and teachers;

– students [16].

Quality and relevance of education for a global knowledge-based society, access to high-quality secondary education is a prerequisite for the success of further education and preparation for entering the market of labour. Urgent action is needed to improve the quality of education if the goal is to enable everyone to acquire the knowledge, skills and competencies necessary to succeed in a world that is increasingly dependent on new technologies and rapid exchange of information. However, setting the goal of «quality improvement» (as is done in the concept of modernization) may be abstract and even meaningless, since there is no precise definition of it, although some characteristics of quality can

be measured (and are measured) by a number of indicators. It seems to us that it is necessary to focus on specific aspects of quality, for example, the relevance and importance of education for the needs of the modern economy and society; orientation of education on flexibility, independence, initiative and innovation of graduates. But these concepts are not easy to define. For example, demand is not a sustainable characteristic of education: in a rapidly changing environment, it is impossible to predict what will and will not be in demand in the longer term in ten or even five years. Indeed, in vocational education, the focus on the» demand «of industrial specialization contributed to the formation of an inflexible and largely outdated system, which is now not relevant and significant for young people. In this sense, a rigid «blind» orientation to external need («demand» can create obstacles to development, rather than opportunities for improving quality in the long term [18].

Herefore, speaking further about quality, we will not talk about improving the «old» quality, but about giving new qualitative characteristics to education. Some areas of «qualitative change» are based today on three important assumptions. First, a high-quality education system aims to achieve long-term results that reflect not so much the current as the projected needs of a changing society. Second, in order to achieve a new quality, the organization of education and the governance structure of education must themselves reflect the basic characteristics of the new knowledge-based economy and society: they must be flexible, innovative and able to respond quickly to changes. Thirdly, in the implementation of the modernization strategy, it is necessary to move from « slogans» about the quality assurance policy to actions on the implementation of this policy, and, consequently, to specific guidelines [20].

The creation of a system of continuing education provides for a variety of types of higher education in terms of terms and levels of training, forms of training, diplomas, degrees and titles. At the same time, the traditional system, which has been operating for many years and has proven itself in some cases, is not destroyed, but is supplemented with new elements, passing into a new quality. The quality of specialist training implies the need to create conditions for psychological and pedagogical support of the student's personal development at the stages of his adaptation to study and work, his identification with the requirements of professional activity, creative self-realization. To ensure the mobility and openness of a more complete account of individual characteristics of the person, the qualitative development of the Kazakh educational system, it is necessary to abandon the narrow specialization, create conditions for the unstoppable educational «trajectory» through the introduction of a multi-level structure of training [21].

One of the main directions of improvement of this structure is the creation of new mechanisms for managing the system, and above all, the quality of training. Until relatively recently, the educational process in professional institutions was aimed at teaching specific professions, rather than the formation of a set of applied skills and flexible key skills applicable in a number of professions. Improving the quality of education is one of the main problems to be solved in the course of reforming the educational system of our country. Quality as a system methodological category reflects the degree of conformity of the educational result to the goals and is an integral characteristic of the educational process.

Based on this, the solution of the quality problem implies further democratization of education at all levels of the educational process, its being at a new stage of social development, it is impossible not to make new demands on education in general and on the lesson in particular. It is important to understand that there is a modern lesson. Teachers are responsible for achieving the goals of the educational process in the light of modern requirements of society [22].

The lesson is the forge, the workshop; it is the most important thing in the educational process. A good lesson includes many components: methods, forms of work and, of course, the professionalism and skill of the teacher.

So, let's start with the consideration of the basic concepts, namely, consider the meaning of the words «modern» and «lesson». Dictionary of Ozhegova offers us the following interpretation of these concepts: Modern-related to the present time, the present. + Lesson-study hour dedicated to the subject. Modern-standing at the level of his century, not backward. + Lesson-something instructive, from what can be done conclusion for the future. After analyzing the definitions presented in the dictionary, we come to the conclusion that:

1 The modern lesson is the introduction of students to the totality of human achievements in close connection with modernity during the school hour [9].

2 A modern lesson is a high level of skill, the ability of a teacher to convey to students something instructive, corresponding to the level of his time and allowing to draw a conclusion for the future. Speaking about the modern lesson, of course, it is very important to understand the differences between traditional and modern lessons. In contrast to the «traditional» «modern» lesson contributes to the wider development of cognitive abilities of students. Under this structure, the system of didactic means is rebuilt, and new requirements are imposed on the level of independent work, their cognitive activity increasingly acquires a search, creative character. The modern lesson is absolutely new, but at the same time not losing connection with the past, having direct relation to interests of the living person, urgent, that is — actual lesson. If the lesson is modern, it necessarily lays the Foundation for the future. It should be emphasized that today educational

institutions are not so much a source of information as they teach to learn. The teacher today is not only a conductor of knowledge – it is a person who teaches the ways of creative activity aimed at independent acquisition and assimilation of new knowledge. The student takes an active position in educational activities, ceases to be a passive participant in the educational process, and along with the teacher participates in setting goals and objectives of each lesson, determines the plan of his work, chooses the means and ways to achieve the goals. All of the above allows you to flexibly vary the structure of the lesson. However, the variation in the structure of the lesson should not be spontaneous. In any lesson, the learning process consists of certain logically related stages that reflect the logic of the learning process. Speaking about the features of the modern lesson, we must not forget that the modern lesson is a problem lesson, that is, a lesson in which the teacher deliberately creates problem situations and organizes the search activity of students on their own formulation of educational problems and their solution, or he poses problems and solves them, showing students the logic of thought in a search situation [1].

3 Factors influencing the success of the modern lesson.

Speaking about the success of the lesson, you should start with the principles of its organization:

– the principle of freedom, i.e. providing opportunities for each student to discover themselves in different activities;

– the principle of cooperation, which, of course, is based on mutual understanding and interaction between the teacher and the student in the learning process;

– the principle of tolerance, which implies understanding and acceptance of the characteristics of the student and the creation of a favorable atmosphere for further self-development;

– the principle of tolerance, which is based on the ability to reduce the level of emotional response to adverse factors of interpersonal interaction [2].

4 Conditions for creating a favorable microclimate in the classroom. Of course, the modern lesson should contribute to the activation of cognitive activity of students, the development of their initiative and creativity, as well as the unity of the formation of knowledge, skills (practical, mental, special and General) at three levels and have a favorable psychological microclimate. To successfully achieve the above goals, the following situations should be viewed in the lesson:

– situation of openness a Student should be able to be as successful as he can or wants to be.

– the situation of success. An atmosphere should be created for the student, motivating him to successful learning and aimed at forming a positive attitude to learning, which, of course, is an additional impetus to active work.

– support situation. In order to create a favorable microclimate in the classroom, the teacher should support the student in the emotional, volitional, intellectual, active aspects.

– communication situation. Productive communication aimed at effective interaction between teacher and student should be created. The presence of all factors influencing the successful conduct of modern lessons is an important condition for creating a productive educational process.

5 Requirements to the modern teacher. The modern lesson is, first of all, the lesson generated by aspiration to present to the student a maximum of freedom for individual development. It is in the process of such a lesson that samples of high culture of relations are comprehended, the possibility of free mental work and intensive spiritual development of each student is provided. At such lesson the teacher skillfully uses all opportunities for development of the personality of students, its active and intellectual growth, deep and meaningful assimilation of knowledge, for formation of its moral bases. A modern teacher should demonstrate mastery of the classical structure of the lesson against the background of active use of their own creative and methodological developments, both in the sense of its construction and in the selection of the content of educational material, methods and technology of its presentation. So, the modern teacher:

– applies a variety of modern teaching methods and technologies,

– guided by the principles of modern lesson organization,

– creates conditions for a favorable microclimate in the classroom,

– uses multi-level learning in the lesson,

– teaches to work independently,

– organizes the search activity of students for self-formulation of educational problems and their solution.

The new standard of education, presenting new requirements for learning outcomes, gave the opportunity to take a fresh look at the lesson, to implement new creative ideas. What should be a modern lesson-to decide each teacher personally, but today the teacher is obliged not just to develop ZUN, but also to educate, develop the student's Personality [3].

Features of CLIL. Any language is the most important means of communication, the key to the existence and progress of human society. The changes taking place in the modern world require improvement of communicative competences and thorough language training of students. Only in this case, they will be able to exchange thoughts in different life situations when communicating

with other people, using a system of language norms and adequate communicative behavior. In other words, the main purpose of a foreign language is to form communicative competence, that is, the ability and willingness to carry out personal and cultural communication with others.

Communicative competence is not an innate quality or feature of a person. It is formed in a long process of communication. And the primary task of the teacher is to create such a model of real communication, so that it causes students a natural desire and need to interact with other participants in the situation and gives confidence in themselves when communicating. Based on the personality-oriented approach of training and education of the younger generation, the teacher should strive to create a diverse educational environment that will allow students to fully demonstrate their abilities and skills.

Modern educational technologies used for the formation of foreign language communicative competence are very effective in terms of creating an educational environment that ensures the interaction of all participants in the educational process. When teaching a foreign language, the teacher has the right to use or independently adjust any modern technology in accordance with the functions, content of educational material, goals and objectives of training in a particular group of students. One of these technologies that we use in our lessons is subject-language integrated learning-CLIL (Content and Language Integrated Learning). The term CLIL was first proposed by David Marsh in 1994. At first, this term referred to the process in which academic disciplines or their individual parts were taught in a foreign language. To achieve the ultimate goals of the educational process, a two-fold goal was set: the study of the subject and the simultaneous study of a foreign language. Marsh conducted his research for several years and by 2001 had developed a methodology for educational language integration and characterized it as follows: CLIL considers foreign language learning as a tool for studying other subjects. The technique forms the student's need for learning, and this, in turn, allows him to rethink and develop his abilities, including in his native language.

Modern educational methodologies give this methodology the following definition: it is a didactic technique that allows students to form linguistic and communicative competence in a non-native language in the same educational context in which they have the formation and development of General knowledge and skills. Planning training sessions on the basis of this technique, it is necessary to consider its mandatory components, the so-called»4 C»:

– «content»,
– «communication» (communication),
– «cognition» (thinking ability),

– «culture» (knowledge of cultural studies).

We will dwell on each component in detail. «Content» is the content. The teacher should stimulate the process of assimilation of new knowledge, skills and abilities on the subject. «Communication» – communication. This stage should encourage students to make full use of the means of learning a foreign language to acquire new knowledge, skills and abilities. «Cognition» – thinking. The teacher strives to develop the students ' thinking abilities to a better understanding of the language and the subject being studied. To achieve this goal, tasks for the development of analytical and critical thinking, tasks and exercises for comparison, guess, finding the main thing, etc. «Culture» – knowledge of cultural studies. Understanding the peculiarities, similarities and differences of modern world cultures will help students to quickly adapt to the cultural space, understand the native culture and strive to preserve and develop it. In addition, when planning educational material on the basis of the CLIL methodology, it is important for the teacher to take into account the age of students, their degree of foreign language proficiency, readiness for the perception of educational material in a foreign language [4].

When preparing lessons the teacher faces a number of tasks:

1) the material on the subject on the level of complexity should be slightly inferior to the level of knowledge of students on this subject in their native language;

2) tasks should reflect the characteristics of the language being studied, to work out the ability to use certain linguistic forms;

3) the texts should be carefully chosen according to the theme and the actual level of knowledge of the students;

4) tasks should correspond to the subject and contain enough information for understanding and assimilation.

The method of language integration allows you to move away from the standard presentation of the material and get more extensive knowledge that will undoubtedly be useful for future professional and everyday communication. This technique is reflected in the writing team co-author Tsaid D. V., Zhienkulova R. R., Kitanova Zh. K. In S.M.K. «Creation of interactive lessons with the use of educational Internet resources and mobile devices» is recommended for use in colleges in Kazakhstan. In addition, when studying certain topics, students have to memorize terms and speech cliches, and this expands their vocabulary and prepares them for future study and application of the acquired knowledge in the acquisition of the chosen profession.

However, with the huge presence of positive aspects, when implementing this technique in the educational process, some problems may arise. The two main ones

are the lack of sufficient knowledge of a foreign language teacher on a particular subject and the lack of language proficiency of the subject teacher. The negative aspects include the imperfection of some textbooks of the English language, and the insufficient number of training sessions according to the educational program. The application of the technique also complicates the different level of foreign language proficiency of students, which can lead to an increase in the workload and, accordingly, to a number of psychological and psychosomatic problems. Over TIME, the CLIL teacher acquires specific professional competencies.

STEM technology. If you decipher the abbreviation STEM, you get: S-science, T-technology, E-engineering, M-mathematics. Or in Russian: natural Sciences, technology, engineering, mathematics. In short, the disciplines that are becoming the most popular in the modern world. So it is not surprising that today the development of STEM is one of the main trends in world education. STEM centers (Science, Technology, Engineering, Mathematics). The project aims to increase students ' interest in engineering and technical specialties and motivate students to continue their education in the scientific and technical sphere. STEM labs make state-of-the-art equipment and innovative programs more accessible to students interested in research [5].

In many countries, STEM education is a priority for the following reasons:

In the near future, the world will be sharply lacking: IT-specialists, programmers, engineers, specialists of high-tech industries, etc.

In the distant future, there will be professions that are now even difficult to imagine, all of them will be associated with technology and high-tech production at the junction with the natural Sciences. Specialists of bio-and nano-technologies will be especially in demand.

Specialists of the future require comprehensive training and knowledge from a variety of educational fields of natural Sciences, engineering and technology.

STEM education is the basis for training employees in the field of high technology. Therefore, many countries such as Australia, China, the United Kingdom, Israel, Korea, Singapore, the United States conduct government programs in the field of STEM education. STEM-centers allow students to get acquainted with science, to take part in scientific research. And it is possible that some of these guys will not go to the fashionable lawyers-economists, and will choose the path of a scientist or an inventor, or get carried away with programming [6].

Advantages of STEM technology:

1 Providing students with access to technology. Today, when the world is riddled with ubiquitous computer networks, students create digital content, share it and consume it on a scale never seen before. They run websites, make movies on phones and develop games themselves.

2 STEM technology means creating a learning environment that allows students to be more active. Whatever happens, students are involved in their own learning. The upshot is that students are better off remembering what they have learned when they are involved in the process as well, without being passive observers.

3 STEM technologies require students to be able to think critically, work as a team, and independently [7].

The latest Internet resources used in the lessons of spec.disciplines and industrial training:

– Microsoft Forms
– Microsoft Sway
– One Drive
– Google Disk
– Yandex Disk

Conclusion

The XXI century is the age of education. Thus, our thoughtful, intelligent and motivated learning through computer technology after higher education contributes to students ' interest in learning. Thanks to our work, we see our contribution to the development of our own knowledge and skills of current students[10].

Modern education is the implementation of quality education, the formation of students' motivation, the development of professional and decisive qualifications. To achieve this goal, a set of measures and tools are needed, such as: improving the quality of teaching materials and other teaching materials, improving the content and content used in lessons, and individual work directly with students. This mechanism of education provides students with the opportunity to work independently, with the help of various learning tools, and encourages students to realize their potential and learn to work in a team [15].

References

1 https://infourok.ru. [Electronic resource].

2 https://studbooks.net/580723/pedagogika/sovremennye_trebovaniya_k_prepodavatelyu_vuza. [Electronic resource].

3 https://icrov-pvl.gov.kz/files/blogs/1509525227252.pdf/ methodology CLIL. [Electronic resource].

4 https://dic.academic.ru/dic.nsf/eng_rus. [Electronic resource].

5 http://www.robo.house / ru / stem-osvita-copy. [Electronic resource].

6 http://iac.kz/ru/publishing/razvitie-stem-obrazovaniya-v-mire-i-kazahstane. [Electronic resource].

7 https://studbooks.net/1910290/pedagogika/ponyatie_sovremennogo_uroka. [Electronic resource].

8 https://blogs.technet.microsoft.com/tasush/2016/06/21/microsoft-forms-novoe-sredstvo-dlja-testirovanija-i-ocenki-znanij-v-office-365-dlja-obrazovanija. [Electronic resource].

9 GEF in the direction of training. UPL: http://www.edu.ru. [Electronic resource].

10 **Akulova, O. V., Pisareva, S. A., Piskunova, E. V.** Designing situational problems for assessing the competence of students : Studies-method.manual for teachers of schools. – St. Peterburg : CARO, 2008. – P. 96.

11 **Vilensky, V. Ya., Obraztsov, P. I., Uman, A. I.** Technologies of professionally oriented education in higher school : studies. benefit. 2nd ed. / poked. V. A. Slastenina. – Moscow : The Teacher Society of Russia, 2005. – P. 192.

12 Activity technologies in higher education : approaches and experience of Udmurt University : Col. Monograph Nauch. ed. – Izhevsk : Publishing house «Udmurt University», 2012. – Part 1. – 283 p.

13 Humanitarian technologies of teaching in higher education : Studies-method. allowance / Number of authors under the editorship of T. V. Chernikova. – Moscow : Planeta, 2011. – P. 496.

14 **Gurevich, A. M.** Role-playing and cases in business training. St. Peterburg, 2004.

15 **Lednev, V. S.** Scientific education : development of abilities to scientific creativity. 2nd ed., revised. – Moscow : MGAU, 2002. – P. 120.

16 **Panina, T. S.** Modern ways to activate learning : studies manual for students. Edited by T. S. Panina. 4th ed. – Moscow : Izdat. center «Academy», 2008. – P. 176.

17 **Panfilova, A. P.** Innovative pedagogical technologies : Active training: a training manual for students. – Moscow : Izdat. Center «Academy», 2009. – P. 192.

18 **Panfilova, A. P.** Game modeling in the activity of the teacher: studies. manual for students. General editorship of V. A. Slastenina, I. A. Kolesnikova. 3rd ed., revised. – Moscow : Izdat. center «Academy», 2008. – P. 368.

19 **Savelyeva, M. G.** Technologies of professionally oriented training : studies.-method. benefit. – Izhevsk : Association «Scientific book», 2007. – 80 p.

20 Modern educational technologies : studies. manual. Number of authors : ed. N. V. Bordovskaya. – Moscow : KNORUS, 2010. – P. 432.

Material received on 15.12.20.

Г. Т. Аубакирова, Ж. К. Китанова

Кәсіби кадрларды даярлау саласындағы білім беру процесінің қазіргі заманғы деңгейіне қойылатын талаптар

Қазтұтынуодағы Қарағанды экономикалық университеті,
Қазақстан Республикасы, Қарағанды қ.
Материал 15.12.20 баспаға түсті.

Г. Т. Аубакирова, Ж. К. Китанова

Требования к современному уровню образовательного процесса в сфере подготовки профессиональных кадров

Карагандинский экономический университет Казпотребсоюза,
Республика Казахстан, г. Караганда.
Материал поступил в редакцию 15.12.20.

Қазіргі заманғы дәрісте студенттердің белсенділігін, олардың бастамашылығын және шығармашылығын дамытуға, сондай-ақ үш деңгейде білім, дағдылар мен дағдыларды (практикалық, ақыл-ой, ерекше және жалпы) қалыптастырудың бірлігі мен қолайлы психологиялық микроклиматқа ие болуына ықпал етуі тиіс. Қазіргі заманғы білім беру – сапалы білім беруді іске асыру, студенттердің ынтасын қалыптастыру, олардың бойында кәсіптік және шешуші біліктілікті дамыту. Мұндай мақсатқа қол жеткізу үшін тұтас бір шаралар мен құралдардың кешені қажет, яғни: оқу материалдары мен өзге де оқу құралдарының сапасын жақсарту, білім беру мазмұны мен сабақтарда қолданылатын әдістерді жетілдіру және студенттермен тікелей жұмыс жасау. Студенттердің дербес жұмысына тән ерекшеліктерге ие, оқыту үшін қолданылатын әр түрлі құралдардың көмегімен негұрлым жандандыруға мүмкіндік береді, студенттердің өз мүмкіндігін іске асыруына және ұжымдық еңбекке үйренуіне қозғау салады.

Кілтті сөздер: Заманауи сабақ, CLIL, STEM-технологиялар, коммуникативтік құзыреттілік, интернет-ресурстар, сұраныс.

Главной задачей образования становится предоставление обучающимся возможности самостоятельно ставить и реализовывать учебные цели, оценивать свои достижения. XXI век – это век образования. Таким образом, наше продуманное, интеллектуальное и мотивированное обучение с помощью компьютерных технологий после получения высшего образования

способствует заинтересованности студентов в обучении и их стремлению к совершенствованию. Современное образование – это реализация качественного образования, формирование у студентов мотивации, развитие профессиональной квалификации. Для достижения этой цели необходим комплекс мер и инструментов, таких как: повышение качества учебных материалов улучшение содержания используемых на уроках, и индивидуальная работа непосредственно со студентами.

Ключевые слова: современный урок, CLIL, STEM-технологии, коммуникативная компетентность, интернет-ресурсы, спрос.

Теруге 29.12.2020 ж. жіберілді. Басуға 11.01.2021 ж. қол қойылды.
Электронды баспа
2,93 Mb RAM
Шартты баспа табағы 38,0.
Таралымы 300 дана. Бағасы келісім бойынша.
Компьютерде беттеген З. С. Искакова
Корректорлар: А. Р. Омарова
Тапсырыс № 3720

Сдано в набор 29.12.2020 г. Подписано в печать 11.01.2021 г.
Электронное издание
2,93 Mb RAM
Усл.п.л. 38,0. Тираж 300 экз. Цена договорная.
Компьютерная верстка З. С. Искакова
Корректор: А. Р. Омарова
Заказ № 3720

«Toraighyrov University» баспасынан басылып шығарылған
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