In Kazakhstan the process of using the "4K" model in education is underway: the development of creativity, critical thinking, sociability and the ability to work in a team.

The purpose is to determine the effectiveness of the "4K" method in the formation of critical thinking in Russian language and literature lessons in schools in Turkestan.

Research methods. The following methods were used to solve the tasks set, achieve the goal of scientific research and verify the initial provisions on the topic under study: theoretical – analysis and synthesis of psychological, pedagogical theoretical literature; empirical – pedagogical observation, analysis, questionnaire, survey among teachers, seminar for school teachers, generalization and approbation of research results.

The main results of the study. The main results of the study are reflected in Diagram 1–2 and Table 1–3.

The scientific novelty lies in the fact that for the first time an attempt was made to identify the level of dissemination and application of the "4K" method as an effective way of forming critical thinking and creative skill in Russian language and literature lessons in schools in Turkestan.

Conclusions and specific suggestions of the author. Actions performed: a questionnaire among school teachers, a seminar for school teachers where the practice took place on the topic "The essence of the "4K" model", monitoring to identify the possession of elements of the c model, surveys among teachers helped to determine the effectiveness of the "4K" method in the formation of critical thinking in Russian language and literature lessons in schools in Turkestan.

We can say with confidence that to ensure quality education, this "4K" model is effective in secondary education.

Keywords: critical thinking; "4K" method; creativity; communication; coordination; resources; modernization; pedagogical interaction; integration.

Problem statement. Recently, in Kazakhstan, the emphasis in education has shifted towards the "4K" model: the development of creativity, critical thinking, sociability and the ability to work in a team. It is necessary to focus on each model that will comprehensively reveal the personality of the student.

Creativity (from the English creativity) is the level of creative giftedness, the ability to create, which is a relatively stable characteristic of a person [1].

American psychologist Alice Paul Torrence, throughout his life studied the concept of "creativity". He developed a test in which he diagnosed creative thinking. In his opinion, creativity means lighting the "bright sun" of a child's creative personality.

The most important thing in creativity is the ability to original ideas, to use non-standard ways in intellectual activity. The ability to think creatively is directly related to creative thinking. When a teacher develops a student’s creative abilities, he helps to develop his speech. And speech is a means of expressing thoughts. In order to comprehensively develop the student, it is necessary to support him by creating a creative, relaxed atmosphere in the classroom.

To date, one of the innovative methods that allows achieving effective results in the formation of students' mental activity is the technology of developing critical thinking. Being able to think critically does not mean that you need to look for flaws, but objectively evaluate the positive and negative sides in cognition.

Critical thinking is the ability to raise new questions, develop a variety of arguments, and make independent, thoughtful decisions. This technology teaches the child to think,
not starting with answers to the teacher’s questions, but based on their own questions and problems [2].

The problems of critical thinking were considered in the works of the authors: N.M. Stukalenko and A.N. Imanova, R. Paul, E.N. Volkov, I.V. Mushtavinskaya, etc. [3–6].

S.S. Ualiev in the article “Why is it necessary to think critically?” notes: “The scientific approach to solving a wide range of problems – from everyday to professional is carried out through the use of critical thinking. The generation of new knowledge about nature, society and thinking is primarily connected with scientific thinking. While critical thinking is considered a practical application of a scientific approach to solving professional and personal problems’ [7, c. 13].

It is important to highlight that it is not necessary to give ready-made knowledge to students, but it is necessary to extract it together. Work within the framework of the development of critical thinking will teach you to draw conclusions, synthesize, compare, analyze, express your thoughts. It is this kind of work that promotes communication.

Sociability – the ability to communicate, to establish connections, contacts, sociability; compatibility (the ability to communicate. work) of different types of information transmission systems [8; 9].

Communication is a very important factor in personality formation. This is the main type of human activity, which is aimed at cognition. It is during communication that information is exchanged, which will contribute to the implementation of the “4K” model.

The latest “4K” model is teamwork. A team is a small number of people (most often 5–7, less often up to 15–20) who are united by goals and common approaches to the implementation of joint activities [10].

Working in a team gives faster results than in an individual form. Teamwork allows you to evaluate your own and others’ actions, understand other people, find an answer to a question by listening to everyone in the team.

We will present a model Russian language teaching model.

Table 1

<table>
<thead>
<tr>
<th>Category</th>
<th>Element</th>
<th>Content/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal</td>
<td>Communication</td>
<td>Answers to questions</td>
</tr>
<tr>
<td>determining the effectiveness of the method &quot;4K&quot;</td>
<td>Collaboration</td>
<td>Work in subgroups of 4-5 people /project with team members/presentation through research,</td>
</tr>
<tr>
<td>Creativity</td>
<td>Gathering resources (information) through taking notes/ listening, reading and grammar, etc.</td>
<td></td>
</tr>
<tr>
<td>Critical thinking</td>
<td>Improve your reading and critical thinking skills through speaking engagements</td>
<td></td>
</tr>
</tbody>
</table>

To be successful in the profession, any professional must have two different skills:

– professional”, solid” abilities, professional competencies in all these abilities are directly related to the profession and activity that the individual is engaged in;

– additional, "flexible" abilities, general or redundant professional competencies.

“4K” skills – universal abilities and personal qualities that are invariable for many professions and specialties, aimed at solving professional and labor problems, and increase the efficiency of work and interaction with other people. Soft abilities – These are the abilities that an individual acquires through formal, non-formal and non-formal education based on their own life practice and applies for personal and further continuous professional development.

Tall the process of developing information technologies, a fairly significant amount of material, and doubling the number, role, and variability of ways of interacting when performing professional missions require a fairly high level of soft skills development in absolutely all many activities. Employers represent and create a demand from professional education institutions for highly qualified specialists who possess not only the professional competencies necessary to perform labor functions, but also soft skills.

Goal – determining the effectiveness of the method “4K” when forming critical thinking in Russian language and literature lessons in Turkestan schools.

Tasks:

– determine the level of research of this problem in science;

– determine the distribution level the “4K” method in schools;

– determine the method’s distribution level “4K” in schools in Turkestan;

– determine the effectiveness of the method “4K” and in the formation of critical thinking in Russian language and literature lessons.

Relevance of the research topic it is justified by the importance of “4K” models in so-
cio-pedagogical, scientific-pedagogical and practical terms, and its insufficient development for use in school education.

### Scientific novelty
This is the first attempt to identify the level of distribution and application of the method "4K" as an effective way to develop critical thinking and creative skills at Russian language and literature classes in schools in Turkestan.

### Research methods.
Today, teachers of school organizations face the following questions:"How to achieve good results by working on models “4K” resolution”(developing creativity, critical thinking, communication skills, and teamwork skills)? What is the methodology of this work at the secondary school level?"

Modern schools use many different methods of teaching children. In recent years, the method of critical thinking has become popular, the elements of which can be successfully applied in Russian language and literature lessons. “Critical thinking is a fulcrum for human thinking, it is a natural way to interact with ideas and information. It requires the ability not only to master information, but also to critically evaluate it, comprehend it, and apply it” [11, 7].

When the lesson is based on the principles of critical thinking, everyone formulates their ideas, assessments and beliefs independently of others. No one can think critically for us, we do it exclusively for ourselves. Consequently, thinking can be critical only when it is individual in nature. Students should have enough freedom to think with their own heads and solve even the most difficult questions on their own.

When encountering new information, students should be able to consider it thoughtfully, critically, and evaluate new ideas from different perspectives, drawing conclusions about the accuracy and value of this information. Using the technology of developing critical thinking in my work, I consider such methods as Jigsaw, "Thick and Thin Questions", "Two-part Diary", "Logbook", "Cluster Clusters", "Six Hats of Thinking" by Edward de Bono and others to be the most acceptable for students.

The main goal of the technology for developing critical thinking is to develop the intellectual abilities of the student, allowing him to learn independently. When developing the skills of independent activity of students, children have an opportunity to express themselves in the knowledge of the Russian language. When evaluating each other, mistakes made and the desire to improve their work are taken into account. Using the techniques of critical thinking development technology, various tasks with descriptors are performed.

"For a nation to survive, the individual must think creatively," was the motto America put forward in 1964 when it needed creative scientists. Creativity has existed for as long as humanity itself, regardless of age or culture. Creativity is the goal of any upbringing, it is an indicator of "the highest level of mental health, intellectual and artistic function” [12, 28]. Creative people are independent in their judgments, self-confident, resist suppression and restriction, open, curious, with a great sense of humor, they are rich in imagination, flexibility and originality in their thinking. These qualities, one way or another, are inherent in each of us, but not everyone dares to implement them, because these makinings are hidden under habits and prejudices, fear of failure or not being accepted by society. Therefore, the modern school must, in order to eliminate the contradiction

- introduce new methods, techniques, and technologies that allow each student to maximize their potential,
- create conditions for obtaining solid knowledge and at the same time develop creative thinking of students.

In pedagogy, creativity is most often understood as such various abilities as ingenuity, originality, imagination, intuition, problem-solving ability, etc. The versatility of this ability is emphasized. A necessary condition for organizing creativity is assertiveness (from Lat. assertorius – affirmative) – the ability to do things your own way. Assertiveness means the originality of a person’s self-expression, as opposed to manipulating it. Thus, heuristic learning relies on at least three of the student’s integrative abilities: creative, cognitive, and organizational. Together, they ensure that the student creates such educational products that have the character of a comprehensive general education result, and not its individual elements. From this point of view, under heuristic abilities, we will understand the complex capabilities of a student in performing activities and actions aimed at creating new educational products for them.

One of the most important problems facing the modern teacher, this is to teach children to reason, think creatively, that is, to form creative thinking in children.

The problem of creative thinking has always been and remains one of the most important problems of the entire human society. It is particularly relevant in modern society, when a person must continuously adapt to rapidly changing socio-economic conditions. In addition, this is due to the constantly increasing amount of information that a modern specialist in any field is forced to operate with, and with the process of inte-
Communicative competence (students’ awareness of the peculiarities of the functioning of their native language in oral and written forms – is the basis of a person’s practical activity in any sphere of life. It is difficult to overestimate the role of proficiency in one’s speech. Professional, business contacts, and interpersonal interactions require that a modern person has a universal ability to generate many different utterances, both orally and in writing. Therefore, the formation of communicative competence serves not only a practical purpose – the formation of communication and speech skills of schoolchildren, but also develops the general educational culture of the individual through the “great, powerful and beautiful Russian language”.

Communicative competence is implemented in the process of implementing the following areas:

- functional literacy (the ability of the student to freely use reading and writing skills for the purpose of obtaining information from the text);
- mastering the skills and abilities of understanding and analyzing various types of texts;
- mastering productive skills and abilities of various types of oral and written speech; mastering spelling and punctuation.

In modern education in general and in the teaching of the Russian language, there is a search for reference points among educational values and priorities. Therefore, teaching oral and written speech communication (communicative competence) is becoming particularly important in the current situation, when the level of national language culture as a whole is steadily decreasing: in the mass media, in fiction, in journalism, and in everyday communication.

Communication skills are related to the organization of speech communication in accordance with its goals, motives, and tasks, on the one hand, and on the other – in accordance with the social norms of speech behavior. The practical goal—the formation of communication skills—is brought to the fore.

In the teacher’s normative documents, communicative competence is the mastery of all types of speech activity and the basics of oral and written speech culture, basic skills and language use skills in areas and situations of communication that are vital for a given age.

Many scientists agree that the defining condition for the formation of students’ communicative competence is the organization of communicative situations in the educational process, in which the teacher creates communicative interaction with and between students, evaluating the results of work through the educational product – text or utterance (in oral and written forms) [14–15].

G. V. Kalshansky quotes: “In order to fully communicate,” writes A. A. Leontiev, “a person must in principle have a number of skills. They must, first, be able to quickly and correctly navigate the conditions of communication, second, be able to plan their speech correctly, choose the content of the communication act correctly, third, find adequate means to convey this content, and fourth, be able to provide feedback. If any of the links in the act of communication is broken, the speaker will not be able to achieve the expected results of communication – it will be ineffective” [16, c. 28].

The formation of communicative competence is an interesting task, but not an easy one. The ability to speak and create is developed gradually: knowledge is accumulated, general culture, literacy, the ability to express one’s thoughts are improved, and a person is brought up. Children will not learn to think, reason, analyze, and create on their own; they need to be taught this step-by-step and skillfully.

The most favorable conditions for involving each student in active work in the classroom are created by group forms of work. When organizing work in pairs and groups, each student thinks, does not just sit in class, offers his opinion, even if it is incorrect, disputes are born in groups, different solutions are discussed, children are mutually taught in the process of educational discussion, educational dialogue.

Interpersonal communication in the educational process increases motivation by including social incentives: personal responsibility appears, a sense of satisfaction from publicly experienced success in teaching. All this creates a qualitatively new attitude to the subject, a sense of personal involvement in the common cause, which becomes a joint mastery of knowledge.

Working in pairs gives students time to think, exchange ideas with their partner, and then voice their thoughts to the class. It promotes the development of communication skills, the ability to speak out, critical thinking, the ability to persuade and lead a dis-
Discussion. Collective types of work make the lesson more interesting, lively. Educate students in a conscious attitude to learning work, activate mental activity, give them the opportunity to repeat the material many times, help the teacher explain and constantly monitor the knowledge, skills and abilities of the children of the entire class with minimal teacher time.

The simplest case of collective training sessions in Russian language lessons can serve as mutual dictation of students, when each in turn works with different partners and performs the functions of a teacher (dictating and checking), then a trainee. Mutual dictation sessions in pairs of permanent and rotating staff are held starting from the first class. At the beginning of training, you can use the split alphabet. Children in pairs make up simple words: mom, Dad, Tanya, Kolya. When they start writing words, they dictate one word to each other, then two, and then small sentences. The same work in pairs of permanent and rotating staff on writing mutual dictation continues in the second and fourth grades.

When organizing collective work, teachers are responsible for preparing task cards, developing special tasks, and teaching children a new type of collaboration.

Effectively introduce elements of teamwork from the very first days of school for children. Children can be placed in groups. Groups are formed due to a certain arrangement of furniture (although this is not necessary). Content groups appear later. So far, the group is a support mechanism.

To ensure quality education, this "4K" model is effective in secondary education.

During the internship, 3rd year students of the International Kazakh-Turkish University named after Kh. Yasavi worked on the topic: "Ways to implement the Model 4K". A survey was conducted among school teachers: gymnasium No. 15 named after M. Zhumbayev, school No. 2 named after Hamzy, school No. 3 named after A. Timur.

Questionnaire questions:
1. Have you ever heard of the model "4K" in training?
2. Do you use the "4K" model in your training?

The results of the survey are shown in Table 2.

<table>
<thead>
<tr>
<th>School</th>
<th>Gymnasium No. 15 named after M. Zhumbayev</th>
<th>School No. 2 named after Hamzy</th>
<th>School No. 3 named after A. Timur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses in %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>15</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>I know, but I don’t use it</td>
<td>63</td>
<td>56</td>
<td>59</td>
</tr>
<tr>
<td>I don’t use it</td>
<td>22</td>
<td>19</td>
<td>20</td>
</tr>
</tbody>
</table>

Many teachers began to show interest in this method after the survey. The author conducted a seminar for school teachers, where the practice took place, on the topic "The essence of the "4K" model".

After the seminar, teachers and our students conducted a series of lessons using elements of the "4K" model.

Then among students of grades 5–6 (students were trained in these classes) Monitoring was carried out to identify the ownership of elements of the "4K" model. To do this, it was suggested to fill in Table 3.

<table>
<thead>
<tr>
<th>Creativity/ classes, %</th>
<th>Cooperation/ Classes, %</th>
<th>Communication/ Classes, %</th>
<th>Critical Thinking/ Classes, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>33,3</td>
<td>20,0</td>
<td>25,9</td>
<td>27,8</td>
</tr>
</tbody>
</table>

During the general monitoring, it was revealed that in the 5th grade a large number of students possess the following skills: creatives (33.3%), skills co-ops (27.8%), skills communications (22.2%), skills critical thinking (16.7%).

And in the 6th grades, students have the following skills: creatives (20%), skills co-ops (35%) Next, 15% – skills critical thinking. And the majority of students (30%) give preference to communication skills.

In the 7th grade, during the survey, many people answered that they have the same skills communications (25.9%), skills creatives (22.2%), skills co-ops (18.5%), skills critical thinking (33.3%).
In all three classes of skills *communications* the majority of students are proficient, and critical thinking skills come in second place. It became clear that students have poor creative skills. The monitoring results are shown in diagram 1.

Diagram 1. Results of monitoring the ownership of elements of the “4K” model.

Some work has been done to instill adaptive skills:
- working with texts;
- testing;
- tasks;
- exercises.

When studying D. Swift’s novel “Gulliver’s Journey” in literature class in the 7th grade, the following questions were considered:

**Questions:**
1. Identify a creative approach to the topic.
2. Identify the hidden meaning of the characters’ speech.
3. Answer the questions in pairs.

Here are the results of working with text in Diagram 2.

Diagram 2. Results of working with the text

The results show that after forming adaptive skills using working with texts; testing; completing tasks and exercises, adaptive skills much improved.

At the end of the practice, surveys were conducted among teachers.

1. **What is the effectiveness of the “4K” model?**

37 teachers from 3 schools in Turkestan participated in the survey. 15 teachers noted that the “4K” model promotes the development of thinking: logical, critical, analytical and associative thinking.

11 Russian experts believe that the “4K” model contributes to the formation and development of students’ communication skills.

8 teachers of Russian language and literature answered that the “4K” model helps to develop “soft skills” methods. That is, it improves team and group work of students, and allows them to work on a single problem field.

And the other 3 teachers believe that the “4K” model also contributes to the development of creative skills and abilities.

2. **Do you recommend using the “4K” model in Russian language lessons?**

85% said they recommend using the “4K” model, 5% don’t recommend it, and 10% don’t know yet.

That is, most teachers believe that it is necessary to use the “4K” model, which shows the effectiveness of our students’ practice.

**Conclusion.** Today, the current lifestyle of an individual, combined with the rapidly changing and constantly developing information field, as well as the high rate of industrial and information development of humanity as a whole, determine the constant updating of modern professions and specialties. Market demand creates a high demand for the development of new individual and collective skills. Knowledge becomes context, and for this reason, human competence limited to only one area of life is no longer sufficient.
Based on the trends shaping the complex world of the future, all employees should:

1) Various skills and knowledge for working with new technological developments.

2) Having general knowledge that can be used to address a wide range of professional, social, or personal contexts (for example: skills and knowledge that help deal with the complexity of fundamental variability, uncertainty, and future uncertainty), including collaboration, creativity, and entrepreneurial abilities.

The main values of the 21st century are critical, creative, and social skills that are formed throughout the life of an individual. The education system is also rethinking its goals and introducing a wide range of skills into educational programs. In the 20th century, universal education set the goal of teaching people to read, count, and write. Then special education, engineering schools or special courses provided workers with the skills necessary for a particular profession. The tasks performed changed very little over time, and most of the workers were limited to training, improving their skills on one machine every day, and gradually moving up the career ladder from an ordinary worker to a master and shop manager.

In the modern educational community, a new literacy list called “4K” is gaining popularity: communication, creativity, critical thinking and teamwork. Some countries are already undergoing full-scale reforms aimed at creating a full-fledged education of the XXI century, which will allow us to move from utilitarian-industrial education to an integrated educational paradigm. In the new complex world, education should be aimed not only at developing knowledge and skills, but also at providing comprehensive support for the formation of an individual as a full-fledged creator of their life. Taking all this into account, the goals and objectives of the training practice were set before the practice of 3rd-year students.

Actions performed: survey of school teachers, seminar for teachers of schools where the internship took place, on the topic “The essence of the “4K” model”, monitoring performed to identify ownership of elements of the “4K” model, surveys among teachers helped determine the effectiveness of the method “4K” when forming critical thinking in Russian language and literature lessons in Turkistan schools.

The tasks assigned to the students were completed, i.e.:

- the level of research of this problem in science is determined;
- distribution level determined the “4K” method in schools;
- the method distribution level is determined "4K" in schools in Turkistan;
- efficiency of the method is determined "4K" when forming critical thinking in Russian language and literature lessons.

It is safe to say that to ensure quality education, this 4K model is effective in secondary education.

References


ВПРОВАДЖЕННЯ МОДЕЛІ “4К” В НАВЧАННЯ РОСІЙСЬКОЇ МОВИ У ШКОЛАХ КАЗАХСТАНУ

У Казахстані поширюється процес використання в освіті моделі “4К”, яка передбачає: розвиток креативності, критичного мислення, комунікативності та вміння працювати у команді.

Метою статті є визначення ефективності методу “4К” для формування критичного мислення на уроках російської мови та літератури у школах Казахстану.

Для досягнення мети наукового дослідження, переписи вибіркових показників підгрупами теми було використано такі методи: теоретичні – аналіз та синтез психологічної, педагогічної теорії та літератури; емпіричні – педагогічне спостереження, аналіз, інтерв'ю з учителем, оцінка результатів під час проведення інтерв'ю з вчителем.

Основні результати дослідження наведено відображено:

- у таблиці 1 (результати моніторингу);
- таблиці 2 (результати російської мови).

Наша нова визначена дослідження полягає в тому, що вперше зроблено спробу виявити рівень поширення та застосування методу “4К” як ефективного інструменту розвитку критичного мислення та творчих навичок на уроках російської мови та літератури у школах Казахстану.

Ефективність “4К” можна визначити методом аналізу, оцінки та відображення результатів. Отримані дані дають підстави вважати, що для забезпечення якісної освіти моделю “4К” є ефективною в системі середньої освіти.

Ключові слова: критичне мислення, метод “4К”; креативність; стилізування; координація; рефлексія; модернізація; педагогічна взаємодія; інтерпретація.