

HUMANITARIAN GUIDELINES OF MODERN EDUCATION

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Evney Arstanovich Buketov (1925-1983) was an outstanding metallurgist, academician, writer, editor, teacher and public figure, after whom the Karaganda National Research University is named. His work went far beyond the natural sciences, covering the humanitarian and social spheres. He was not only a researcher, but also a thinker, for whom science is inextricably linked with culture, morality and social development. The study of the legacy of E.A. Buketov is especially important in the context of modern higher education. Today, we are witnessing a desire for narrow specialization, in which students receive deep professional knowledge, but sometimes remain cut off from the humanitarian and social context of science. Buketov warned of such a danger back in the 1970-1980s. He insisted that a scientist should be not only a specialist, but also a citizen, a cultured person, a bearer of moral guidelines [1].

For students of the Faculty of Mathematics and Information Technology, turning to the humanitarian heritage of Buketov is of particular importance. Mathematics is a science of precision and strict logic, but it is also a universal language of knowledge that influences the development of society and technology. Understanding the social mission of mathematics, its role in culture and in humanitarian knowledge helps future specialists to form a holistic worldview. The purpose of this article is to consider E.A. Buketov as a social thinker in the context of the humanities and social sciences, to show the relevance of his ideas for modern educational practice and, in particular, for the training of specialists in the field of mathematics.

For students of the Faculty of Mathematics and Information Technology, acquaintance with the humanitarian heritage of Buketov is of great importance. Mathematics as a strict science is often perceived in isolation from the humanitarian sphere. However, Evney Arstanovich Buketov himself showed an example of integration: he believed that science cannot exist outside of culture and that a scientist must think broadly, understanding the consequences of his activities for society.

Buketov Evney Arstanovich argued that science is not only a search for technical solutions, but also a part of the cultural heritage of mankind. He opposed narrow specialization, believing that a true scientist should also be a thinker. For him, scientific knowledge has always had a cultural dimension: discoveries are inextricably linked with history, philosophy, literature and moral values.

The scientist emphasized that each discovery shapes not only the scientific, but also the cultural environment of society. Science influences language, art, the education system and the everyday worldview of people. That is why Buketov E.A. saw in the scientist not only a researcher, but also a cultural figure capable of shaping the spiritual image of society.

In his works and journalism, he repeatedly noted that the progress of science is impossible without preserving the humanitarian foundations. Science deprived of culture and morality can turn into a dangerous force, while in alliance with humanitarian values, it becomes a source of creation.

For students of the Faculty of Mathematics and Information Technology, this idea is especially relevant: mathematics as a universal language of science plays a fundamental role in the culture of mankind. It is not only a tool for precise calculations, but also part of the intellectual heritage that unites different civilizations and eras. Understanding this connection helps future mathematicians realize that their activities have not only applied, but also cultural and humanitarian significance.

In addition to scientific works, Buketov actively wrote fiction and journalism. His literary texts raise the topics of morality, historical memory, and the fate of man in society. This proves that the scientist saw in humanitarian forms of creativity an equal way of understanding the world.

One of Buketov's key postulates was the idea of social responsibility of science. He warned that scientific discoveries can have both a constructive and destructive impact. Therefore, a scientist must be aware of the consequences of his work.

Buketov E.A. emphasized that science does not exist in a vacuum: it develops within society and has a direct impact on social processes. Research results are used in industry, economics, medicine, education, and even politics. This means that a scientist is responsible not only for the accuracy of calculations and the correctness of experiments, but also for how his discoveries will be used.

He often spoke about the need for a moral choice facing a researcher. In the era of scientific and technological progress, when achievements can be used both for good and for harm, the responsibility of a scientist increases many times over. The scientist believed that the duty of a true scientist is to foresee the possible consequences of his discoveries and defend their humanistic use.

In addition, Buketov saw an educational mission in the responsibility of a scientist. He was sure that a scientist is obliged to share knowledge, to form critical thinking in young people, respect for science and the desire to use its achievements for the benefit of society. Thus, social responsibility is expressed not only in control over the practical application of discoveries, but also in active educational and pedagogical activities.

For students of the Faculty of Mathematics and Information Technology, this idea is especially important. Mathematics is the basis of modern technologies: algorithms, models and computational methods are used in economics, information systems, artificial intelligence. The responsibility of a future mathematician lies in the understanding that his work can influence society - from the development of technologies to the formation of ethical standards for their application.

Buketov considered moral values as a necessary part of scientific activity. For him, science could not be neutral: it is always connected with the fate of a person, with his cultural and spiritual guidelines.

He noted that scientific knowledge is inextricably linked with the choice of a person - a scientist, a teacher, a researcher. This choice includes not only methodology and accuracy, but also the moral principles that guide the researcher. This is why Buketov argued that moral principles should accompany any scientific work. He paid special attention to the problem of "dual use" of scientific discoveries. Any new technology can serve both for the benefit of society and for harm. In this context, morality acts as a filter that determines the direction of scientific development. Buketov believed that a scientist must be guided by humanistic values so that his activities contribute to progress, not destruction.

In his journalistic works, he emphasized: science without morality loses its true meaning. If knowledge is used solely for profit or political interests, it turns into an instrument of pressure, not creation. Only in alliance with moral principles can science remain the true engine of civilization.

For future mathematicians, this idea is of particular importance. Mathematical methods and algorithms are used today in a wide variety of areas - from financial systems to military technologies. Therefore, the moral choice of a specialist plays a key role: whether to use knowledge to strengthen justice and sustainable development of society or to subordinate it to narrow interests.

Thus, morality for science, as Buketov understands it, is not an abstract addition, but a necessary condition for its existence and development.

In addition to scientific works, Buketov actively wrote fiction and journalism. His literary texts raise the topics of morality, historical memory, the fate of man in society. This proves that the scientist saw in the humanitarian forms of creativity an equal way of understanding the world. The scientist was the author of short stories and journalistic articles, in which he touched upon issues of spiritual values, national identity, patriotism and moral choice of the individual. His works were distinguished by the simplicity of language, depth of content and a bright civic position. The writing talent of E.A. Buketov allowed him to address a wide range of readers, making complex philosophical and social ideas accessible.

He paid special attention to the educational function of literature and journalism. For him, the word was not just a form of self-expression, but a tool for enlightenment and the formation of public consciousness. In articles and speeches, the scientist discussed the role of the intelligentsia, the preservation of cultural heritage, and the future of Kazakhstan.

His literary heritage is closely intertwined with scientific views: as in scientific activity, here the desire for harmony between knowledge and morality is manifested. The journalism of E.A. Buketov became a continuation of his scientific and pedagogical path, allowing him to convey to society important ideas about culture, morality and social responsibility. For students of the Faculty of Mathematics and Information Technology, acquaintance with this layer of his work shows that science and literature can coexist in the personality of one person. This forms an understanding that a real scientist must have not only professional knowledge, but also a cultural outlook, the ability to think broadly and humanitarily. In one of his works, Buketov E.A. emphasized: "Science is a whole that is divided only conditionally." This idea is especially relevant for mathematicians. Mathematics, being a formal and strict science, is closely connected with philosophy, logic and ethics.

Humanities help mathematics students develop skills in critical thinking, argumentation and understanding of the social context of the application of mathematics. This is what E.A. Buketov demanded - harmony in education.

Today's system of higher education is faced with the problem of narrow specialization. The scientist's idea of the need to combine technical and humanitarian knowledge remains relevant: a future specialist must think not only in calculations, but also in humanistic categories.

E.A. Buketov, reflecting on the role of science, repeatedly emphasized that its development is inextricably linked with the fate of society. In the 21st century, this connection has become especially noticeable. Science has become the main factor in economic, social and cultural progress.

Modern societies rely on the achievements of scientific knowledge in almost all areas: medicine and biotechnology improve the quality of life, digital technologies change communications and education, artificial intelligence transforms production and the service sector. At the same time, new challenges are growing: the threat of an environmental crisis, ethical problems of the use of technology, issues of social justice. In this context, the ideas of E.A. Buketov remain relevant [2]. He warned about the need for harmony between science and humanitarian values. Science without a spiritual and moral basis can lead to a loss of bearings, to a situation where technical progress will outpace the moral maturity of society.

In the 21st century, a scientist must be not only a specialist, but also a citizen, capable of assessing the consequences of his discoveries for humanity. In the context of globalization and the acceleration of scientific change, the need for interdisciplinarity and open dialogue between scientists, politicians, educators and society as a whole is growing.

Mathematics plays a special role here as a universal language of science. Modern mathematical models underlie the forecasting of climate change, the development of medical technologies, and the creation of digital platforms. Future mathematicians must understand that their knowledge is becoming a tool for transforming society, and it is their moral position that will determine the direction in which this transformation will go. Thus, science in the 21st century appears not only as a source of technology, but also as a cultural and social force that can determine the shape of the future. And Buketov's ideas help to see in this process not only pragmatic, but also humanistic guidelines.

E.A. Buketov was not only a scientist, but also a social thinker who sought to combine the accuracy of scientific knowledge with humanistic values. His ideas about the unity of science, the moral responsibility of a scientist and the cultural significance of education are especially important for future mathematicians.

For students of the Faculty of Mathematics and Information Technology, turning to Buketov's humanitarian heritage is an opportunity to broaden their horizons, realize the social significance of their profession and learn to think in terms of not only formulas, but also values.

References

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