

**The importance of the sciences and humanities, including physics,
history, and English, in society**

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Annotation

The article analyzes the role of the exact and humanities in the development of modern society. The importance of physics in scientific and technical progress, history in the formation of national identity and historical memory, and English as a means of international communication in the conditions of globalization are highlighted. The role of these disciplines in the education system and their impact on personal development and social development are revealed on the basis of scientific sources.

Key words

science, exact sciences, humanities, physics, history, English, education, scientific thinking, communication, globalization, social development.

Since the creation of humanity, humanity has always studied the environment surrounding it. The world surrounding it has always seemed interesting to mankind. Since ancient times, mankind has been dividing the knowledge it has accumulated about the environment into certain systems called sciences. Science is an orderly system of knowledge accumulated by the scientific method. Science is a system of knowledge

among the peoples of the world, one of the forms of social consciousness. It includes both activities related to the acquisition of new knowledge, and the product of this activity - knowledge that forms the basis of the scientific picture of the world; it represents certain areas of human knowledge. The direct goal of science is to describe, explain, and predict the processes and phenomena of reality, the subject of its study, on the basis of discovering the laws of this reality. The first buds of science appeared on the scene in connection with the emergence of human society. The initial knowledge had a practical nature. The buds of the system of thought were formed in ancient times as mythology. It began to appear in the East and Greece. Science organizes empirically obtained data (facts) to explain this or that observed phenomenon, such an arrangement is called a hypothesis. If a hypothesis is sufficient to explain the phenomenon and is confirmed by appropriate evidence, it becomes a theory.

To date, humanity has divided the knowledge it has accumulated into such sections as exact and humanities.

Exact sciences are a branch of science that mainly studies specific laws and uses rigorous methods to test hypotheses. This is based on experiments and rigorous logical reasoning. Exact sciences include such disciplines as mathematics, physics, chemistry, computer science, and some branches of biology. Humanities are academic disciplines that study aspects of human society and culture, including the fundamental questions asked by humans. During the Renaissance, the term “humanities” referred to the study of classical literature and language, as opposed to the study of religion or “divinity.” The study of the humanities was a major part of the secular curriculum in universities at that time. Today, the humanities are defined as any field of education other than natural sciences, social sciences, formal sciences (for example, mathematics) and applied sciences (or vocational training).

Exact and humanities are the basis of society and serve the comprehensive

development of our lives.

In the XXIst century, science and education are recognized as one of the main factors determining the economic power and social development of states. As a result of the formation of a knowledge economy, human capital has become the main resource for the development of society. Therefore, studying the importance of exact and humanities in the education system is one of the urgent scientific issues. As the President of the Republic of Uzbekistan Sh.M. Mirziyoyev noted, in order to achieve modern progress, the development of science and education must be one of the priority areas of state policy.¹

Indeed, while the exact sciences ensure the technological progress of humanity, the humanities ensure the continuity of spiritual values, historical memory, and cultural heritage.²

Physics provides technical progress, history provides lessons from the past, and English provides global communication and information exchange. Below is a detailed description of the importance of each of them in society.

Physics is a fundamental science that studies the most general laws of natural phenomena. Physics explains how the universe works and forms the basis of technological development. According to Academician A. Einstein, physics is one of the most important scientific directions that shape humanity's ideas about nature.³

Today, all the advances in energy, space technology, telecommunications, electronics, and medicine are based on physical laws. For example, laser technology, magnetic resonance imaging (MRI), semiconductor physics, and the hardware basis of artificial intelligence systems are practical results of physical science.⁴

¹ Shavkat Mirziyoyev. Strategy of the New Uzbekistan. – Tashkent: Uzbekistan, 2021. – P. 218.

² Abu Nasr Farabi. The City of Virtuous People. – Tashkent: New Age Generation, 2016. – P. 34.

³ Albert Einstein. The Evolution of Physics. – New York, 1938. – P. 12.

⁴ Modern research in Physics. – Cambridge University Press, 2022. – P. 47.

As a result of studying physics, students develop the competencies of logical thinking, analytical thinking, conducting experiments, and drawing scientific conclusions. For this reason, special attention is paid to STEM (Science, Technology, Engineering, Mathematics) education in the education systems of developed countries.⁵ In conclusion, it can be noted that the science of physics plays an important role in the development of mankind. History studies the past, culture and stages of development of society. The main task of the science of history is to study the experience of human development and pass it on to future generations. The German historian Leopold von Ranke explained the task of history as "to show the past as it was."⁶

Historical knowledge is an important tool for understanding national identity, forming feelings of patriotism, and developing civic responsibility. Especially during the years of independence, special attention was paid to studying the history of Uzbekistan on an objective and scientific basis.⁷

The study of history serves to educate young people in the spirit of respect for national and universal values. In short, historical memory is one of the factors ensuring the spiritual development and social stability of society.⁸

English has become the language of international communication, science and business. In the context of globalization, English has become the main means of communication in international science, technology and business. D. Crystal described English as a "global language" and scientifically substantiated its leading position in international communication.⁹

Today, the vast majority of scientific articles in the world are published in English. The vast majority of scientific research in international scientific databases - Scopus,

⁵ UNESCO. STEM Education Report. – Paris, 2023. – P. 21.

⁶ Leopold von Ranke. Theory and Practice of History. – London, 2011. – P. 57.

⁷ The newest history of Uzbekistan. – Tashkent: East, 2023. – P. 17.

⁸ Ibrohim Muminov. Selected works. – Tashkent: Science, 1969. – P. 112

⁹ David Crystal. English as a Global Language. – Cambridge University Press, 2019. – P. 7.

Web of Science and other platforms - is presented in English..¹⁰ Also, knowledge of English expands the academic and professional opportunities of a person, develops international cooperation and serves the effective use of modern information resources. In conclusion, physics, history and English are interrelated and inseparable components of the development of society. Physics creates the theoretical foundations of scientific and technological progress, history forms national identity and historical memory, and English allows integration into the global knowledge space. In-depth study of these disciplines is one of the important conditions for training comprehensively developed, competitive and modern specialists. If the exact sciences allow us to create and understand the world, then the humanities serve to preserve humanity and develop society. They complement each other and build a harmonious society.

REFERENCES.

1. Abu Nasr Farabiy. The City of Virtuous People. – Tashkent: New Age Generation, 2016. 320 p.
2. Albert Einstein. The Evolution of Physics. – New York, 1938. 320 p.
3. David Crystal. English as a Global Language. – Cambridge University Press, 2019. 228 p.
4. The most recent history of Uzbekistan. – Tashkent: East, 2023. 186 p.
5. Ibrahim Muminov. Selected Works. – Tashkent: Fan, 1969. 277 p.
6. International Research in Applied Linguistics. – Routledge, 2022. 314 p.
7. Leopold von Ranke. Theory and Practice of History. – London, 2011. 514 p.
8. Modern research in Physics. – Cambridge University Press, 2022. 471 p.
9. Shavkat Mirziyoyev. Strategy of the New Uzbekistan. – Tashkent: Uzbekistan, 2021. 167 p.
10. UNESCO. STEM Education Report. – Paris, 2023. 416 p.

¹⁰ International Research in Applied Linguistics. – Routledge, 2022. – P. 73.