THE EFFECTIVENESS OF SUBSTANTIATING THE SCIENTIFIC HERITAGE OF OUR GREAT SCIENTISTS IN THE FORMATION OF SCIENTIFIC EDUCATION OF STUDENTS OF PEDAGOGICAL UNIVERSITIES

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Annotatsiya.*Ushbu maqolada buyuk mutafakkirlarimizning ilmiy merosi va bu merosdan talabalarga bilim berishda foydalanish hamda talabada milliy g`ururni shakllanishi va ilmiy tarbiyadagi ahamiyati aks etgan.*

Kalit so'zlar.*O`rta asr sharq allomalari va mutafakkirlari, ta`lim, tarbiya, g`urur, ilmiy meros, ilmiy tarbiya, qadryati*

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Аннотация.*Данной статье отражено научное наследие наших великих мыслителей и использование этого наследия в образовании студентов, а также формирование у учащихся национальной гордости и ее значение в научном образовании.*

Ключевые слова. *Ученые и мыслители Ближнего Востока, образование, воспитание, гордость, научное наследие, научное образование, ценность*

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Abstract. *This article reflects the scientific heritage of our great thinkers and the use of this heritage in the education of students, as well as the formation of national pride in the student and its importance in scientific education.*

Keywords. *Scholars and thinkers of the Middle East, education, upbringing, pride, scientific heritage, scientific education, value.*

The first president of the Republic of Uzbekistan I.A.Karimov made the following remarks at the conference held in Samarkand on May 15-16, 2014 in his speech on the historical heritage of medieval eastern scientists and thinkers, its role and importance in the development of modern civilization.

"The purpose of our conference today is to discuss in depth the scientific heritage of the great scientists and thinkers who lived and worked in the Eastern world in the Middle Ages and to evaluate the role and role of angla in the history of modern civilization. The history of the Middle Ages East is evidenced by the fact that culture, education, medicine, physics, literature, art, architecture were directly related to the maintenance of the stability of the incomparable rise and development in the spheres.

Speaking of the great scientific discoveries made in the East in the early Middle Ages, we are among the first to mention the name of Musa al-Kharizmi,

who made an invaluable contribution to the development of modern mathematics, trigonometry and geography. He was one of the first to substantiate and put into practice the decimal positional system of zero sign and polar coordinates. This marked a turning point in the development of mathematics and astronomy.

Musa Al-Kharizmi founded the science of algebra, developed clear rules for the presentation of scientific information and treatises. He is the author of many scientific works on astronomy, geography and climate theory. His contribution to the development of world science was widely recognized, and modern scientific terms such as his name and works - algorithm and algebra (algebra) were immortalized among oriental scholars.

The Fundamentals of Astronomy, written by Ahmad Fergani in the ninth century, contains evidence that the structure of the universe and the size of the earth have a spherical shape and served as a scientific basis for the discoveries of other travelers. One of Ahmad Fergani's practical achievements was the development of his basic medieval astronomical instrument theory, as well as the famous Nilomer in the Nile, which for many centuries served as a means of measuring water levels.

We recognize the rich heritage left to us by the scholars of the East as the core of the development of modern science. In studying the course of physics, it is important to get acquainted with the scientific work of Central Asian scientists. For example, in studying the laws of mechanics, the following ideas of Ibn Sina in the Book of Encyclopaedia can be cited. He argues that there is an opposite equality in any action. If the power is lost, the consequence of this cause cannot stand. Under the same conditions, what is small must move faster, and what is large must move slower. His statement implies that mass is a measure of the inertia of a body according to Newton's definition. Velocity and acceleration are inversely proportional to mass.

Among the scholars of the Middle East, the scientific heritage of Abu Rayhan Beruni has a special place. Beruni has written more than 200 works and pamphlets. Although only 31 of these have survived, these incomplete specimens of the scholar's manuscripts are a testament to his multifaceted legacy. The whole world on the subject of the law of gravity the following points can be made in the instruction on the attraction of the bodies of Bruni and Ibi Sinoni to the center of the earth. Because the earth is spherical, Beruni believes that the weight of objects is drawn from all sides toward the center of the earth.

Beruni invented the globe by measuring the radius, level, and volume of the earth's circle in a unique way. The following examples from Beruni's work on atmospheric pressure and hydrostatics of liquids can be found in the section on hydrostatics of liquids. Beruni’s modern accuracy of the specific gravity of more

than 50 substances measured at the level of. Beruni determined the specific gravities of 18 liquids using a special container similar to a pycnometer. Beruni created a number of modern instruments that measure atmospheric pressure. For example: Gun gyros or are devices called automatic suction. Beruni's automatic watering device is still used in poultry farms and other places. From the fabora i.e. the fountain is thrown upwards into the water.

Beruni explains the reasons for this: ―If the water is taken from a reservoir above the ground level, it is compressed and thrown upwards, if the reservoir is below the ground level, the water is completely gone

Does not rise to the top. Sometimes the reservoir is said to have thousands of gases in the high mountains, then the water can be carried to the tops of towers and towers.

He wrote that the repulsive force of liquids and gases (Archimedes) depends on the density of the liquid or gas;

The danger of rivers flowing into the sea depends on the taste of the water in it, the delicious (fresh) water cannot lift heavy things like salt water. So, based on the above knowledge, Beruni's body is immersed in liquids interpret Archimedes' views on the relative repulsive force by determining the specific gravities of salt and fresh water indicates that it is possible.

Mirzo Ulugbek built an observatory on the Kokhak hill in Samarkand in 1424-1429. In the 17th century, this observatory, known around the world as the Samarkand Academy, became a center of science. In 1437.

Ziji-Koragoni created a catalog of astronomy.

This catalog is known as Ulugbek's table of stars and calculates the accuracy of the stellar path with the positions of 1018 stars. In Ulugbek 365 days 6 hours 20 minutes 8 seconds, in the current accuracy 365 days 6 hours 9 minutes 10 seconds, the difference is 10 minutes 58 seconds. An expression of the theory of motion of the sun and planets in the specificity of the prologue given perfectly, and the fact that the day of the lunar and solar eclipses was determined in it, shows the importance of this pamphlet.

The Uzbek people, along with other nations, is experiencing its rich science, culture, folk traditions, the process of understanding and feeling their identity.

The noble work of studying the work of scientists living and working in Central Asia in the field of physics, astronomy and other natural sciences, serving it for today and tomorrow, is rising to a new level. The study of the scientific heritage of our ancestors is gaining importance.

If today our society is experiencing positive changes in scientific, technical, economic, cultural and spiritual spheres, then in the process of comprehensive

scientific research of the rich and diverse scientific and cultural heritage, so much deep and meaningful work must be done.

We are witnessing the need. Attitude to the past is a defining attitude to the future.

To convey to the younger generation the invaluable contribution of Central Asian scientists to the development of natural sciences, the restoration of the values of our people and the education of students in the spirit of patriotism plays an important role.

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