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EDUCATION OF YOUTH OF NEW UZBEKISTAN BY STUDYING THE HERITAGE OF THINKERS

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ABSTRACT

The article scientifically analyzes the problem of educating the youth of New Uzbekistan by teaching the heritage of scientists. The scientific activities of scientists of the Khorezm Mamun Academy, who worked in the 10th century, were also studied.

Keywords: youth, spiritual heritage, social sciences, natural sciences, philosophical heritage, medicine, astronomy, mathematics, education.

In order to study the heritage of the scientists of the Mamun Academy and effectively use it in educational practice, it is necessary to turn to the history of the Khorezm state of that time and analyze the events that took place there. However, understanding the past is the most important factor in ensuring human maturity.

Abu Nasr Mansur Ali ibn Iraq, one of the scholars of the Khorezm Mamun Academy, was a great mathematician and astronomer who taught Abu Rayhan Beruni. The famous poet and scientist Omar Khayyam spoke of him as "the greatest of those who studied mathematics." The works of Ibn Iraq "Al-Majisti al-Shahi" ("King al-Magesti"), "Risala fi zadba masa'il al-Khandasa" ("Answers to Khandasa's questions") and other works are well known.

Abu Sahl Isa ibn Yahya al-Jurjani al-Masihi is a great scholar who studied medicine, ethics, psychology and philosophy at the Mamun Academy. During his life and scientific activity, he trained many students. His works "One Hundred Questions on Medicine", "The Book of the Spirit", "The Book of General Medicine" are well known.

According to Abu Usaybia, Masihi was a close friend of Ibn Sina and was his mentor in the field of medicine. Ibn Sina also wrote works dedicated to the Messiah. He died at the age of 40 in 401/1010 while fleeing to Khorasan with Ibn Sina, rejecting Sultan Mahmud's invitation to Ghazna [1, 326].

Abul Hakim Al-Qosi is a scientist at the Academy who studied chemistry. His "Essence and Help of Art" (عين الصنعة و عين الصناعة) ("Ain al-sana and ayn as-sana") corresponds to the level of scientific research in Europe of the 13th-14th centuries, and its translation into English in 1905 shows how his knowledge is high. Doctor of Historical Sciences, Professor S. Karimova conducted scientific research on this work of Al-Qosi.

Abu Mansur Abdulmalik ibn Muhammad ibn Ismail al-Salibi is one of the most prolific founders of the academy, possessing knowledge in the field of history, literature, logic, and linguistics. Alloma, the author of many works on the problems of human ethics and speech etiquette, left us a rich legacy. He is the author of "Masterpieces of the era about the virtues of people of the

century", "Best manners", "Language laws and secrets of the Arabic language", "Amazing information" and other works.

Abu Ubayd Abd-al-Wahid al-Jurjani - provod, student of Ibn Sina. He studied philosophy, medicine, and jurisprudence. He set an example of dedication in preserving his mentor's legacy. His famous work is "Biography of the Chief Scientist (Ibn Sina)." In addition to diligently studying the works of his teacher, Giurjani also participated in surgical operations. He authored works on medicine "Medicine of the Kings", "The Purpose of Medicine", "Treasures of the Khorezm Shahs", "Memoirs in the Field of Medicine". The largest of them was the 12-volume "Treasures of the Khorezm Shahs" [2, 326]. Although these treatises have not reached us, it is known that they made a great contribution to the development of medical science of their time. Scientists were able to use it more widely as a result of the reduction and compactification of Ibn Sina's work "Al-Qanun" [3, 59-63].

Mamun held scientific discussions with scientists in his palace. They expressed their opinions on various issues in various fields and argued. The winners of this scientific conference were awarded valuable gifts.

The scientists were led by Abu Raikhan Beruni, the Mudarris of Khorezmshah, the patron of science, Abu Mansur al-Sakhri, did not spare his services in creating a truly creative environment for scientists. Scientists studied in the rich library of Gurganch, deepened the knowledge of their students and expanded their thinking. Representatives of the Academy made a worthy contribution to the rise of science not only in Central Asia, but also in all countries of the East and West [4, 24]. They served to further increase his influence in Movarunnahr and Khorasan.

Abu Rayhan Beruni studied with the famous scientist of his time, Abu Nasr ibn Iraq. This teacher wrote several works on astronomy, geometry and mathematics, dedicating 12 of them to Abu Rayhan Beruni. He introduced him to the geometry of Euclid and the teachings of astronomy of Ptolemy [5, pp. 63-70].

Abu Nasr Mansur ibn Iraq wrote in one of his scientific works that Abu Rayhan Beruni, despite being very young during his stay in Khorezm, made important observations of astronomy in the city of Kot in 384-385 (994-995). He himself invented instruments for these observations. But he was able to determine the farthest, highest point of the ecliptic and the ecliptic without azimuth only for the village located south of Khorezm on the left bank of Jeyhun (Amu Darya).

Abu Rayhan Beruni was educated by Abu Nasr ibn Iraq and became a mature scholar. At a young age, he had a deep knowledge of mathematics, astronomy and other sciences. First of all, it is noteworthy that he knows many languages. Judging by the fact that all the scientist's works were written in Arabic, Arabic was the common scientific language in the countries where Islam was spreading at that time, and he knew the grammar of this language deeply. His "Mineralogy", "India" and other works testify to his deep knowledge of Arabic poetry and its meanings [6, p. 20-23].

His works such as "Monuments of Past Generations", "Kanoni Masudi" and "Saydana" show that Abu Raikhan Beruni spoke Sogdian and Persian-Dariic languages. According to Saidan, he studied Greek from a young age. He began learning Sanskrit from Indian merchants in Khorezm when he was young [7].

The fact that Abu Rayhan Beruni in his youth was familiar with historical treatises written in these languages is reflected in his first major work (written in 1000-1003) "Monuments of Past Generations".

Abu Rayhan Beruni expressed ideas on determining the geographical latitude and longitude of places [8, 77 pp.] and compiling calendars in the field of practical astronomy.

In his "Cartography" he mentions two treatises: the first is "The Book on Compiling a Globe", and the second is "The Book on Determining the Longitude and Latitude of Places on Earth". They are included in the list of scientific works of the encyclopedist.

The scientist spent his entire life collecting information for Abu Rayhan Beruni's work "Mineralogy". During his childhood in Khorezm, and then during his stay in Iran, India and Afghanistan, he collected stories, retellings and information about the properties of precious stones, the lands where they were mined, and such minerals, and studied their physical and chemical properties. In his works on mineralogy, he scientifically analyzes the idea of the weight and volume of objects, for the first time in the history of science, he calculates with modern accuracy the density and specific gravity of more than 50 substances, and manufactures special instruments for measuring specific gravities. solids and liquids and gives their description [2, p.20-23]. Many studies of the work of Abu Raikhan Beruni are presented in monographs and scientific articles published by G. K. Masharipova [8, p. 15].

The scientist remained devoted to his love of science until the last moments of his life. Even on his deathbed he tried to study. During his life, Abu Rayhan Beruni wrote 180 works on mathematics, astronomy, its instruments, geography, philosophy, mineralogy, pharmacognosy, history, ethnography, chronology and philology [9, p.47].

At the suggestion of Abu Rayhan Beruni, the Khorezmshah, the patron of knowledge in Khorezm, began to gather many great scientists of the East in Gurganj. Among them were famous doctors, philosophers, poets, mathematicians, astronomers, historians and linguists.

About one of them, Ahmad ibn Muhammad al-Sakhri, Abu Rayhan Beruni writes the following: "Sakhri collaborated with Mamunshah. He was a scholar and wrote poetry with a very beautiful and refined taste. The wide range of knowledge that interested Khorezm scientists at that time is surprising. These are jurisprudence, geology, grammar, narrative, theory of verse, history, philosophy, logic, medicine, arithmetic, geometry, astronomy, music, mechanics, optics, chemistry, astrology, physiognomy, interpretation of words, geodesy, topography, weights and measures and precision , they studied knowledge of measuring instruments, mixing water and chemistry, as well as knowledge of magic, education, spirituality and witchcraft. All scientists were teachers and students of each other.

The scientists of the Mamun Academy were mainly creative people in the field of exact sciences and medicine. Among them, the famous doctor, philosopher, astrologer, linguist and ethicist Abu-l-Khair Hammar stood out for his fruitful activities. Khorezmshah Mamun II, born in Baghdad, summoned Abu-l-Khair Hammar to Gurganj and appointed him as his personal physician and minister, serving in the palace along with Ibn Sina. Abu l-Khair Hammar left the Christian religion and converted to Islam. He was interested in various sciences, and became especially famous for his works on philosophy and medicine; he was called the "Second Hippocrates." He was well versed in Greek medicine and was known throughout the East for his scientific achievements in this field. Hammar also took an active part in the academic

discussions of the academy and acquired an excellent reputation. His work here was the most productive period in the scientist's work.

After Mahmud Ghaznavi transferred Khorezm to his sphere of influence, he took Hammar with him to the capital. In the palace, Hammar acts as the Sultan's personal physician, treating him for the rest of his life. The Sultan will allocate private land to the scholar in a place called Hammar, and this name will be added to his name.

Abu-l-Khair Hammar not only wrote books and became a translator. Among his translated works, the following have reached us: "Kitab al-Asor al-alwiyya" (كتاب الأثار العلوية) ("The Book of Highest Impact"), (كتاب اللبس فى الكتب الأربعة فى المنطق) "Kitab al-lubs fi-l-kutub al-arba'a fi-l-mantiq" ("The Book of Confusion in Four Books of Logic").

Abu Ali ibn Sina (980-1037) is one of the great figures who made a great contribution to the development of world science, and his scientific works, together with the works of the Khorezm encyclopedist Abu Rayhan Beruni, constitute the highest peak of the development of science of that time.

According to Ibn Sina, mathematical sciences include the following parts: number theory (علم العدد) ('ilm al-'adad), geometry (علم الغيامترية) ('ilm al-handāsa), (علم الهيئة) , astronomy ('ilm al-hay'a) and music (علم الموسيقي) ('ilm al-musiqi) [16, 77 p.].

The life and work of Abu Ali ibn Sina took place in extremely difficult conditions. All his life he had to move from one city to another, from one country to another. In 999, the Samanid state was abolished; in 1002, Ibn Sina arrived in Khorezm from Bukhara.

"The Amazing At-Tabakot" [17] manuscript No. 9042 is stored in the manuscript collection of the Institute of Oriental Studies named after Abu Raikhan Beruni of the Academy of Sciences of the Republic of Uzbekistan. This treatise was written by Muhammad Tahir ibn Abu-l-Qasim and consists of an introduction and seven sections (chapters). In the last part of the fourth chapter, information about him is given in red ink under the heading "Dhikri Sheikh Abu Ali ibn Sina." This manuscript is a geographical work. On one of the pages dedicated to Ibn Sina, about how long he spent in Bukhara and Khorezm, the following lines are written:

"Abu Ali ibn Abdullah ibn Sina, at the age of twenty-four, was knowledgeable about all the intellectual, narrative and mathematical sciences, and in Bukhara he argued with the scientists and defeated them. Then he went to Khorezm and taught there for seven years. Then he will go from there to Jurjon."

According to the biography of Ibn Sina, written by his student Abu Ubayd Jujani, who worked with him for a quarter of a century, he reached the maturity of science at the moment when the Samani state reached a high stage of political, economic and cultural development. He gained fame as a scientist in the fields of medicine, logic, philosophy and natural sciences. Considering that there are sufficient grounds for a separate study of natural sciences within the framework of scientific research, the opinions of Abu Ali ibn Sina, one of the scientists who worked at the Khorezm Mamun Academy, are of great importance.

Conclusion.

1. One of the factors that motivated the development of science was the expansion of external relations. The development and arrangement of new lands required mastery of geography and ancient sciences. To improve the well-being of the people and raise a healthy generation, it is necessary to study medicine and the spiritual heritage of our ancestors. It is clear that

establishing contacts with foreign countries is impossible without studying their life and culture. This situation gives rise to the need to study the languages of other peoples. That is why the rulers, as far as possible, tried to gather mature scientists in their country and opened a wide path for translations.

2. "Kitab ash-shifa" is considered the greatest philosophical work of Abu Ali ibn Sina; it can be called the scientific encyclopedia of its time. It consists of four parts: 1) logical; 2) natural sciences (this section is devoted to minerals, plants, wildlife and humans); 3) mathematics subjects will be discussed (counting, geometry, astronomy and music); 4) metaphysics or theology.

3. At the Khorezm Mamun Academy, a scientific environment has been created for scientific research by world scientists, scientific research is being carried out.

4. Teaching the youth of new Uzbekistan by studying the heritage of scientists is of great importance today.

REFERENCES

1. Sezgin F. Geaschichte des arabischen Schrifltums. - Leiden, 1974. - P. 326.
2. Masharipova G. The influence of the natural science, socio-philosophical and spiritual heritage of scientists of the Khorezm Mamun Academy on the development of public thinking. Monograph. – Tashkent: Navro`z, 2019.
3. Masharipova G.K. Updating Of The Khorezm Academy Of Ma'mun, Influence And Prospects For The Development Of Historical And Philosophical Thought Of Science. European Scholar Journal. – 2021. - 2(7), Retrieved from https://scholarzest.com /index.php/esj/article /view/1105. - Pp. 59-62.
4. Beruni Abu Raikhan. Selected works. T.3. Geodesy // Introduction, translation. and the author of the comments A. Akhmedov. – Tashkent: Fan, 1982. – 24 p.
5. Masharipova G.K. The significance of the rich scientific heritage of Abu Nasr ibn Iraq in the education of the successors of the Third Renaissance. UzAcademy Magazine. Issue 2 for 2022. - P. 63-70.
6. Beruni Abu Rayhan. Book of As-saydan fi-t-tibb. (Pharmaceutics). Selected works. Volume IX - Toshken: Ma`naviyat, 2023.
7. Sadikov Kh.U. Beruni and his works on astronomy and mathematical geography. - Moscow: USSR Academy of Sciences, 1953. – 77 p.
8. Masharipova G.K. The great discoveries of the Middle Ages are the contribution of Khorezm mathematicians to the development of science. Monograph. - Tashkent: Navro`z, 2021.
9. Masharipova G.K. Different Approaches To Studying The Natural-Scientific And Historical-Philosophical Heritage Of The Khorezm Academy Of Ma'mun. - Turkish Journal of Computer and Mathematics Education. – Turkiya, Anqara. - Vol.12-Issue - 11. 2021. - Pp. 846-856.
10. Masharipova G.K. Scientific heritage and philosophical views of Abu Rayhan Beruni. Monograph. – Tashkent, Publishing House "Fan Ziyosy", 2022. – 160 p.
11. Masharipova G.K. Socio-political and philosophical views of Abu Rayhan Beruni. – Magazine "Tamaddun Nuri", special issue 9. 2023. - B. 56-64.
12. Masharipova G.K. The role of the scientific, philosophical and spiritual heritage of Abu Ali

ibn Sina in the life of society. Monograph. – Tashkent, “Navro`z”, 2020. – 99 b.t.

13. Muhammad Tahir ibn Abu-l-Qasim, Azhoyib at-tabakot, Manuscript Fund of the Oriental Institute named after Abu Rayhan Beruni of the Academy of Sciences of the Republic of Uzbekistan, No. 9042, p. 175a.