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THE DIDACTIC VIEWS OF SCHOLAR ABU ABDULLAH KHOREZMI IN HIS CENTURIES

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ANNOTATION

In this article, the didactic views of the scientist Abu Abdullah Khorezmi in his centuries have been presented, and at the same time, the scientist has taken a worthy place in the development of pedagogical thought by promoting the idea of human maturity and the importance of science in human relations. Khorezm's major researches in the fields of mathematics, geography, geodesy, catastrophes were discussed.

Keywords: Movarounnahr, didactics, education, education.

The renaissance period that arose in the 9th century in the Arab caliphate began in the cities of the caliphate, Baghdad, Damascus, and Aleppo, and spread to the cultural life of all other nations, which paved the way for the cultural development of those countries as well.

In the Near and Middle East, including Iran, Kavkazorti and Movarounnahr, the development of trade relations, the development of science, crafts, material and cultural relations all affected the general development. The main reason for cultural growth in the countries of the Near and Middle East was a new stage of feudal relations. In the cultural development of this period, the economic and economic relations of the countries subject to the Arab caliphate were strengthened, and as a result, different cultures - Indian, Movarounnahr, Iranian, Arab, Egyptian, Greek-Greek-Roman - were closely related and interpreted. the secret played a big role.

The scientific legacy of al-Khorazmi, who lived in this period and advanced his scientific and didactic ideas, has not lost his scientific views even today. We present these data as evidence to prove our point. According to information, there were about 100 tables related to trigonometry and astronomy in the 8th-15th centuries. Among them there are zijs compiled by Khorezmi along with other scholars.

According to the sources, he has the following works:

1. Arithmetic work known as "Algorithm of Indian Arithmetic". Arabic copies of the work have not been preserved.
2. Al-kitab al-mukhtassar fi lisab al-jabr wal-muqabala (a brief book about al-jabr al-muqabala calculation)
3. "Ziji al-Khorazmi" (Khorazmi Ziji) has not been preserved in Arabic. In 1007, the Spanish Arab astronomer Maslama al-Majriti (X-XI) reworked the copy of the work, and there are copies of the Latin translation by Adelard Bath in the XII work.
4. From the excellent works of Muhammad ibn al-Khwarazmi, Determining azimuth using Asturlab ("Zaraif min amal Muhammad ibn Musa al-Khwarazmi tarif as-samt bi-l-asturlab"), the only Arabic manuscript from the Hagia Sophia Library in Istanbul 4830G Inventory No. 13 (54 sheets 198-200, copied in 620 AH) is stored with no. A Russian translation was published.
5. Book about marble clock (Kitab ar-ruhama)
6. Book of history (Kitab at-ta rikh)

7. Abu Maslama al-Majriti in his work entitled "Ghayat al-hakim" quotes from Khorezmi's work with astrological meaning. This work is not saved.
8. A treatise on the eras and holidays of the Jews. (Risala fi istikhraj tarikh al-yakhud wa a yakhidim) refers to kadendar. This book has been translated.
9. Surati-l-arz book (Book image - l - arl) - Khorazmi's "Geography" this work is also translated from the author's side.
10. The book about acting with asturlobat (Kitab al-amal bi-l - asturlobot. [18]. 48-54 p.

Caliph al-Ma'mun even organizes several scientific trips to India and Rum (Byzantium) Khazaria (in the lower reaches of the Volga) under the leadership of Muhammad al-Khwarizmi. The scientist takes a worthy place in the development of pedagogic thought, putting forward the idea of human maturity and the importance of science in human relations. Khorezmi conducted extensive research in the fields of mathematics, geography, geodesy, and catastrophe. But he remained in history as a theoretician and pedagogue-successful scientist who created innovations in the field of mathematics.

With the work "Al-Jabr wal Muqabalah" he developed the science of mathematics, studied the previous knowledge and explained the methods of their synthesis and practical application.

Thanks to this work, Al-Khwarizmi's Latin transcription took the form of "Algorithm", and later, the main concept of modern computational mathematics, Algorithm, became Algorithm. Along with the theoretical development of mathematics, he also gave ways to use it in marriage, presented calculations necessary for practical work that people need in the distribution of inheritance, making wills, and dividing property.

The scholar's full name is Abu Abdullah Muhammad ibn Musa al-Khorazmi Al-Majusi, Abu Abdullah Muhammad was a traditional name given to converts to Islam. Khorezmi's descendants were pagan priests, i.e. "Mongols", and his father must have converted to Islam. According to scientific literature, Khorezmi received his primary education at home, because his father was aware of ancient religious and secular knowledge. Because of this, al-Khwarizmi had the opportunity to learn from these scientific sources from his childhood. Muhammad Khorezmi was very devoted to mathematics, he diligently studied all the works related to this field, he studied Arabic, Persian, Indian, and Greek languages and was able to read the works created in these languages.

The reasons for this are, first of all, at that time, all the scientists who aspired to knowledge traveled to science centers after mastering certain subjects, and there they interacted with advanced scientists and debated on various subjects. and those who have passed the tests, who have tried themselves in the world of science. Secondly, the development of science in Damascus and Baghdad, which were considered the centers of science in the caliphate, and the fact that the caliphs personally sponsored the development of science also attracted scientists.

In "Baytul Hikma" studies were conducted in mathematics, geodesy, geography, disaster and other fields, and the al-Khorazmi school was created. The scientific legacy of the scientist, especially in mathematics, has gained world importance.

Khorezmi's second book on mathematics is "Book on Indian Arithmetic" ("Hisab al hind"). The work is dedicated to the numbers of the decimal system (0, 1, 2, 3, 4, 5, 6, 7, 8, 9). Khwarazmi read Sindihind, an Indian handbook of astrology and mathematics, reworked its innovations and difficulties, added new chapters, and called it Kisqargan Sindihind (On Algorithmic Indian

Arithmetic). The work is not only in the east. It also spread fame as a guide in Europe. The discovery of the decimal system made a revolutionary change in the number system and defines it. Writing the largest numbers using the decimal system numbers and showing exact locations came to Europe from the Arabs in the X-XI centuries.

Khorezmi created the rules of addition, subtraction, multiplication, and division, which are algorithms of arithmetic. He also gave an algorithm for multiplying numbers of different "sex". For example, in order to multiply minutes by seconds, it was first shown to convert them to the same form, that is, to convert them to seconds or minutes. In a special chapter, he wrote the procedures for subtracting fractions.

In his works on catastrophes, Khorezmi analyzed Indian catastrophe tables and compiled astronomical tables known as "Xorazmiy ziji".

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