SECTION 13. Geography. History. Oceanology. Meteorology.

EDUCATION DURING AMIR TEMUR AND TEMURIDS EPOCH

Abstract: The article deals with the issues about culture, science, education, and madrasahs aimed at giving higher education during Amir Temur and Temurids epoch. The article informs with education system, subjects, directions, textbooks and manuals used in madrasahs in Movaraunnahr and Khurso. 

Key words: Temurids epoch, culture, science, education system, madrasahs, subjects, textbooks and manuals. 

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Introduction
During the reign of Temur and Temurids madrasahs served as higher educational centers. There were several madrasahs built with the investment of the state and rich people in Movaraunnahr and Khurso.

Materials and Methods
It is known that in Islamic world the first madrasahs, where world sciences were taught together with theology was built in Bukhara in X century. Science of law, mathematics, geometry, astronomy, medicine, history, geography, literature, poetry, Arabic, Persian and other subjects were taught here. Highly skilled specialists taught in madrasahs. They had certain payment. Mongol conquest hinder further development of science in Central Asia.

Amir Temur realized that for the development and flourishing of science and culture all over again there had to be strong basis. Therefore he payed great attention to save existing higher educational institutions and build new ones. For instance, one of those madrasahs, which were built before Amir Temur’s reign and also later carried on its function was madrasah Shahobiya built by Najmiddin Qutlug’ Temur in Jurjoniya (now Urganch), where he was buried after his death in 736 (1335-1336) [1].

In 1404 Amir Temur’s wife Saroymulkhonim erected a huge madrasah (Jome’ mosque, opposite the main portal which is at present Bibikhonim mosque) in Samarkand with her husband’s permission at the expense of her father’s inheritance Qazonkhon. The madrasah was distinguished from other buildings of that time by its luxury, where prominent scientists of that time worked.

When Amir Temur’s grandson Mirzo Ulug’bek became the governor of Movarounnahr in 1413 he brought his preceptor Qozizoda Rumiy (born in about 1360 in Busra south to the Sea of Marmara) here, who stayed here for the rest of his life. It is known that Ulug’bek built four madrasahs: two in Samarkand, one in Bukhoro and one in G’ijdunov.

Ulug’bek built madrasah [2] and observatory in Samarkand in 823(1420) on Qozizoda’s advice, who died in 1437. Qozizoda taught at Ulug’bek madrasah and conducted his researches there, he also took active part in construction of observatory and on completion of building works he took out observations together with Ulug’bek.

He wrote several works on astronomy and mathematics and two among them became especially well-known. He also wrote comments for the works of great scientists, who lived earlier. For instance, he wrote comments for the Samarkand scholar’s work in geometry “Ashqol at-ta’sis” by Shamsiddin ibn Muhammad as-Samarqandiy (XIII) [3]. His book was named as “Sharh ashqol at-ta’sis fi-l-handasa” (“Propositions based on geometry”), which served as geometry textbook in Movarounnahr madrasahs. A lot of manuscripts of these comments have been preserved.

The second work of Qozizoda “Sharh al-mulalahas fi-l-hayali-l-nujum” (comments on “Brief description of astronomy”) is the comments written...
to the work of scientist from Khorazm Makhmud Ibn Umar al-Chag’miiny (died in 1220). Qozizoda used this book while teaching in Ulug’bek madrasah [4]. This work was widely spread and is still kept in many world manuscript treasures.

This work by Chag’miiny is preserved in 4 copies in the treasures of the Institute for Oriental Studies at the Academy of Sciences of the Republic of Uzbekistan [5].

One of the active members in the construction of observatory was the well-known scholar of Samarkand Jamshid ibn Mas’ud ibn Mahmud al-Koshiy, who worked at Ulug’bek madrasah in Samarkand. Originally he came from city Koshon of Iraq. After he had come to Samarkand he completed his Zij and presented it to Ulug’bek’s library as a gift.

Koshiy achieved high and scientifically valuable results in the field of mathematics. One of his books on mathematics “Miftoh al-hisob” (“A key to arithmetic”) was also composed for Ulug’bek library. From the preface written for the “Miftoh al-hisob”, we found out that it was finished in Samarkand and namely it was the work of Movarounnahr scientific school.

Koshiy mainly used this book while teaching in Ulug’bek madrasah. His book “Miftoh al-hisob” consists of 5 books: the 1st is devoted to arithmetic, the second one is devoted to fraction arithmetic, the 3rd to counting of sixties, the 4th to geometric measures and the 5th to algebra. As it can be seen, it is obvious why the book was chosen as textbook for the madrasah. Koshiy’s lectures made it possible for students to master arithmetic fully.

The most devoted student of Ulug’bek was Alovuddin Ali ibn Muhammad Qushchi (born in 1402). Even though he was relatively young, he taught at Ulug’bek madrasah. Ali Qushchi assisted Ulug’bek faithfully while construction of observatory and conducting research.

We mentioned above only very prominent scholars of Samarkand, who comprised the basis of Ulug’bek astronomy school. No doubt, Ulug’bek himself was the founder and sponsor of the science.

In a letter sent from Samarkand to his father G’iyosiddin Koshiy described Ulug’bek as a great scholar and teacher[6]. According to him, Ulug’bek madrasah in Samarkand was a competent scientific centre, where Ulug’bek held lectures on mathematics. When the letter was composed (in 1420 or 1421), Ulug’bek was 26 or 27 years old, and at that moment he was conducting research in astronomy and mathematics. Therefore, he paid great attention to mathematics [6]. The author of the letter also noted Ulug’bek’s rare talent in astronomy and mentioned about his wonderful lectures from “Tazkira” (“Nosiriddin’s memoirs”) and “Tuhfa” (“King’s gift”) [6, p.278]. While describing Ulug’bek’s fantastic memory Koshiy wrote that he could accurately do mental arithmetic on light length, degrees and minutes [6].

Now and then big scientific councils were held in madrasah, where debates on different topics brought up, including the issues of dismissing students, who kept behind. Ulug’bek was the initiator and active participant of such meetings. There were more teachers in madrasah besides those, whose names were mentioned above, but their names were not preserved in historical sources. G’iyosiddin Koshiy’s following words can be a good prove: “Well-known teachers and scientists on all subjects are gathered in Samarkand, the majority of whom are engaged in mathematics”.

Besides two madrasahs built in Samarkand by Ulug’bek order, there were more madrasahs such as Khonim, Qutbiddin Sadr and Muhammad Sultan at that time. Lectures were also held in some tekkes. Surely, teachers together with madrasah and tekke listeners analyzed a lot of books there. There were principal libraries in Amir Temur and Temurids’ palaces. Books of ancient times and unique woks of Middle Ages were kept there.

In Samarkand the libraries of Amir Temur and Ulug’bek, and in Herat the libraries of Shokhrukh Mirzo, Boysunqur, Khusayn Boyqaro and Alisher Naviy served the needs of intellectuals.

As it is known, in 850 (1447) Aloiddin al-Bukhoriy presented Ulug’bek with his book “Sharh ala-l-fiqh al-akbar” (“Comments on Great Theology”) [6] written for the work of Abu Khanifa an-no’mon ibn Sobitibn Zuta (died in 150 (767). Moreover, the book “Qonuni Mas’udiy” (“Mas’udiy Law”) by Abu Raykhon Berunyi (born in 973) was considered as a manual constantly used by Ulug’bek and scientists around him [7]. No doubt these books were also in Ulug’bek library. Ulug’bek’s interest to books was very great. He was eager to have a copy of any book, first appeared in Shokhrukh’s- his father’s library. Most great scientists (such as Qozizoda Rumiy, Koshiy and others) granted their books to Ulug’bek’s library.

Nowadays the fate of Ulug’bek’s library is unknown. We believe that one part of the books was taken to Istanbul by Ali Qushchi, another part was taken to Russia by Russians and finally the small number of books is preserved in Uzbekintan’s Manuscript Treasury.

**Conclusion**

In conclusion it can be said that Amir Temur himself greatly contributed to the development of science and education in Movarounnahr. He brought to Samarkand a lot of prominent scientists from various countries and created all necessary conditions for their creative work. His grandson Mirzo Ulug’bek carried on this tradition and left memorable trace in the history.
Impact Factor:

| Journal       | Impact Factor |
|---------------|---------------|
| ISRA (India)  | 1.344         |
| ISI (Dubai, UAE) | 0.829       |
| GII (Australia) | 0.564         |
| JIF           | 1.500         |
| SIS (USA)     | 0.912         |
| ICF (Poland)  | 6.630         |
| PII (India)   | 1.940         |
| ESJI (KZ)     | 4.102         |
| IBF (India)   | 4.260         |

References:

1. Fasikh Akhmad Ibn Jalal Mukhammad al-Khavafi (1980) Mujmali fasikhi // Translation, commentaries and indexes by D. Yu. Yusupova. Tashkent. - p. 59, p. 125.
2. (2008) This datum was given in historical sources. See: Fasikh Akhmad Ibn Jalal Mukhammad al-Khavafi. Mujmali fasikhi. P. 188; Abdurazzoq Samarqandi’s “Matlai sa’dayn va majmait bahrayin” in II Volumes, 1st Volume. Translation from Persian and commentaries by A. Or’inboyev. – Tashkent.
3. (1998) Collection of oriental manuscripts. Academy of Sciences of the Republic of Uzbekistan. Exact and natural sciences. Compiler A. B. Vildanova. Tashkent, 1998. – p.188, 189.
4. Kazi Zada Rumi (1993) Comments on “Compendium of Chagmani astronomy”. Preface, translation from Arabic and commentaries by P. G. Bulgakova. Tashkent.
5. (2018) Collection of oriental manuscripts. Exact and natural sciences. List №240-243.
6. Yusupova D. Yu. (1979) A Letter of Giyas ad-Din Koshi to his father from Samarkand to Koshan // From the history of science in the epoch of Ulugbek. Tashkent, 1979. - p. 37-64, 278, 282.
7. (2018) The manuscript of this work is kept in the Institute for Oriental Studies at the Uzbek Academy of Sciences, inv.// 4817.
8. Yusupova D. (2006) Life and creative work of Khondamir. Tashkent.
9. Nizomiddin Shomiy (2006) Zafarnoma. Tashkent.
10. Khofizu Abru Zaymi (1939) Jome’ at-tavorikh ba muqaddima va ti’liqot doctor Khon Bobo Bayoniy. Teheran.
11. Mo’yniddin Natamzi (2011) Mutakhob ut-tavorikhi Mu’ini. Translation from the Persian, introduction, comments and indexes by G’. Karimi. Tashkent.
12. Sharafiddin Ali Yazdiy (1972) Zafarnoma. Editor-in chief, introduction, comments and indexes by A.O’rinboyev, Tashkent.