



SCIENTIFIC AND PEDAGOGICAL HERITAGE OF AVICENNA

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Summary

This article is devoted to the role of the views, works of the Eastern thinker Avicenna in the education and upbringing of the modern young generation. The article analyzes and discusses the ideas and teachings about upbringing and education contained in the works of Ibn Sina, his view of education at school, the structure of education, the issue of training teachers and educators.

Key words: education, Abu Ali ibn Sino, Avicenna's works, education, medical heritage.

НАУЧНО-ПЕДАГОГИЧЕСКОЕ НАСЛЕДИЕ АВИЦЕННЫ

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Резюме

Данная статья посвящена роли взглядов, произведений мыслителя Востока Авиценны в образовании и воспитании современного молодого поколения. В статье анализируются и рассматриваются идеи и учения о воспитании и образовании заключающиеся в трудах ибн Сина, его взгляд на образование в школе, структура образования, вопрос подготовки учителей и воспитателей.

Ключевые слова: образование, Абу Али ибн Сино, труды Авиценны, воспитание, медицинское наследие.

Relevance

The change in the state-political and socio-economic system taking place in Uzbekistan in our country has created a fundamentally new situation in the education system in general, a new approach to the educational system and the education of modern youth has been formed. The new approach is to use in the educational process the works, ideas and teachings of the thinkers of the medieval East. [18.p.31].

Care for the younger generation is the basis of the social policy of Uzbekistan [13.p.18].





The works of thinkers of Central Asia, such as Beruni, Ibn-Sina, Omar Khayyam, Farabi, Al-Fergani, Navoi, Ulugbek, Mukimi, Furkat, Makhtumkul, have survived to this day. Eastern thinkers have developed some of the basic, important principles of educating the young generation, which remain relevant at the present time, are the main stimulating moment in the system of education and upbringing of modern youth. A characteristic feature of the system of pedagogical views of these thinkers was special attention to the harmonious development of the personality [18.p.32].

Scientists of the East in their works reveal the inner world of a person and give important recommendations on education and upbringing. A characteristic feature of the system of pedagogical views of these thinkers was a special attention to the harmonious development of the individual. Thinkers who possessed genuine knowledge devoted their works to the study of a wide range of issues related to the harmony of the soul and body in the process of personality development. These include Kindi, Farabi, Biruni, Avicenna, Averroes, Tusi, Ibn-Khaldun and others, who considered pedagogical problems not as an abstract theory, but as part of a living process of human development. Studying the pedagogical views of al-Khwarizmi, al-Farabi, al-Beruni, ibn Sina, Omar Khayyam, Saadi, Abdurakhman Jami, Alisher Navoi and others, we come to the conclusion that the great scientists-teachers, philosophizing about a person, personality, upbringing and training of the younger generation, great importance was attached to work, knowledge, intelligence, art of the word, high moral qualities. They wanted to see a person comprehensively developed, skillful, educated.[18. pp.32-33].

One of the outstanding progressive representatives of his time was the scientist, physician, philosopher Avicenna. Avicenna is included in the galaxy of personalities of the widest scale, such as Aristotle, Leonardo da Vinci, Francis Skorina, Mikhail Lomonosov. The legacy of Avicenna is impressively voluminous and multifaceted. It includes works on medicine, chemistry, astrology, mechanics, philosophy, psychology, biology, physics, geometry, arithmetic, music. [8.p.11-12]

Abu Ali al Husain Abdullah Ibn al Hassan Ali Ibn Sino (in Europe - Avicenna) was born in 980 (Hijri) in the village of Ashfana, located 30 km from Bukhara in the family of a financial official.[12.p.12]. In the Renaissance, there was not a single learned person who would neither travel far, nor speak four or five languages, nor live in the midst of the interests of his time. All this can rightfully be attributed to Avicenna. Many cities, including Bukhara, near which Avicenna was born and worked, became both cultural and scientific centers. Their pride was the repository of wisdom - libraries. [10.p.212]. In the libraries of Bukhara, extensive literature on all branches of science of that time was collected in Arabic. When Avicenna was 16 years old, he





became the personal physician of the Emir of Bukhara Nuh ibn Mansur. Then the young man got access to the local library, in which he actively studied medicine. Ibn Sina himself described the library of Nuh ibn Mansur, the ruler of Bukhara, as follows: "... I entered the building, where there were many rooms. In each room were chests of books stacked one on top of the other. In one room there were books on Arabic poetry, in the other - books on fiqh, and so in each room (there were) books on any branch of science. "[2.p.196]. During the years of study, Abu Ali ibn Sina studied Aristotle and other ancient Greek thinkers with great zeal in translation into Arabic (the language of science of his time).

Abu Ali ibn Sina is a figure of global importance, a genius recognized by the entire international scientific community. The works of Ibn Sina are still of interest to the most authoritative researchers and are becoming the subject of study in the most prestigious scientific schools in many countries. A major work: "The Canon of Medicine" in 5 volumes, translated into Latin and up to the 17th century. served as a textbook of medicine in Europe.[12.p.12]

The total number of Ibn Sina's works exceeds 450, but only about 160 of his works have come down to us. Many of his treatises were lost during moving, wars, palace coups, various disasters characteristic of that time. [17.p.49]

Ibn Sina is an encyclopedist, experimenter, medical theorist and practicing healer, poet, musician, author of works covering almost all branches of knowledge of his era. Ibn Sina left a huge contribution "in 12 branches of science", one of these sciences is pedagogy, his works today, after 1000 years, have not lost their relevance. [7.p.154].

Of great interest is the study of the scientific and pedagogical heritage of Ibn Sina. Ibn Sina approached pedagogy creatively. Ibn Sina's views on pedagogy were formed by the works of his predecessors and contemporaries (Aristotle, Farabi, Beruni) and do not lose their relevance in our time. In his treatise "Politics" Avicenna considered the actual problems of education, in the "Canon of Medicine" he repeatedly mentioned the correct physical and spiritual education of children. Other works of the scientist devoted to the pedagogical problems of that time were The Book of Justice, The Canon of Duty, The Control of the Body and Thought, The Canons of Morality. Called by his contemporaries "the master of sciences", adviser to the rulers of the countries of the Near and Middle East, Ibn Sina devoted many years to teaching and left many works, among which the "Book of Healing" stands out, which included treatises directly related to pedagogical theory "The Book of the Soul", " Book of knowledge", "Book of instructions and instructions". [eighteen. p.35].

In them, the analysis of Abu Ali ibn Sina touched on the problems of goodness, truth, the meaning of knowledge, the nature of the world and human nature, which are





fundamental for the education of all times, etc. The practical experience of teaching and the fact that his medical works are still used in the training of modern doctors gives every reason to assume that the system of his philosophical views became the result of such brilliant pedagogical work.[1.p.21]

Many of his thoughts about the education and upbringing of children are striking in the depth and correctness of the interpretation of the problem of education. Ibn Sina pays great attention

the importance of education and upbringing at school. In the work "Tabdiri Manzil", a separate section "Education and upbringing in school" devotes this issue.

le." [14.p.228]. Abu Ali ibn Sina considered the process of education as a single one, including mental, physical, aesthetic, legal education, as well as training in a craft (labor). [12.p.12] Abu Ali ibn Sina attached great importance to the correct formulation of school education. Among the pedagogical views of the great thinker, which have not lost their relevance even today, Ibn Sina's innovative pedagogical idea for that time about collective learning at school is of interest [7.p.154]. Ibn Sina was a supporter of only collective learning in school. This idea is supported by the following facts:

- in the course of collective, joint learning, students have a desire to learn sciences, a desire to compete with each other, which contributes to better knowledge and motivation to be ahead;
- in the process of discussions, students share information with each other;
- collective learning contributes to the development of such personality traits as respect and mutual understanding, patience.[14.p.228].

The content of education proposed by Avicenna includes:

- 1) mental education;
- 2) physical recovery based on the data of the science of healing;
- 3) aesthetic education;
- 4) moral education;
- 5) training in the craft. [8.p. 166]

In the Middle Ages, people who did not have the appropriate training were appointed to the post of teacher; religious institutions were the main sign of the recruitment of teachers. In the writings of ibn Sina, it can be noted that he paid great attention to the issue of training teachers and educators: "a teacher must be religious ... honest, wise, fair,

neat, polite":

- Educators should practice moderation with kids;





- in the course of teaching, the teacher should show diversity in the application of various methods and forms, taking into account the individual abilities of each child;
- the speech of the teacher should be intelligible and accessible to students;
- the speech of the teacher should be accompanied by facial expressions and gestures;
- the teacher should be able to interest students [14.p.228-229].

Abu Ali ibn Sina believed that education should form an independent personality capable of solving various life problems through arguments and judgments. In his treatise "Risalai akhlok" ("Treatise on morality"), he writes: "Let the student speak for himself, and not his memory." In the pedagogical ideas of Ibn Sina, great importance is attached to the upbringing and education of children in school. In his book "Family Economy" he devotes a special chapter to this issue. In the section "Education and upbringing of children in school", he speaks - first of all - about the need to cover all children with schooling and promotes the idea of collective education, opposes individual education of children at home. [4.p.18]

In his writings, Ibn Sina draws attention to the education of children up to 14 years of age. Several aspects are outlined on the basis of which the educational process should be built:

- learning should proceed from simple to complex;
- tasks must be feasible to perform;
- the learning process should be built taking into account the abilities of students;
- the need to combine education and physical culture;
- students should have free time for physical exercises, sports, play activities.[14.p.228]

In medicine, Avicenna had a profound influence on the schools of Europe until the 17th century. He compiled the Kitab ash-shifa (The Book of Healing), a vast philosophical and scientific encyclopedia, and Al-Qanun fi at-tibb (The Canon of Medicine), which is one of the most famous books in the history of medicine. The canon was subject to increasing criticism from Renaissance teachers, however, since Avicenna's text adhered to the practice and theory of medicine described in Greco-Roman texts, teachers used it to familiarize their students with the basic principles of science [23].

The Canon of Medicine is the greatest legacy in medical science, a work completed around 1020, in which Avicenna gathers the medical knowledge of the ancient world, creating its critical balance. The canon marked a new stage in the development of medicine, was translated from Arabic into Latin and other languages, spread throughout Europe, and was repeatedly reprinted. For several centuries it was the most important source of medical knowledge, thanks to which its author became



known as the prince of physicians. In his work "The Canon of Medicine", he described more than 700 medicinal substances, considering their general and healing properties. About 150 plants described by him are also used in modern medicine. Also, in his most famous treatise, he describes the signs and procedure for treating cancer. In addition, Ibn Sina gives the symptoms of dislocations, burns and minor wounds, as well as methods for repositioning the joints, which in Western medicine are called the "Avicenna method". It was he who distinguished between cholera and plague, and also described leprosy. The work "Canon of Medical Science" has earned Ibn Sina world fame. It is distinguished by the simplicity of describing diseases, as well as ways to treat them. Avicenna paid great attention to the prevention of diseases. That is why he called for the observance of the rules of personal hygiene, which are spelled out in his work "On Hygiene". To maintain the purity of his body, Ibn Sina insisted on the need to regularly perform ablution and beware of touching dirty objects. In order to prevent diseases, he also recommended to constantly engage in physical education, calling it the most important condition for the health of the body. Ibn Sina described physical exercises for people of different ages. An important role in promoting health, he assigned to the diet and sleep.

On September 6, 1990, by the Decree of the Cabinet of Ministers of the Republic of Uzbekistan No. 307, the Bukhara State Medical Institute was established in the city of Bukhara in the homeland of Abu Ali ibn Sino. According to the decision of the Presidium of the Bukhara Regional Council of People's Deputies, in March 1991, this institute was given the respected name of Abu Ali ibn Sino, the brightest and most brilliant star in the field of medicine, our great-grandfather and compatriot. [23.p.35]. Through his work, Ibn Sina managed to awaken people's respect for science, enlightenment and the pursuit of knowledge. [17.p.50]

Abu Ali ibn Sina is a figure of world-historical significance, whose outstanding merits and unique natural genius are recognized by the entire international scientific community. His works to this day arouse genuine interest among the most authoritative researchers, become the subject of study in the most prestigious scientific schools. The United Nations Educational, Scientific and Cultural Organization (UNESCO) on the occasion of the 1000th anniversary of the creation of the encyclopedic work "The Canon of Medicine" declared 2013 the Year of the great scientist of the Muslim world - Avicenna. In 1980, there was a celebration of the 1000th anniversary of Abu Ali ibn Sina according to the European calendar, held by decision of the XX session of the General Conference of UNESCO. The memorial museum of ibn Sina (Avicenna) is located in the village of Afshona, 40 km from Bukhara. The exposition of the museum is dedicated to the life and work of the





outstanding scientist of the East. The memorial complex includes a museum and a monument to the scientist, the authors of which are the sculptor Kh. Khusnitdinkhodzhaev and the architect R. Tokhtaganov. The museum was built in 1980 for the 1000th anniversary of the scientist-encyclopedist. In the museum, visitors can get acquainted with copies of medical instruments of the era of the scientist, manuscripts of the Canon of Medicine, the Book of Knowledge and the Book of Healing, fragments of ceramics of the 10th century.

We find in the work of the great thinker so much desire to solve the incomprehensible laws of life that even today we draw strength from them for further striving into the world of beauty and harmony. Despite the huge scientific legacy left behind, his dissatisfaction with the reached heights of human thought, as an appeal and appeal to future generations, resulted in the following lines:

From the depths of the underworld to distant planets

I found the answer to the riddles of the universe.

Unleashed all the knots, destroyed all the shackles,

I did not unravel the knot of death alone - no. [2.p.199]

References

1. Abdugarimova G.B. Philosophical views of Abu Ali ibn Sino on education // Achievements of science and education. —2019. №4 (45) - S.21-24
2. Gulomov Z.S., Filipuschenko I.A., Urazgaliev R.N., Ismailova M.A. The great legacy of Abu Ali ibn Sina // Russian otorhinolaryngology - 2010 No. 3 (46) - P. 195-199
3. Kadirova L. V., Makhmudov Sh. S. PATHOPHYSIOLOGICAL APPROACH TO THE STUDY OF MOUNTAIN SICKNESS // BARKARORLIK VA ETAKCHI TADKIQTOTLAR ONLINE ILMIIY JURNALI. - 2022. - Vol. 2. - No. 4. - S. 8-12.
4. Kadirova L.V. FEATURES OF THE MACROSCOPIC CHARACTERISTICS OF THE ADRENAL GAS OF 3-MONTH-OLD WHITE RATS AFTER SEVERE BRAIN INJURY // Vestnik TMA — 2022.—No. 3,- P.80-82
5. Kadirova L.V., Nodirdidinov D.M. FEATURES OF PATHOPHYSIOLOGICAL COURSE OF LONG-TERM COMPRESSION SYNDROME //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. - 2022. - Vol. 2. - No. 4. - S. 13-17.
6. Kadirova Laylo Valizhanovna, Temirov, Timur Ikhtiyarovich PATHOPHYSIOLOGICAL APPROACH TO THE STUDY OF ELECTRICAL INJURY // ORIENSS. 2022. No. Special Issue 4-2.





7. Kurbonova G.M. Questions of humanistic education in the works of teachers of Central Asia // Kazan Pedagogical Journal -2010. No. 5-6.- P.153-157
8. Kukharik E.A. Pedagogical views of Avicenna.//Materials of the international scientific conference Avicenna: thinker, scientist, humanist Minsk - 2013.- P.166-167
9. L.V. Kadyrova, G.Sh. Rakhimova "Some Aspects of the State of the Endocrine Glands of White Rats After Traumatic Brain Injury." CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURALSCIENCES. -2021. -FROM. 254-257.
10. Lazarevich N.A., Questions of medical ethics: from Avicenna to the present // Proceedings of the international scientific conference Avicenna: thinker, scientist, humanist. Republic of Belarus, Minsk - 2013.- P. 212-214
11. Laylo Valizhanovna Kadirova INTERACTIVE METHOD "BLITZ POLL" IN TEACHING THE SUBJECT PATHOLOGICAL PHYSIOLOGY, ON THE EXAMPLE OF THE TOPIC: "INFLAMMATORY" // Scientific progress. 2022. №2.
12. Morkhova I.V. Open lesson of the Senior Lecturer of the Department "General Pedagogy" // Tashkent State Pedagogical University named after Nizami. Tashkent -2019
13. Munarova R.U., Kamolova Sh.U., Shakarboeva Sh.A., Karshiboeva D.B., Alimkulov S.O. Great thinkers of Central Asia on the upbringing of a harmonious and comprehensively developed generation // Problems of Pedagogy - 2016. No. 2 (13). - P. 17-20
14. Mukhametzyanova I.G. Pedagogical legacy of Ibn Sina. //Minbar. Islamic Studies -2013, Vol.6. No. 2-C. 222-224
15. Rakhimova G. Sh. INTERPRETATION OF MACROSCOPIC TOPOGRAPHY OF THE TESTES OF EXPERIMENTAL WHITE RATS AFTER SIMULATED CRANIO-BRAIN INJURY. – S. 83.
16. Ruzieva D. M. Philosophical views of Ibn Sino // Academy -2018. No. 8 (35).- S.49-51
17. Eshonkulov Sh.U. The role of Eastern thinkers in modern education.// Boshlang'ich ta'limda Innovatsiyalar -2021.2(2)
18. Alfonso T.F.I., Díaz A.Y., Martínez R.A.T., Rivas C.B., Benítez P.C. Avicenna and the transcendence of medicine and the Islamic culture in the western world // Edu Me Centro - 2016, No. 2 - P. 32-47.
19. Flannery M. "Avicenna" // Encyclopedia Britannica1—2022





20. Perez AJJ, Armenteros CJK, Hernández OLM. Avicena, the doctors' prince. Life, works and legacy for the contemporary medicine. //Revista Cubana de Medicina -2018.57(1) - P.66-79.
21. Shamsievna R. G. Modern Aspects of Studying the Features of Morphofunctional Characteristics of Testes under Various Factor Influences // Eurasian Scientific Herald. - 2022. - T. 7. - S. 279-286
22. Tursunov K. S. History of the bukhara state medical institute named after abu ali ibn sino // Science, technology and education -2020. No. 11 (75) - P.35-38
23. Rakhimova G. Sh. "Experimental modeling of traumatic brain injury in white rats". Tibbiyotda yangi kun. –2021, 2/34 C-197-200
24. Valizhanovna, K. L. (2022). Rational application of new pedagogical methods of teaching in a modern university, results and effects of interactive learning.// Barqarorlik va etakchi tadqiqotlar online ilmiy journali, 2(2), 33-38.

