

## **THE IMPORTANCE OF THE PRINCIPLE OF HISTORICISM IN THE HUMANITARIZATION OF PHYSICS AND ASTRONOMY EDUCATION**

Dadabaeva Feruzakhon Olimjonovna  
Kokand State Pedagogical Institute

Rahimov Kamoliddin Anvarovich  
Tashkent State Technical University named after Islam Karimov  
Teacher of Kokand Branch

Ibrahimova Rana Hamdamovna  
Kokand State Pedagogical Institute

### **ANATATSION**

In this article it is assumed that the richness of historical materials in physics and astronomy and their effective use is a powerful factor in the fulfillment of educational and developmental tasks of education.

**Keywords:** Humanism, upbringing and developmental aspects of education, humanization of education, humanitarian potential, self – education, the principle of historicity.

Based on many years of experience in teaching the natural sciences (astronomy), it should be said with confidence that the humanization of teaching the natural sciences at application of the principle of historicism has a huge effect. A sharp revitalization of the educational aspect of education can be achieved due to the widespread use of historical materials in the teaching process. Especially in this issue, the principle of historicism occupies a special place in the education of the scientific worldview, morality, patriotism, internationalism in students . Historical materials used in the process of teaching are directly related to the content of the subject being taught, and can be in the form of a scheme, photography, a statement of scientists about a particular phenomenon, formulas, drawings, a narrative image of the era, the working conditions of scientists, some discoveries in the form of a struggle of historical ideas. Within historical materials, which in most cases make a strong impression on students, which can provoke strong emotional emotions in them, biographical information related to the life and work of scientists is noteworthy, which plays an important role in the formation of the reader's personality. "The moral qualities of a famous person," says the great physicist A. Einstein, - this is more important for the entire course of generation and history than just intellectual achievements."

Revealing the image of the scientist, the form of technology, of course, it is necessary to pay attention to certain conditions in which it should work. The historical event should be covered in such a way that readers, before everyone else, understood the essence of the tasks performed and the importance of discoveries made by great people

Experiments show that when using historical materials, it is necessary to pay attention to:  
1. The amount of historical information provided during the lesson should be minimal;

2. The historical materials intended for use should be closely related to the topic studied in the lesson;

3. The reported historical facts should be bright, touching, with great educational morality; they should be chosen in such a way as to provoke certain feelings of students (approval, condemnation, admiration, joy, anger, etc.). In doing so, moral feelings and beliefs are usually awakened and formed more actively;

4. It is advisable to present historical material in such a way that the reader must be forced to put himself in the place of the scientist in the process of making an important decision; this will allow him to mentally live a fragment of the scientist's life and become a partner in events; It should not be forgotten that the basis of the life of scientists is scientific research. Consequently, his humanity is embodied in his research. Therefore, when choosing historical materials, special attention should be paid to the creative path of the scientist and the analysis of his scientific activity. It is necessary to emphasize that this is the creative activity of scientists — hard work-in order to create a correct picture in students. Also another common feature for real scientists is that it is determined by the scientist's spiritual wealth, intellect, worldview, attitude to art and politics in general, not limited to the scope of his knowledge in a particular science. They are not indifferent to those around them, emotional feelings in a person are not alien to them, for them literature, art and all humanities stand on a par with the Exact Sciences in which they work. In the life and work of such broad erudite scientists, it is important for all areas of the education of students of comprehensive education by the presence of Model qualities and richness in instructive elements.

In the implementation of the principle of historicism in teaching, attention should be paid to the widespread use of local materials on the life and scientific work of medieval eastern scholars, including Central Asian scientists, in the content of teaching .

In this regard, especially Al-Khorezmi, Ahmad Al-Fergani, Beruni, who were born and created in the regions of our country, he.Khayyam, Ulugbek, J. It should not be forgotten by the teacher that the scientific views on the movements of celestial bodies (first of all-the Sun, The Moon and the planets), the structure of the universe and the physical nature of celestial bodies, the foundations of natural sciences, including astronomy, are of great interest in students.

Acquaintance of students with the life and scientific heritage of scientists of our motherland, as well as their merits in the development of World Science, fosters national pride in them, in the spirit of patriotism. Scientists who have made a great contribution to the development of the astronomy of our motherland will be found in the school astronomy course. Within these Middle Ages scholars of the East and Central Asia also place great emphasis. It should be noted that if the places where scientists were born or lived and worked are closely familiar to students or are related to the places where they live and study, it will be possible to achieve great effectiveness in their teaching and upbringing on the basis of the principle of historicism. A teacher who is closely acquainted with the life and scientific activities of the staff of the Observatory of Al-Khorezmi, Al-Beruni, Abu Ali Ibn Sina, Nasriddin Tusi and Ulugbek in the schools of the republics of Central Asia, the life of these scientists on suitable topics of the astronomy course, the work of a theoretical nature, the observation devices of the observatories

In conclusion, it should be noted that the content of Natural Sciences, in particular physics, astronomy, which is contained in the taught content, is called the humanization of the content

of familiar persons, scientists and well-known engineers, experimenters, in other words, the humanization of the content of these educational subjects, using them in practice, forming its humanitarian potential. Important factors are considered to be the realization of the content of humanized Science in lessons, the interest of students in the basics of this particular science, the awakening of motives for its study. However, this will not be an easy task, nor will it be possible for any science teacher. This requires a sufficient amount of information from the teacher's history of the subject, talent, a reserve of Talay knowledge and such skills as being able to surprise and surprise the student. If in the lessons these two factors are addressed in optimal condition, the intended goal is realized and becomes an effective weapon of the teaching process.

### **REFERENCES**

1. Мамадазимов М.М., Дадабоева Ф., Гуманизация естественно-научных дисциплин— один важных принципов образования. – Ж.:Таълим, фан ва инновация—№2,2015. С.24–26
2. Эйнштейн А. Физика и реальность. – М., 1965. С. 116.
3. Королев Ю.А. Нравственное воспитание учащихся на историческом материале – Физика в школе №1. 1999. С.14-15
4. Мамадазимов М. Принцип историзма как средство гуманитаризации астрономического образования// Педагогик таълим.- 2001. № 4. С. 21-25.
5. Dadaboyeva, F., and R. Ibragimova. "GUMANITAR YO'NALISHLI O'QUV MUASSASALARIDA ASTRONOMYADAN SIFAT MASALALARINI YECHISH." ЎЗБЕКИСТОН РЕСПУБЛИКАСИ ОЛИЙ ВА ЎРТА MAXCUC ТАЪЛИМ ВАЗИРЛИГИ ТЕРМИЗ ДАВЛАТ УНИВЕРСИТЕТИ: 301.
6. O'ZBEKISTON RESPUBLIKASI, OLIY VA O. "RTA MAXSUS TA'LIM VAZIRLIGI Yusupov Ibragim Mirsaydalievich UMUMIY MIKROBIOLOGIYA 5110400-Biologiya o'qitish metodikasi DARSLIK Toshkent-2020 138-139 бетлар." Мувофиқлаштирувчи кенгашнинг ўқув-услубий бирлашма ва комиссиялари томонидан ижобий хуоса берилган. Ўз Р. Олий ва ўрта махсус таълим вазирлигининг (2021).
7. Yusupov, Ibragim. "METHODS OF DETERMINING THE MINERALIZATION OF THE SOIL: <https://doi.org/10.47100/conferences. v1i1. 1393.>" RESEARCH SUPPORT CENTER CONFERENCES. No. 18.06. 2021.
8. Yusupov, Ibragim. "METHODS OF DETERMINING THE MINERALIZATION OF THE SOIL." Конференции. 2021.
9. Mirsaydalievich, Yusupov Ibragim. "SCIENTIFIC AND METHODOLOGICAL BASES OF ECOLOGICAL EDUCATION OF SCHOOLCHILDREN." INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429 11.06 (2022): 102-106.
10. Mirsaydalievich, Yusupov Ibragim. "HISTORY OF BIOINFORMATICS." INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429 11.07 (2022): 72-76.

11. Тошматова, Шоирахон Рузиевна. "Показатели достоверности и нарушения подразделений экологических ниш тлей." Молодой ученый 20 (2016): 50-53.
12. Toshmatova, Shoirahon Ruzievna, and Saminjon Olimovich Usmonov. "Biological aspects of human adaptation to environmental conditions." ACADEMICIA: An International Multidisciplinary Research Journal 11.3 (2021): 2185-2188.
13. Kalanova, M., R. V. Tashmatova, and N. K. Mukhamadiev. "Preparation of melanin from silkworm wastes and studying its physical and chemical characteristics." CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES 1.2 (2020): 8-12.
14. Muminova, R. N., and R. Sh Tashmatova. "Bioecological features and significance of higher aquatic plants of the syr darya basin." ASIAN JOURNAL OF MULTIDIMENSIONAL RESEARCH 10.4 (2021): 939-943.
15. Toshmatova, Sh R., and I. Ernazarov. "THE IMPORTANCE OF THE PROBLEM OF BIOREMEDIATION AS AN IMPORTANT SCIENTIFIC AND PRACTICAL PROBLEM IN THE FIELD OF HUMAN ACTIVITY." Экономика и социум 1-1 (2021): 274-276.
16. ТОШМАТОВА, ШОИРАХОН РУЗИЕВНА, ЗАФАРЖОН МАМУРОВИЧ ЭРНАЗАРОВ, and ДИЛФУЗАХОН АДХАМОВНА ИБРАГИМОВА. "ILMIY XABARNOMA. НАУЧНЫЙ ВЕСТНИК." ILMIY XABARNOMA. НАУЧНЫЙ ВЕСТНИК Учредители: Андижанский государственный университет им. ЗМ Бабура 4: 48-55.
17. Toshmatova, Sh R., Z. M. Ernazarov, and D. A. Ibragimova. "RESULTS OF ANALYSIS OF AN APPLE OF RED BLOOD APHID (ERIOSOMA LANIGERIUM) IN THE RESEARCH AREA." ILMIY XABARNOMA: 54
18. Sharipova, O. A. "The Role of National Values in the Family in Child Education." International Journal on Orange Technologies 3.4 (2021): 238-240.
19. Махкамов, Г. М., and Р. Я. Рузматов. "Педагогические и психологические проблемы обучения детей с нарушениями зрения." Наука и мир 2.4 (2020): 84-86.
20. Облабердиева, К. Д., et al. "Воспитание информационной и нравственной культуры у современной молодежи в интернете." Сборники конференций НИЦ Социосфера. No. 12. Vedecko vydavatelske centrum Sociosfera-CZ sro, 2016.
21. Mahkamov, Gulomjon Mamurovich, and Rozali Yakubovich Ruzmatov. "About the practice of using excursions in natural lessons." ACADEMICIA: An International Multidisciplinary Research Journal 11.3 (2021): 2066-2070.
22. Mo'minova, R. N., and S. Sobirjonov. "DEVELOPMENT OF ECOLOGY IN UZBEKISTAN." INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT, ENGINEERING AND SOCIAL SCIENCES ISSN: 2349-7793 Impact Factor: 6.876 16.06 (2022): 82-85.