

Available online @ https://procedia.online/index.php/philosophy

"Community Education, Psychology and Social Studies"

## Scientific Pedagogical Creativity of Eastern Thinkers

Alimkhanova Nigorakhon Amilevna

Teacher, department of "Theoretical aspects of the English language 1", Uzbekistan State World Languages University, Uzbekistan

**Abstract.** The article deals with the issues based on analyzing scientific pedagogical contribution of eastern thinkers to the development of pedagogy. The Great thinkers and teachers have put forward many ideas, the critical study of which contributes to the development of pedagogical science and the enrichment of the history of pedagogy.

Key words: eastern thinkers, science, pedagogy, development.

The peoples of Central Asia made a great contribution to the development of world culture. Among the outstanding figures of the centuries-old Central Asian culture, a worthy place is occupied by such scholars and educators as al-Fergani, al-Khwarizmi, al-Farabi, Ibn Sina, Omar Khayyam, Mirza Ulugbek, Navoi and others. The "Great Khorezmian" shares this glory with them - Abu Raykhan Beruni, who made an invaluable contribution to the treasury of the entire cultural heritage.

A study of the scientific work of Abu Raykhan Beruni, rightfully recognized by historians of world science as the greatest mind of his time, indicates that his views at one time constituted a solid foundation for scientific education and upbringing, based on the achievements of progressive thought. The scientific heritage of Beruni in the field of astronomy, mathematics, geodesy, physics, philosophy, history, mineralogy was the subject of a comprehensive study of many Soviet and foreign scientists.

A systematic study of the scientific heritage of Beruni, translation of his works into European languages and commentary begins in the second half of the last century. The recognition of Beruni's genius all over the world speaks of how great his contribution to universal science and culture is. His name is on a par with the names of such scientists as Ptolemy, Leonardo da Vinci, Copernicus, Lomonosov and others. The well-known American historian of science J. Sarton calls the entire first half of the 11th century in the history of world science the era of Beruni.

At the present stage of social development, the questions of the formation of a comprehensively developed harmonious personality are of particular importance. An integral part of this major program task is to improve the content of education. The

effectiveness of solving this problem to a certain extent also depends on how skillfully and creatively the progressive ideas of the pedagogical systems of the past are used.

One of the main tasks is to select from the huge fund of public ideas, moral norms and cultural traditions what can and should be used for better education of the younger generation.

The heritage of the outstanding scientist Beruni seems to be a huge treasury, which contains valuable ideas about science, the content of education and upbringing.

Beruni's thoughts about learning, its ways and meaning are found in many works, they are, as it were, scattered across the pages of his books. In our opinion, Beruni about learning should be considered in the following classification: 1) consciousness of learning; 2) visibility; 3) consistency and consistency; 4) validity; 5) connection between theory and practice; 6) requirements for the textbook.

The objectivity and impartiality of a scientist, observations, experiments, the study of oral and written monuments, a critical approach to the information received, their comparison in order to establish the truth, the logical generalization of facts into conclusions, and conclusions into theory - these are the characteristic features and foundations of the scientific method of Beruni. For his era, this method was a huge achievement and was of great scientific value. Beruni himself, guided by this method, has achieved great success in scientific work on the consciousness of learning.

Comparison analysis, logical operations and other thoughts of the scientist are correct for the present time, since the basis of modern school education is the conscious mastery of knowledge. This means that the student must have not only a fund of scientific knowledge, but also be able to extract it on their own, and this is achieved with the help of mental operations.

Emphasizing the need to combine theory with practice, Beruni writes that doctors have the greatest right to respect for their efforts to improve their science, for the fact that they not only "raise it on the wings of theory, but also apply it in practice."

Beruni's writings are a textbook in mathematics, astronomy, geography and other subjects intended for the initial teaching of these sciences.

About the sequence of subjects studied in the book "The Science of the Stars", Beruni gives the following explanation: "I started with geometry, then moved on to arithmetic and numbers, then to the structure of the universe, and then to the judgments of the stars, for only he is worthy of the title of astrologer who has fully studied these four sciences"[2]

Beruni emphasized the importance of visualization in teaching. In his opinion, visualization makes learning more accessible, concrete and interesting, develops observation and thinking. In the "Science of the Stars" many concepts and definitions are provided with visual drawings, drawings and easy-to-use tables. Speaking about the need for visualization in the learning process, Beruni wrote: "When you get used to imagining the visible, it is easy to gradually move on to the conceivable."

In addition to clarity, the scientist attaches great importance to consistency and systematic presentation of the material and its transmission. So, he believed that the scientific activity

## **Community Education, Psychology and Social Studies**

of a person is meaningless without knowledge of the fundamental principles of sciences: "However, people do not entrust things to someone who can do it better.

## **References:**

- 1. Bulgakov P.G. Life and works of Beruni. Tashkent, Fan. 1972.
- 2. Davletshin M.G. Psychological foundations of moral education.-Tashkent: 1975.