



THE HISTORY OF THE CREATION OF THE MODULAR EDUCATION SYSTEM AND ITS ROLE IN EDUCATIONAL EFFICIENCY

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Annotation. The article presents some issues of creation and development of modular technologies in education. In the process of preparing the article, the authors studied the works of classical scientists and thinkers of the East, as well as the work of Western teachers in the field of improving the efficiency of education.

Keywords: modular training, methodological foundations, brainstorming, synectics, taxonomy, blocks of sciences

Ideas about modular education, their methodological foundations and the idea of creating and developing innovative ideas in stages with the participation of individual groups are initially proposed by the American businessman, Alex Osborne, in the 1915-1940 process of improving advertising and teaching engineers to discover new inventions. On the basis of these ideas-the "mental document", new, proprietary methods and "technologies" of education were created in hundreds of countries of the world. This method was called the "mental cell" method [1,13,14].

This method was later further refined by William Gordon under the name "Synectics" and by Benjamin Bloom under the name "taxonomy" [15-17]. Detailed information about these methods is described by the author in [1]. Some sources also state that the modular system appeared in the 1950s [2]. But their authors [13-17] did not want any of the works. These educational visions, their methodological foundations, have developed much by the 90s of the last century.

In fact, the rules and methods of the method of analysis, separated into parts(blocks), in the study and explanation of nature phenomena and certain physical processes, are also reflected in the correspondence of Berunius and Ibn Sina, in the works of Farabi. The principle of going from simple to complex or easy to difficult in education and upbringing, as the main elements of learning to agitate on blocks later, in the tenth century, Joseph Khos Khojib's "Qutadgü bilig" and in the seventeenth century Ya. O. Komensky's famous works "The Great didactics" are described as more consistent, the principles of Education. The modular system, if properly organized, makes it possible to dramatically increase the effectiveness of education in the upper stages. In fact, classical scholars and educators have expressed their views on improving educational effectiveness since a very long time.

Great thinkers: A.Beruniy, Ibn Sina, Al Khwarazmiy, Farabi, Imam Bukhari, Imam at Termiziy, Yusuf has Hajib, A.Navoi, A.Ghijduwani, Bakhouldin Naqshbandi, A.These include Timur and the hundreds of our allomas recognized by the world as such[1]. When applying the modular system, almost all the principles of education are followed, and it is required to actively use

the most effective methods in itself. This condition requires great activity from the teacher first. Once the method is established and the students are taught, it is easy for the teacher to work. There will be no excessive fatigue, nervous tension in it. Students are used to distinguishing the basic aspects of the knowledge they need to learn. They get used to turning complex things into imaginary simple things. They are taught to observe and think and think more deeply.

The formation of a modern market economy, on the basis of competition between enterprises, assumes the sharp development of all branches and zvenos of the national economy. Because a market economy cannot be imagined without competition. Competition between enterprises, in turn, leads to an acceleration of the new scientific technical progress of Science, Technology. Therefore, in our state, the law "on education" was adopted in a new revision.

First of all-the current state of scientific technical progress is determined by the rising role of science. In the 20th century, the rate of development of science, especially in its second half, reached its greatest pace.

Over the past 10-15 years, the main indicators of scientific activity have been increasing twice. The acceleration of the development of Science and the rapid growth and frequent renewal of scientific and technical information. The development of science according to the exponential law means its landslide growth. Hence, the growth of scientific and technical information is also an avalanche. Thousands of books, journals are published annually in the world and thousands of dissertations are defended.

Modern telecommunication information systems are being used in order to ensure the speed of the rising avalanche of information flow. The development of science is the sphere of activity of specialists with higher education. Therefore, the system of training specialists with higher education should give the opportunity to master the flow of modern information to their super-gifted, to develop skills of individual and independent work of scientific and technical information and to be able to work creatively with educational scientific literature.

Secondly-the development of modern science in an avalanche is also ensured by the connection of two, three and more disciplines, the emergence of a new type of science. For example: geophysics, biogeochemistry, Informatics, physicochemical mechanics, etc. A Fan tree is formed. A new science, born in the connections of certain disciplines, means new directions, problems, topics and scientific issues. These issues should be addressed by talented graduates of the Higher School.

Therefore, a modern system of Personnel Training should develop the ability to think in them, to constantly develop the skills of endurance and perseverance on oneself.

Thirdly-the landslide development of the development of Science and a similar increase in Scientific Technical Information lead to an increase in the speed of transmission and processing of information, on the basis of which the computational technique lies. Without individualization of education, the use of modern informative systems cannot be brought to the fore. Therefore, the Higher School is tasked with "individualization of learning, independent learning, and the development and acquisition of technology and tools of the distance education system."

Fourth-the feature of scientific technical progress is a sharp increase in the type of Engineering Solutions, a rapid exchange of materials, an increase in the level of automation of machine construction, control systems of technological processes, a decrease in the deadlines for introducing the result of scientific achievements into production.

Fifth-in order to train specialists who fully meet the increasing requirements of the accelerated scientific technical progress in the Higher School, it is necessary to accelerate training, to use the human body in the training of the entire possibility, its consciousness. It is necessary to accelerate the teaching of the new symbolic show. This entails the use of teaching television to structure and systemize educational material, computerize teaching, while information is provided in the educational process.

Sixth-any person is considered a separate individuum from birth, that is, everyone will have no mental buds, the ability to receive education. From this, the task of the modern teaching system should be focused on the development of individual abilities of a person. As noted in it, it is necessary to "accelerate the training of students using a new pedagogical and Information Technology, a modular system of training."

References:

- 1.A.Artiqov, A.Xakimov, M.Qodirov, A.Asqarov. Fizika o'qitishda innovatsion ta'lim texnologiyalari. 1-qism. Andijon, 2011. 48 s.
- 2.Методологические основы системы модульного формирования //Сб.нормативных документов.М.2006.
- 3.Борисова Н.В.От традиционного через модульное к дистанционному образованию: Учеб.пособие.М.ВИПК МВД России,1999.-174 с.
- 4.Башарин В.Ф. Модульная технология обучения физике//Специалист. 1994.№ 9.
- 5.Вазина К.Я.Саморазвитие человека и модульное обучение.Н.Н., 1991.
- 6.qizi Turg'unova G. A., Ahmadjon o'g'li X. A., Shodmonov S. A. SUYUQ VA GAZ HOLATIDAGI HAMDA CHANG KO'RINISHIDAGI YUKLARNI TASHUVCHI MAXSUS VA GIBRID AVTOMOBILLAR //Conference Zone. – 2022. – C. 287-295.
- 7.Ahmadjon o'g'li X. A., Shodmonov S. A., qizi Turg'unova G. A. YO'LOVCHI AVTOMOBIL TRANSPORTI VOSITALARI //Conference Zone. – 2022. – C. 207-214.
- 8.Махамматзокир Тоштемирович Гаффаров, & Анварбек Аҳмаджон ўғли Хомидов. (2022). Регулирование Транспортных Потокв В Республике. Обеспечение Безопасности Дорожного Движения И Предотвращение Пробок. Periodica Journal of Modern Philosophy, Social Sciences and Humanities, 12, 73–78.
- 9.Гаффаров, М. Т., & ўғли Хомидов, А. А. (2022). Регулирование Транспортных Потокв В Республике. Обеспечение Безопасности Дорожного Движения И Предотвращение Пробок. Periodica Journal of Modern Philosophy, Social Sciences and Humanities, 12, 73-78.
- 10.Шодмонов С. А., Ортиқов, С. С., & Abdiraxmonov, R. A. International jurnal for innovative Enjineering and Management Research Хиндистон Hyderabad 2021 THE RESULTS OF LOBORATORY STUDIES CONDUCTED TO DEVELOP THE TECHNOLOGIY OF RESTOROTION OF SHAFTS March-2021, Volume 10, Issue 03, Pages: 402-404.
- 11.Ортиқов Сарвар Саттаралиевич, & Негматов Бекзодбек Баходир Ўғли (2021). АНАЛИЗ ОТКАЗОВ БЕНЗОНАСОСОВ АВТОМОБИЛЕЙ ПРОИЗВОДСТВА АК «УЗАВТО МОТОРС». Universum: технические науки, (6-1 (87)), 51-54.
- 12.Ортиқов Сарвар Саттаралиевич, Джумабаев Алижан Бакишевич. НОРМИРОВАНИЕ РАБОТЫ СЛЕСАРЯ НА ПРЕДПРИЯТИЯХ АВТОСЕРВИСА. О'ЗBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI., 14-SON 20.12.2022.

13. Arislanbaevich, A. R. (2022). PROBLEMS OF EVALUATION OF MODERN MEDIA CENTERS: INNOVATIVE RESEARCH AND DEVELOPMENT. EPRA International Journal of Research and Development (IJRD), 7(10), 152-154.
14. Arislanbaevich, A. R. (2022). PHILOSOPHICAL ANALYSIS OF SOCIO-DEMOCRATIC FUNCTIONS OF PUBLIC AND MEDIA CENTERS. EPRA International Journal of Multidisciplinary Research (IJMR), 8(10), 348-355.
15. Арзиев, Р. А. (2022). СИНЕРГЕТИК ТАЪЛИМ ПАРАДИГМАЛАРИНИНГ МАЗМУНИ ВА МОҲИЯТИ. Academic research in educational sciences, 3(NUU Conference 2), 247-251.
16. Arziev, R. A. (2019). THE HISTORY OF APPEARANCE OF THE PRESS IN KARAKALPAKSTAN. European Journal of Humanities and Social Sciences, (5), 3-5.
17. Arziev, R. A. (2015). The problems of development of genres in publisher of Karakalpakstan. In The Seventh European Conference on Languages, Literature and Linguistics (pp. 45-51).
18. АРЗИЕВ, Р. ВЕРБАЛ (ОҒЗАКИ, СЎЗ, ФИКР БИЛДИРИШ) ДЕМОКРАТИЯ БОСҚИЧИ ВА УНИНГ ИЖТИМОИЙ МОҲИЯТИ. Social sciences.
19. Rafuqjon o'g'li, R. R. (2022, December). TIRSAKLI VALLARNI TAMIRLASH ISTIQBOLLARI. In Conference Zone (pp. 333-342).
20. A Rakhmanov, R Rakhimov, I Nazarov. (2019). URBAN WASTE AS ORGANIC FUEL. Точная наука. УДК: 662.(39), 35-37.
21. Rahmatullo. Rahimov. (2022). Avtomobil transportida tashuv ishlarini amalga oshirishda harakat havfsizligini taminlash uslublarini takomilashtirish uslublari. Международный научно-образовательный электронный журнал «МОЯ ПРОФЕССИОНАЛЬНАЯ КАРЬЕРА», 7(35), 750-754.
22. Ёғли Раҳимов, Р. Р. (2022). ТАШИШДА ТРАНСПОРТ ВОСИТАЛАРИНИНГ СИФАТ КЎРСАТКИЧЛАРИНИ БАҲОЛАШ. O'ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI, 2(14), 656-663