ETHIOPIAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH

eISSN: 2349-5715 pISSN: 2349-5707

Volume: 11, Issue 01, Jan-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980

TEACHING METHODS OF MATHEMATICS IN ACADEMIC HIGH SCHOOL PROGRAMS

G‘ofurov Abdukarim Abuasalimovich

teacher of mathematics

Rashidov Alijon Turobovich

teacher of mathematics

Makkamov Jaloliddin Normurodovich

teacher of computer science

Abstract: In this article, the use of modern technologies and methods for teaching mathematics is recommended. It was mentioned that it is possible to find a solution to the problems by organizing a certain sequence in the course of the lesson.

Key words: Information, computerization, problem method, search methods,reproductive methods, special teaching methods.

Attention to education is attention to the future. Adoption of modern information and computer technologies, internet system, modern methods of digital and wide-format telecommunications in the field of education, such advanced achievements, which determine the level of today’s development, are not only for schools, lyceums and colleges, higher educational institutions, but also for any We need to deeply understand the importance of creating a foundation for the family to penetrate into his life. The word “information” comes from the Latin word “information” which means “to explain, to introduce, to explain”. In many cases, the word “information is used instead of the word “given”, which is quite different. Information technologies are a set of methods and tools for collecting, storing, transmitting, changing, and processing information.

The new information technology of education means only the newest information technologies that can be applied to the educational process. New information technologies - by different categories of users. It consists of providing services for obtaining and processing information based on EHM.

Computerization of mathematics education processes, the use of special software packages in experimental mathematics the informational environment of mathematics teaching, the role of cognitive tools in mathematics education, the requirements for modern electronic educational literature and their conditions of use, goals and tasks in educational processes have been researched by scientists. Teaching technology may include the following programs: linear program; branched program; adaptive program; generalized program; program-algorithm; modular training program; a program of complete mastery of knowledge. A linear program consists of small blocks of instructional information with control assignments. In a linear program, the student moves to the next step (block) when the answer to this step (block) of information is correct, and returns to this step when the answer is incorrect, or must relearn the initial information. In a networked program, when the answer is incorrect, the student is given additional educational information that allows him to complete the control task, give the correct answer and move to the next step (block) of educational information. The adaptive program allows the student to choose the level of complexity of the new

eISSN: 2349-5715 pISSN: 2349-5707

Volume: 11, Issue 01, Jan-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980

educational material, to change it as he learns, to use reference literature, dictionaries, manuals, etc. allows you to refer to The generalized program includes pieces (fragments) of linear, branched and adaptive programs. The program-algorithm determines the sequence order of mental (theoretical) and practical operations. It can be both an independent training program and a part of another training program. Algorithm refers to giving clear and clear instructions to the performer on the execution of a sequence of actions aimed at achieving the stated goal or solving the problem.

Basic methods of mathematical research: observation and experience; compare; analysis and synthesis; generalization and specialization; abstraction and specification.

Modern methods of teaching mathematics: problem (perspective) method; laboratory method; programmed educational method; heuristic method; method of constructing mathematical models, axiomatic method, etc.

Teaching methods that develop information are divided into two classes:

a) transfer of information in ready form (lecture, explanation, showing educational films and videos, listening to tape recordings, etc.);

b) independent acquisition of knowledge (independent work with books, independent work with curriculum, independent work with information databases - use of information technologies).

Methods of problem-based research include: problem-based presentation of educational material (heuristic conversation), educational discussion, laboratory-research work (before studying the material), organization of collective mental activity when working in small groups, organizational and active game; research work.

Reproductive methods: repeating the educational material, performing exercises according to the sample, laboratory work according to the instructions, exercises in simulators. Creative and reproductive methods: composition, variational exercises, analysis of production situations, business games and imitation of professional activities. other types of doing.

REFERENCES:

1. Okhunov, M., & Minamatov, Y. (2021). Application of Innovative Projects in Information Systems. European Journal of Life Safety and Stability (2660-9630), 11, 167-168.
2. Minamatov, Y.E.U. (2021). APPLICATION OF MODULAR TEACHING TECHNOLOGY IN TECHNOLOGY. Scientific progress, 2(8), 911-913.
3. Минаматов, Ю. (2021). УМНЫЕ УСТРОЙСТВА И ПРОЦЕССЫ В ИХ ПРАКТИЧЕСКОЙ ЭКСПЛУАТАЦИИ. Eurasian Journal of Academic Research, 1(9), 875-879.
4. Mamadalieva, L. K., & Minamatov, Y. E. (2021). High Efficiency of a Photoelectric Converter in a Combined Design with a Thermoelectric Converter. Middle European Scientific Bulletin, 19, 178-186.
5. Kamiljanovna, M. L. (2021). Analysis of the Results of the Study of the Thermoelectric Part of the Source Sensor. Middle European Scientific Bulletin, 19, 191.