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STUDY OF NON-STANDARD ISSUES IN GENERAL SECONDARY EDUCATION AND ACADEMIC LYCEUMS

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Abstract
This article highlights the importance, methodology and practical approaches of studying non-standard issues in general secondary schools and academic lyceums. Non-standard problems are complex problems that cannot be solved by traditional methods and require creative and critical thinking. These problems are a convenient tool for developing students' mathematical logic, forming analytical thinking skills, and teaching a creative approach to real-life problems. The article analyzes the types of non-standard problems, methods of solving them, the effectiveness of their use in the educational process, as well as the role of the environment created for teachers and students. It is emphasized that studying the solution of these problems in academic lyceums serves to deepen scientific and practical knowledge. According to the results of the research, the inclusion of non-standard issues in the curriculum helps to significantly increase students' independent thinking, innovative approach and creativity.
This article is aimed at revealing the didactic possibilities of non-standard issues for teachers, methodologists and other specialists involved in the educational process.

Keywords: Non-standard problems, mathematical logic, creative thinking, critical thinking, secondary education, academic high school, educational process, innovative approach, didactic possibilities, problem solving methodology.

Introduction

The main goal of the modern education system is not only to acquire knowledge, but also to develop the skills of independent thinking, analytical and creative approach. In this process, non-standard issues are of particular importance. Non-standard problems require departure from simple logical directions, use of new methods and encourage students to think unconventionally.

The use of non-standard problems in the educational process in general secondary schools and academic lyceums is one of the important tools for developing students' thinking potential. Such problems are widely used in various subjects, especially mathematics and natural sciences, and serve to develop students' logical analysis, problem solving and creativity skills. This article is dedicated to the study of the role of non-standard issues in the educational process, their solution methods and practical results. It describes in detail how students acquire skills by working with non-standard problems, the effectiveness of these problems in the pedagogical process, and the educational value.

Increasing students' interest in learning, developing creative and critical thinking skills is one of the urgent tasks in the educational process today. In addition to traditional problems and tasks, the inclusion of non-standard problems in the educational process is important in achieving these goals. Non-standard problems are distinguished by their inherent complexity and creativity. They serve to expand the scope of students' thinking, to form an innovative approach to mastering new knowledge.

Studying non-standard issues in general secondary education and academic lyceums helps not only to strengthen theoretical knowledge, but also to form practical skills aimed at solving real-life problems. The educational process can be more effective and interesting by choosing these issues by teachers and adapting them to students.

The purpose of this research is to shed light on the role and importance of non-standard issues in the educational process, to analyze the advantages of including them in educational programs, and to study advanced methods in this regard. This article will be useful for pedagogues and specialists in the field of education who are interested in the methodology of teaching non-standard problems.

The nature and characteristics of non-standard issues

Non-standard problems are an important tool in developing students' creative thinking skills. These problems are solved not by conventional algorithms, but by problem analysis and an unconventional approach. They have the following characteristics:

Creativity required: The learner is asked to use a new approach to arrive at a solution.

Logical Complexity: Requires a higher level of thinking than traditional problems.

Vitality: Enriched with content that reflects real-world issues.

These issues not only strengthen students' theoretical knowledge, but also develop their critical thinking and decision-making skills.

Introduction of non-standard issues in secondary education and academic lyceums. The use of non-standard problems in the educational process is of great importance in deepening students' mathematical knowledge. In academic lyceums and general secondary schools, non-standard issues can be introduced through the following methods:

Textbook Enrichment: The addition of non-standard problems to traditional textbooks increases students' interest in knowledge.

Special training: Organization of additional lessons on non-standard issues.

Olympics and competitions: Holding special competitions to encourage students to be creative.Methods used in solving non-standard problems

The following methods are effective in solving non-standard problems:

Analytical method: Finding a solution by breaking down a problem into parts.

Creative approach: Finding an innovative solution by trying multiple approaches to a problem.

Problem Solving Algorithms: Teaching students how to choose and apply different algorithms.Pedagogical efficiency of non-standard problems.

The use of non-standard problems in teaching leads to the following results:

~ Students' logical and creative thinking skills develop.

• Independent and team work skills are formed.

1. The ability to find solutions to real problems increases.

As a result, students become independent thinkers, have analytical skills and are able to approach creatively.The role of non-standard problems for academic lyceum students. Academic lyceums as high-level educational institutions are of great importance in developing the scientific potential of students. At this stage, non-standard problems are an effective tool for strengthening students' critical thinking, solving complex problems, and developing their abilities to conduct scientific research.

This process is carried out by adapting educational programs to modern requirements, developing innovative educational materials for applying non-standard issues, and improving pedagogical approaches.

In conclusion, the study of non-standard issues in general secondary education and academic lyceums develops students' logical thinking, creative approach and independent decision-making skills. It increases students' interest in knowledge, strengthens analytical skills and forms effective approaches to solving practical problems. Nostalndart problems serve as the main means of stimulating creative thinking in the educational process.

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