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THE ROLE OF LOGICAL ISSUES IN COMPUTER SCIENCE LESSON PROCESSES

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Abstrakt: This article provides information on logic and game issues. The use of logical problems in the lessons and their solution are also illustrated on the basis of examples.

Key words: arifthmetic, informatics, mathematics, logic, pedagogy, technology, activity, rebus, numerial rebus, puzzle, thinking, ability.

Аннотация: Эта статья содержит информацию по логике и игровым вопросам. Использование логических задач на уроках и их решение также иллюстрируются на основе примеров.

Ключевые слова: арифметика, информатика, математика, логика, педагогика, технология, деятельность, ребус, числовой ребус, головоломка, мышление, умение.

The purpose of computer science classes is to organize effective educational activities for the student's positive attitude to learning, the formation of an Information Culture, the emergence of the ability to think logically and creatively, and to be able to apply the knowledge gained in everyday life. The teacher implies not only the mastery of certain knowledge and skills of students in the educational process, but also the scientific development of cognitive abilities in them, such as observation, perception, creative imagination, independence, attention, memory, thinking [1]. This, in connection with logical thinking, develops such necessary qualities as a specific clear, concise, simple and correct statement of oral and written mathematical speech. At this point, the application of logical issues in the course process gives a good result.

There are a number of interesting issues that are conventionally called logical. What unites logical issues? Perhaps, first of all, to solve them, no calculations, special mathematical knowledge or familiarity with the methods of intelligent thinking are required, but the absence

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of obstacles of a technical nature allows you to look at the way of thinking. Therefore, solving logical problems is an ideal material for the development of algorithmic thinking.

By supporting life experience and imagination, logical issues are very insignificant from the very beginning. Therefore, the stage of special exercises, where the answer is obvious, and the detailed basis of the student looks artificial and is not required.

The absence of technical difficulties, coping with them, has the advantage of not being able to replace evidence in the reader's mind. For example, when solving equations, the reader spends a lot of effort and paper on the same changes, which does not doubt that it will be done in a long time. In addition, no written justification of the equality of changes is required.

When solving logical issues, on the contrary, nothing is required except to substantiate the answer. Schoolchildren learn that they need to say or write at least something before responding in mathematical matters. Since no arithmetic or other formal actions imply logical problems, children gradually get used to concrete arguments when recording solutions and verbal answers.

The following series of recommendations for the use of logical issues are given in the lessons [2].

- 1. Logical issues correspond to classes in the 5th, 6th and partial 7th grade. They serve as a good preparation for a conscious study of geometry.
- 2. When solving logical (as well as other) issues, readers should not be limited in choosing a method. If the purpose of the lesson is to develop a method, then we need to suggest the issues that are most convenient for this method. However, if the reader still accepts a solution in his own way, give him the opportunity to bring the work to the end, and then come up with a different approach.
- 3. It will be useful not to methodically study all new types of logical issues, but to solve various issues all year round. Of course, after the first acquaintance with each new idea (let's say, this work must be brought to the end, even if the work that satisfies the situation has already been found), it will be useful to apply it several times. If schoolchildren do not solve all the issues in the lesson (and this always happens!), it is not necessary to immediately "destroy the gaps". It is better to leave it for later. Also, do not devote logical issues to many lessons in a sequential way.
- 4. The need for evidence indicates the best issues with incomplete information equivalent to an ambiguous answer. Pay attention to such issues of children.
- 5. Some issues are well resolved in couples and groups. Often a small role can be played on the issue floor (this is written in detail in the methodological instructions for classes). These forms of work stimulate students in Grades 5, 7 with an interest in mathematics.
- 6. Advise children to discuss the most interesting issues with family members. Adults who are far from computer literacy are sometimes interested in puzzles, but they accept a better solution than children. This can lead to joyful and productive family communication.

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Creating algorithms and programs for each of the logical issues given in computer science lessons encourages the student to expand the circle of thinking, creative thinking, create News, new ideas, solve one issue using several methods.

And again, the useful side of logical issues is teaching students to play, Imagine, and cultivating their creative abilities.

In conclusion, in order for students to consciously master knowledge, skills and abilities, teachers need a creative approach to the lesson. This will help students clearly, fluently, correctly and understandably express their thoughts, develop the qualities of observation, resourcefulness, responsiveness now.

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