

THE USE OF IT TECHNOLOGIES FOR MEDIA-LESSON IN COMPUTER SCIENCE IN THE SENIOR CLASSES OF NATURAL SCIENCES. ALGORITHM FOR DETERMINING THE BLOOD GROUP AND RH-FACTORS

Naumova A. I.

the teacher of computer science of the highest qualification category,

Municipal educational institution "Tver Lyceum", Tver, Russia

One of the main tasks of a school course of informatics is the formation at pupils abilities to work with information from a variety of subject areas.

Most successfully it happens on profile level. Leveraging received knowledge, pupils develop projects by the profile with the implementation of the basic design stages: productions of tasks, algorithm design, programming, testing and debugging, analysis decision and program accompaniment.

Guided by the principles of modern education through the integration of knowledge, skills and practical skills at the lessons in the senior classes of natural sciences, the teacher of the highest category A. I. Naumova on example of programming tasks from the course of human physiology has developed an algorithm for determining the blood group and Rh-factors.

To implement this task, the pupils must know not only the laws of inheritance of parental blood group and Rh factors, but also be able to program in the language PascalABC.NET using arrays of strings, cycles, and selection operator.

The work consists of two parts: description (general information with drawings, photographs and diagrams) and the project (a formal description of the algorithm, the creation of the source file, preparation of test cases and carrying out computer experiment).

The selected task uses Intersubject communications and it is of interest in terms of the use of algorithmic designs and its implementation on the computer. In addition, this work is one of the options for using on the lessons of modern IT-technology - is the programming and work with ready-made applications.

Such a technique allows to implement the principles of integrated application of knowledge, skills, creates conditions for the realization of individual personality creative abilities of each pupil.

Designed project "Programming tasks from course of human physiology. Blood group and Rh factor" was presented at the All-Russian competition of professional skill of the educator "IT-lesson" in category "Information Technology for the creation and implementation of media-lesson" (October, 2015), awarded Diploma behind III place. For the exchange of experience, text file and media application are published on the website of the Centre of new educational technologies TSPU (Tomsk State Pedagogical University) - <http://planeta.tspu.ru>.