

## First steps of the "Competition in science and mathematics" for 7th - 9th grade students

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Today each student should have an opportunity to study science and mathematics in a way which is attractive, related to the real life and involving use of modern teaching and learning methods. Therefore a State scale projects with the financial support of the European Union are implement in Latvia. The first one was the National Programme project “Curriculum Development and In-service Training of Teachers in Science, Mathematics and Technology” for grades 10 to 12 (2005-2008). Since December 2008 the project “Science and Mathematics” is running in order to improve subject curricula in science and mathematics for the grades 7 to 9. Main work of the project “Science and Mathematics” is directed towards changes and development of curriculum, methodological support for teachers and students, in-service teacher training and raising students’ interest in science and mathematics.

First of all, students’ interest in science and mathematics can be enhanced by ensuring an interesting and exciting teaching-learning process in schools. Performers of the project are developing different materials for students and creating e-environment in the project home page [www.dzm.lv](http://www.dzm.lv). It contains teaching aids, interesting facts, experiments and contests in problem solving.

One of the activities that is rising interest of the students and is located on the project web-page is an online “**Competition in science and mathematics**” for 7<sup>th</sup> – 9<sup>th</sup> grade students, started in October 2009. One round per week is running in this competition. Each round consists of 8 tasks for each grade – two tasks from each subject: physics, chemistry, biology and mathematics. Students who would like to participate must fill in the registration form and get their own login name. Students may solve problems for their or higher grade. After each round results are published on the website. In the beginning of the April the final – intramural – round is taking place in Riga. Some educational and social events along with the contest are taking place on this day as well.

There is wide system of advanced math education developed in Latvia, including math olympiads and various contests for students up to grade 9. In Latvia there are olympiads in science subjects as well. So students who are gifted and interested in mathematics have possibilities to develop their skills outside school lessons. Nevertheless “curricula” of math olympiads is quite different from school curricula what often deter “regular” students from additional work.

However main aim of the abovementioned “Competition in science and mathematics” is to encourage interest to science and mathematics for as many students as possible. So the problems of this competition correspond to school curricula, but are more creative and real-life based than regular school task.

First year’s experience of the “Competition in science and mathematics” will be considered in the report.