

положительное число с отрицательным, а студент 2-го курса может дать и такое «определение»: квадратным треугольником называется треугольник, у которого имеется хотя бы один прямой угол.

Произошла смена поколений учителей, качество обучения снизилось не только в обычной общей средней школе, но и в гимназиях и лицеях. Не малую часть ответственности несут региональные структуры образования.

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SEVERAL POINTS ON INFORMAL MATHEMATICAL EDUCATION IN LITHUANIA

This report reviews experience accumulated in organising and pursuing the activities of the Lithuanian School for Young Mathematicians (LSYM) during the last eighteen years.

Mathematical education has enjoyed a long-established tradition in Lithuania, cherished and developed by the community of mathematicians – teachers of mathematics, university professors, and scholars. With the initiative of Prof. Jonas Kubilius, Lithuanian Olympiads for young mathematicians were first started in 1952, and the Lithuanian Extramural School for Young Mathematicians was set up in 1969. In two decades (from 1969 to 1989) 7469 students out of the total 14420 graduated the Lithuanian Extramural School for Young Mathematicians. As a consequence, extra mathematical education of young people had gained an organised character.

In twenty years this school had become for young people an important public institution of mathematical education and training that had served as a link between secondary school teachers of mathematics and academics as well as educationalists. The Lithuanian Extramural School for Young Mathematicians was patronised by Prof. Jonas Kubilius while Prof. Kleopas Grincevičius became the first chairman of the School Council. Assoc. Prof. Petras Rumšas, a brilliant educationalist of mathematics, became a soul of this school. Under unfavourable circumstances the Lithuanian Extramural School for Young Mathematicians was closed in 1989. The School had undoubtedly made a great impact on mathematical culture in Lithuania.

The Lithuanian School for Young Mathematicians (LSYM) was restored in 1998. The objectives of the LSYM include helping Lithuanian students extend their knowledge of mathematics; encouraging them to work independently; helping them master the fundamentals of mathematics; organising problem-solving competitions of mathematics for students; providing information on international competitions and inviting students to take part in them; introducing more interesting applications of mathematics.

LSYM is a voluntary institution for extra mathematical education. Tuition at LSYM is carried out via correspondence and runs for two years. Admission to

LSYM takes place in September. The school curriculum covers eight topics and students receive eight tasks in two years. LSYM students have access to the information system 'My LSYM' where they can check their evaluations and get to know solutions to the problems. The studies end with a problem-solving contest at Vilnius University. Students who fulfil the programme are awarded with leaving certificates of LSYM. Methodological material and tasks are available on LSYM website <http://www.mif.vu.lt/ljmm>.

At the end of the school year, all solutions to the problems and methodological material are published in a separate book. As many as seventeen such publications titled 'For a Young Mathematician' have been released so far. It is vital to emphasise that the LSYM curriculum is updated annually (for the entire cycle of two school years) and announced alongside with the entrance task at the beginning of September. Consequently, quite a rich library of methodological literature has been collected in all these eighteen years.

Various aspects of LSYM activities are quite often discussed at conferences run by the Lithuanian Mathematical Society and Lithuanian Association of Teachers of Mathematics or in regional seminars for teachers of mathematics. A comprehensive constructive analysis of the first ten years of activities is laid out in the article by Apynis, Stankus, and Šinkūnas [1].

➤ **REFERENCES**

1. A. Apynis, E. Stankus, J. Šinkūnas, Lithuanian School for Young Mathematicians: Review of Its Activities in Ten Years, *Pedagogika*, VPU, Vilnius, 2009, vol. 94, p. 105–109.

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**ТЕХНИЧЕСКИЕ И МЕТОДИЧЕСКИЕ АСПЕКТЫ ПОДГОТОВКИ
И ИСПОЛЬЗОВАНИЯ УЧЕБНЫХ МАТЕРИАЛОВ ФОРМАТА CDF В MOODLE**

В настоящее время система образования модернизируется на всех уровнях. Совершенствуется система открытого и смешанного (очно-виртуального) образования, реализуются парадигмы образования на протяжении всей жизни (lifelong learning), мобильного обучения (m-learning), обучения, проникающего во все сферы жизни общества и человека (u-learning, ubiquitous learning). Соответствующие процессы развиваются на основе новых информационных технологий [1].

В докладе предполагается обсудить полученные за последние несколько лет новые обоснованные и апробированные технические решения, примеры адаптации компьютерных средств и реализаций эффективных методов создания интерактивных интеллектуальных образовательных ресурсов, результаты их применения при создании умной образовательной среды, очно-виртуальном