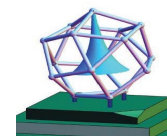




Sixth Central- and Eastern European Conference on  
Computer Algebra- and Dynamic Geometry Systems  
in Mathematics Education

7-10 September, 2016 Targu Mures, Romania



## GEOMATECH: Integrating Technology into Primary and Secondary School Teaching to Enhance Mathematics Education in Hungary

**Abstract:** Technology is increasingly becoming an important part of mathematics teaching and learning in the 21<sup>st</sup> Century. There have been numerous attempts to integrate technology into education systems, but without serious development and research the success of these attempts had been limited. In my talk, I will highlight the importance of research and developing trials in technology-supported education and describe related projects. But, most importantly, I will outline the work that we are doing with colleagues in the Geomatech project in Hungary. Geomatech (<http://geomatech.hu>) is a large scale EU funded project, which aimed to develop high-quality teaching and learning materials for all grades in primary and secondary schools in Hungary. These materials (1200+ Mathematics, 600+ Science) will be embedded into an on-line communication and collaboration environment that can be used as an electronic textbook, a homework system, and a virtual classroom environment. In addition to material development, we offered 60-hour professional development courses for more than 2400 teachers in 950 schools in Hungary. Furthermore, we organized a wide-range of teacher and student activities including competitions, maths and science meetings, and developed a network of schools for the long-term sustainability of the Geomatech project. We believe that this project became a test bed for future international projects and trialling ground for different educational activities.



**Short bio:** After receiving his degrees in mathematics and physics in Hungary, Dr Zsolt Lavicza began his postgraduate studies in applied mathematics at the University of Cincinnati. While teaching mathematics at the University of Cincinnati he became interested in researching issues in the teaching and learning mathematics. In particular, he focused on investigating issues in relation to the use of technology in undergraduate mathematics education. Since then, both at the University of Michigan and Cambridge, working with Deborah Ball, Hyman Bass, Paul Andrews, and Kenneth Ruthven, he has worked on several research projects examining technology and mathematics teaching in a variety of classroom environments. Currently, Zsolt is working in numerous research projects worldwide related to technology integration into schools; offering educational research training courses at a number of universities; leading a doctoral programme in STEM education at Johannes Kepler University; and coordinates research projects within the International GeoGebra Institute.

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