



## Teaching of old historical mathematics problems with ICT tools

TÜNDE KÁNTOR and ANNA TÓTH

*Abstract.* The aim of this study is to examine how teachers can use ICT (information and communications technology) tools and the method of blended learning to teach mathematical problem solving. The new Hungarian mathematics curriculum (NAT) emphasizes the role of history of science, therefore we chose a topic from the history of mathematics, from the geometry of triangles: Viviani's Theorem and its problem field. We carried out our teaching experiments at a secondary school with 14-year-old students. Students investigated open geometrical problems with the help of a dynamic geometric software (GeoGebra). Their research work was similar to the historical way.

*Key words and phrases:* Viviani, geometry of triangles, problem field, open-ended problems, GeoGebra, blended learning, ICT tools.

*ZDM Subject Classification:* A30, C30, G10, D40, U50.

TÜNDE KÁNTOR  
UNIVERSITY OF DEBRECEN  
DEBRECEN, HUNGARY

ANNA TÓTH  
SVETITS CATHOLIC SECONDARY SCHOOL  
DEBRECEN, HUNGARY

*E-mail:* [tkantor@science.unideb.hu](mailto:tkantor@science.unideb.hu)

*E-mail:* [tothanna85@gmail.com](mailto:tothanna85@gmail.com)

*(Received June, 2015)*