

# Using problem teaching system toward new discoveries

Jasmina Micić<sup>1</sup>

<sup>1</sup>First High School of Kragujevac, jasmina.micic@gmail.com

The project that is presented in this paper is based on the usage of the problem teaching, applied in classes of talented students for mathematics and computer science, at The First High School of Kragujevac. The students have created the class presentation containing the results of their hypothesis and research in collaborative way, between each other and a teacher. The final product is a presentation of results in the first number of School Electronic Paper. “Mathematics everywhere around us”, “Parabola, everywhere around us” and “Archimedes spiral of recursive equations” are topics of students research, in the first, second and third class, respectively. The project has the aim to involve a few generation of students, in the year 2017 up to 2020. The main project effects are: students put their efforts to go deeper in learning, establishing knowledge, making new knowledge using new tools and developed skills; they become more independent in creative manner, making better knowledge applicability by transferring knowledge; they solve problems in their own way using heuristic approach. Students Jasmina Vulovic and Andjela Radojevic have demonstrated results of their research by a short video. The project results have been published in School Electronic Paper, available at The First High School of Kragujevac website. The students can make connections between teaching curriculum and real life situations but also can visualize their conclusions. Various IKT tools were used in this research.