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Experiment-o-mania

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Abstract Text:

Every 21st century student is expected to develop science literacy skills. As this is not part of Serbian national curriculum yet, we decided to introduce it with this project. Experiment-o-mania provides students to experience science in different and exciting way. It makes opportunity for personalized learning offering space and time to ask (why, where, how, what if) and to try.

Therefore, we empower young people with skills of experimenting, and they love science back.

They ask questions, make hypothesis, make problems and solve them, make mistakes, discuss about the results. Subsequently this raises the students' interest for school curriculum. This vision of science teaching is associated with inquiry-based learning. Experiment-o-mania is the unique and recognizable teaching methodology for the elementary school Drinka Pavlović, Belgrade, Serbia.

Experiment-o-mania implies activities throughout the school year. They are held on extra class sessions, through science experiments, science projects or preparations for School's Days of science. Students learn to ask questions, make observations, classify data, communicate ideas, conduct experiments, analyse results and make conclusions. All science teachers participate in designing activities and experiments for students in Experiment-o-mania teaching method. But they are not alone. Teacher of fine arts, English teachers and others also take part. Students have their representatives in this team, too. This is a good way to blend knowledge among different school subject and popularize science in general. All the experiments are age appropriate and related to real life situations, local community, society and the world. We explore Fibonacci's arrays, saving energy, solar power, climate change, environmental problems, pollution, daily life situations in the country or worldwide. We introduce great scientists as Nikola Tesla, Milutin Milanković and sir Isaac Newton. We celebrate all relevant international days, weeks, months or years (this year, 2015. the students will prepare opera science for celebrate the International Year of Light and International Year of Soils).

Experiment-o-mania makes science teaching and learning exciting for teachers as well as for students. The acquisition of this kind of teaching method (and its frequency) empowers students and become self-regulated learners, independent, to creatively solve problems, to innovate, to truly understand and appreciate science and to better understand themselves and the world around them.