Digitization of cultural and scientific heritage with applications in high school and university teaching of mathematics, computer science, astronomy, history, and Serbian language (National program for popularization of science in 2011.)

Abstract
The main objective of the proposed project is to use a systematic approach to digitized content in the repositories:

- **http://spomenicikulture.mi.sanu.ac.rs** – eCatalog of cultural monuments in Serbia, Mathematical Institute of the Serbian Academy of Sciences and Arts
- **http://elibrary.matf.bg.ac.rs** – Virtuel library of the Faculty of mathematics, Belgrade

in implementation of teaching material for secondary schools and university students.

Cooperation will be established with teachers of high schools in Velika Plana. The aim is to show that the use of digitized content may influence greater activity and involvement of students and that this can significantly contribute to greater student autonomy in the adoption of planned courses content. Students (of information technology, history, Serbian language and physics) will become familiar with the work of the National Center for digitization (http://www.ncd.org.rs/), the Internet sites of Cultural Monuments of Serbia, Nikola Tesla Museum Website, Virtual Library of the Faculty of Mathematics and Digital National library of Serbia. It will be shown that this approach to learning becomes interesting to the students, because in addition to acquiring new knowledge, such a method allows independent and deeper study of the regular teaching material. An additional effect will be that the medium grade in classes in which students use the digitized content is higher than the average grade in other classes. We also expect that students from Velika Plana, through the IT-Section, under the leadership of their teachers and participants of the proposed project, will be involved in the process of digitization of the local cultural heritage.

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