

Flexible mathematics content preparation

Primož Lukšič, Matija Lokar, University of Ljubljana, Faculty of Mathematics and Physics, Slovenia

Abstract

Recent studies have shown that teachers need e-learning content that can be easily adapted and reused for their own purposes. Therefore, resources should be made out of small learning blocks. A new concept of how to create really useful e-learning content has evolved in Slovenia, using the motto of “putting the teacher back into the game”.

The project "Mathematics for Secondary Schools", one among the projects of NAUK.si (NApredne Učne Kocke – Advanced Learning Blocks), offers teachers the ability to create their own materials or to modify already existing ones. Using the knowledge that is needed to publish articles on Wikipedia it is now possible to create one's own e-learning content, which will have no shortage of interactivity and will be readily available to students.

In the workshop we will show how to create a nonlinear learning path, combine the resources with an interactive simulation in GeoGebra, build a quiz where the next question depends on the correctness of the answer to the previous one or is selected at random from a given database, create a question where the answers are given as images, offer feedbacks when solving, correct mistakes in the content in real time, etc. Some preliminary resources can already be seen at <http://www.nauk.si>