



Scientix and Ingenious: Innovative Learning and Teaching in Science and Maths Education

Premysl Velek, Mathilde Bargoin

European Schoolnet (Belgium)

premysl.velek@eun.org

Abstract

The European Union's flagship initiative 'Innovation Union' estimates that EU will need one million net additional researchers by 2020 to meet the Research & Development intensity target of 3 % of GDP. The aim of this paper is to present two major initiatives in STEM (Science, Technology, Engineering and Mathematics) education supported by the EU's 7th Framework Programme to address the anticipated future skills gap, Scientix and inGenious. The paper compares the different approaches of Scientix and inGenious to supporting innovative STEM education, discusses possible synergies between them and outlines future perspectives and expected impact.

Scientix connects teaching practice with science education research and aims to bring together practitioners, researchers and policy-makers in science education. inGenious focuses on collaboration between education and industry, showcasing career opportunities for students in research-driven industry sectors. Whereas Scientix highlights and promotes innovative teaching methodologies and community building among STEM education professionals, inGenious concentrates on practical ways to improve the image of STEM careers among young people.

Although the concrete actions of Scientix and inGenious have different emphasis (direct contact between industry and students in case of inGenious, collaboration with academia and policymakers for Scientix), there is a great potential for cross-fertilisation and synergy. The inclusive character of Scientix allows inGenious stakeholders to fully benefit from its services (e.g. Translation of teaching and learning materials), the more practical perspective of industry partners in the inGenious project can feed into policy recommendations, research and teacher training supported by Scientix. The first examples of Scientix – inGenious collaboration include joint teacher workshops or coordinated media outreach activities.