2nd HEIRRI Conference: Education towards a responsible society, transforming universities through RRI

Abstract template

Aula der Wissenschaften, Vienna, Austria – April 27th, 2018
www.heirri.eu

Abstract template

Title	Citizen science and project crowdfunding in high school: a case
	study in Italy
Author(s)	Negri ¹ , I., Capri ² , E., and Pellecchia ^{,3} , M.
Affiliation(s)	¹ Dept. of Sustainable Crop Production, Università Cattolica del
	Sacro Cuore di Piacenza, Piacenza, Italy.
	² Dept. for Sustainable food process, Università Cattolica del
	Sacro Cuore di Piacenza, Piacenza, Italy
	³ Koinè – Environmental Consulting, Montechiarugolo (Parma),
	Italy.
Corresponding	ilaria.negri@unicatt.it
author's e-mail	
Keywords	Citizen science, crowdfunding platforms, high school, scientific
(maximum 5)	methods, bioindicators
Preferred format	Verbal presentation

^{**} The 2nd HEIRRI Conference will feature a speed-dating session, which will introduce 20 RRI initiatives in an elevator-ride pitch (3 min) to a small group of maximum 10 people. The Conference Committee will select 20 abstracts to be presented in the speed dating session. In addition, we invite poster applications for a poster session which will be ongoing throughout the day. Based on the authors' preferences and the abstracts accepted, contributions will be located to either the speed-dating session or as poster presentations.



Abstract (maximum 2,000 characters)

The rise of citizen science for high school students is putting schools on the frontline of research, bringing significant benefits in terms of innovative learning pathways and providing practical experiences in scientific inquiry, critical thinking, and problem solving. The implementation of the scientific method in high school should become a must for science teachers: this can help teenagers, who are recognized as "digital natives", to fight back in the war against fake news, commonly spreading on social media and networks (e.g. twitter, facebook, whatsapp, etc.), and to eventually cope with the "post-truth society" era. In this project, high school students have been involved in a scientific project aimed at monitoring airborne pollutants in an industrial area of their town, by using the honey bee (Apis mellifera) as a bioindicator. Given that the project deals with scientific topics of great interest for the community, including local environmental pollution, public health, role of pollinators in securing local ecosystem services and supporting life, this fostered motivation and helped students to learn and implement the scientific method, eventually nourishing the desire to care for the community.

Furthermore, our project was able to empower the role of the school as a dynamic institution, able to implement the dialogue between the community "living" inside the school (teachers and students) with that occurring outside (the rest of society), in the name of protecting the health of fellow citizens.

Finally, the use of crowdfunding platforms to finance the project gave the students the opportunity to approach new technologies, exercise autonomy, empowering a sense of purpose, the role of responsibility and fostering supportive relationships through cooperative learning.

The role of crowdfunding in school as an ideal tool for sharing projects with citizens through key social groups (from the family to family members, friends, peers, colleagues, and so on) and providing chances to reach stakeholders in a capillary way is also discussed.

