A participative model for undertaking and evaluating scientific communication in Earth Observation

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Public communication of Science and Technology (PCST) is an integral part of the mission of the Italian National Research Council (CNR) and widely carried out among the scientific community. Recently it has also become a research field investigating practices, channels, tools and models of public engagement and their impact on the relation between Science and Society. Understanding such aspects is increasingly considered relevant for an effective and aware outreach. Within this context, CNR has adopted some innovative communication approaches addressed to different publics, such as stakeholders, users, media, young people and the general public, using participative methodologies.

Besides being practices of communication promoting the scientific culture, such initiatives aim at understanding the models at the basis of the relationship between the scientific community and the public. To what extent do scientists put their communication and involvement strategies in discussion? Do they use to have a real exchange with their publics in order to evaluate the effectiveness of the participatory techniques they adopt in communicating and disseminating their activities?

In this paper we present a case study of a communication and educational proposal recently developed by CNR in order to promote a mutual exchange between Education/School and Research, that are the most important actors in the production and the revision of the scientific knowledge. The proposal brings an ongoing CNR research project (its steps, subjects, tools, activities, costs etc) in classrooms, making use of interactive Earth Sciences workshops conducted directly by researchers. The ongoing CNR project shared with students studies Innovative Methodologies of Earth Observation supporting the Agricultural sector in Lombardy. It aims at exploiting the Aerospace Earth Observation (EO) tools to develop dedicated agricultural downstream services that will bring added economic value and benefits for Lombardy public administrations and citizens.

This initiative aims at introducing students to the world of the research and scientific production and vice versa to connect scientists with the educational world, its language and its teaching models. The exchange Research-School is mutual and real. The goal is so twofold: introducing students to a critical/concrete vision of the scientific process and inviting scientists to reflect on PCST activities, participative models and their critical aspects.

Doing so, in fact, researchers have the chance to open a dialogue with the educational world - to better understand it, its lacks, needs, reasoning and, as a result, improve their own communication/involvement approaches. At the same time, schools, being co-players of a scientific research project and following side by side scientists in their procedures, can actively participate, give personal contributions and feedbacks. The initiative represents an attempt of ‘participative research’ in which researchers and students can freely express their expectations, acquire information, test new approaches and build together a piece of knowledge.

The proposal makes use of participative methodologies and qualitative tools for evaluating the involvement of students, teachers and researchers and analyzing the communication model implied in the relation among them. In EGU presentation the first results of this evaluation process will be reported.