Experimental introduction of RRI & Open Science into RFPOs using the quadruple helix approach

Fostering Improved Training Tools for Responsible Research & Innovation



FIT4RRI acts on two key factors: RRI training offer & governance settings

APPRAISAL STAGE Reflect & select RRI Pillars

DESIGN STAGE Set objectives

IMPLEMENTATION STAGE

Organize & implement focus group



ISQ RRI MODEL (a) ISQ, Portugal Develop an ISQ RRI model & implement it in ISQ R&D unit

• ISQ researchers showed openness to the RRI concept and willingness to be part of the



- ISQ RRI model, that is to be developed as a consequence of this experiment.
- Empowerment of ISQ researchers on the RRI concept and some of its pillars. A series of workshops have been implemented as training actions and discussion forums on OS and Open Access, Governance and Science Education. Public Engagement will follow and there is still the will to create and promote workshops dedicated to Gender Equality and Ethics.
- Development of an ISQ RRI model to be applied to the recently created R&Di Department activity. We also plan to implement a mandatory training on RRI to all new researchers entering ISQ.
- Involvement of external quadruple helix stakeholders in the definition of ISQ RRI model.
 As a consequence of this experiment, ISQ team has included an RRI dimension in new European projects, spreading the word and promoting RRI dissemination in the STEM field, including private companies.
- Participants have gained an insight into RRI and Open Science, focusing on ethics and science education.
- Discussions with university to help develop a new training module for all students on ethics and research. This will include the principles of RRI.
- Conversations with university to help develop mandatory training on ethics for all members of staff. This is likely lead to a change in university policies.
- With knowledge gained from the project, an ethics section is being added to an adoption readiness tool kit for small to medium enterprises. This is to ensure these SME's are thinking ethically when conducting research and innovation.
- Initial feedback from participants shows a higher level of understanding of RRI, in particular ethics and science education than at the start of the project. With many participants suggesting they will use RRI principles moving forward in their research and innovation.

MATERIAL SCIENCE (a) University of Rome, Italy

Implement a responsible governance in a new research center

- Aim: establishing the first RRI-based research center, named Saperi&Co., in our university in order to deliver public services in an innovative and interdisciplinary way.
 Thematic focus: sustainability and bio-materials
- 3 RRI pillars: governance, public engagement and science education.

TEXT & DATA MINING (a) Open University, UK

Investigate machine accessiblity of non-open access publications

RRI best practices:

- Researchers must have an excellent understanding of the stakeholders related to their research question.
- The experiment received:
- A wide interest from beneficiaries relating to the aims of the experiment.
- Extended interest from the learning perspective, especially with relation to technical and organisational challenges.

 Governance: developed through a collaborative workshop based on Theory of Change and finalised via a balance score card underlining the main objectives of such a governance process.

- Science Education & Public Engagement: training and awareness activities has been developed during May 2019 in tight collaboration with Sapienza Museums' Network.
 These activities, such as 3d printing with organic materials as well as bioplastic's prepration with "daily ingredients" were addressed to society at a large (mainly children and their families), took place @Saperi&Co., and were focused on the role of sustainability in everyday life.
- Next steps: definition of a manifesto for responsible governance for Saperi&Co. and assessment of experiment through selected indicators.
- Involve as many quadruple helix actors
 (government, academia, industry, civil t society) as possible.
- OU has established new networks of collaboration with the involved actors.
- Involving a range of stakeholders early on in the process has potential to increase awareness. However, equal participation of a variety of stakeholders throughout the whole process might be too much to expect. It is important to allow different stakeholders to chip in at the right time.
- Funding for keeping engagement and following RRI process is a challenge. Participation
 in the eduTDM working group was voluntary, which makes it harder to meet and keep
 everyone involved.

