

Introducing RRI Principles in your school projects

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Society is facing many challenges today...



Health, demographic change, and wellbeing



Food, agriculture and forestry, and rural development



Secure, clean and efficient energy



Smart, green and integrated transport



Climate action, environment, and resources



Europe in a changing world: inclusive, innovative and reflective societies

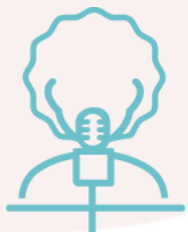


Secure societies: freedom and security of Europe and its citizens

...like those identified by the European Commission



Who are the main actors in R&I processes?



POLICY MAKERS

From funders to policy officers, research centre directors and representatives of learned societies, whether at a European, national, or local scale



RESEARCH COMMUNITY

Researchers, innovators, research managers, public affairs and communication officers, and all those who support the diversity of the R&I system



EDUCATION COMMUNITY

Teachers, students, science museums' staff, families and all those concerned with education at all levels



BUSINESS & INDUSTRY

From contractors and SMEs to large transnational companies with strong R&I activity

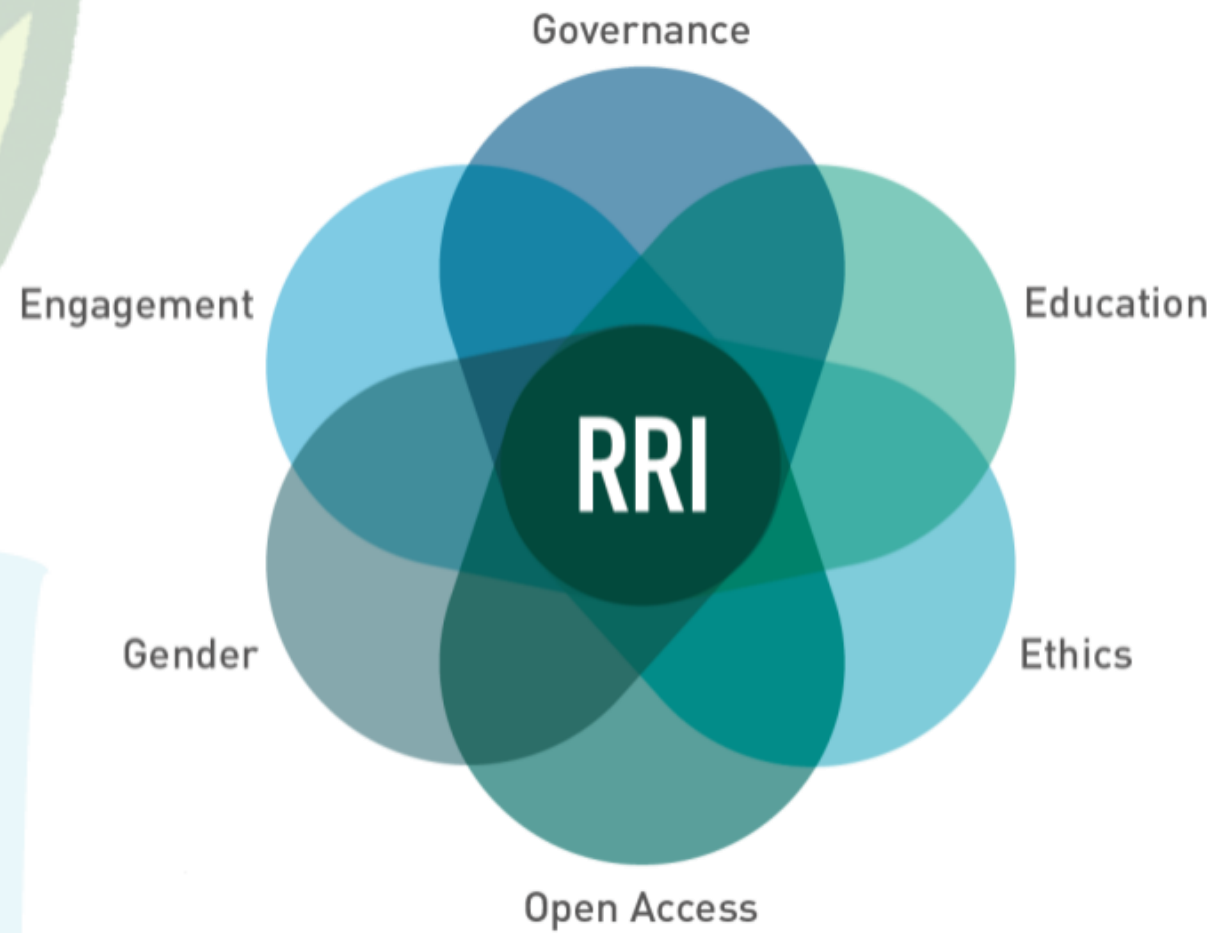


CIVIL SOCIETY ORGANISATIONS

From individuals to organisations, NGOs and the media, civil society is crucial to shape the R&I our society needs



Breaking down the RRI Concept



Ethics



Science is not neutral

- Ethical dimensions of scientific and technological developments
- Research Integrity (Responsibility, Respect, Fairness, Trustworthiness, Honesty)
- Reflection on people's ideas about research



Gender



Cultural – School – Interactional – Individual level

Gender versus Sexes (Social gender, biological gender)

Gender dimensions of research

- Curriculums, Textbooks
- Media, Public representation of STEM and Gender
- Professional development courses
- School Facilities
- Pedagogical methodologies in the classrooms



Education

- 21st century skills
- Link with future careers
- Learning outside the school walls
- Students as responsible citizens
- Putting STEM in context (social, ethical, economic)
- Co-creation
- Citizen Science



Governance



- Instruments to foster shared responsibility (Participatory Governance)
- Inclusion, transparency, reflection, adaptation
- Anticipation of unintended consequences from Research and Innovation



Open Access

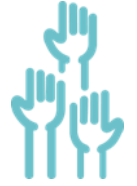


1/3 of the total global research budget is spent on publishing results that 99% of people cannot access

- Free access to scientific data
- Issue with ownership of scientific Information (90% of research outcomes are lost)
- Valid data useful to different stakeholders are out of reach
- Dialogue with civil society
- 50% of all research data is considered non reproducible (due to current data malpractice)



Public Engagement



- Citizen science projects (with genuine science outcome, that ensure both scientists and citizens benefit from taking part and citizens receive feedback from the project, that have data publicly available and citizens are acknowledged in the results)
- More democratic processes , enhancement of public accountability



RRI in your school projects

- How does your school project address the RRI principles?
- Which one(s)?
- How?

