



# Science education & Public engagement

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# The GRACE context

- Grounding Actions – actions implementing or favouring institutional change (e.g. rules, culture)
- 3 partners working on the RRI Keys: SE & PE
- Post-project period: ‘enlarging the action scope to other keys’
- Start early & benefit to the maximum from opportunities offered by the project
- The foundational character of SE and PE as RRI keys

# An attempt to define science education



**Science education** is a major field of practice, with science (and individual science disciplines) being taught and learnt at various levels, both formally and through informal approaches.

- key component of schooling
- higher education in science subjects is usually considered of major importance for meeting societal needs, such as ensuring:
  - a 'supply' of scientists, engineers and other professionals working in scientific fields
  - sustainable economic development

**Scientific literacy** is commonly considered the main goal of science education.



# Science education & RRI

“Under the lens of RRI, contemporary science education should foster students’ **engagement**, **critical thinking** and **reflexivity** about science and scientific practice, as well as enhance **social and personal skills**, and embed social and ethical principles in the educative process.”

*Science Education for Responsible Citizenship. Report to the European Commission of the expert group on science education. 2015.*



# An attempt to define public engagement



**Public engagement** encompasses the myriad of ways in which the activity and benefits of Research and Innovation can be shared with the public, and in particular:

- Acknowledging and integrating different forms of knowledge
- Citizens as (research) partners and engagement as a two-way process
- Input and influence at different stages of R&I

**Improved relations and outcomes** in the collaboration between science and society can be seen as a main, broad goal.



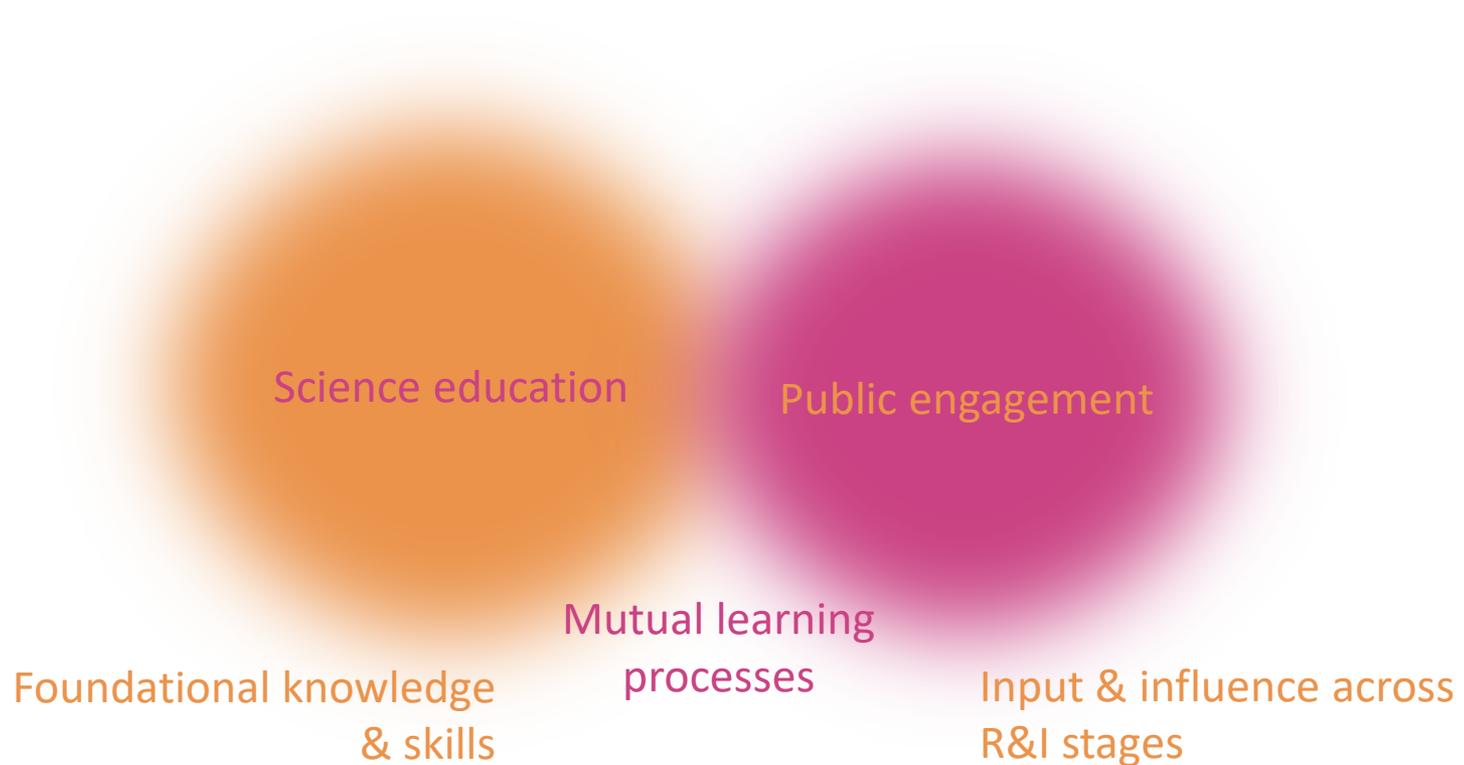
# Public engagement & RRI

“By bringing together researchers, citizens and other stakeholders, [public engagement activities] activities have created opportunities to **improve the connections** between researchers and citizens, to **identify priority research questions** and to **co-design scientific solutions** that are closer to societal needs and concerns.”

*Engaging citizens in research and innovation. A playful toolkit of activities.  
Sparks project. 2017.*



# A line to draw?



# Key messages

## PE and SE as enablers

Perspectives with an array of benefits.

## Models and tools

Available to support delivery.



# Key messages

## Synergies between RRI Keys

E.g. gender and science education, open access and science education

## Partners committed to the same goal in your ecosystem.

E.g. Science engagement organisations, outreach officers, Science Shops



# Some questions to consider



- What have you heard during the pitches?
- How it is relevant to you and your organisation?
- What would you like to know more about?
- What would you like to try out? (Think of it as a proto-Grounding Action 😊)
- What synergies, partnerships or opportunities could you explore?
- What barriers or obstacles would you have to overcome?



# Plan for today

- Pitch 1 – Diana Szakál, Research Fellow, Environmental Social Science Research Group (Budapest, Hungary) – 10 minutes
- Pitch 2 – Sara Calcagnini, Education & CREI, Public engagement, National Museum of Science and Technology Leonardo da Vinci (Milan, Italy) – 10 minutes
- Exchange 1 (20 minutes, breakout rooms)
- Exchange 2 (20 minutes, breakout rooms)



# Disclaimer

- Perspective of public engagement in (private & public) funding organisations
  - Research calls
  - Dedicated public engagement calls
  - Co-creating innovation
  - Examples of projects funded

