Enhancing Responsible Research and Innovation through Curricula in Higher Education

Moving Forward from EnRRICH

Jozefien De Marrée
Emma McKenna
Enhancing RRI through Curricula in HE


• Science With And For Society (SWAFS)
• SEAC.2: Responsible Research and Innovation in Higher Education Curricula

• €1.5 million
• 2015-2018
• 12 partners
• 10 advisory board members

www.enrrich.eu
EnRRICH Goals

1. Build understanding of RRI in the curriculum [WP2]
2. Pilot RRI teaching practices and produce resources [WP3]
3. Test Science Shops as a way of incorporating RRI in curriculum [WP4]
4. Stimulate dialogue and leverage policy [WP 5, 6, 7, 8]
5. Enable mutual learning [WP 6, 7, 8]
6. Build partnerships [all]
What we did – Stage 1

• Consulted with lecturers, students, CSOs, policymakers
• Identified 26 promising practices
• Developed a definition of RRI in curricula
• Developed a framework ‘The EnRRICH tool’
Defining RRI in Curricula

“Fostering RRI in higher education curricula is about equipping learners to care for the future by means of responsive stewardship of research and innovation practices that address the grand challenges of our time in a collaborative, ethical and sustainable way”

Tassone and Eppink, 2016
Stage 2: Piloted RRI in Curricula

• Carried out 30 pilots
• Engaged 5926 students across 79 courses
• Worked in a wide range of disciplines
• Resources developed to help educators embed RRI in their curricula
• Started 3 new Science Shops (Budapest, Barcelona, Vilnius)
• Strengthened 9 existing Science Shops through CoP

www.enrrich.eu
“Science Shops are not “shops” in the traditional sense of the word. They are small entities that carry out scientific research in a wide range of disciplines – usually free of charge and – on behalf of citizens and local civil society.”

www.livingknowledge.org
“Community Based Participatory Research Module for PhD students”

www.enrich.eu
“Social Projects for Engineering Students: An introduction to RRI”

www.enrrich.eu
Mutual Learning and Partnerships

- Supported by our International Advisory Board
- 208 conference and seminar presentations
- 266 delegates at Dublin conference
- Published 32 articles to reach academic audiences
- 15 formal National/Regional policy meetings
- 9 formal institutional policy meetings
- Hosted 2 Policy roundtables
- RRI mentioned in 10 policy documents
‘(Re-)designing higher education curricula in times of systemic dysfunction: a responsible research and innovation perspective’


Tassone et al, 2017
Evaluation with students (so far) tells us that...

Students value:
• Engaging in cross-boundary learning experiences
• Working on real life issues and ethical dilemmas
• Collaborating with others

Students struggle with:
• Actively participating in the learning process and activities
Evaluation with educators (so far) tells us that...

- Educators and policy makers showed a strong interest in the RRI keys and process requirements, but needed to be convinced about RRI as an integrated system.
- Educators highlight that there is an appetite from students but they need support and good teaching.
- Educators highlight relevance of dedicated teaching and supportive organisational arrangements e.g. Science Shops.
Tentative Project Findings to test

RRI through curricula

- Can help develop the capacity of graduates to solve societal problems and address sustainable development goals
- Can help Europe respond to urgent problems by skilling up early stage researchers in societal impact and helping to build an understanding of fact based democracy amongst young people
- Offers a resource to civil society organisations, giving them small scale research projects in response to their research needs whilst putting their concerns on the agenda of future generations

To succeed it needs

- Support for all stakeholders— students, teachers and policymakers
- Dedicated resources, e.g. Science Shops, COP
Purpose of today

- Test findings and exchange ideas with stakeholders – CSOs, European Commission, HEIs, other RRI projects
- Bring learning back into EnRRICH for sharing via final papers
- Identify opportunities and blockages at policy level
- Work towards inspiring policy change
**Workshop Plan**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Description</th>
<th>Facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>15.30</strong></td>
<td>EnRRICH pilots: storytelling</td>
<td>on how to introduce RRI in the curricula</td>
<td>Andrea Vargiu, Università degli Studi di Sassari (Italy)</td>
</tr>
<tr>
<td><strong>15.50</strong></td>
<td>1st Discussion round: Opportunities and obstacles</td>
<td>to implement RRI in HE</td>
<td>Karin Bokop, Marco Reickmann, University of Vechta (Germany)</td>
</tr>
<tr>
<td><strong>16.25</strong></td>
<td>2nd Discussion round: How can we progress</td>
<td>with embedding RRI in academic curricula?</td>
<td>Reka Matolay, Corvinus University Budapest (Hungary) Ruth Hally, University College Cork, (Ireland).</td>
</tr>
<tr>
<td><strong>17.00</strong></td>
<td>Feedback from rapporteurs</td>
<td></td>
<td>Henk Mulder, University of Groningen, Netherlands Budd Hall, University of Victoria (Canada) Catherine Bates, Dublin Institute of Technology, (Ireland) Norbert Steinhaus, Bonn Science Shop, Germany</td>
</tr>
<tr>
<td><strong>17.15</strong></td>
<td>Feedback from key participants</td>
<td></td>
<td>Philippe Galiay, SWAFS (European Commission) Sophie Duncan, National Co-ordinating Centre for Public Engagement (UK) Emma McKenna Queen’s University Belfast (UK)</td>
</tr>
<tr>
<td><strong>18.00</strong></td>
<td>Priority setting</td>
<td>(during wine reception)!</td>
<td>(results will be shared via future EnRRICH publications)</td>
</tr>
</tbody>
</table>
Working towards...

• Last consortium meeting
• Final internal evaluation report
• Summative EnRRICH policy paper
• External evaluator report

• Where will you bring our shared learning??
Future Directions

• Continue to address opportunities and blockages at policy level
• Bring learning back into EnRRICH which will be shared via final papers
• Bringing EnRRICH learning into new projects – ENtRANCE, K4C, InSPIRES, SciShops, others??
• Continue work towards building practices and inspiring policy change
• Follow us on twitter @EnRRICH_EU for final outcomes
• Join us at the Living Knowledge Conference in Budapest