How can we ensure that students apply science to their lives?

ENGAGE aims to help students analyse emerging issues and develop informed opinions on science and technology. To do this, ENGAGE provides teachers with innovative curriculum materials and professional learning.

Communicate ideas

Devise question

Use ethics

Big Science

Interrogate media

Values Thinking

Justify opinions

Technology Impact

Science Media

Examine consequences

Critique claims

Estimate risks

Draw conclusion

Analyse patterns

The Engage "RRI" curriculum

ENGAGE is part of the Responsible Research & Innovation (RRI) agenda to help Europe respond to societal challenges. We are equipping students to evaluate claims, weigh up science & values, argue opinions and compare solutions.

Sheffield Hallam University — The Open University — WEIZMANN INSTITUTE OF SCIENCE — TUDelft Delft University of Technology — IACM FORTH Educational Research & Evaluation

UNIVERSITAT DE BARCELONA — TRACES — UNIVERSITY OF NICOSIA — FAU FRIEDRICH-ALEXANDER UNIVERSITÄT ERLANGEN-NÜRNBERG

LATTANZIO LEARNING — HBV — HEP|PH FR — LIETUVOS EDUKOLOGIJOS UNIVERSITETAS

engage

Enquiries into life-changing Science

Cutting-edge Science and Technology

COLLABORATIVE LEARNING for TEACHERS

Curriculum Materials to get students to talk and think

engagingscience.eu

European Commission

Research-based curriculum materials
to help students learn how to analyse science and technology issues

60 inspiring dilemmas

Ban Coke?
Science: Health; Skill: Critique Claims
Now that scientists have discovered that sugar is like an addictive drug, pressure is building for action to reduce the amount of sugar children consume in soft drinks. What is the evidence for causal links between sugar consumption, obesity and disease? Is there enough strong evidence to ban sugary drinks?

20 problem-solving sequences

Two degrees
Science: Climate; Skill: Examine consequences
World leaders are meeting at the COP21 conference in Paris to discuss how to stop average global temperatures from rising over 2 degrees, preventing catastrophic consequences. In this sequence students create an apocalyptic weather report showing the possible effects of climate change and then learn how to examine consequences of actions to help them to decide how they would save the world

10 open-ended scenarios
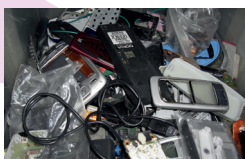
Electronic waste
Science: Global Issue

Entrepreneurs import 200 000 tonnes of electronic waste every year. Recycling workers make money, but pay with their health. Think twice: do you need that new device? What are the impacts of recycling electronic waste? Students use the sources of information and their RRI skills and communicate their decision creatively. We want to collect their work for the web site and the conference.

6 Teaching Tools
Practical strategies for using socio-scientific issues as a curriculum approach

- **Dilemma** and **Problem-Solving** to make learning authentic

- **Group Discussions** and **Conversations** to build reasoning and understanding

- **Scenario** and **Performance Assessment** to develop knowledge and skills

4 Integrated components
Workshops, Online Courses, a Community and the Materials work together to build expertise

Workshops
Learning from experts in socio-scientific teaching, explore all the ENGAGE components, and practise using the curriculum materials and Tools.

Online Courses
Flexible, inquiry-based modules for 'just in time' learning based on a cycle of conceptual input, classroom practice, reflection, and peer collaboration.

Community
Q&A support from project teachers, scientists and curriculum specialists on how to get the most from of the materials.

Curriculum Materials
Dilemmas to teach and apply science in society knowledge and inquiry, and open-ended projects to interact with scientists.