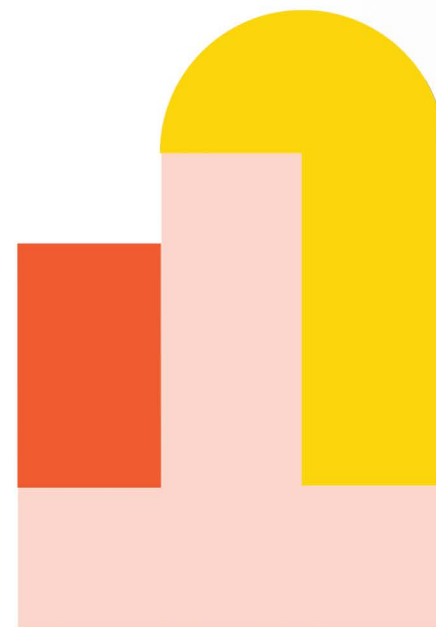


SCHOOLS
AS LIVING
LABS

SALL

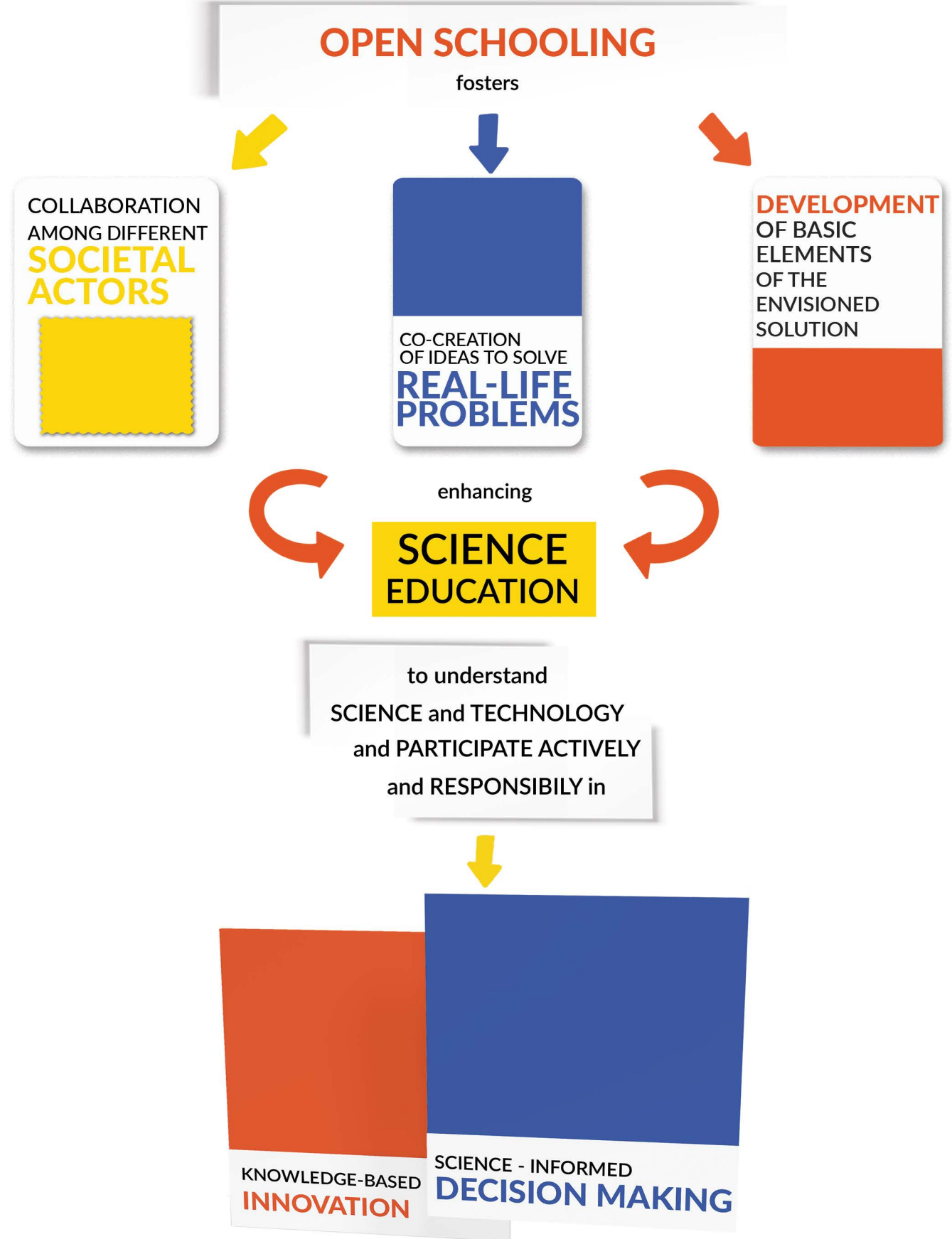
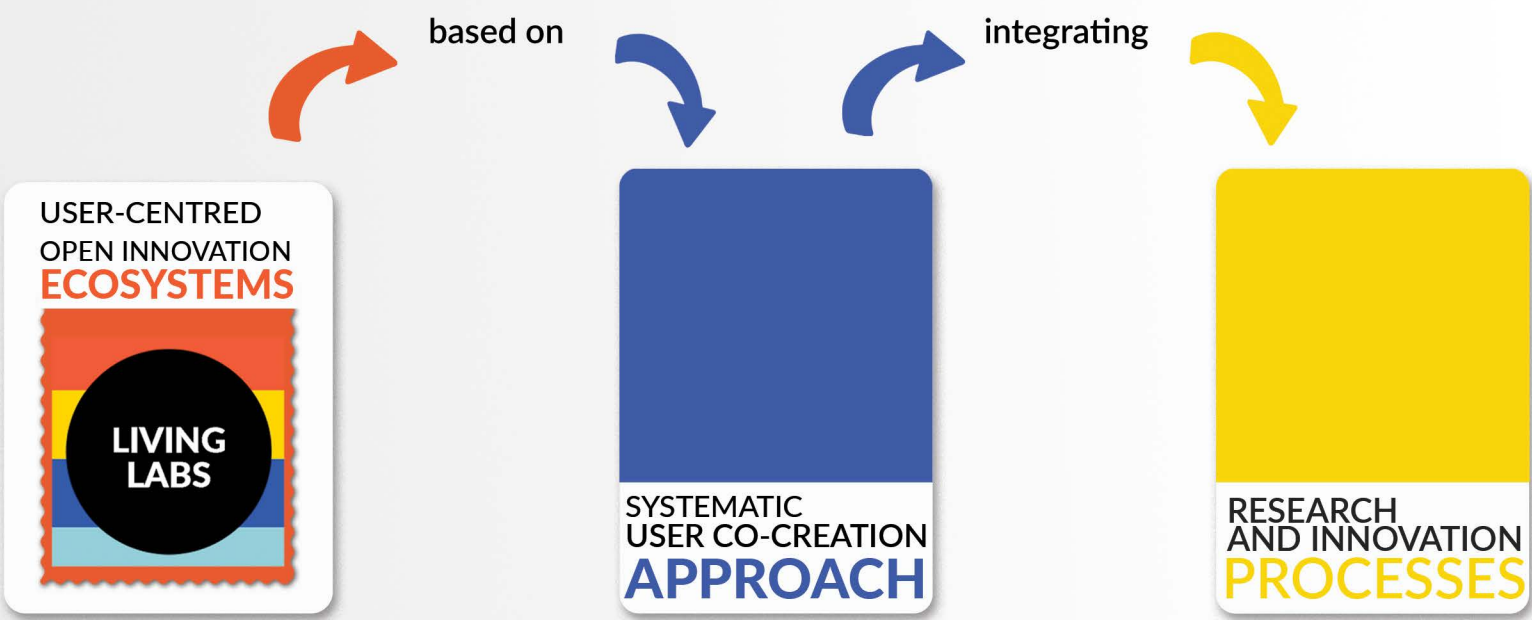


A useful summary outlining a concrete approach to science education programs by promoting collaboration between schools and local communities, utilising the living-lab methodology to facilitate a transformation in the European educational landscape



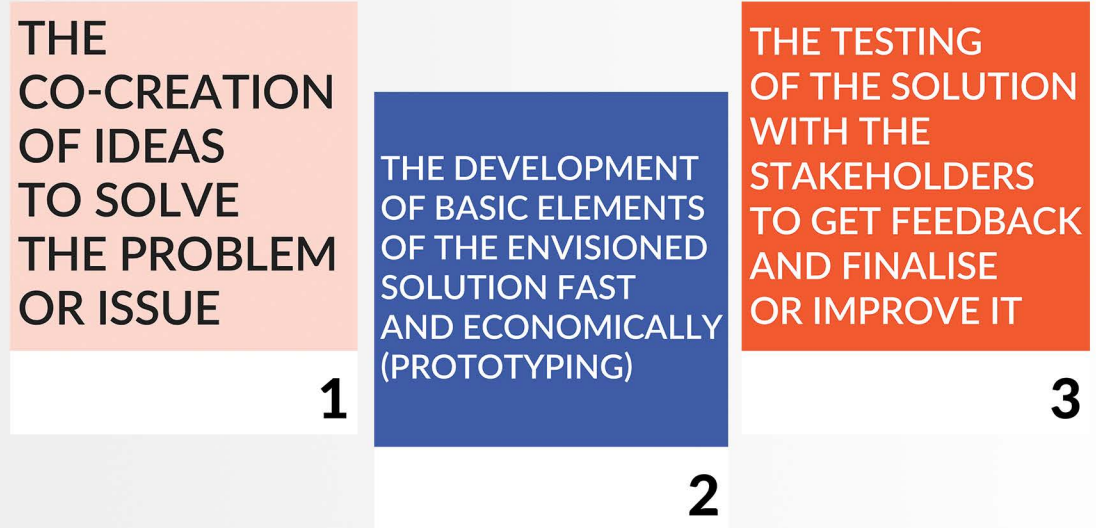
The SALL Project brings the powerful **CONCEPT** and **METHODOLOGY** of **LIVING LABS**

The SALL Project has adopted the concept of **OPEN SCHOOLING** in **SCIENCE EDUCATION** where schools become agents of community well-being by creating new partnerships with other local actors and addressing local issues relevant to them.



Our conceptualization of a **LIVING LAB** involves:
The collaboration among different societal actors who wish to deal together with a certain problem or issue which is important to each one of them.

This includes:



SALL PROPOSES TO TRANSFORM SCHOOLS INTO LIVING LABS

This methodology has been widely tested and has proved to be capable of nurturing meaningful collaborations between actors with diverging interests but with common objectives.

Together, they build new products, new services, new uses, etc. through a cycle that typically comprises:



SALL BRINGS TOGETHER SCHOOL COMMUNITIES, INCLUDING:

- Teachers
- Students, and their families
- Research institutions
- Policy-makers
- Science engagement organisations and other non-formal learning
- Open innovation spaces

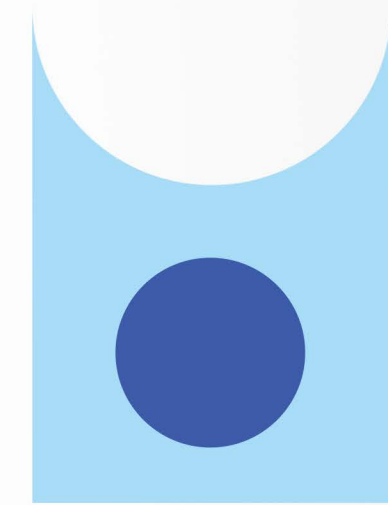
More than 400 school communities across 10 countries implement the SALL LIVING-LAB Methodology to address local issues linked to the food system.



1

SCIENCE LEARNING DIALOGUES

A wealth of opinion exchanges,
discussions and reflections
which have taken place during
the whole project since its start.



KEY

MESSAGES

OPPORTUNITIES:

1

REAL-WORLD application that allows students to engage in:

- Authentic scientific inquiry
- Experimentation

to apply theoretical knowledge to practical situations and foster
DEEPER UNDERSTANDING of **SCIENTIFIC** concepts and principles

2

EXPERIENTIAL LEARNING allows students to participate in scientific inquiry and experimentation and promotes:

- Critical thinking
- Problem-solving skills
- Development of scientific inquiry skills

3

HANDS-ON LEARNING that allows students to actively participate in scientific investigations by:

- Conducting experiments
- Collecting data
- Analysing results

4

COLLABORATION and **COMMUNITY ENGAGEMENT** that allow students to interact with:

- Scientists
- Researchers
- Experts

5

INTERDISCIPLINARY APPROACH

help students to see the interconnectedness of various fields fostering a holistic understanding of how science applies to real-world challenges and promotes teamwork, communication and creativity.

KEY

MESSAGES

CHALLENGES:

1

RESOURCE CONSTRAINTS:

- Equipment
- Materials
- Personnel

Limited funding or lack of access to necessary resources can hinder the successful implementation of these activities.

Schools and educators may face challenges in acquiring and maintaining the required resources to support meaningful and engaging science teaching and learning. Necessary resources can hinder the successful implementation of these activities.

2

CURRICULUM ALIGNMENT

can pose challenges such as:

- Aligning the hands-on experiences with the established educational standards
- Learning objectives
- Finding the balance between the exploration and inquiry-based nature of living
- Need to cover specific curriculum content within limited timeframes.

3

TIME CONSTRAINTS

Implementing living lab activities in schools may require additional time for:

- Planning, coordination, and execution
- Managing field trips
- Collaborations with external partners
- Balancing the regular academic curriculum with the demands of living lab activities

4

TEACHER TRAINING and SUPPORT

to implement living lab activities which involve new teaching methods and approaches and in acquiring the necessary skills and knowledge to effectively manage and facilitate these activities.

5

COMMUNITY ENGAGEMENT

External stakeholders (businesses, community organisations, and researchers) may not be familiar with the school setting or the educational process, and they may not be willing or able to commit the time and resources necessary to collaborate on living lab activities.

6

ASSESSMENT

Evaluating the effectiveness of living lab activities in terms of students' learning can be challenging. There is no one-size-fits-all approach to assessment, and the methods used will need to be tailored to the specific goals and objectives of the activities.

2

EVALUATION

YEAR 2

127 SALL school projects
(implemented by 125 schools)

YEAR 3

174 SALL school projects
(implemented by 150 schools)

485
TEACHERS

184
MEMBERS
OF THE SCHOOL
ADMINISTRATION

1697
STUDENTS

200
SOCIETAL
ACTORS

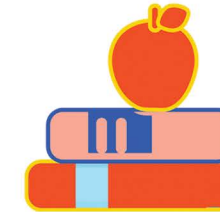
KEY FINDINGS



Responses of ADMINISTRATION STAFF after the COMPLETION of the SCHOOL IMPLEMENTATION

The school is very motivated in supporting the participation of its staff in innovative projects (i.e. non-traditional methodologies)

94% of the participants agreed that the school is motivated in supporting their teaching staff in innovative projects and that teamwork and collaboration is encouraged



Responses of TEACHERS after the COMPLETION of the SCHOOL IMPLEMENTATION

I feel more confident in communicating and collaborating with societal actors

80% of teachers felt more confident about their communication skills



HOW DO WE READ THE FINDING



CONFIDENCE in communicating and collaborating with societal actors is very important

KEY FINDINGS



Descriptive statistics of STUDENTS beliefs towards the SALL PROJECT

I'm excited to pitch my ideas to companies, organizations, etc.

70% of students expressed agreement with the statement that they felt enthusiastic about presenting their ideas to companies and organizations

I feel the SALL project gave me freedom of choice

73% of students who participated in the SALL project feel they had freedom of choice



HOW DO WE READ THE FINDING



The most open pathways resulted in enhancing students' science-related affective domains, such as **self-efficacy** and **intrinsic motivation** in doing science

3

AIMING TO PROVIDE ANSWERS TO THE FOLLOWING QUESTIONS

What are the broad recommendations and policy objectives for policymakers, researchers, and civil society organisations that are meaningful to accelerate the take-up of living-lab-based open schooling?

What is the anticipated impact of these changes on each policy domain and society?

Which major policy gaps and challenges should be considered and addressed for normalising the implementation of living-lab-based open schooling?

What kind of instruments and incentives are necessary to tackle these challenges?

Which actions should be put in place in order to implement such recommendations and related policy objectives?

RECOMMENDATIONS FOR POLICY ACTIONS

developed to address the policy challenges and identified gaps and achieve the foreseen policy objectives

RECOMMENDATION

1 MAKE OPEN SCHOOLING MAINSTREAM

Incorporate open schooling in national educational strategies, central policies and curricula, boosting its legitimacy as a fully fledged alternative to more traditional teaching methods

This can improve stakeholder as well as parents of the students interested in STEAM education, engagement and thus support teachers in adopting the SALL methodology

RECOMMENDATION

2 TRAIN THE TEACHERS OF THE FUTURE

Integrate open schooling into teacher training curricula and encourage the development of leadership, facilitation, and project management skills, as well as digital and technological competencies among newly qualified teachers

In parallel,
invest in upskilling the existing workforce
(lifelong learning)

RECOMMENDATIONS FOR POLICY ACTIONS

developed to address the policy challenges and identified gaps and achieve the foreseen policy objectives

RECOMMENDATION

3
MAKE FUNDING
AVAILABLE FOR
OPEN
SCHOOLING
PROGRAMMES

Create incentives for school management to invest in open schooling initiatives

Taking into account existing disparities in science literacy, schools in under resourced regions and rural areas should be prioritised so that no one is left behind

RECOMMENDATION

4
SUPPORT
SCHOOLS IN
ACCOMMODATING
STUDENTS'
NEEDS

Open schooling programmes should be designed to be as inclusive as possible

Schools need funding and, where necessary, technical support to fully implement existing legislations and policies to ensure accessibility, and to better support students with disabilities

RECOMMENDATIONS FOR POLICY ACTIONS

developed to address the policy challenges and identified gaps
and achieve the foreseen policy objectives

RECOMMENDATION

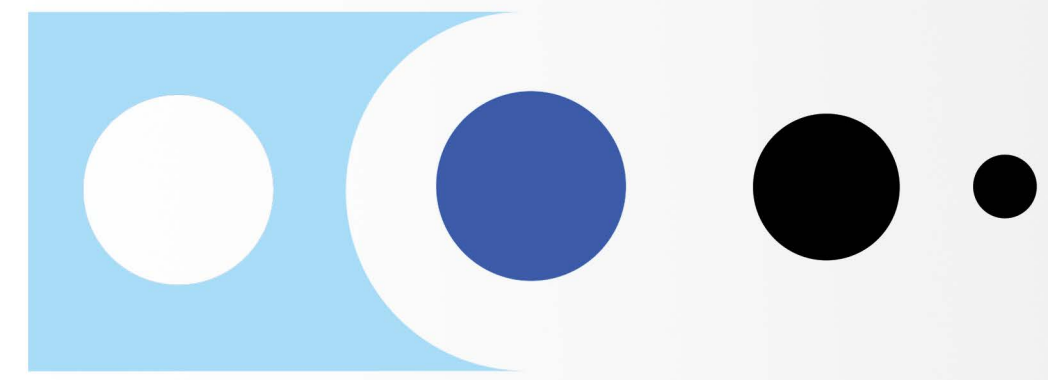
5 PRIORITISE SKILLS DEVELOPMENT

Promote a shift away from traditional grading, and encourage rigorous monitoring and evaluation of open schooling initiatives

While standardised testing may continue to have some utility in providing consistent measurement of scientific knowledge at the national and international levels, the results of these assessments should not be relied upon solely to evaluate the success of open schooling programmes

4

LESSONS LEARNED



Collection of
SALL – SCHOOLS AS LIVING LABS
lessons learned that can be
featured and highlighted.

LESSONS LEARNED

LESSON LEARNED 1

Open schooling policies are gaining momentum worldwide.

Open schooling is aligned with the need for more inclusive and flexible student learning opportunities

LESSON LEARNED 2

SALL has showed that with the right guidance

Policymakers will promote awareness about open schooling process

LESSON LEARNED 3

EU policymakers have showed their needs for tools and knowledge to promote COOPERATION and COLLABORATION between countries

So that open schooling models can be adapted to national and local realities applied throughout Europe

LESSON LEARNED 4

Education policies and practices remain primarily within the preview of individual member states.

LESSON LEARNED 5

Partners involved in the SALL project's approach promoted the use of educational institutions as real-world testbeds for sustainability and innovation

and are seeing open schooling as a way to foster experimental learning, interdisciplinary collaboration, and community engagement to make the European educational framework easier to transform and slowly unify.

LESSON LEARNED 6

Transforming EU schools into Living Labs will help rethink the current EU educational system and eventually redesign EU's governments' shared educational goals and challenges

LESSON LEARNED 7

Transforming EU schools into Living Labs will help rethink the current EU educational system and eventually redesign EU's governments' shared educational goals and challenges

LESSON LEARNED 8

More efforts and investment are required to keep on promoting the positive effect of the open schooling models

LESSON LEARNED 9

Participants in SALL see open schooling as a way to foster:

Experimental Learning
Interdisciplinary collaboration
Community Engagement

SCHOOLS
AS LIVING
LABS

SALL



IF YOU WANT SOME INSPIRATION GO VISIT OUR PLATFORM
www.schoolsaslivinglabs.eu

SALL TOOLBOX



POLICY BRIEF



SALL ROADMAP

