

POLICY DIGEST #2

Open Schooling for science education and a learning continuum for all

BACKGROUND



STE(A)M Learning Ecologies (SLEs) is a EU-funded project creating partnerships that promote lifelong learning, collaboration, interdisciplinarity, and the integration of STEM and non-STEM subjects –STE(A)M– into holistic learning experiences.

An SLE is a multi stakeholder, multi actor Open Schooling (OS) partnership

OPEN SCHOOLING AND STE(A)M IN EUROPE

Open Schooling is broadly accepted as a useful tool for creating engaging science education, as indicated by an increasing number of European policies and initiatives, including the **Open Schools for Open Societies (OSOS)** projects, the **European Research Area (ERA)** policy and the **European Education Area (EEA)** policy.

Our piloting of STE(A)M Learning Ecologies throughout Europe (detailed in the [SLEs Portfolio](#)) showcased major successes in terms of teaching practices, stakeholder involvement and learning outcomes. Nevertheless, the participants involved in the pilots agree on shared difficulties:

- ✘ The recognition of teachers' and experts' contributions in OS activities is lacking, whether it be financial or academic,
- ✘ OS initiatives are under-resourced. They face financial and human constraints and the lack of training on technological tools for teachers,
- ✘ Administrative barriers, rigid curricula and traditional teaching methods impair the teachers' ability to engage with OS,
- ✘ The lack of knowledge on how to engage with Industry, along with reserves from the communities make collaboration and networking difficult.

The SLEs initiative thrives to make science more accessible, relevant, and inclusive, encouraging broader participation in the scientific process. The following recommendations will support the institutionalization and sustainability of the SLEs approach, providing a framework for broader adoption and integration into educational systems.

For practical information and recommendations on our learning ecologies concept and how to implement them, please refer to the [SLEs methodology](#).

RESOURCES & SUPPORT

- ✓ Provide or advocate for increased financial support for OS and STE(A)M projects.
- ✓ Create a robust support system on OS and STE(A)M for schools and teachers. This support is needed for teaching practices but also in administrative fields.
- ✓ Promote the adoption of innovative educational approaches and methodologies through training. This includes producing new training opportunities or endorsing existing EU-funded courses in OS and STE(A)M.
- ✓ Establish reward and/or recognition mechanisms for teachers to acknowledge their effort and commitment in the implementation of innovative learning methodologies. Recognition can come in various forms, such as professional development opportunities, awards, and public acknowledgment of their achievements

CURRICULUM & POLICY

- ✓ Integrate OS, STE(A)M, Problem-based learning and interdisciplinarity into formal curricula or help develop policies that support curriculum flexibility.
- ✓ Develop strategies and policies that support inclusivity and diversity in STE(A)M education to increase the appeal of science to all students.
- ✓ Encourage collaboration between teachers, but also between schools and other external stakeholders (e.g. business, museums, research centers, local community, non formal education centers etc.)

STAKEHOLDER & COMMUNITY PARTICIPATION

- ✓ Enhance the collaboration between educational institutions, research bodies and industry by developing policies for sustainable partnerships. Develop policies supporting community engagement with schools, with a focus on OS and STE(A)M initiatives.
- ✓ Develop clear guidelines for stakeholder cooperation, starting from the guidelines developed by the SLEs project. This much-needed collaborative framework should embed a shared ownership model among schools, communities, and industry partners to nurture engagement and agency from all stakeholders.