

## STEAM - take it outside!

Erasmus project No. 2024-2-LV01-KA210-SCH-000293066

**Period**: 01/02/2025 to 30/06/2026 (17 months)

**Budget**: €60,000.00

**Applicant:** Skibes pamatskola (Latvia)

Partners: Jelgavas Valsts gimnazija (Latvia), Palade Põhikool (Estonia) and Agrupamento de Escolas

Henriques Nogueira (Portugal).

## **Aim** of the project:

through cooperating and exchanging of experience and good practice, to create outdoor STEAM lesson plans and activity centers, that promote environmental awareness, green thinking in children and create conditions for recognising, exploring, experimenting and curiosity.

## Project has following **objectives**:

O1: Teacher's training and experiences exchange in applying/using interdisciplinary-learning and STEAM method in

outdoor environment and organizing outdoor classes;

O2: Planning of STEAM outdoor activity centres – gathering of ideas;

O3: Development of activity plans for STEAM outdoor activity centres;

O4: Establishment of STEAM outdoor activity centres;

O5: Gathering of the experience and made teaching materials of partners in a single material;

O6: Securing of information dissemination activities about the project to other schools and stakeholders.

#### Teams:

Each partners team consist of 1 project manager, 1 staff working with PWD's and 12 directly involved PWD's. In addition, each partner involves additional PWDs within their possibilities, who benefit from the project indirectly.

#### LV team:

Organizational works: Agris Dobrovolskis: agris.dobrovolskis@jelgavasnovads.lv

Content related works: Lilija Andrasone: <a href="mailto:lilija.andrasone@jelgavasnovads.lv">lilija.andrasone@jelgavasnovads.lv</a>;

Content related works, coordinator at school: Saiva Kupriša: <a href="mailto:saivabelova@gmail.com">saivabelova@gmail.com</a> Content related works, involved teachers: Laura Stepiņa: <a href="mailto:laura.liepniece34@gmail.com">laura.liepniece34@gmail.com</a>

Tatjana Kolkovska: tatjana.kolkovska@jelgavasnovads.lv

# PT team:

Organizational works: project manager: Rita Costa, <a href="mailto:rita.costa@aehn.net">rita.costa@aehn.net</a>

Content related works: Teacher Physical education Cristina Martins, <a href="mailto:cristina.martins@aehn.net">cristina.martins@aehn.net</a> Content related works: Teacher I grade: Norberto Monteiro, <a href="mailto:norberto.monteiro@aehn.net">norberto.monteiro@aehn.net</a> Content related works: Teacher I grade: Filomena Isidoro, <a href="mailto:filomena.isidoro@aehn.net">filomena.isidoro@aehn.net</a>

#### EE team:

Organizational works, project manager: Klaire Leigri: klaire.leigri@gmail.com

Content related works, teacher II, IV grade: Ingridt Pihlamägi: <a href="mailto:ingridt.pihlamagi@palade.edu.ee">ingridt.pihlamagi@palade.edu.ee</a>

Content related works, teacher I grade: Kristin Saare: kristin.saare@palade.edu.ee



Content related works: Anne-Ly Grab, Art and History teacher: <a href="mailto:anne-ly.grab@palade.edu.ee">anne-ly.grab@palade.edu.ee</a> Content related works, Math teacher: Ulvi Voolma: <a href="mailto:ulvi.voolma@palade.edu.ee">ulvi.voolma@palade.edu.ee</a>

# Planned **project activities**:

**Project management and implementation:** This activity will encompass administrative arrangements, project team creation and communication, financial management, and dissemination activities.

An online kick-off meeting: This virtual event will bring together project partners to review the project structure, timelines, responsibilities, and collaborative working arrangements.

Six short-term joint staff training events: These events will be hosted by each partner institution in Latvia, Estonia, and Portugal over two cycles.

## **Activity plan**

Activity plan						
Туре		Date	From	То	Number of travellers	Duration*
Cycle 1	C1	03-2025	PT; EE	LV	2	3 WD+2TD
	C2	04-2025	LV; PT	EE	2	2 WD+2TD
	C3	05-2025	LV; EE	PT	2	2 WD+2TD
Cycle 2	C4	02-2026	LV; EE	PT	2	2 WD+2TD
	C5	03-2026	LV; PT	EE	2	2 WD+2TD
	C6	04-2026	PT; EE	LV	2	2 WD+2TD

<sup>\*</sup>WD: working days; TD: travel days

**Cycle 1:** Focusing on professional development, these events will introduce partners to each other's educational systems and provide training on the STEAM approach and implementing **interdisciplinary learning** in outdoor environments. Participants will also engage in hands-on activities, exploring outdoor learning environments and visiting local stakeholders.

**Cycle 2:** Concentrating on quality control and good practice sharing, these events will allow partners to present their developed STEAM activity plans and outdoor activity centres. Participants will observe demonstrations, provide feedback, and further explore best practices for integrating the STEAM approach into their teaching.

Each partner in this project comes with its own expertise, or strength. Thus, Portugal colleagues within their group of schools will share their experience on the possibilities of using digital/IT tools in the creation of interdisciplinary curriculum, Estonian colleagues will share their experience on the possibilities of organizing and implementing outdoor learning activities, thinking and acting outside the box, teachers motivation matters/changing of mindsets, while teachers from Šķibe, in cooperation with the local municipality, will share their experience on creating STEAM ecosystem, as well as will share their experience and methods in implementing inclusive education.

**Development of STEAM activity plans and establishing of outdoor activity centres (3 plans each partner):** Led by Jelgavas Valsts gimnazija (Latvia), this activity will involve the creation, testing, evaluation, and sharing of nine STEAM activity plans (three from each partner). The development process will include gathering ideas, creating materials, piloting the plans internally and with external schools, evaluating the results, and **compiling the best practices into a final, shareable resource**.



#### **Project outcomes**

- Enhanced **knowledge and skills** among participating teachers **in implementing** interdisciplinary learning and the **STEAM approach**, particularly in outdoor settings.
- Development of high-quality, engaging **STEAM activity plans** integrated into the curricula of partner schools.
- Creation of stimulating and practical **STEAM outdoor activity centres** that provide hands-on learning opportunities for students.
- Fostering of **environmental awareness and green thinking** among students.
- Production of a **final project material** compiling good practices, available as a downloadable PDF, for wider dissemination and use by other educational institutions.
- lasting impact on the participating institutions, their teachers, and students, while inspiring broader adoption of the STEAM approach, especially in outdoor learning environments.

## **Project is aimed on elaborating teaching content and methodology that:**

- is based on a set of **future-oriented skills** (critical thinking, creativity, problem solving skills, etc.)
- promotes green thinking
- helps to build an inclusive local education ecosystem based on EU values involvement of students with fewer opportunities (learning difficulties, no learning support from families, a lot of time spent on the way to school, societal stigmas about gendered professions, etc.)
- creates interest in STEM subjects
- motivate/"push" the teachers to collaborate interdisciplinary and to move their lessons both physically and mentally to the outdoor environment.

## Project main keywords/phrases/ideas:

- Promoting of interest and expertise in STEM/STEAM
- helping to support the implementation of local educational approaches (integration into the
  curriculum) to fill gaps in national curricula and the educational process (e.g. lack of teaching
  materials, mitigating the consequences of covid, interest in STEM, more practical teaching,
  emphasis on "hands-on" approach, etc.)
- green thinking/ future-oriented green technologies
- cooperation with local actors/stakeholders
- **EU core values** inclusion, equality, non-discrimination, etc.



## Partners strengths/expertise

- **Latvia** sharing of experience on creating STEAM ecosystem, as well as sharing of experience and methods in implementing inclusive education
- Estonia sharing of experience on the possibilities of organizing and implementing outdoor learning activities, thinking and acting outside the box, teachers motivation matters/changing of mindsets
- Portugal sharing of experience on the possibilities of using digital/IT tools in the creation of interdisciplinary curriculum

# Needs and goals of the participating organisations and the identified needs of their target groups

The project will help to solve the following existing problems in the **Šķibe school**:

- -Teachers' openness and motivation to innovations
- -Cross-curricular content planning: know how?
- -Encouraging interest in STEM subjects (especially mathematics)
- -Transfer of the learning process to the outdoor environment, companies, promoting students' interest in learning.

For **Estonian partner** this project aligns with the organization's goal of providing inclusive, high-quality, modern education. They see a great opportunity to continue developing previously started educational initiatives and solutions in the outdoor environment and to add new elements: STEAM ideas as well as collaboration with external partners.

By creating STEAM outdoor activity centers and lesson plans, the project meets the need for interactive and hands-on learning experiences. Involving parents and the local community in STEAM workshops creates a sense of shared partnership. This approach will strengthen the school's ties with community and address the need for their engagement and support in education.

#### The **Portuguese partner** has identified following primary needs:

- -the need for training events for teachers, acquiring new knowledge in order to diversify daily teaching practices and to be able to solve the growing challenges in education, which are migration (different nationalities with different prior knowledge in classes), interest in learning, dropouts, etc.
- -there is a perception among students that STEM subjects are very theoretical and therefore boring. Both of these needs can be met by including such methods in the learning process that promote the use of a "hands-on" approach, i.e. experiential learning or learning-by-doing, which is STEAM.