

OUTSTE(A)M toolkit

Made with educators, for educators

OUTDOOR STE(A)M: Outdoor learning in Early Childhood Education and Care and primary schools using age-appropriate technology and the STE(A)M Approach.



**Funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

The toolkit in a nutshell

A hands-on toolkit for ECEC educators and primary teachers supporting engaging, play-based learning for children aged 2–9. It combines experiential approaches with age-appropriate technologies, outdoor learning, and an integrated STEM approach. Co-created and tested with educators across Europe, the toolkit offers flexible, ready-to-use learning scenarios, outdoor activities, guidelines and early career awareness content that foster curiosity, creativity, and positive relationships with the natural environment.

*Use me
to come
back to
this
menu!*

The toolkit includes:



[Learning
Scenarios](#)



[Job
Profiles](#)



[Games
and Toys](#)



[Extra
resources](#)



[Guidelines](#)

Five ready to use learning scenarios for ages 2–9. Designed to engage young learners through interdisciplinary, hands-on experiences.



*Learning
Scenarios*

- Boxes and Foxes: [Word](#); [PDF](#)
- Let's sail off the island!: [Word](#); [PDF](#)
- The Wonderful World of Water: [Word](#); [PDF](#)
- Let's fix it!: [Word](#); [PDF](#)
- The Guardians of Tribology: [Word](#); [PDF](#)

TIMKEN®

"Let's fix it!" and "The Guardians of Tribology"
are supported by Timken®.

Two Job Profiles, each with a video interview (in age-appropriate versions) and flexible activities to support career-related learning. Activities can be used independently or alongside existing practice and are organised by age group (2–9) and learning objectives, with video links and resources provided first for each profile.



*Job
profiles*

- Marine Biologist (ages 2–5): [video](#)
- Marine Biologist (ages 6–9): [video](#)
- Meteorologist: [video](#)
- Accompanying activities: [Word](#); [PDF](#)

Three games and toys, each designed to support integrated STEM learning. You can use them independently or alongside your existing practice and aim to spark children's curiosity while supporting understanding of scientific and interdisciplinary concepts through play.



*Games
and Toys*

- AREcoRescue: [Word](#); [PDF](#)
- Rain Explorers: [Word](#); [PDF](#)
- Solar System: [Word](#); [PDF](#)

Additional resources include a literature review, a study of STEM-related toys available on the market and supporting materials such as posters and infographics.



*Extra
resources*

- Literature review: [PDF](#)
- STEM-related toys available in the market: [PDF](#)
- Posters and infographics: [PDF](#)

These Guidelines are designed to help navigate the OUTSTE(A)M Toolkit. By using these them educators and teachers in ECEC and primary school settings can get deeper insights about the learning scenarios, the job profiles that feature real scientists talking about their work as well as the curated STEM-related games and toys suitable for children aged 2 to 9 years.



Guidelines

- Full document Guidelines: [word](#); [pdf](#)

The three Parts of the Guidelines:

- Stand-alone Part I "The OUTSTE(A)M Framework": [word](#); [pdf](#)
- Stand-alone Part II "The Toolkit": [word](#); [pdf](#)
- Stand-alone Part III "Extra Resources about I-STEM": [word](#); [pdf](#)

More information?

Visit the OUTSTE(A)M webpage:

<https://www.scientix.eu/community/partner-projects/outsteam>

OUTSTE(A)M