



**It is less a transfer than
a conversation:**

What five European cities are learning about STEAM — and why it matters

ARTICLE 2

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I am sitting in a café in the creative quarter of a European city. Around me, people are collaborating at shared tables, sketching ideas, working on their laptops or pausing to watch the skateboarders jumping in a vibrant square, other people moving between a small gallery next door and looking at the window of the circus hub or the creative designs of a local tailor. A few years ago this square was empty. The building I am sitting in now was a vegetables distribution hub for the market stalls that filled this neighbourhood on weekday mornings: vans arriving before dawn, the whole place quiet by afternoon. Now it hums differently, at different hours, for different reasons, with different people and activities.

This transformation didn't happen by accident. Like many European cities, this one used EU funding to breathe new life into a derelict area — converting abandoned industrial and commercial spaces into places of creativity, collaboration and local economic activity. Across Europe, programmes from the European Regional Development Fund to the European Urban Initiative and URBACT have backed exactly this kind of change — each in different ways, but with a shared conviction: that investing in how cities think and work together is as important as investing in what they build. The result is rarely dramatic or sudden. It accumulates — through a series of small collective decisions, co-creation and experiments that eventually add up to something you can see.

It could be many cities in Europe. Sitting here, I find myself thinking about the five cities in the URBACT Future STEAM Cities network I am working with — Aveiro, Alytus, Kolding, Oulu, and Płock — and the work they have been doing since the beginning of the project.

How will their cities look in five years? And in 25 years? How much of that future is already being shaped—quietly and incrementally—in stakeholder meetings, workshops, and local experiments that may seem small or disconnected, but are, in reality, laying the foundations for systemic change?

The answer, it turns out, is more than you might expect.

A year of trying things out

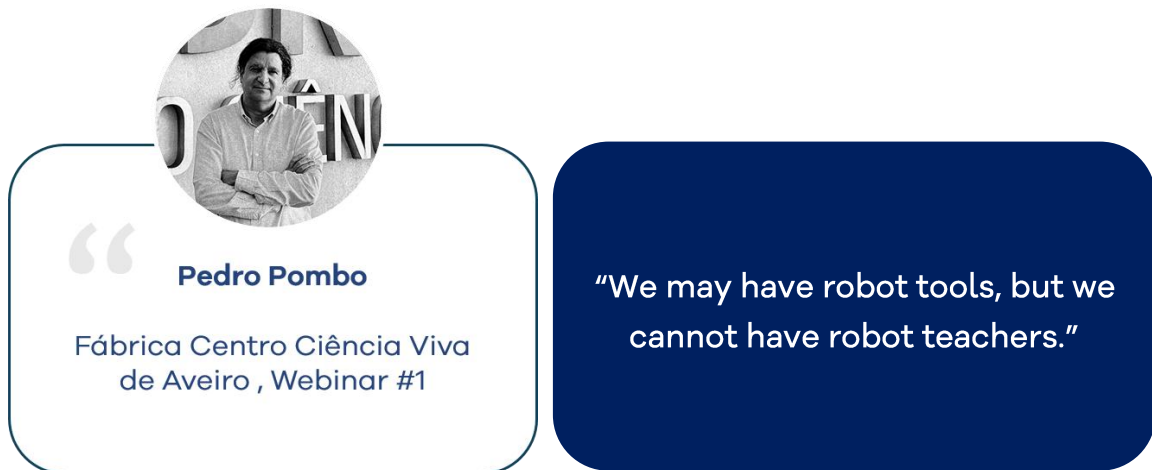
STEAM — Science, Technology, Engineering, Arts and Mathematics — is an approach to education that treats these disciplines not as separate subjects but as a connected way of thinking and making. **The ‘A’ is what distinguishes it from STEM: the conviction that creativity, culture and the arts are not extras but essential to how people learn, innovate and solve problems.** For cities, STEAM is more than a curriculum question. It is a strategy for building the skills, connections and civic confidence that allow communities to shape their own futures — and to attract and retain the talent needed to do it.

Future STEAM Cities network, is one of the URBACT Innovation Transfer Networks programme, and works in three phases: Understand, Adapt, and Re-use. In the Understand phase, the network cities built a shared picture of Aveiro’s STEAM City model and assessed their own local contexts. In the final phase, Re-use, they will finalise their plans and prepare for implementation. But the Adapt phase — the heart of the network — is where the real work happens: cities test ideas, learn from what they try, and begin to translate those learnings into investable plans. Between March 2025 and February 2026, that is exactly what has been happening.

The year included transnational meetings in Alytus and Płock, two public webinars, a mid-term review, and a steady intensification of local testing across all five cities. In the background, the URBACT Local Groups (ULGs) — key local stakeholders in each city that come together with the city partner to get involved in the project actions and share their experiences at a transnational level — ensured the joint design of the city strategies and development of the investment plans. A support group formed by the Lead Partner and the ad-hoc and lead experts provided the technical backbone. Simple and robust infrastructure, based on collaboration and expertise.

The first webinar, in May 2025, asked what it means to imagine the future of STEAM education — **not just as a school subject, but as a civic and cultural force**

rooted in values — essential to how cities and communities navigate the challenges that AI and technological change are bringing. Thirty-six participants heard from speakers including Pedro Pombo from Aveiro, who made a distinction that has stayed with the network ever since: STEAM must be human at its core.



Pedro Pombo
Fábrica Centro Ciência Viva
de Aveiro, Webinar #1

“We may have robot tools, but we cannot have robot teachers.”

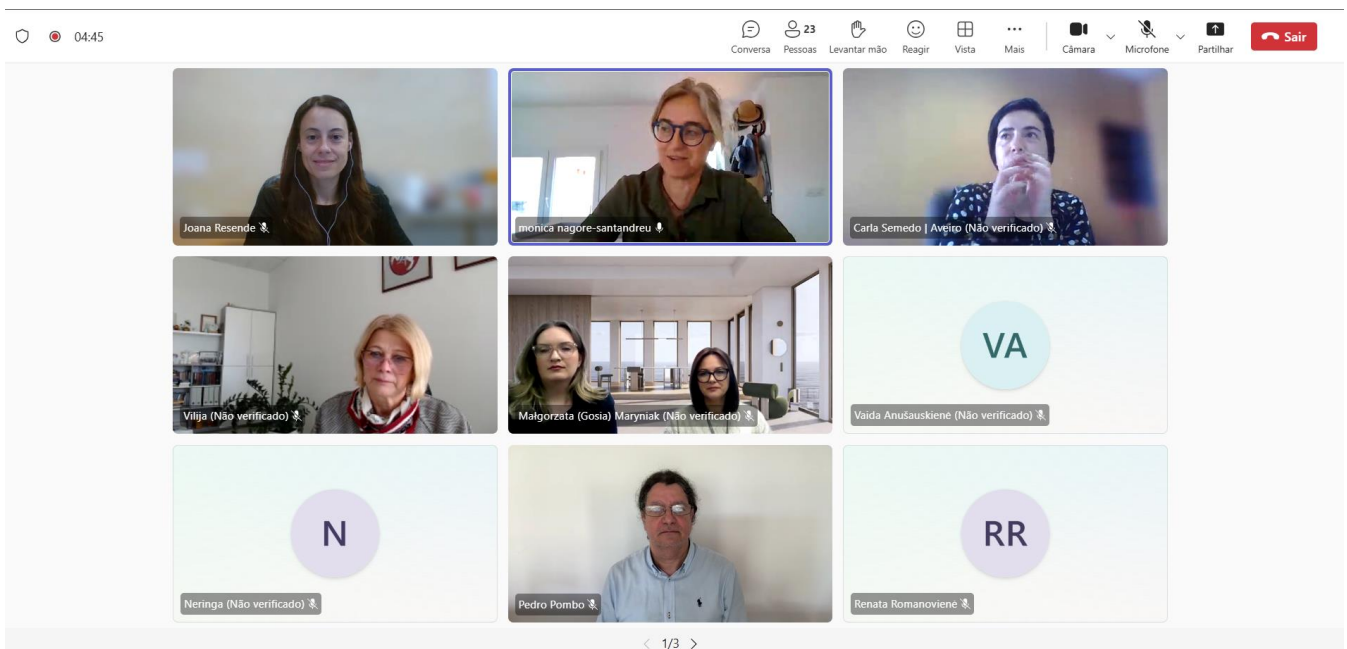


Figure 1: Webinar 1 print.

By December, a second webinar went deeper into the 'A' in STEAM. Five speakers — from museums, creative industries, neuroscience, sound design and education — explored what arts and creativity actually contribute, not as decoration but as method. From the Mazovian Museum in Płock to Sonic College in Kolding, the cases were different but the finding was consistent: the “A” of STEAM is a connector. Between disciplines, between people, between ideas and the will to act on them.



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Lars Tirsbæk
Sonic College, Kolding ·
Webinar #2

“Art appeals directly to the senses, offering an inclusive way into complex technological fields. Before learning theory, students can feel and experience concepts.”

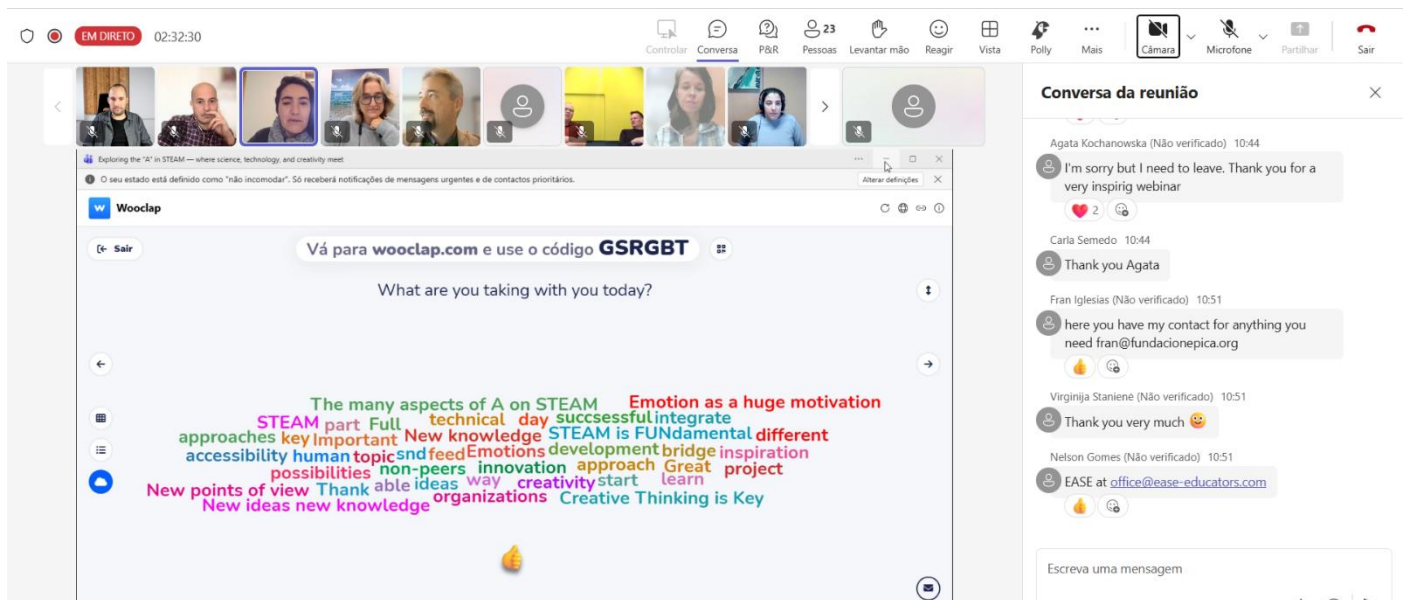


Figure 1: Webinar 1 print.

Five cities, five stories of adaptation

None of the cities are simply copying Aveiro's model. They are reading it through their own contexts, making deliberate choices about what fits — and in doing so, discovering things they did not expect. Transfer, it turns out, is not a one-way street. Knowledge flows from Aveiro to partner cities, but also back — as cities' adaptations enrich and challenge the original model — and between cities themselves, as each learns from what the others are trying. It is less a transfer than a conversation.

Aveiro *Portugal · Lead Partner*

Having pioneered the STEAM City model through a decade of practice, Aveiro is now testing how far it can reach beyond schools. A two-day family stop-motion workshop — using 3D printers and plotting tools to build sceneries and scripts around city culture and tourism — revealed that STEAM methodologies work for community audiences in ways that reinforce, rather than compete with, the municipality's broader digital strategy. Coding workshops for unemployed adults with no prior digital experience have shown similar appetite. The lesson: the model is more portable than expected, and the community is ready. Their investment plan - called continuity plan - will seek to make these permanent — extending Aveiro's innovation into lifelong learning and digital inclusion across the wider community.

Alytus *Lithuania*

Facing youth out-migration, Alytus is using STEAM as a reason to stay. Company Open Days brought gymnasium students – secondary school students - into local tech businesses and the response was immediate. But the testing phase surfaced

something more important than the events themselves: doing many different things resulted in scattered, isolated moments rather than a cohesive strategy. The insight pointed directly to what the investment plan needs to be — not more events, but a unified retention strategy: a coherent programme that connects young people with the local economy in a structured, measurable way. The testing phase also surfaced a governance lesson: top-down approaches don't work. Success depends on formalised working groups, co-designed evaluation, and anchoring the strategy in local legal frameworks that secure its future regardless of political cycles. A new Learning Hub under development will provide the physical home for all of this.

“ Our strength lies in doing things people can see — something students can touch, build, or show. It makes STEAM real.
— Alytus ULG member

Kolding *Denmark*

Kolding is approaching STEAM through the lens of economic relevance and talent retention. The SONIC Challenge engaged sound technology students in real company problems; entrepreneurship workshops connected design, IT, sound and industrial technology students with local employers. The city is building towards a living lab model where business, education and city administration co-create around shared innovation challenges — new connections that did not exist before the network. The investment plan will focus on making these annual fixtures rather than one-off events.

“ Today we hire personalities. We hire people who like to learn, who love to learn — and all of the soft social skills, the 'A' of STEAM, are overarching the technological skills we need.
— Morten Harboe, Schneider Electric, Kolding

Oulu Finland

Already a national leader in STEAM education, Oulu is using the network to go deeper. Artistic residencies, a redesigned Future Classroom, and leadership workshops for school heads are building the systemic infrastructure for what the city calls STEAM 2.0 — making STEAM not just an activity, but the default culture of its education system. Testing revealed an unexpected pivot: when literacy robots proved too expensive for large-scale use, the city turned the constraint into an opportunity, using their 'Tool Camp' to challenge students to design and build their own. Future Classrooms are now also being explored as living laboratories for non-stop technology testing. And Oulu is extending its STEAM ambition beyond schools — to adults and seniors in a city committed to lifelong learning. The STEAM Summit in May 2026 will be a key public moment for this vision.

“People learn more when they are collaborating. The main challenge is not about the type of competence students develop, but how autonomous they are in their own competence and its development.
— Sari Harmoinen, Dean of University of Oulu

Płock Poland

Płock entered the network at the beginning of its STEAM journey and has made remarkable progress. Five testing actions — spanning schools, the University of Technology, the Mazovian Museum, and local businesses — have built relationships and evidence that did not exist two years ago. The learnings were specific: students need background knowledge before university labs, and STEAM activities must be embedded in the regular curriculum to be taken seriously rather than treated as 'fun extras'. The national context is moving in Płock's favour: Poland's Ministry of Education is embedding STEAM into the national curriculum, and Płock's local

teacher training centre is well placed to lead that alignment. The city has the potential to become a national reference point for STEAM education.

“ The idea of STEAM education makes everything possible. It is about creating a more open-minded society, a society that thinks better.
— ULG member, Płock

Taken together, these five stories point to something the network has learned as a whole. Transfer is not about copying a model — it is about understanding what a model makes possible, and then making deliberate choices about what to do with that. The shared challenge now is connecting these local learnings to the decisions that need to go into an investment plan. Moving from ‘this did or didn’t work’ to ‘this is what we should sustain’ requires a different kind of thinking. And that is what these cities are now doing.

Turning learning into commitment

The adapt phase ended in February 2026, but its most important work is only now becoming visible. Each city is now drafting its Investment Plan — a document that has to make the case for sustained public investment in STEAM, grounded in evidence from testing, shaped by a collaborative and integrated approach, built on a credible funding strategy, and owned by local decision-makers and key local stakeholders. A team of experts provides support through clinic sessions and narrative development around each plan’s story, and two rounds of feedback will follow before final submission in June.

This is where the work becomes real in a different sense. Testing can be exploratory, uncertain, generative. An investment plan has to commit and be specific

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What do we actually want to be funded in our city, by whom, for how long, and why is it important for our city?

It has to translate the energy of a productive testing period into language that a municipal budget committee, a European funding body, or a local business partner can act on.

The cities in this network have spent the past year and a half building the evidence and the relationships that make those plans credible. They have tested in classrooms, business premises, civic centres and museums. **STEAM is more than a curriculum approach. It creates new relationships and contributes to the economic development of cities by connecting the 'A' with science, technology, engineering and mathematics — preparing young people with the skills needed to address the societal challenges before us and in the future.**

Back in the café, I think about what this square will look like in another five years. Probably different again. What makes a place resilient is not that it holds onto one identity, but that it builds the capacity to adapt to new realities, new needs, and reinvent — while keeping something of what it was.

That is what these five cities are building. Not a blueprint, transplanted wholesale. But a capacity — to ask different questions, to test ideas before committing to them, to connect the people who need to be in the room, creating new systems that support the changes that will be needed in the future with innovation. The plans will be the evidence that it worked. The cities themselves will be the proof.

About Future STEAM Cities

Future STEAM Cities is an URBACT Innovation Transfer Network led by the municipality of Aveiro (Portugal), with partner cities Alytus (Lithuania), Kolding (Denmark), Oulu (Finland) and Płock (Poland). The network transfers and adapts the Aveiro STEAM City model, developed through the Urban Innovative Actions programme.