



STEAM in a Nutshell

What Educators Need to Know

What Policymakers Need to Know

Why STEAM Matters to Citizens

The Roadmap to Future Learning

STEAM in Action Across Europe

10 Key Themes at a Glance

Practical Tools for You

**Take Action Now** 

### Welcome to the Road-STEAMer Toolbox



#### Reimagining Science Education in Europe

STEAM education brings together Science, Technology, Engineering, Arts and Mathematics to foster creativity, inclusion, and real-world problem solving. The Road-STEAMer Toolbox offers a curated synthesis of insights and resources from across Europe.

Whether you're an educator, policymaker, or citizen, this guide helps you explore what's possible – and why it matters.

Use this document as a starting point, then dive deeper into the <u>Toolbox in full.</u>



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### It's not just subjects. It's a way of thinking.

STEAM education is about connection – between disciplines, people, and real–world challenges. It nurtures relational learning: interdisciplinary, equity–based, hands–on, and culturally responsive.

The Road-STEAMer framework highlights four learning approaches:

- o Experiential
- o Cognitive
- o Social-material
- o Equity-oriented

STEAM supports inclusion and creativity as central pillars – not optional add–ons. Learn more in the **Conceptual Framework (D2.2) and its visual summary.** 

Infographic —

D2.2 Infographic



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# STEAM starts in γour classroom – and γour leadership.

Educators are key to making STEAM happen. Road–STEAMer identifies conditions for success:

The Road-STEAMer framework highlights four learning approaches:

- Flexible curricula
- Ongoing professional development
- o Inclusive, hands-on teaching
- o Supportive leadership and school culture
- o Focus on student agency and well-being

STEAM empowers students through creativity, collaboration, and relevance. Explore practical tools in D2.1 – D2.3 and the real-world case studies in D4.1 – D4.4. Want to see STEAM in action? Check the interactive map.

 $\mathsf{Map} \longrightarrow \bigcirc$ 

**STEAM Practices Across Europe** 



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# Innovation needs enabling policy, not just funding.

Despite growing interest, most policies treat STEAM as optional.

Road-STEAMer recommends:

The Road-STEAMer framework highlights four learning approaches:

- o Remove rigid curricula barriers
- o Embed STEAM in teacher education
- Foster cross-sector partnerships
- Reform assessment frameworks
- O Make equity and inclusion non-negotiables

Effective policy enables systemic change, not isolated pilots. Align education with the digital, green, and democratic transitions.

Explore our policy briefs and the full list of recommendations in D3.1 – D3.3.

Policy Brief "Time for Bold Choices"



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### STEAM prepares young people for real life – not just exams.

STEAM helps students connect school to society. It improves:







It supports inclusion, especially for underrepresented groups. Communities benefit when learning is linked to real-world challenges. You don't need to be a teacher to support STEAM—you just need to care about the next generation.

Explore!

Why STEAM matters for citizens

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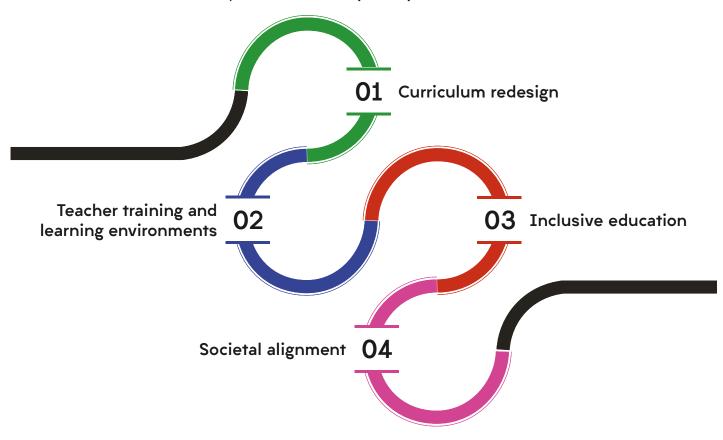
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### A structured plan for long-term change.

The Road-STEAMer Roadmap identifies four priority areas:



Each includes specific actions and real-world examples. The goal? Systemic change that embeds creativity, collaboration, and inclusion in everyday education.

Read more

**STEAM Education Roadmap** 

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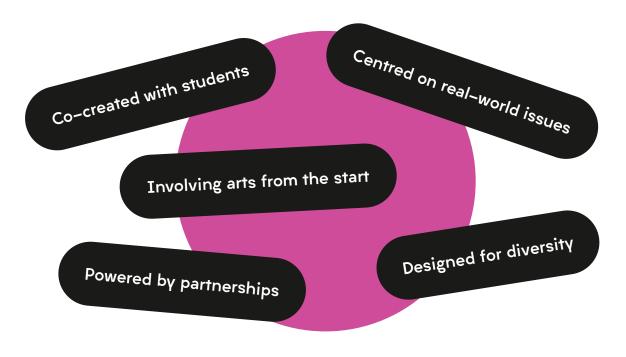
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#### It's alreadγ happening – everγwhere.

From local schools to museums and communities, real STEAM projects show how learning can be reimagined.



Browse dozens of examples from across Europe in our Interactive Map. Each project shows what's possible—with the right support.

View the Map

**Interactive Map of STEAM Practices** 

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#### Explore the Toolbox by Topic.

Pick a theme. Find your entry point.

Defining STEAM	Inclusion & Intersectionalitγ
Digital Education	Arts Integration
Teacher Development	Curriculum Flexibilitγ
Assessment	Sustainability & Green Skills
Open Schooling & Partnerships	Career Orientation & Skills

Each theme includes insights, examples, and links to relevant deliverables and resources.

Go to

**Road STEAMer Toolbox** 

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### It's not just reports – it's readγ–to–use content.

We've developed infographics, briefs, maps, frameworks, and guidance γou can adapt. **Top picks:** 

- O Conceptual Framework Infographic (D2.2)
- O Quality Criteria for Practices (D4.1)
- o Policy Briefs D7.4 + D7.5
- o Interactive Map of Use Cases
- o Full Roadmap (D5.1)

Everything is open access. Explore, share, remix.

All resources —

**Toolbox Resources** 



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### Three ways to get started – wherever γou are.



**Educators** 

- ο Test a STEAM activitγ
- o Reflect on curriculum flexibility
- O Share your practice on the map



Policγmakers

- o Review local curriculum barriers
- o Invite educators into policy design
- o Explore roadmap recommendations



Citizens

- Support local STEAM efforts
- o Promote creativity in education
- O Raise awareness through your networks



Share your practice



Submit here

Contact us



info@road-steamer.eu



