

From Classrooms to Policy: Teachers' Perspectives on the Future of STEM Education in Europe

Recommendations from Europe's largest STEM teacher network

Introduction

STEM education is essential for preparing young people for a rapidly changing world. Teachers are central to this task: they implement new curricula, introduce emerging topics such as artificial intelligence and sustainability, and equip students with the competences and skills they need for the future.

Science on Stage Europe, a grassroots initiative and Europe's largest STEM teacher network, reaches more than 100,000 teachers in over 30 countries. In 2026, we conducted an anonymous survey to better understand their priorities, challenges, and support needs.* Teachers from 33 countries participated, representing all education levels and a broad range of STEM subjects.

This paper brings their voices into the European policy debate. As the European Commission develops initiatives such as the European STEM Competence Framework and the Teachers Agenda, alongside the development of national STEM frameworks, classroom perspectives must help shape these policies. Based on our survey findings, we propose recommendations to better support teachers and strengthen STEM education across Europe.

1 Put teachers at the centre of STEM policy

European STEM policies should be developed together with practicing teachers. Teachers should be systematically involved in the design of curricula, competence frameworks, teaching resources, and professional development initiatives.

2 Give teachers time to innovate

Member States should ensure that dedicated time is embedded within teachers' working hours to support professional collaboration, interdisciplinary project development, lesson planning, and professional learning. Providing such protected time is essential for fostering educational innovation.

3 Invest in teacher-led professional development

The European Commission should strengthen its support for peer-to-peer professional learning and European teacher networks, creating sustained opportunities for educators to exchange, adapt, and disseminate classroom-tested practices across national and educational contexts.

4 Prioritise practical, classroom-ready resources

European funding programmes should prioritise the development, validation, and widespread dissemination of high-quality, open-access, evidence-informed STEM teaching resources that can be readily implemented and adapted to diverse educational contexts.

* For the full survey results, see: www.science-on-stage.eu/news/survey-results-position-paper



5 Promote interdisciplinary STEM education linked to societal challenges

European STEM education should encourage interdisciplinary and future-orientated learning that connects science, technology, engineering, and mathematics with sustainability, AI, entrepreneurship, and real-world problem solving. Such an approach reflects the teachers' vision for the future of STEM education.

6 Recognise collaboration as an essential part of teaching

European and national education policies should formally recognise and embed teacher collaboration as a core dimension of professional practice. Collaboration contributes to enhancing teaching quality, facilitates the exchange and development of innovative pedagogical practices, strengthens collective professional capacity, and helps reduce professional isolation among educators.

7 Support innovation through trust and flexibility

Provide schools and teachers with greater flexibility to implement project-based, inquiry-based, and interdisciplinary STEM learning while reducing administrative burdens.

Europe has set ambitious strategic objectives for strengthening its competitiveness, sustainability, resilience, and digital transformation. Achieving these objectives depends fundamentally on the capacity of European education systems to provide high-quality, inclusive, and future-oriented STEM education. Such education, in turn, cannot be achieved without empowered, highly skilled, and professionally supported teachers.

As a European network dedicated to STEM teachers, Science on Stage Europe calls on European and national policymakers to

1. place teachers at the heart of future STEM policies, ensuring that their professional expertise, classroom experience, and perspectives inform policy design, and to translate the recommendations outlined above into concrete measures;
2. prioritise a sustainable and dedicated European funding mechanism for teacher-led STEM networks, recognising their strategic role in advancing European educational priorities. Such funding should enable long-term cross-border collaboration, peer-to-peer professional learning, the co-creation and dissemination of evidence-informed and classroom-tested practices, and continuous professional development across Europe.

