

# STREAM IT 2024: A Year in Review – Key Moments, Insights, and Future Plans

# Research Report Highlights Barriers and Solutions for Gender Equality in STEM Education

Our "Research Report on Obstacles and Supports for Gender Equality and Inclusiveness in STEM Education, R&I" (available soon) reveals critical insights into the obstacles girls and young women face in pursuing STEM education and careers. The study, conducted between March and May 2024, involved more than 150 interviews with 97 female students and 85 experts from across 15 European countries. Its primary aim was identifying barriers, as well as supports that could foster gender equality and inclusiveness in STEM fields.

The report provides a comprehensive analysis of the challenges young women face in STEAM education, including gender stereotypes, societal expectations, exclusionary classroom environments, and the lack of institutional support.

Key findings include:

- Gender stereotypes and family expectations often discourage girls from pursuing STEM careers.
- A lack of supportive social relationships and a predominantly male-centred environment in classrooms hinder female students' sense of belonging.
- Financial barriers and limited institutional support remain major obstacles, particularly at the tertiary level.

Despite these challenges, the study also identified areas of support that contribute to female students' success, including a welcoming and inclusive environment, mentorship programs, and the perception of gradual progress in gender equality. The report offers expert recommendations for addressing these issues, including the early development of critical skills, gender-sensitive training for educators, and innovative learning approaches that engage students creatively. Role models and community support are also seen as vital in sustaining girls' interest in STEM.

## STREAM IT Launches Virtual Makerspace to Support Gender-sensitive and Inclusive STEAM Education

We are proud to announce the launch of the 'Virtual Makerspace', an online platform designed to promote STEAM education with a special emphasis on incorporating gendersensitive and diversity-inclusive approaches.

The Virtual Makerspace aims to serve as a hub for fostering innovation in STEAM education and offers a dynamic space for educators and communities to collaborate, share resources, and advance inclusive teaching practices across Europe and beyond.

Key features of the Virtual Makerspace include:

- **Resources for STEAM Education:** This section will provide valuable educational resources developed by the STREAM IT project, along with external materials focused on gender-sensitive teaching methodologies and diversity-inclusive tools.
- **Interactive Map:** The platform features an interactive map showcasing STEAM projects and initiatives across various countries. Users can explore regional educational resources, connect with other educators, and discover new opportunities for collaboration. The map is continuously updated with the latest initiatives and programs.
- National Inspiration Hubs: The hubs are hosted on the Virtual Makerspace, the National Inspiration Hubs are online spaces where STEM educators can share knowledge and collaborate on best practices. These hubs, launching in January 2025, will focus on fostering inclusive, gender-neutral teaching methods and providing national-level webinars and international training opportunities in 13 countries, including Belgium, Bulgaria, Hungary, Iceland, Italy, Lithuania, North Macedonia, Poland, Serbia, Slovakia, Slovenia, Spain, and Ukraine.
- **Forum:** A dedicated community space for educators and STEAM enthusiasts to discuss topics, share ideas, ask questions, and collaborate on global projects.
- **Events:** A curated calendar of upcoming events, including STREAM IT partner-led gatherings, global STEAM initiatives, and opportunities to network with like-minded individuals and organizations.

Please visit for more information and begin exploring the Virtual Makerspace.

# **Empowering STEAM Educators to Contribute to Improving Gender Equality Through National Inspiration Hubs**

Our project is also excited to announce the launch of the <u>National Inspiration Hubs</u>, online spaces that bring together STEM educators, communities, and stakeholders from across Europe to promote gender equality and inclusiveness in STEM education. These hubs serve as platforms for sharing knowledge, collaborating, and building capacity through interactive national-level webinars, international training sessions, and further peer-to-peer learning opportunities.

The National Inspiration Hubs are designed to empower educators to foster innovative, gender-sensitive teaching practices, particularly in STEAM fields. The hubs are built on the belief that teachers play a pivotal role in shaping students' attitudes, career aspirations, and self-efficacy in STEM. By supporting educators in addressing gender biases and stereotypes, the National Inspiration Hubs seek to empower the next generation of women in STEM. The hubs aim to create a collaborative environment where educators can exchange best practices, resources, and insights to help bridge the gender gap in STEM education. The hubs are to be organized in 15 countries, including Belgium, Bulgaria, Hungary, Iceland, Italy, Lithuania, North Macedonia, Poland, Serbia, Slovakia, Slovenia, Spain, and Ukraine.

The STREAM IT project invites other stakeholders to join the effort by establishing additional National Inspiration Hubs in their regions. If you are interested in contributing, please contact <a href="mailto:info@streamit-project.eu">info@streamit-project.eu</a>.

For more information or to participate, please visit the **National Inspiration Hubs** 

# Advancing Gender Equality in STEAM: Policy Dialogue Webinars for Inclusive Education and Careers

As part of the activities supporting broader EU objectives and "The European Manifesto for Gender-Inclusive STE(A)M Education and Careers," our project partner, Steinbeis, has developed the framework for a six-part webinar series. These webinars, to be held in 2025 and 2026, will highlight current trends and insights on policies that foster gender equality in STEAM education. They will bring together thought leaders, policymakers, teachers, students, civil society, and education influencers.

Two of the policy dialogue webinars will focus specifically on addressing gender-based barriers and identifying effective measures in higher education STEAM programs. Throughout the series, special attention will be given to policymakers to ensure political commitment and long-term impact. The final two webinars will directly promote "The European Manifesto for Gender-Inclusive STE(A)M Education and Careers."

#### **Introducing STREAM IT's First Cohort of Ambassadors**

As part of our commitment to inspiring the next generation of women in STEM, we are thrilled to announce that STREAM IT has successfully recruited its first cohort of Project Ambassadors. These ten accomplished professionals—hailing from diverse backgrounds and a range of scientific, technological, engineering, and mathematical disciplines—will play a pivotal role in motivating young girls to envision themselves as future leaders in STEM.

Each ambassador was carefully selected by our partners following a set of clear and

inclusive criteria, ensuring that they bring both expertise and relatability to the table. While some are seasoned researchers and innovators, others are at earlier stages of their careers offering fresh perspectives and recently acquired skills. What unites them is their proven ability to communicate complex concepts in accessible ways and their passion for mentoring future talent.

Although these ambassadors have only just been onboarded and have not yet begun their activities, their planned involvement will be both meaningful and varied. They will help lead workshops, participate in panels, create engaging content, and connect directly with educational communities. Across all channels—online and in-person—these ambassadors will share their personal journeys, highlight diverse career paths, and emphasize the importance of perseverance and curiosity.

Through this ambassador initiative, we aim to show young girls that STEM is not only within their reach, but that it also holds countless opportunities for creative problem-solving, innovation, and personal growth. In the coming months, as the Project Ambassadors begin contributing their time, insights, and voices, we look forward to celebrating their achievements and documenting their impact. We believe their collective efforts will amplify the STREAM IT mission: to broaden participation, remove barriers, and ensure that girls everywhere can envision themselves as the future leaders, thinkers, and creators in the ever-evolving world of STEM.

### Shaping Perceptions: Awareness Campaigns for Women's Role in STEM and the Benefits of STEM Education

In 2024, three Awareness Raising Campaigns were launched on STREAM IT's platforms. The general goal of these campaigns is to initiate change in the perception of the general public and relevant stakeholders about women's role in STEM fields, and to communicate the benefits of STEM education for European society. We thought that the best way to make a long-lasting impression on the audience's perception about women's role in STEM was to show them real-life examples of successful women in STEM. Women from each partner country shared thoughts about their professional journey, creating a unique foundation for the Awareness Raising Campaign posts for 2024.

In September, the campaign "Teachers: Your Effort Matters" highlighted an important aspect of these women's professional life: the teachers who inspired and encouraged them during their studies. In October, the "Inspire and Empower the Next Generation of Women in STEM Education" campaign targeted young girls who might be interested in pursuing a career in STEM. The campaign posts introduced several inspiring women, whose experiences served as examples to these girls. In November, during the World Science Day for Peace and Development, we shared infographics about a recently emerging issue in gender equality: gender bias in Al models. This campaign was called "Women need to be represented in Al".

By summarising insightful studies of Genevieve Smith & Ishita Rustagi, Dr. Erin Young, Prof. Judy Wajcman & Laila Sprejer, and an UNESCO analysis about Generative AI, we aimed to show how crucial it is that women be equally represented in STEM so they shape the technologies of our future.

In 2025, we plan to share more inspiring stories to reach and encourage more girls who might be interested in the STEM field. Moreover, we aim to show that gender equality in STEM should not only be reached by the efforts of individuals, but by actions taken at the institutional level. During the campaign in February, 2025, we will share already-established practices promoting gender equality at the institutional level to show good examples of how to support women in STEM to be active agents of their lives and careers.

STREAM IT is dedicated to creating meaningful change in addressing gender inequalities in STEM education, research, and innovation. With your continued support, we are making strides toward a more inclusive and equitable future for all genders in the STEM fields. Thank you for being part of this journey.

As the year comes to a close, we wish you a joyful and peaceful holiday season, filled with happiness and inspiration. Stay connected with us for updates and more exciting news by following us on our socials LinkedIn, Facebook and Instagram. We look forward to achieving even greater milestones together in the year ahead!



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