EU STEM COALITION

Science Technology
Engineering Mathematics

Accelerating Europe's Tech Advantage: Union of Skills for Chips, Tech and Inclusion

Beatrice Boots
Chair of the EU STEM Coalition

2 October 2025

Why Strengthen the STEM Education Ecosystem

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- Draghi: Economic growth and competitiveness
- Niinistö: Braces European Defence and Readiness
- Crucial for Green and Digital Transitions
- Enhances democratic citizenship, social equity and (digital) resilience

How to improve STEM education

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- Triple helix approach: Collaboration between schools, businesses, governments and civil society
- Sharing best practices to reduce duplication
- Building a resilient, inclusive STEM ecosystem

EU STEM COALITION

SEMI Europe
International

Astra
Denmark

Ciência Viva
Portugal

Platform Talent voor Technologie (PTvT)
Netherlands

Teknikcollege
Sweden

ZDI – Zukunft durch Innovation in North Rhine-Westphalia, Germany
Germany

CyberMentor
Germany

ICSE – International Centre for STEM Education
International

Flemish STEM Platform
Belgium

House of Natural Sciences
Denmark

Swiss Academy of Engineering Sciences (SATW)

ENGINEERS EUROPE
Belgium

National Centre for STEM Recruitment (NCSR)
Norway

LUMA Centre Finland
Finland

UPSTI
France

Ceemet
Europe

Nationales MINT Forum
Germany

MINTvernetzt
Germany

STEAM+ Albania
Albania

Turkish STEM Alliance
Turkey

Science on Stage Europe
Europe

European Science Engagement Association (EUSEA)
EU

European Institute for Technologies, Education and Digitalisation (EITED)
Bulgaria

ThinkYoung
EU

CSR Europe
EU

CESAER
EU

AEDE-France
France

Estonian Research Council
Estonia

Global Talent Mentoring
Germany

matrix gGmbH
Germany

FORTH
Greece

STEMLab
Albania

Turkish STEM Alliance
Turkey

University College London - UCL Engineering
United Kingdom

University of Mostar
Bosnia and Herzegovina

University of Ljubljana
Slovenia

Passport 2 Employability International
Malta

Midtjylland Region
Denmark

Ministry of Education and Science Bulgaria
Bulgaria

LearnIT Academy
Slovakia

Board of European Students of Technology (BEST)
EU

VLAIO (Flanders Innovation & Entrepreneurship)
Belgium

Óbuda University
Hungary

University Kadri Zeka
Kosovo

Riga Technical University (RTU)
Latvia

MINT-EC
Germany

ECSITE
EU

Foundation for Transport
Malta

Asturias Regional Dept. for Science, Innovation and Higher Education

Innobasque
Spain

The Basque Government
Spain

CSR Ukraine
Ukraine

Land Salzburg
Austria

VALNALÓN (Ciudad Industrial del Valle del Nalón)
Spain

STEM Learning
United Kingdom

Government of Catalonia
Spain

For a full list of our Coalition's members, please visit our website here

Recommendations & solutions: Next steps?

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1. Early exposure and education

- Introduce STEM concepts and activities at a young age
- Develop engaging, hands-on STEM curricula for kindergarten to 12th grade
- Offer coding classes and robotics clubs in schools to stimulate interest in tech
- Integrating STEM education into curricula and extracurricula

Recommendations & solutions: Next steps?

2. Addressing stereotypes and biases

- Train teachers to recognize and counteract unconsious biases
- Develop gender-neutral educational materials
- Promote media representation of women in STEM

Recommendations & solutions: Next steps?

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3. Mentorship and role models

- Establish mentorship programs pairing girls with women in STEM careers
- Create online platforms where girls can connect with women in STEM
- Invite female STEM professionals as guest speakers at schools

Recommendations & solutions: Next steps?

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4. Supportive environments

- Recruitment strategies and creating women-in-STEM student groups in colleges and universities
- Ensure safe and inclusive workplace cultures in STEM fields
- Supportive work-life policies in companies can also help retain women in academic positions and/or industry careers
- Supportive social circles

Recommendations & solutions: Next steps?

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5. Promote a systemic evidence-based approach

- Move beyond individual factors → tackle systemic barriers
- Ensure continuous monitoring & evaluation of STEM initiatives

- Read our research paper on Girls & women in STEM: what to know and what to do next

Listen to and engage with students!

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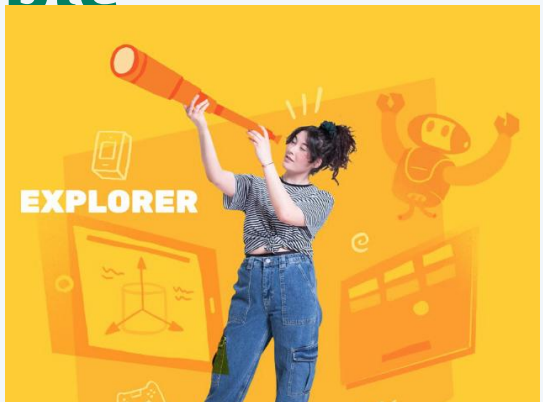
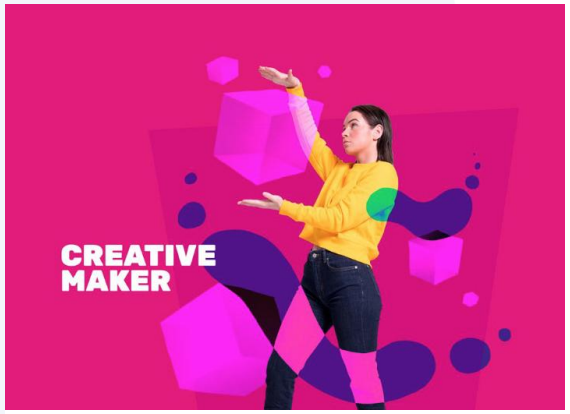
Platform Talent voor Technologie

Colourful, diverse & nuanced view on motivations of young people



"I really don't know what I want to do yet. Fortunately, I don't have to choose a profile until the end of this year." (Lana, age 14, theoretical VMBO)

"I like to do chemistry experiments, but actually we almost never do that." (Lea, age 14, HAVO)



"If something is explained in physics or chemistry class, I will experiment with it at home. Soon I'm going to do something with electricity at home with my dad, because we're learning that at school now." (Joanna, age 13, VMBO)

"Technology doesn't seem like something for me. It has nothing to do with the body or with sports, so I don't see it as an option." (Nina, age 14, VWO)

"I read a lot of comic books, especially Donald Duck. There are a lot of inventions in there. Not those things that explode, but really handy new things. I would like to become an inventor. Being a researcher also sounds fun." (Mick, age 11, explaining the "inventor" profession)

Platform Talent voor Technologie

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Thank you!

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