European Schoolnet’s programme to improve Science, Technology Engineering and Mathematics (STEM) teaching and learning in formal education follows the priorities set by our Ministries of Education STEM representatives Working Group.

- **Priority 1:** Improving STEM teaching in early childhood education, primary and secondary. E.g. Increasing the content knowledge of and confidence in of each of the STEM disciplines of primary school teachers and supporting secondary school teachers with integrated STEM teaching and learning with a special focus on transversal themes.
- **Priority 2:** Connecting STEM education with Global challenges. This includes for example sustainability.
- **Priority 3:** Expanding access to STEM Careers. This includes, for example, addressing gender role stereotypes.
- **Priority 4:** Facilitating STEM educators exchange & peer learning. Through, validation, and piloting of initiatives, practices, and solutions; sharing of best practices and results from projects; etc.

European Schoolnet’s core initiative on STEM education

- **Community:** Ministries of Education (MoE STEM WG); Industry (STEM Alliance); Associated Partners; Partner Projects; Educators (Scientix Ambassadors); Schools...
- **Campaigns:** Scientix Awards, STEM Discovery Campaign...
- **Information:** News, ScientixTV...
- **Resources:**
  - Professional development: STEM School Label; MOOCs; Webinars; Workshops...
  - Networking: Blog; Interest Groups; Conferences; Seminars...
  - Knowledge: Papers; Teaching Materials; Job Profiles; Projects...

Addressing Ministries of Education priorities, and under the umbrella of Scientix, European Schoolnet runs projects covering

- **INTEGRATED STEM:** connecting STEM subjects
- **CONTEXTUALISING STEM:** Environmental Sustainability
- **CONTEXTUALISING STEM:** Culture and Society
- **EMERGING TECHNOLOGIES:** EdTechs and Innovation
- **EXPLORATORY ACTIONS:** Beyond STEM

European Schoolnet’s STEM activities involve

- **Pilot testing and validation,** e.g.  
  - (2024) European Schoolnet Coding with VinciBot, MatataStudio-VinciBot pilot programme
- **Research** e.g.  
- **Policy exchange** e.g.  
  - (2023) LIFE values in STEM education - Discussion and Results  
  - (2023) Enhancing STE(A)M Education and Inclusivity - Discussion and Results
- **Communications and mainstreaming,** e.g.  
  - STEM Discovery Campaign, joint annual (Feb – Apr) international initiative, inviting everybody to celebrate STEM. In 2023 showcased over 2,200 activities and had 360,000 participants.
  - ScientixTV, addressing different topics on STEM education
- **Supporting schools and professional development of teachers,** e.g.  
  - The Scientix STEM School Label, helping schools self-assess their STEM strategies and identify areas of development, training and resources to improve their STEM activities at the school level.
  - (2024) Grand-Meyer, E. et al. COOL SCHOOLS Guidelines [...] turn your schoolyard into a nature-based climate shelter

More information

The Science Education Department has 25 colleagues with experience in STEM education, analysis, research, pedagogy, communications, teaching and management.

scientix@eun.org

10/04/2024