

# Helping students understand the importance of science and technology

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From biotechnology to digital media, from energy to cloud computing, almost every job area today is strongly affected, if not entirely reshaped, by scientific and technological advancements. Still, according to surveys,

young people in developed countries do not place a high value on science, technology, engineering and mathematics (STEM).

The EU-funded project ECB ('European Coordinating Body in Science, Technology, Engineering and Maths Education') is addressing the current need to increase pupils' interest in, and understanding of, STEM education and career paths.

"Key findings from the ROSE Project show that pupils in wealthy countries are not enthusiastic about science in school," says Alexa Joyce, Senior Manager for Corporate Development at European Schoolnet. "They think learning about [science and technology](#) isn't important or doesn't increase their career chances."

The European Coordinating Body in Science, Technology, Engineering and Mathematics, now dubbed 'inGenious', represents a large-scale, strategic response to the EU call to reinforce links between [science education](#) and science and technology careers.

"European Schoolnet and the European Round Table of industrialists (ERT) have launched inGenious to bring school and industry together," Alexa says, "in order to help pupils understand the link between their passions, the set of skills which make them possible, the education paths leading to those skills, and ultimately the jobs that they could perform."

The project has set up an academic and industrial community on STEM education, open to all interested [science teachers](#) and business professionals in Europe. Community members have free access to teaching resources developed in collaboration with industry to provide a real-life context to STEM subjects in class.

"They can also participate in training events, including webinars and forums, and they can consult a catalogue of collaborative activities, from

visits to industry premises to presentations by role models."

Alexa says inGenious is also running a pilot exercise, managed by Agueda Gras-Velazquez, Science Programme Manager at European Schoolnet, now entering its third year, with over 150 teachers chosen each year to participate in a more rigorous testing and evaluation of industry science activities. "Their feedback is essential to understand the main challenges as well as transferability opportunities," she says.

The results of the project are also feeding into policy activities, with inGenious actively promoting debate about STEM, mutual learning and transfer of experiences, with publications, conferences and other events at both national and European levels.

"The outcomes of our pilot activities have just been presented at the ESERA conference in Cyprus, and contribute to shedding light on the factors affecting pupils' education and career choices," says Alexa.

"Among the main findings - interest in [science](#) education does not imply interest in STEM as a concrete career choice. On the other hand, talking about careers in class can make a difference. Pupils exposed to career-related discussions are, on average, 20 percent more interested in STEM careers."

So far, between 12 000 and 16 000 students have been directly engaged in the piloting exercise. Alexa says a new school competition open to all interested schools will be launched this autumn. "In the long term, we hope to help build a larger and more talented STEM workforce to promote innovation-led growth in Europe."

**More information:** [www.ingenious-science.eu](http://www.ingenious-science.eu)

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