

# Science education for the future

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Credit: AI-generated image ([disclaimer](#))

In a democratic society, citizens need to be able to weigh the pros and cons when deciding what they believe and how they should vote. In today's knowledge-based society, that sometimes means having to understand technical and scientific issues. But do young people in Europe actually have the scientific literacy needed to participate in decisions that involve science?

Studies show European young people often do not have the knowledge to understand basic scientific questions, while the number of people choosing careers in science is falling. This rather alarming trend represents a clear challenge for Europe and its future in the knowledge economy.

The EU-funded SED [project](#), 'Science Education for Diversity' has been working to understand how countries in both Europe (UK and the Netherlands) and partner countries (India, Turkey, Lebanon and Malaysia) are addressing gender and [cultural diversity](#) when trying to engage [young people](#) in science education.

Led by the University of Exeter, SED implemented an extensive research programme across all of the partner countries, distributing questionnaires, organising focus groups and carrying out interviews with teachers and pupils.

Points of particular interest were the impact of culture and [religious belief](#), as well as understanding the process whereby attitudes towards science are formed between the ages of 10 and 14.

Going into the study, project partners believed that understanding the dynamics at play between culture, gender and science education in the diverse partner countries would provide a basis for developing better approaches to science education, approaches that would appeal to more students.

One of the ideas investigated was whether and to what extent social [networking technologies](#) have made the apparent unity and authority presented by [school science](#) appear irrelevant.

Among the outcomes of the project are two new books from the SED team. Science Education for Diversity is an edited collection by Dr

Nasser Mansour and Professor Rupert Wegerif from Exeter University including several articles from SED project members. In addition Professor Rupert Wegerif's book, 'Dialogic: Education for the Internet Age' refers to the findings of the SED project and argues that despite rapid advances in communication technologies, most teaching still relies on a traditional approach, built upon the logic of print, and dependent on the notion that there is a single true representation of reality.

In practice, Professor Wegerif argues, the use of the Internet has disrupted this traditional logic of education by offering an experience of knowledge as participatory and multiple. This new logic or 'dialogic' is more about learning to learn, where individuals are confronted with multiple perspectives and ultimate uncertainty.

SED Project partners say further publications based on their work will be forthcoming for a number of years and the very large dataset established will continue to be a resource for many years to come for researchers who want to improve [science education](#) across Europe and around the globe.

**More information:** SED [science-education-for-diversity.eu/University](http://science-education-for-diversity.eu/University) of Exeter

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