

An inquiry-based science project

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I was involved in the Chain Reaction European Project: <http://www.chreact.eu/> in 2016 as the team leader for my school's science teachers. The aim of this project was to develop a more dynamic, experimental and inquiry-based science education. Using critical thinking, reasoning and problem solving skills, students in the 15-16 age groups worked together to research scientific scenarios. They were supervised by mathematics, chemistry, physics, biology and geology teachers from our school, and by young practising scientists (PhD students mostly) as role models. Their work was summarised in presentations that were shared at a national student celebration event. We also encouraged these young people to consider science-related careers.

Today we keep on in that vein in the French curriculum's multidisciplinary option MPS (Méthodes et Pratiques Scientifiques, i.e. Science Methods and Practices). For one semester, for 1h30 a week, groups of 2 to 4 pupils research chosen scientific subjects related to a general topic such as "Astronomy", "Arts and Science", "Culinary Science", "Forensic Science" and so on. This work consists in desk research as well as in practical scientific experiments, guided by specialist teachers. It is summarised by a poster or a slideshow, including a quick English summary (as it is the custom in scientific research). Finally each group gives a short oral presentation in front of the class and is asked a few questions. A typical semester ends with a lecture from an external speaker (examples in the previous years include several scientists, an architect, a policeman and a nutritionist).