

Chemistry Teaching in Europe: The “Chemistry is All Around Network” Project

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“Chemistry is All Around Network”¹⁻⁵ (<http://www.chemistryisnetwork.eu>) is a three year project funded in the framework of the Lifelong Learning Programme – Comenius sub programme – Networks Action. It aims at enhancing the teaching and learning of chemistry, that is recognized as one of the most difficult subjects, as also evidenced by the results of the former project: “Chemistry Is All Around Us”^{6,7} (<http://www.chemistry-is.eu/>).

The identified background of the project idea relies on the evidence of common needs within the eleven countries involved and in Europe in general, related to the insufficient diffusion of scientific culture and awareness, that starting from the school level (primary and secondary education) affects the educational and training systems and therefore citizens in general.

The specific aims of the “Chemistry is All Around Network” are:

- Enhance the interest for chemistry, by sharing the most effective strategies for learning and teaching this subject.
- Present chemistry under a renewed and positive attitude, by giving evidence to how it affects everyday life and how it can contribute to the explanation of many everyday phenomena.
- Improve science teaching methodologies through the cooperation between teachers and experts.
- Create a Network among educational institutions for the exchange and comparison of experiences in order to fill in the gap between the world of scientists and school teachers.

The project is based on the collaboration of school teachers, scientific experts and university researchers and each year is dedicated to a specific area of research: 1. student’s motivation; 2. teacher’s training; 3. successful experiences and good practices.

Many activities are foreseen, particularly noteworthy are those devoted at introducing ICTs in the teaching of chemistry and those aiming at sharing information, experiences and good practices among the Partners.

The Project Portal provides databases of significant documents and papers and a special section collecting selected ICTs resources to teach chemistry/science at each school grade. Some of these resources are actually under testing at schools involved in the project and specific guidelines will be published in order to train teachers to a conscious and suitable use.

Every year, meetings among partners and international conferences are organized in order to present the results and to discuss future activities: the joint effort among teachers and experts of different countries, in order to fulfil common objectives, is one of the strength points of the project.

The usefulness of the project is also to bring a large number of teachers to share experiences that can have a positive impact on all students of our continent. In fact, the project evidences that, not only the problems, but also the setting of chemistry education is very similar in European schools; the consciousness that the method of study is not so different should reassure students and teachers in order to increase exchanges between European students. In fact, not only the financial resources affect the number of experiences abroad, but also the fear of not being able to fit into a system poorly known. Only a cultural exchange that starts since the last years of high school, when pupils are very young, will help to increase the mobility of university students.

Finally, the number of ICT resources available in the project portal contributes to the use of a foreign language that young people can no longer do without.

References

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