TOWARDS A CODE OF PRACTICE FOR HELPING SOLVE PROBLEMS ASSOCIATED WITH TEACHING CHEMISTRY IN A FOREIGN LANGUAGE

Natalia Tarasova
Christopher Brett

Chemistry is a core teaching scientific subject. In order to further progress and information exchange in the chemical sciences at the world-wide level and in order to foment the progress in future research, it has been decided by many countries that the exchange of students between universities, as well as training periods in different countries, should occur at the undergraduate level as well as at the graduate level. The objective is that students are better qualified when finishing their courses to enter the international market-place. Such exchanges signify that the students must be adequately prepared beforehand. This preparation can involve teaching in common languages, usually accepted as being English, and lectures and teaching in chemistry in English would continue during the training period abroad, regardless of whether the university visited would be in an English-speaking country or not.

The success of such approaches in countries where the native language is not English and where contact with the English language is probably not sufficient for the majority of students requires a number of critical criteria to be considered – essentially a code of practice drawn up on how to introduce the teaching of chemistry in English. This code should be sufficiently flexible to be adaptable to different circumstances in different countries.

Questions to ask and consider for a code of practice are:

- Is the level of English of the professors/instructors sufficiently good for them to be able to teach successfully in English and how should this be improved?
- What is a reasonable timetable, given the local context, for the introduction of teaching in the English language and should it be just for MSc courses or extended to the first years of undergraduate teaching?
- Should there be lecture courses in both English (for foreign students) and the native language?
- Can courses be organised for the instructors in scientific English (perhaps with a certificate of aptitude at the end)?
- How adequate is English teaching in the schools and how can it be improved for those adolescents who wish to pursue science courses in university?
- Is there a need for courses in scientific English for university students?
- What is the support with respect to textbooks and multimedia in the English language?
- Should there be discussion of the course content in the native language and to what extent, in particular in relation to explaining new concepts?
- Is English the most appropriate foreign language for teaching chemistry in the country concerned, taking into account its international relations, or should others be considered?

Can the CCE help in drawing up this code of practice and give advice on an individual basis? CCE is an excellent position since it comprises chemists from many different countries and educational systems and can draw on the members' expertise and experience in recommending good strategies.