New Working Group 2006-2009: 

Innovative Methods in University Chemistry Teaching

Call for contributions / Call for volunteers

Are you interested in innovative approaches to university chemistry education?
Have you participated in any innovations concerning teaching methods in recent years?
Are you interested in sharing your ideas and experiences with others?
If yes, we invite you to join the new ECTN-working group “Innovative Methods in University Chemistry Teaching”.

Rationale of the group

At the general assembly meeting in Vienna in April 2006 the ECTN decided to form a new working group dedicated to “Innovative Methods in University Chemistry Teaching”. It was agreed that Ingo Eilks (Bremen, DE) and Bill Byers (Ulster, UK) would act jointly as the working group leaders.

The objective of the working group is to survey good practice involving innovative teaching methods in university chemistry education at all levels. This will include many of the recent initiatives introduced by ECTN working groups.

The final aim is to produce a publication covering the field. The book will contain

- Pedagogical justifications for different kinds of innovative methods in chemistry teaching stemming from educational theory and empirical research,
- Critical and comparative overviews of different approaches, and
- A collection of good practices from the ECTN member institutions and beyond. Possibly new innovations may be developed within the project’s timescale and become part of the product.

A major objective of the project will be to produce a book that will be printed and disseminated with ECTN support. The book will contain single chapters dealing with different fields of innovation for chemistry teaching (see below). Each chapter will include (1) ideas, approaches and a theoretical background, (2) a review of relevant literature and (3) examples and experiences from within ECTN and beyond. Chapters will be edited by one or two members of the working group who will act as sub-group leaders.

Provisional content areas for the book

Modern theories of learning and the need for innovation in university chemistry education
Writing: Ingo Eilks (Bremen, DE) and Bill Byers (Ulster, UK)

Problem- and context based approaches within university chemistry education
Leaders: Bill Byers (Ulster, UK) and Tina L. Overtone (Hull, UK)

Research-based teaching
Leaders: Sari Lindblom-Ylänne (Helsinki, FI) and Martin Goedhart (Groningen, NL)

Making students the teachers - Cooperative learning and peer-tutoring in the lab environment and beyond
Leaders: Ingo Eilks (Bremen, DE) and Marcus Baueumer (Bremen, DE)

Dealing with chemicals and experiments in a different style – including risk assessment, environmental issues and micro-scale approaches
Leaders: Stuart Bennett (Open University, UK) and ??

Learning beyond the lecture hall
Call for contributions and call for volunteers

A working group only can be as good as its members. Thus, the leaders of the working group appeal for your contributions. We are looking for two types of contribution:

- We are looking for volunteers interested in becoming a sub-group leader in one of the areas mentioned above. Do you have the required expertise, interest and time given your personal workload? If so you are welcome. The suggested list of chapters is only provisional, if you would be interested in contributing a chapter on some other types of innovation, please contact the working group leaders. (Keep in mind however, the project is concerned with innovative methods of teaching and not with issues relating to specific areas of content or to the curriculum as a whole.)

- We are also looking for contributors to describe specific innovations in university chemistry education on a limited number of pages for inclusion into a chapter by the sub-group leaders. Do you have any innovative ideas, methods, or experience? Please, let us know. The working group leaders will be happy to discuss with you how your specific idea may best be incorporated into the product.

First year timetable for the working group.

- Autumn/Winter 2006: Forming sub-groups, selecting sub-group leaders; meeting in Bremen of the editors for preparing a clear outline to guide the sub-group leaders toward a coherent approach
- April 2007: Meeting in San Sebastian, discussion of chapters outlines; discussion about contributions
- April 2007-April 2008: Writing the chapters
- September/October 2007: Workshop for sub-group leaders to discuss and revise approaches to chapters.

Are you interested?

Please contact Ingo or Bill:

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