Modernisation of Post-Graduate Studies in Chemistry - an example of TEMPUS project activities

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With the ever increasing progress and achievement in science and technology it is evident that higher education is under pressure to continue to produce new generations of highly skilled individuals who will be capable of contributing further intellectual and technical advances in the 21st century. Therefore, higher education (HE) systems around the globe are facing an enormous challenge to develop programmes that will help produce such scientific graduate leaders and the necessary new generations of scientists and technologists. Project aims to respond to current societal needs to develop and modernise existing Chemistry programmes in Serbia with a view of making programme outcomes consistent with best practice in the rest of Europe.

Way to achieve project goals

Benchmarking
Align benchmark statements with 21st century needs. Involve stakeholders in defining criteria

Quality assurance
Modernisation of the Higher Education QA policies and procedures are required

Staff development
Establishing continuous pedagogical and scientific staff development

Teaching, learning and assessment
Implementation of modern technologies in teaching practice. Alignment between assessment criteria and methodology with learning outcomes and new teaching strategies

Higher education modernisation is often driven by its desire to establish the most effective ways of delivering teaching and learning. Although, some may think that modernisation of curricula in the 21st century is driven by the use of modern technologies (computer aided) it is evident that implementation of new teaching strategies is often dictated by:

- An effective understanding of how learners learn
- The desired learning outcomes
- Available teaching tools
- Latest scientific discoveries

21st century education should fully understand, modernise and implement teaching methods to foster development of a new generation of not only confident, skilled and knowledgeable but also creative scientist with capacity for independent critical thinking.

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