International Conference
“Initiatives in Chemistry Teacher Training”

29th November 2013, Limerick Institute of Technology, Limerick, Ireland.
INTRODUCTION

- Teacher’s training has also to include contents on the *history of scientific ideas*, *processes of knowledge building*, *interaction with other subjects* and *staying update with specific and technological recent developments*.

- Some authors suggest the *inclusion of contents related to sciences’ didactics, students’ assessment and pedagogical training* that might enable students to reflect on their practice and get involved in educational innovation and research tasks.
Teacher training national situation

- **Since 70s to 2009**, the Secondary Education Teacher Training Programme in Spain consisted on the Educational Aptitude Course (CAP).

- **From academic course 2009/2010** onwards, a new curriculum is being introduced: 60 ECTS (1500 hours) credit MASTER organised by public and state Spanish Universities.

- The MASTER was structured into three modules:
  1. **Generic Module (12 ECTS)** devoted to general contents, including: *educational processes and contexts, society, family and education*. Its objective is to acquire several competences related to *communication processes* and problem solving. Further more, education and social contexts are related in this section in order to *increase the acquirement of social competences* connected to respect equal rights and duties.
  2. **Specific Module (14 ECTS)** devoted to specific contents, including: *complements for disciplines training, learning and teaching of each specific subject and teaching innovation and introduction to educational research*. Future teachers need to learn how to transmit a *dynamic view of their subject* through history, *recent developments*, the acquirement of knowledge about theoretical/practical contents and how to transform curricula into activity and work programmes which means the importance for the future teacher to learn *how to put into practice innovative teaching resources*, basic research and evaluation techniques.
  3. **Practicum (16 ECTS)** the main aim is to gain some experience in *planning, teaching and assessing* the subjects they specialized in.
Lifelong Training

- Lifelong training should allow the achievement of goals such as widening teachers' specialized and didactic knowledge, enabling teachers to design curricular projects and developing more critical and cooperative didactic practices.

- In Spain, teachers' training on active service is optional and it is organized by the Education Ministry through Educational Technologies and Teachers Training National Institute (INTEF), Education Councils of Regional Governments through their Teachers Training Centres (CEPS), Universities through Lifelong Training Centres, trade unions, employers and teachers associations and private institutions (CECE).

- A new model of Lifelong learning is arising in Spain. Its basic features are: the improvement of school success, acquisition of basic competences, ICTs application in the classroom, multilingualism, inclusion and cohabitation, good-quality management of Centres and educational leadership.

- Moreover, the idea of training teachers in their centres linking their training to their own educational projects is starting to arise in recent conferences. This way, training would be related to the centres' needs.
Strengths and weaknesses of the Master and the Lifelong training

**Strengths**

- High degree of implication and motivation from teachers and students.
- The Master can become a permanent teaching instrument for tutors and a initial training tool for prospective teachers.
- It reinforces the relationship between universities and secondary education teachers.
- The use of virtual environments.
- Teachers are offered a wide range of courses specialized.

**Weaknesses**

- Hasty implementation of the Master.
- Lack of coordination between institutions and teachers involved.
- Economic criteria as a priority in the design of the curricula activities.
- Lack of coherence between teaching models expected to use in the classroom.
- Teacher’s courses are not compulsory.
- Lack of time for teachers to attend training courses.
- Teachers’ courses are not compulsory.
Conclusions

- The teacher training in Spain needed some changes.
- Initial training shows many failures due to its hurried implementation and coordination mistakes.
- Long-life training still needs to be adapted to the centres’ real needs.
- It is not easy to motivate teachers who have little time and whose education is not oriented towards research in the classroom.
- Those problems will be solved provided that both, teachers and students, get strongly involved in the process and a long teacher training programs count on institutions’ support, in order to achieve high-quality teaching and properly qualified teachers.
Thank You!