In-Service Teacher Training in Portugal: Objectives, Organization and Impact on Teacher’s Career

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This work will give an overview of teacher’s training in Portugal focusing the three categories addressed by the Portuguese legislation [1]:

- Specialized training;
- In-service training.

In Portugal and following Bologna process, ITE comprises:

- **A first cycle (3 years - 180 ECTS):**
  - Class teachers: broad training in basic education;
  - Subject teachers: Knowledge oriented training.

- **A second cycle**
  - Class teachers: 1-2 years, 60-120 ECTS;
  - Subject teachers: 1.5-2 years, 90-120 ECTS.

Subject oriented first cycle (e.g. Chemistry, Physical-Chemistry Sciences and Biochemistry) followed by a second cycle mainly focused on professional qualifications;

The second cycle entitled “Education in Physical-chemistry Sciences” (2 years, 120 ECTS) aims to qualify teachers, both in physics and chemistry sciences, to teach basic (3th cycle) and secondary education levels;

To access this second cycle the applicants need to have 120 ECTS in the two subject areas (physics and chemistry) including no less than 50 ECTS in each of them;

The second cycle provides training in physics and chemistry didactics, as well as, in educational psychology.
Initial teachers education (ITE)

- Summarizing, ITE in Portugal is currently [*]:
  - A career-long professional development being the formation provided by Higher Education Institutions (HEIs) and continued by in-service teacher education;
  - A research-based level of qualification, where a master degree is required (level 7 of the European Qualifications Framework);
  - A qualification acquired in a teaching context that comprises supervised practice and internship;
  - A qualification supported by a curriculum driven to learning outcomes.

Specialized training is intended to provide qualification in complementary educational functions, such as [*]:

- Special Education;
- Administration and inspection activities in schools;
- Socio-cultural animation;
- Basic education for adults, among others.

In-service training (or continuous training) intends to provide updating, improvement, conversion and support to teaching professionals along their careers;

The training actions can be drawn by schools, according to the needs of their teachers or, simply, result from the individual initiative of the teacher;

It has a direct impact on teacher’s careers, being one of the factors considered to access mobility and progression;
In Portugal, the continuous teacher’s training accreditation (institutions and teachers involved, training actions and evaluation process) is centralized in the “Scientific and Pedagogical Council of in-service training” [*].

Examples of these training bodies are:

- Training centers associated with school associations (CFAE);
- Higher education institutions;
- Training centers of professional or scientific non-profit associations;
- Central services of the Ministry of Science and Education;
- Other non-profit (private or public) entities - accredited for this purpose.

[*] Conselho Científico-Pedagógico da Formação Contínua (http://www.ccpfc.uminho.pt)
Given the current economic situation there is at present no governmental funding to support in-service training.

Although several Higher Education Institutions are able to offer a wide range of paid formation packages, the search for these actions is decreasing.

Some training centers (CFAEs) work to address the most urgent needs of their associated schools. In this context, free training is being offered thanks to:

- Endogenous school resources. Some accredited teachers make themselves available to provide training to their colleagues;
- The existence of protocols and partnerships with other entities within the framework of training programs.
Most of the training actions correspond to face-to-face classes;

Nowadays, the online format through e-learning and b-learning modalities is becoming a current practice, not only because of its effectiveness but also as a way to address financial, distance and time constraints;

The actions evaluation is required;

The final classification must be expressed qualitatively (insufficient to excellent) corresponding to a final ranking on a scale comprised between 1 and 10 values.
In-service training
Impact on professional career

☐ To access progression, teachers must attend, with success, in-service training or specialized training actions during the cycle under evaluation;

☐ It is mandatory that, at least 50%, of the attended training actions lies on the appropriate scientific area;

☐ Actions are in accordance with the teacher’s scientific area if they fall directly into the taught curricular contents, especially if they have direct application in the classroom;

☐ Actions aimed at updating/improve teaching learning practices whether for updating and improving specific didactics, the use of new materials or educational equipment.
In the context of the “Chemistry is all around network project”, and concerning the topic “in-service training” the involved teachers expressed their opinion as follows:

• In-service training is essential to promote teacher’s actualization.

• Concerning the specific region of Bragança they pointed out a lack of offer in what concerns experimental chemistry training. In that context, the IPB project team promoted the organization of a training action in cooperation with the CFAE-Bragança.

• Most of the involved teachers have attended ICT related courses but not specific for chemistry teaching.
In-service training
The “Chemistry is all around network project” teacher’s view

• It was found interesting to develop orientated guides to support the use of ICT resources, either as an introduction to the experimental activity or as a tool to consolidate knowledge.

• More, it was found important to offer training focusing this duality ICT-experimental activity.

• Several topics for in-service training actions were focused. Among them, technological subjects such as “Environmental chemistry”, “Food chemistry”, “Polymer technology”, “Cosmetic chemistry”, “Analytical chemistry”, “Chemical sensors”, “Nuclear chemistry” and “Green and sustainable chemistry” were pointed out as pertinent topics in view of the current “chemistry in context” programs.
THANK YOU!