Becoming an effective teacher at the university level has been one of the goals of my academic career because of two main reasons. Firstly, because I view teaching as an interesting and challenging experience. Secondly, because I believe that the best way to strengthen my own understanding is to explain the ideas to others.

Teaching qualifications

In 2004-2005, I participated in the course ‘Initial Pedagogical Education for University Professors’ delivered by the Vice-chancellorship of Studies and European convergence at the Polytechnic University of Valencia (250 hours).

The objective of the ‘Initial Pedagogical Education for University Professors’ (FIPPU) course is to acquire basic competences in order to start and successfully develop a teaching career at university level. These competences are:

1. Pedagogical competence
   • To build the teaching-learning process.
   • To use different strategies to communicate pedagogically.
   • To correctly use different resources in the teaching and learning process.
   • To manage interaction between teachers and learners.
   • Learners’ tutorship throughout their studies.

2. Institutional competence.
   • To fully educate learners.
   • To work in cross-disciplinary teams with a focus on educational innovation projects.

3. Social-professional competence.
   • To develop thought processes in the teaching methods.
   • To face duties and ethical dilemmas found in the university teaching activities.

This Program is carried out during one academic year with the aim of giving support and suitable answer to problems and doubts that daily arise from teaching and which are based on the individual circumstances. This training contributes to a theoretical frame, a technological baggage and a supervised practice that successfully improve the teaching activity and the later professional development. The Training program is understood as “an opportunity of improvement” not like “an obligation”. Therefore, it intends to support the interest and desire to improve and for that reason focuses its attention in the professional experience of each lecturer and in its analysis and evaluation for later confronting them with other participants.

This approach implies that what’s mostly important is the experience of each one of the participants which is unique according to the idiosyncrasy of each one. Therefore, the objectives of learning during the Training program are customized and the support of both the other lecturers that participate in the program and tutors is fundamental.

Other courses

In 2004 I participated in a course entitled ‘Teaching university students with disabilities’ (10 hours), aimed at providing the guidelines for working with students with different types of disabilities, as for example, physical impairments, visual impairment, hearing loss and communication impairments. The course was organized by the Institute of Education Sciences (Polytechnic University of Valencia)

Teaching evaluation

My quality as a professor (i.e. teaching abilities, concern about students, professional attitude, etc.) has been evaluated by means of official opinion surveys of my students. I have received high students’ evaluations, even during my first years as
Teaching philosophy
All learning activities involve some kind of experience or some kind of dialogue. The two main kinds of dialogue are 'Dialogue with Self' and 'Dialogue with Others'. The two main kinds of experience are 'Observing' and 'Doing' (Table 1). I believe that all four actions are very important during the learning process. Personally, I think (from my experience as student and professor) that the 'Dialogue with Self' and the 'Experience on Doing' are probably the most effective ones. I have tried during my years as professor to pay special attention to these two activities.

The intensity of the lecture may limit the time that the students have for doing deep thinking. The 'Dialogue with Self' can be enhanced by creating opportunities for reflection. The experience on 'Doing' can be achieved by adopting teaching techniques specifically designed to encourage students to see themselves as active thinkers and problem-solvers. In both cases it is especially important that the students relate the subject matter to their own experience. In this way their interest is stimulated and the learning process is facilitated ("Learning consists of building connections").

Table 1. Learning activity

Dialogue - With Self
The student thinks reflectively about a topic

Dialogue - With Others
The student reads a textbook or listen to a lecture, the teacher creates an intense small group discussion on a topic

Experience - Observing
Observing the teacher doing something, listening to other professionals perform or observing the phenomena being studied

Experience - Doing
The learner actually does something: calculates, designs, conduct an experiment, makes an oral presentation (communication), etc.

Recent University lecturing activity
* Data Science (5 ECTS, Master)
* Data Mining (5 ECTS, Bachelor)
* Statistics (5 ECTS, Bachelor)
* Applied Statistics and Experimental Design (5 ECTS, Bachelor)
* Environmental Health and Epidemiology (5 ECTS, Master)
* Advanced Numerical Methods and Computational Fluid Dynamics (5 ECTS, SDU)

Students supervision
Main supervisor of 2 PhD students and 10 Master theses. Co-supervisor of 1 PhD student.