Report on the practice in teaching and learning methodologies in the University of Oviedo

General framework

In the University of Oviedo the initial and continuous teacher education is structured and organized by the Institute of Innovation and Education Research (INIE, in the Spanish acronym), and also supported by other bodies as the Centre for Innovation (C1NN). Despite it is an organized structure, we must underline that in our University is not mandatory to follow any teacher training itinerary.

Nevertheless, since 2001 and, particularly, since 2007, different changes were introduced in the national laws about the professional career for university teaching staff. These changes started to acknowledge the initial and continuous teacher training as well as the teaching publications and innovative projects as a professional merit in the certification processes that everybody need to pass for the different positions within the university (from the initial one to full professor).

The introduction of these criteria in national regulations has pushed most of the university teachers and professors to follow such courses, especially incoming teachers since 2007 or those who want to progress from associate or assistant to full professor.

The training is organized into three different programs. The first one is not properly a teacher training course but part of the PhD training courses. The second one is the initial teacher training program, and the third one is the continuous teacher training program.

PhD courses

During the period students prepare their PhD, they have to follow some cross-curricular courses. These courses have a wide scope, but they are mainly focused on research (methodologies, techniques, statistics, etc.).

Nevertheless, some of the courses are directly or indirectly related to teaching issues or to ICT resources. For instance, in the last years there were courses offered about software that can be helpful for teaching (e.g., word processing, especially LaTeX, presentations, graphics and graphical design, data analysis by R, SPSS or MAXQDA, etc).

Initial teacher training

Let us briefly describe how is the access to the profession as university professor in Spain. There are different possibilities of teacher tenures before obtaining the PhD. Some students have a PhD fellowship from Ministry or Regional Ministries during 4

years, the last 2 they can get enrolled in teaching tasks (up to 60 hours/year) supervised by a senior professor. There is also the possibility of having special positions for initial teacher/research training in which during 4 years students get enrolled both in research and in teaching duties while obtaining the PhD, but these positions are hardly ever offered by universities.

Once the candidates obtain the PhD, they have to pass an external certification by quality agencies, and if they succeed, they can be hired as *Profesor Ayudante Doctor*, which is a tenured position for 5 years. After that, they can apply for another certification to become *Profesor Contratado Doctor*, which is a permanent position (kind of Junior Lecturer or Assistant Professor), or *Profesor Titular de Universidad* (kind of Senior Lecturer or Associate Professor), another permanent position but with an appointment as public servant. Finally, and again after an external certification, they can apply for becoming *Catedrático* (i.e. Full Professor). In every one of these certification processes both the quantity and the quality of the teaching experience is assessed, and, as part of this assessment, candidates should prove their training in teaching courses. Therefore, even when not mandatory, the current situation is pushing most of the staff to get enrolled in these training courses.

On the other hand, the above describe professional path is not always fulfilled, especially for the initial enrollment in different departments in which there are teaching needs (provoked by retirements or time offs) and/or graduates easily find good jobs out of University. This is happening particularly in some fields as mathematics, computer science or electric/electronic engineering. Thus, sometimes people without previous teacher training can hold temporal appointments as university teacher.

The initial teacher training program is oriented to initial tenured teachers (they have preference over other candidates) but also to PhD students with tenure tracks, recently PhD graduates with tenure tracks or recently hired tenured teachers. It is a voluntary program, but, in practice, it becomes almost mandatory as we explained above.

The program consists of a set of different diverse courses, usually non-specifically oriented to a subject, but trying to be generalist, such that they can cover most of candidates' interests. Courses are usually between 10 and 20 in-person teaching hours, and they can also include on-line work hours. The INIE offers about 30 different courses a year (with limited positions), and candidates can enroll so that if they take more than 100 hours they obtain a special certification of having followed an intensive teacher training. Otherwise, they only obtain single certifications per course followed. Performance is not scored, so that certifications only provide a Pass/Not Pass remark. All the courses are free for the students.

Regarding the topics, the program is divided into 4 blocks: awareness, planning & management, development, and assessment-dissemination-impact.

The awareness block is devoted to create sensitivity among teachers about changes in our educational system and our society and the need of acknowledge this reality. So that courses are about innovation and creativity in higher education, inclusiveness (students with special needs), professional qualification system in Europe, gender perspective in higher education, tutorship and counseling with university students, etc.

The planning & management block includes courses about how to plan and develop an innovative teaching project, what is university management, how to write an adequate teaching contract, what are the most important technological resources for innovative teaching, as well as the basic training into the Virtual Campus of the University tools. This is a platform supported by Moodle, which is used in all the courses of the University (we will provide more data later). In order to use it, teachers should follow this basic course.

There is a third block about professional development, including courses about collaborative learning, project-based learning, team working, voice control and care, oratory and oral expression, and also some specific ICT courses as the advanced level of the Virtual Campus, creation of multimedia contents (audio & video) and flipped classroom. The advanced level course of Virtual Campus is mandatory for participating in the online degrees (completely taught online).

The last block is about assessment-dissemination-impact, and it consists of a set of different courses like students' competence assessment, communication techniques, dissemination by video and television, MOOC's, teaching projects assessment, and a course which consists of classroom assessment by video recording own's lectures and then discussing with an expert group.

Every year, near 80 novice teachers are enrolled in this program.

Continuous teacher training

This is a program open to all the teaching positions at the University, therefore younger and older professors can share courses. It is a voluntary program, and it does not have a specific recognition in the professional career at the University, further than the acknowledgement in the certification processes we described above.

The program includes several non-specific courses, despite it is possible that a group of teachers or a department request a customize training in a specific topic. Courses are held during the academic year and they can be between 5 and 20 face-to-

face teaching hours, and some other online hours. The most frequent duration is 5 in-person + 5 online hours.

The program is organized by three axes: teaching, research and technology. It offers around 2500 posts a year.

The technology axis includes courses in Virtual Campus (both basic and advanced level, as well as a course about adapted resources for students with special needs on the virtual campus), corporative software (Office 365, Excel, Access, Onedrive, basic and advanced levels), LaTeX (basic and advanced), image processing software (Imagej-Fiji), audiovisual resources for teaching, social networks and teaching, MOOCs, cybersecurity, etc.

The research axis consists of different courses about responsible research innovation, ethics in animal and human research and experimentation, R+D projects application and management, European projects, spin-off creation, experimental design, qualitative research (MAXQDA), writing research reports in English, presentation of research in English, etc.

The teaching axis offers courses about innovation projects, inclusiveness, creativity, sustainability, team working, active methodologies for learning, communication techniques, coaching and mentoring in the classroom, personal branding, different educative resources (social interaction, theater, environmental tools, etc.), flipped classroom and gamification by using different ICTs, lesson study and counseling, among others.

Additionally, to this institutional program, the University of Oviedo collaborates within a wider training initiative within the G9 group, which gathers 9 Spanish universities. This group offers every year an ambitious program of full online training, so that teachers from the University of Oviedo can participate in a course offered by any of the 9 universities. These courses have a wide scope: from problem-based learning to gamification, or peer learning, statistical analysis, ICT copyrights, etc.

The English-language teaching program

Our University is very concerned about the importance of offering a double path for students so that they can obtain the bachelor degree with a bilingual offer (at least 50% of the courses taught in English). This is now offered in more than 40% of our degrees, in which students can study both in English or Spanish.

Students need at least a B1 level in English to get enrolled in the program, but teachers are asked to hold a C1 level, or with a B2 level they can get certified after following at least 2 specific courses.

The University offers different possibilities for teachers to participate. There are periodical exams for certifying the English level, specific courses for preparing these exams, reinforcement courses for teachers already certified (as a continuous improvement strategy in grammar, pronunciation, communication skills, etc.) and other courses for improving the English level and plan a future certification.

Participating in this program has different acknowledgements. First, the University computes a progressively reduced increase in the teaching hours, so that the first year a course is taught in English every teaching hour computes as 1.5 hours, being reduced to 1.35 the second year, and to 1.2 the third and following years. Second, in the national certification processes it is considered as a merit to teach undergraduate and master courses in English.

General assessment

In average, the teaching staff in the University of Oviedo is very concerned about the importance of using ICT in teaching and also about the use of new methodologies. Just to give an example, nowadays we have more than 7000 different courses on the Virtual Campus, which represents more than 90% of our teaching is partly or fully virtualized, using ICT support.

Moreover, every year the University opens a call for innovative teaching project (not limited to, but including, ICTs; but also considering methodological innovations). About 130 projects a year are approved, involving around 500 teachers (which is approximately 25% of our teaching staff). Projects have to pass an initial assessment, and, after concluding, another final one, so they are quite demanding.

All the courses within the initial and continuous training are assessed after finishing them, and, in general, they obtain quite good scores about users' satisfaction. Also, students have to assess every year all their teachers, so that there some questions in the questionnaire regarding the use of ICTs and the teaching methodology. Therefore, as teachers, we have a continuous assessment of our duties. Students usually acknowledge teachers' efforts for renewing their methodology and incorporating ICTs.