

## Teacher training and education in the presence of the new framework of learning and teaching through competences\*

La educación y la preparación de los profesores en el nuevo marco del aprendizaje y la enseñanza a través de competencias

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### ABSTRACT

The new profile of teaching professionals and, consequently, teacher training and education in the presence of the present framework of learning and teaching through competences, can be understood by reconsidering and transforming the special requirements that the practice of the teaching profession demands. This involves a profound change from the point of view of the shape and design of the incipient models of training and education of future teachers founded on independent work, lifelong learning processes and a dimension which is essentially orientation and tutoring, which must illuminate the professional action of teachers.

*Keywords:* Learning, teaching, competence, orientation, tutorials.

### RESUMEN

El nuevo perfil de los profesionales de la enseñanza y, por lo tanto, la preparación de profesor y la educación en presencia del marco de aprendizaje y enseñanza por medio de competencias, se puede entender al considerar y transformar los requisitos especiales que exige la práctica de la profesión de enseñar. Esto involucra un profundo cambio desde el punto de vista, forma y el diseño de los incipientes modelos de capacitación y educación de los futuros profesores basados en el trabajo independiente, procesos de aprendizaje de por vida y una dimensión que es esencialmente de orientación y tutoría, la cual debe iluminar la acción profesional de los profesores.

*Palabras clave:* Aprendizaje, enseñanza, competencia, orientación, tutorías.

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## 0. AS A GENERAL INTRODUCTION

The designated title of this article “Teacher training and education in the presence of the new framework of learning and teaching through competences”, invites us to widen our thinking the length and breadth of a field of future perspectives in educational training which is impossible to cover completely, in which society, universities, teachers and students will have to establish their forecasts and design their joint collaborative plans of action, within a temporary limited framework, as observers and as actors. Both roles, that of expert observer, and that of experienced actor, must help us to discover and have in sight a clear and improved future to educate and train the teachers of today and tomorrow.

Nowadays, the meaning of teacher training for Elementary and Secondary Education must be considered in and from the complex reality which manifests itself in the multiple forms of present day intercultural societies. We can find this new meaning through the articulation of proposals to professionalize teaching based on the planning of actions which have a psycho-pedagogical and didactic character for the acquisition, development and implementation of a series of general and specific areas of competences. This is, at minimum, a very attractive proposal. Overall it is an exciting challenge, permanently present in the utopian vision of our dreams and, at the same time, a reality which we can see and where we can look for the right answers with a pronounced nuance of collaboration.

There exist a wide and substantial range of reasons which sufficiently endorse or guarantee, the relevance of this change of style of teachers, surpassing the now classical mould which continues to relate the essence of teachers with their aptitude to transmit knowledge, in favour of a new option guided by an attitude of permanent change whose nature is defined as being a facilitator and generator of learning, abilities, capacities and competences.

Among the possible reasons for this change of style, the methodological and didactical conception of teaching and its consequent putting into practise acquires a special dimension. A great challenge to overcome, taking into account the support that students must receive in their significantly independent process of learning and education. But their learning and education must also be guided, because if this doesn't happen, there can be serious risks, as much as for the teachers as the students, in relation to planning of personal work, effort and dedication to studying, reaching expected objectives, expected attainment of contents, etc.

## 1. FROM A TEACHER TRANSMITOR TO A TEACHER GENERATOR

The new organisation of universities, to which we are committed, without the possibility of retreat, will continue to mean, from now on and with more inten-

sity, a series of important changes. We still have the impression that we are not sufficiently conscious of these changes, not only at the level of the manifestation of new Qualifications, putting into action remodelled Study Plans, etc., but also, and this is most extraordinarily significant, the aforementioned changes will also particularly affect, teachers and students in the programming and use of new teaching and learning methods. Teachers who are less prepared for this didactic “revolution” and, hence, more used to transmitting this knowledge almost exclusively from notes, sometimes with an everlasting nature, as a scientific response to the requirements of a subject or discipline for which they are responsible will need special sensitisation, training and education as they will be especially affected by these changes (see Figure 1).

The Royal Decree (El Real Decreto) 1393/2007, of October 29th, in which the reorganisation of official university education is established (Official State Bulletin (BOE) of October 30th) sets the basis for progressive change and harmonisation of the European university systems in which the process of construction of a new European Space for Higher Education demands, initiated in 1999 with the now only too well known and commented “Bologna Declaration”, which must be concluded in the academic year 2009-2010 so that, from the following year, as a deadline, all university education, at least degree qualifications, should be adapted to the new structure and, therefore, be able to begin their journey along the new horizon of initial teacher training and education.

Along these lines, the Organic Law (la Ley Orgánica) 4/2007, of April 12, which modifies the Organic Law 6/2001, of December 21st, for Universities, sets the basis to realise a profound modernisation of Spanish Universities, establishing a new structure for education and, consequently, of official university qualifications in accordance with the principles which proceed from the construction of the afore mentioned European Space for Higher Education. All of this being in the interest of flexible organisation in university education and the promotion of curricular diversification as a means to respond to the demands of a society in constant transformation.

However, the new organisation of university education not only responds to a structural change, but also, and which is most important, it impulses and leads a very profound qualitative change, in teaching methods, in such a way that the central objective of the process of teaching/learning is given over to university students, and not only in educational contents or knowledge, but within a context which must be prolonged or extended throughout their life. Consequently, to reach this objective, the new study plans should have in the centre of their vision the attainment of a series of *competences*, on the students part, putting special emphasis on learning *methods* (also teaching methods) for their achievement and on the *procedures for evaluations* for their acquisition, without losing sight of the sense of European credits (Royal Decree 1125/2003, of September 5th) as units of measurement which reflect results of learning

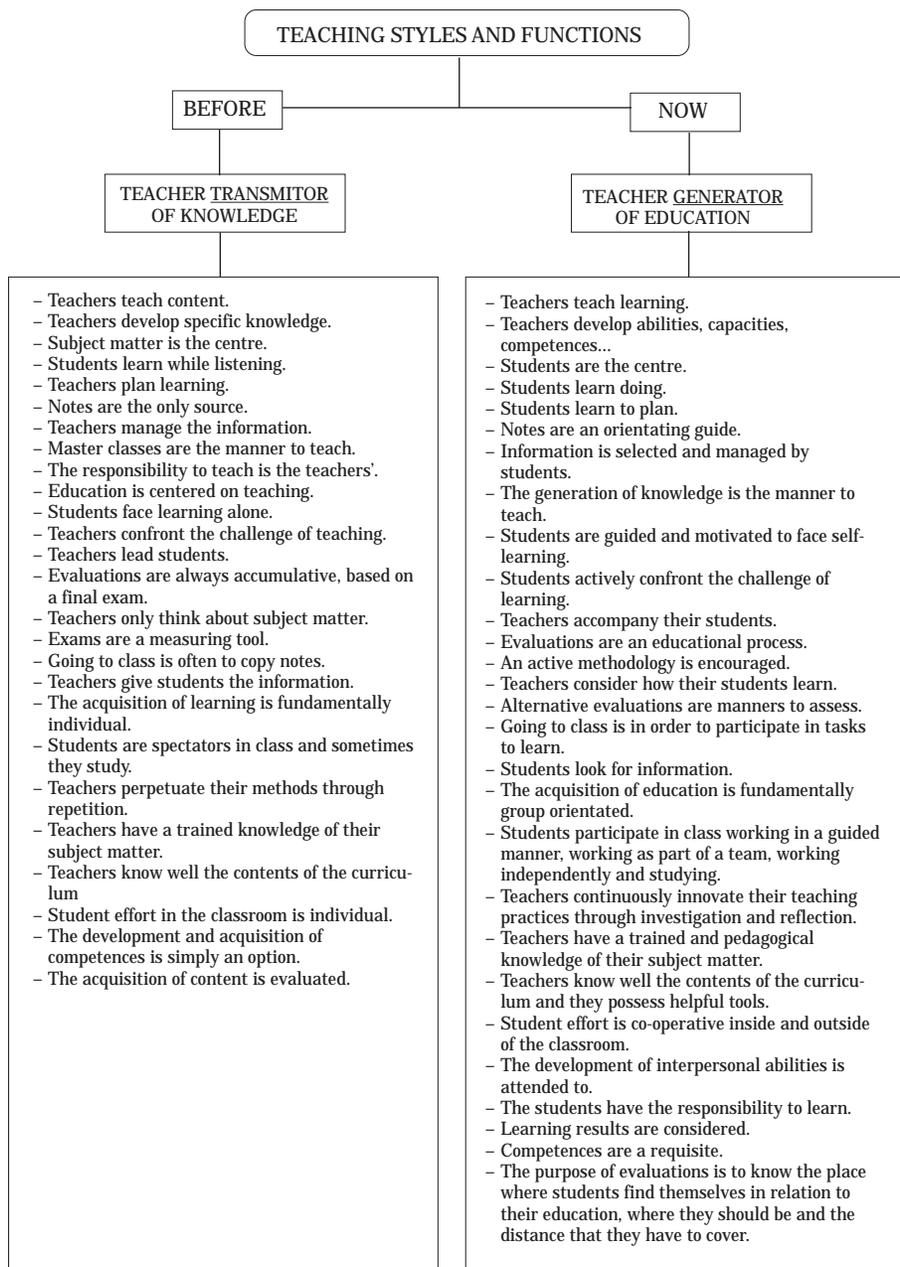


FIGURE 1.

and volume of work realised by future teachers, today in training, to reach the objectives established in study plans, valuing “motivation” and “effort” put into “learning to learn”.

Alongside these aspects, one of the fundamental objectives of this innovative organization of education, is the attention paid to encouraging mobility in today's university students, tomorrow's teachers, in different Spanish, European and world universities. Education which is structured in three cycles designated Degree, Masters and Doctorate, each with their own characteristics. So, the qualification Degree (referring to Infant and Elementary Education: 240 credits) has as its aim the obtainment by the student through general training and education, in one or various disciplines, orientated towards the preparation of exercising activities with a professional character. On the other hand, the teaching of Masters (60-120 credits) has as its aim the acquisition by the student of advanced training and education, of a specialized or multi-disciplined character, orientated towards academic or professional specialization, or to promote the initiation in investigation tasks.

## 2. THE BEING OF A PROFESSIONAL TEACHER: TOWARDS A NEW MODEL OF TEACHING AND LEARNING

The irrevocable necessity to establish some new Study Plans for a new style of teacher “being”, obeys, among other reasons, a series of criteria arguments among which, the following acquire, without any doubt, outstanding prominence:

- The high level of agreement, between training and education experts, university teachers and non university teachers and Elementary school teachers in practice, about the unavoidable priority to adapt the present system of “Initial Training and Education” of future teachers which is certainly far removed from the necessities and demands of a society in continuous change, by means of a training and education process which permits students to mature and at the same time broaden the limits of their knowledge, competences and pedagogical skills essential for an efficient intervention in the educational environment in which they accomplish their work. So, it seems obvious, that one of the requisites for this initial training and education process to conclude successfully is that it lasts longer than the present one.
- The necessity for qualified professionals to teach an Infant, Elementary and Secondary Education stages, which our Education system demands, especially at a moment characterized by a series of reasons and arguments, that is to say:

- The mandate which is explicitly referred to in chapter III (Teacher Training and Education (Formación del Profesorado)) Article 100, of the Organic Law (la Ley Orgánica) 2/2006, of May 3rd, of the Department of Education, about "Initial Training and education", in which it is stated "Initial training and education of teachers will be adjusted to the necessities of qualifications required by the general system of education. Its contents will guarantee the adequate capacity to confront the challenges of the education system and adapt teaching to the new training and education necessities" (art. 100.1). And in the art. 100.4 "The initial training and education of teachers from the different types of regulated education in the present Law will be adapted to the graduate and postgraduate degrees systems in the European space for higher education following what is established by the corresponding basic normative".
- The increase of the school population motivated by the incorporation in the classrooms of students from other countries, as a consequence of a very significant immigration movement which Spain is going through, with an ample expansion in the total practice of Autonomous Communities which reaches, at the moment, the figure of 8% (national average) of the scholastic population.
- The growing demand of educational professionals which emanates from the social and cultural challenges which society presently confronts, principally those directed towards guaranteeing impartial and equal opportunities for all students, attention paid to diversity in classrooms, the reconciliation of work and home life and a growing level of quality in our education system. In this sense, and in a very significant way, a growing necessity is produced for educational professionals to attend to multiple and different initiatives, implanted by the Civil Service (Administraciones Públicas), with competences in educational matters. They confront, with certain guarantees of success, the previously mentioned challenges (early attention programs, early bird programs (the opening of schools before classes start, to facilitate parents' working life), extra curricular activities, attention to immigrants and ethnic minorities programs, centers with resources for intercultural education, regional plans for educational orientation, etc.) and others which could arise in the future.
- The high number of university students (the present Colleges and Faculties of Education (Escuelas y Facultades de Educación) continue growing by number of students enrolled, in spite of the demographic slump suffered), who each year study the qualifications to be Elementary school teachers (an annual average of 100.000 students) in 44 universities (public and private) which cover 100 training and education centres.

- The adaptation to the structure of degree and post graduate qualifications as an essential requisite if the contribution to the improvement of Infant, Elementary and Secondary education is desired, a fact which means one step more towards the recognition and dignifying of the teaching profession, and which, without a doubt, will constitute an attractive extra when choosing Infant, Elementary and Secondary qualifications.
- Retirements, during the period 2008/2015 of, approximately 30% of present Infant, and Elementary teaching staff (somewhat less in Secondary), which, evidently, is going to demand a significant number of teachers who, of course, should be trained in our Universities.
- The balance of supply/demand specially that of teaching qualifications which, according to the information facilitated by the General Secretary of University Co-ordination (la Secretaría General de Coordinación Universitaria) during the period covering the years 2002-2003 and 2005 and 2006, indicates that Elementary school teaching studies (los estudios de Magisterio), as a whole, represent a large number of places (about 28.000 places in each course), certainly the largest of all the State qualifications, an even higher demand (in the last few years around 120% of the places available) and a high occupation, as about 95% of all the places offered are occupied, in spite of the existence of unbalances in the structure of different Autonomous Communities.
- The necessary connection between the present initial teacher training and education acquired in universities and the always open possibility of ongoing training and education, also facilitated by Training and Educational Innovation Centres (Centros de Formación e Innovación Educativa – CFIES) and other Centres of Resources and Teacher Training and Education (Centros de Recursos y de Formación del Profesorado) dependant on the Departments of Education (Consejerías de Educación) of the Autonomous Communities, situated in their different provincial territories.
- The social roots of teaching studies which, as is well known, had their origin in the Elemental Normal Schools (Escuelas Normales Elementales) (one in each province) and Higher Schools (Escuelas Superiores) (one in each university district) today University Colleges and Faculties of Education (Educational Science, ...), the consequent cultural development generated in each province and the increase in educational investigation.
- The agreements adopted by the Conference of Deacons and Directors of centres with qualifications in Education, which endorse and support the implantation of different degrees.

- The opinion of present practising teachers with regard to the identification of the different profiles of specific professional and teaching competences associated with Infant, Elementary and Secondary Education stages (as much as in Infant Education as in Elementary and Secondary Education) as 75% of them demand the existence of differentiated teaching profiles.

So, the new teacher “being” demands, in addition to practising one’s job well as a teacher, being an educator and a competent trainer. This idea is picked up successfully by Salinas (1997) when he refers to the necessity that teachers must stop being the source of all knowledge and go on to act as guides for students to facilitate them in the use of resources and tools which they need to explore and elaborate new knowledge and abilities, thus developing their role as advisers. Without a doubt, difficulties in assuming this role are going to exist. Some will be of an institutional character, about which teachers will be able to do little, others will be more intrinsic, characteristic of their capacities and competences, and not a few will be found in the diversity of students, in their aptitudes, interests, motivation, effort, commitment, etc.

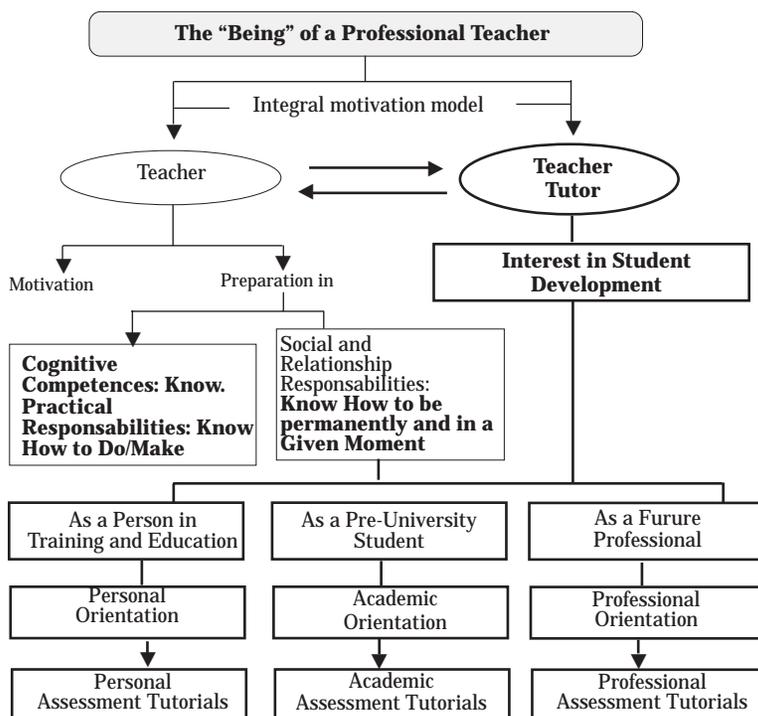


FIGURE 2.

These dynamics of change generate, as we have already implied, on the one hand, a new teacher's role which is presented with the badge of an innovator, a new committed function in universities, as Zabalza points out (2003), with the quality of teaching; favoring the transference of knowledge, as Medrano points out (2002), and finally, much more reflexive in words of Biggs (2001) and prepared to learn. On the other hand, it gives rise to a new concept of students who, from this moment, should concern themselves about learning to learn, adapting themselves to changes, transforming an improvable reality, managing their knowledge and converting themselves into significant agents of learning. Students intrinsically motivated towards learning a conceived and implemented curriculum from professional profiles, organized through a series of specific and general competences of professional action. This fact according to Hernández Pina, Martínez Clares, Da Fonseca Rosario and Rubio Espín (2005: 47) mentioning other authors, *"demands, at the same time, teaching which professionalizes, qualifies, capacitates and makes possible in students professional and personal development, a training and education which suits basic and specific knowledge of disciplines with personal and social abilities"*.

In this complex framework, the importance of a teacher's function forms part of those who practice it: teaching professionals. A profession and that of a teacher is of the most demanding and responsible in its practice, it is not, paraphrasing the author of the prologue of the work of Benito Echeverría Samanes (2005), a suit made only once, of only one piece and made to measure. The true profession, notes the referred author, is above all a way to exist, to be; something which is gradually made, which is gradually constructed and ends up confusing itself with the personal biography and personality of the teacher. Competences are gradually developed through a process of continuous and dynamic learning, profoundly united to our lives and activities.

All of this, "takes us or should take us, step by step, towards the achievement of a new more universal and centered educational model, fundamentally, although not exclusively, in the development of augmented competences of learning and independent work of students, in the joint organization of teaching and in the professional insertion of university students in the work market. If it is important, and it is important, attention paid to students in the process of teaching-learning, it must not be in a lesser measure the role of the teacher as adviser, tutor and guide in this complex process, where the 'Unity of Teacher Work' constitutes a methodological strategy and concise curriculum, adequate, favorable and essential for systematic development and planning of shared teaching and learning. In this sense, alongside these students, who we want to have a capacity to synthesize and analyze, a capacity to resolve problems, to apply knowledge in practice, to adapt themselves to new situations, with a capacity to manage information, to work as part of a team, to organize and plan, to work in an independent way, etc., there must exist teachers who are familiar with

training and education profiles in fields of study and who must develop and breath life into university students within a euro-space context ...” (Cano González, 2005: 20-21). This teacher is no other than the Tutor-teacher, who is the adviser-teacher reflected in the terms that we are trying to capture throughout these pages.

Consequently, the main point, the core of action in university training and education which future trainers/educators are going to experience, is going to undergo a profoundly necessary re-structuring in terms of teacher recycling and student planning and work. An originally intrinsic change and in the practice extrinsic change, which can be seen from a new conception of academic training and education centered on student learning and recognition and re-valuation of teachers’ teaching functions looking more towards the “independent capacity of students to simulate knowledge (Know), to acquire abilities and dominate techniques (Know how to do/make), to develop their critical capacity of analysis and synthesis (Know how to be permanently) and to reach an organized availability for the investment in co-operative and individual work (Know how to be in a given moment). This concept does not underestimate nor makes essential the task of teachers faced with students as main characters; rather it reinforces and bestows it with a more technical and professional role from a perspective eminently psycho-pedagogical, didactic and of an orientating action”. (Cano González, 2005: 21).

### 3. A CONCEPT TO DEFINE

So, what do we understand as the meaning of *competence* from the perspective and vision which we are proposing? To be brief, and making an evaluation-synthesis of the collection of definitions which we can find in the now abundant literature which concerns this topic, without forgetting their small differences and individual nuances, we understand that the competences of a professional teacher can be defined, according to the thinking of the teacher Echeverría Samanes (2005:20-21), as “the collection of knowledge, procedures, capacities and attitudes in action, which complement each other, that professional teachers must possess to <KNOW>, <KNOW HOW TO DO/MAKE>, <KNOW HOW TO BE IN A GIVEN MOMENT> and <KNOW HOW TO BE PERMANENTLY> and, consequently, act responsibly with efficiency and effectiveness when faced with professional situations”, and we can add, which can present themselves each day.

From this perspective, the word “competence”, in its terminological aspect applied to the educational field, is a synonym of aptitude and appropriateness (obligation); never dispute or conflict (rivalry). In conceptual terms, applied to the same field, several defined approximations exist. One of the now classic and most frequently used and accepted since nineteen seventy five (more than forty years ago) has a fundamental curricular projection: “Knowledge as a whole,

abilities, skills and attitudes attributed to a person and applied in their effective teaching practice towards the achievement of proposed objectives in a determined area of personal, social or organizational obligation”.

So, in an uncomplicated manner, we can take the liberty to not linger over any consideration or focus which previously establishes criterial order or classification, we can affirm that when we talk about teacher competences when practicing an academic and guiding function, as an inherent responsibility within their teaching commitment, we are referring to a constellation, definitely complex, of knowledge, procedures, abilities and attitudes (underlying capacities in each competence) in continuous action and interaction, of a general and specific character, which teachers must possess in one or more specific areas of knowledge with a view to taking into account the development of their educational and guiding task, fundamental on four levels or, if one prefers, in four arguments, that is to say: technical-professional, didactic-methodological, socio-participative and personal, which permit them, as Echeverría Samanes (2005: 21) points out “to act with efficiency and effectiveness facing professional situations. This which makes some people better in a post and is going to determine who is in a better situation or in better circumstances to develop this post successfully (differential factors of success)”.

The characteristic, differential elements of competences, whatever the focus they have (psychological, educational, business, economic, linguistic, biological, administrative, etc.), exceedingly emphasizes and highlights, “suitable occupations” and “meaningful learning”, as “*conditio sine qua*” or valid premise, with just the right coordinates, for the process of teaching-learning and the promotion of progressive training and education for students. This criterion or valid premise which we call “suitable command” (the visible part of competence, surface) is an indicative foundation of knowledge to define the concept competence, as: “The suitable occupation (visible part, surface) of one or various capacities (invisible, profound part,) over a base of a collection of knowledge, abilities skills and attitudes” (see Figure 3).

Graphical representation of competence: “Iceberg image”

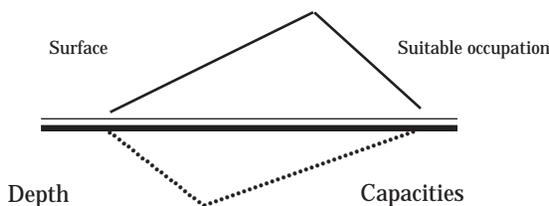


FIGURE 3.

#### 4. EXPRESSIONS AND COMPONENTS OF COMPETENCES OF PROFESSIONAL AND TEACHING ACTION

Each competence is only definable and assessable in action (in work situations) and has its own component or character which makes it specific and fundamental within a continuous succession of learning and permanent acquisition of anticipated knowledge. There does not exist, therefore, competences without prior precedents. Furthermore, “general” as much as “specific” competences, which future teachers (today still students) and present teachers (now practicing), must continue developing in some cases and updating in others during their initial and permanent training and education, must be assessable.

In Figure 4 a possible classification of competences of professional action is presented paying special attention to their respective components and their corresponding dimensions.

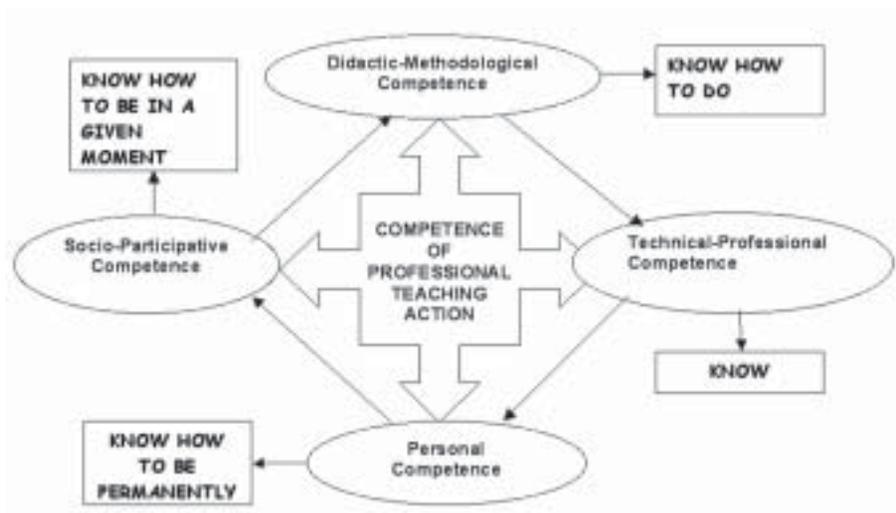


Figure 4.

SOURCE: Personal elaboration from Echeverría Samanes, B. (2005). *Competencias de acción de los profesionales de la orientación*. Madrid: ESIC Publisher, p. 23. Also in Echeverría Samanes, B. (2007) “Perfil competencial de los orientadores: <Saber> y <Sabor>”. In Álvarez González, M. and Bisquerra Alzina, R. (Coords.). *Manual de orientación y tutoría*. Barcelona: Praxis.

In this way, we are referring to its four components or expressions (technical competence, methodological competence, personal competence and participative competence) and its corresponding inter-related dimensions: know, know how to do/make, know how to be permanently and know how to be in a given moment.

Let us briefly look at, each one of them, according to the theoretical discourse created by the teacher Echeverría Samanes (2005: 23-24):

- *Competence of a technical-professional character (Know)*. Have at one's disposal specialized knowledge related to a determined professional field, which permits one (the teacher) to dominate, in an expert way, the contents and tasks characteristic of their activity as a teacher-tutor.
- *Competence of a didactic-methodological character (Know how to do/make)*. Know how to apply interiorized knowledge to concrete professional and teaching situations, using for this all the adequate procedures and strategies for the actions to develop, like knowing how to transfer, whenever possible and with the adequate modifications, acquired experiences to new situations.
- *Competence of a socio-participative character (Know how to be in a given moment)*. To be prepared for interpersonal understanding and comprehension, communication and co-operation with everybody –students and teachers–, and to value the wealth of collaboration in, with, from, and for the group.
- *Competence of a personal character (Know how to be permanently)*. To have a knowledge and the most realistic auto-concept possible of oneself; know how to act in accordance with one's own principles, ideas and convictions; assume freely and coherently the responsibilities which correspond to one in each moment; know how to make pertinent decisions: not go under when faced with the frustrations and problems that can occur; always maintain a motivating course of action without ups and downs.

All of them, and in this there exists a unique position, should be transversal for different types of work and transferable to diverse work organizations and systems of production.

Some authors refer in their studies to two great types of competences which we can synthesize and define as “specific” and “transversal”, as we have already referred to, among others: Alex (1991), Bunck (1994), Echeverría (2005), Mertens (1996) and Le Boterf (2001), quoted by Echeverría Samanes (2005: 24) and which we take up again in order to remember that there exist different types of competences related to functions, contexts, areas of knowledge or scientific disciplines, methodologies, etc., and to have them present in the planning of our personal educational proposals. The first ones, the specific competences (professional), are related to a series of concrete work functions or jobs. In this group the so called technical and methodological competences are included. The second ones, the generic or transversal competences (basic), as they have a broader character, house within themselves a type of competence which

we know by the name of generic, macro-competence, key-competence, etc. (Echeverría Samanes: 2005:24). All of them, without a doubt, have great importance in relation to the particular professional profile of the qualification in which they are considered and some of them can develop themselves through the contents which are contemplated in modules and which are worked on in the matter and subjects of Study Plans

These types of competences are key in all professions and, very especially, for all of us who work for a living as teachers. They are acquired through daily practice and accumulated active experience, and they manifest themselves objectively in different contexts through functional, efficient and effective development of the aforementioned practices.

In Chart 1, shown below, we gather together the thirty generic or transversal competences which the European Tuning Project informs us of (135 universities).

CHART 1. Transversal or generic competences in the training and education of teachers faced with the new framework of learning and teaching.

1. Capacity to analyze and synthesize.
2. Capacity to apply knowledge in practice.
3. Planning and time management.
4. Basic general knowledge about study areas.
5. Basic knowledge of the profession.
6. Oral and written communication in mother language.
7. Knowledge of a second language.
8. Basic abilities to manage a computer.
9. Investigation abilities.
10. Capacity to learn.
11. Ability to manage information.
12. Critical and auto-critical capacity.
13. Capacity to adapt oneself to new situations.
14. Capacity to generate new ideas.
15. Problem solving.
16. Decision taking.
17. Working as part of a team.
18. Interpersonal abilities.
19. Leadership.
20. Capacity to work in an interdisciplinary team.
21. Capacity to communicate with people who are not experts in the matter.
22. Appreciation of diversity and multi-culture.
23. Ability to work in an international context.
24. Knowledge of cultures and customs from other countries.
25. Ability to work in an independent manner.
26. Design and management of projects.
27. Entrepreneur initiative and spirit.
28. Ethical commitment.
29. Concern for quality.
30. Motivation to succeed.

SOURCE: Deusto University, Bilbao (Spain): Tuning Educational Structures in Europe. In [www.relint.deusto.es/TuningProject/index.htm](http://www.relint.deusto.es/TuningProject/index.htm)

In the Royal Decree (el Real Decreto) 1393/2007, of October 29th, in which the re-organization of official university education is established (Official State Bulletin (BOE)) of October 30th, we are reminded in Annex I, points 3.2. and 3.3. that there must exist minimum guarantees, in the following basic competences (in the case of Degrees and Masters) in addition to those others which figure within the Spanish framework of Qualifications for Higher Education (“Marco Español de Cualificaciones para la Educación Superior (MECES)”).

In Table 1 we gather together the above mentioned basic competences which refer to Degrees and Masters, and which students should acquire during their studies and are required in order to possess the qualifications mentioned.

TABLE 1. Basic guaranteed competences to develop, in order to obtain the qualifications degree and masters.

FOR DEGREE STUDIES	FOR MASTERS STUDIES
1. Students have demonstrated that they possess and understand knowledge in an area of study..	1. Students know how to apply acquired knowledge and their capacity to resolve problems in new or little known environments in wider contexts (or multi-disciplined) related to their area of study.
2. Students know how to apply their knowledge to their work or vocation in a professional manner and they possess the competences which are normally demonstrated through the elaboration and defense of arguments and the solution of problems in their area of study.	2. Students are capable of integrating knowledge and facing the complexity of formulating judgments from information which, being incomplete or limited, includes reflections on social and ethical responsibilities connected to the application of their knowledge and judgments.
3. Students have the capacity to collect and interpret relevant data (normally in their area of study) in order to emit judgments which include reflections on relevant themes of a social, scientific or ethical nature.	3. Students know how to communicate their conclusions –and the knowledge and reasons which uphold them– to a specialized and non-specialized public in a clear and unambiguous manner.
4. Students can transmit information, ideas, problems and solutions as much as to a specialized public as a non specialized public.	4. Students possess the learning abilities which allow them to continue studying in a way which will have to be to a large extent auto-directed or independent.
5. Students have developed those learning abilities necessary to undertake posterior studies with a high level of independence.	

As one can easily confirm, this range of competences, the minimum required by all students in order to obtain one of the indicated qualifications, is present in Tuning Educational Structures in Europe. Effectively, it could be said that, it responds to a qualitative selection of a transversal character to whatever type of learning and profession that university students are trained and educated nowadays. All are, we can say, necessary, but the ones we have gathered together and which are taken from the Royal Decree (“Real Decreto”) 1393/2007, of October 29th, are in addition to being necessary, indispensable.

The structure of university education and, in this case the development and acquisition of the basic competences, minimally required of the aspirants for a degree qualification (with the specific denomination which in each case figures in the Register of Universities, Centers and Qualifications (Registro de Universidades, Centros y Títulos, RUCT), have as their aim the acquisition, by the student, of general training and education, in one or various disciplines orientated towards the preparation to practice activities of a professional character. On the other hand, university education and the development and achievement of the basic competences, minimally essential, for the qualification of Masters (with the specific denomination which in each case appears in the Register of Universities, Centers and Qualifications, has as its aim the acquisition by the student of advanced training and education, of a specialized multi-disciplined character, orientated towards academic or professional specialization, or to promote initiation in investigative tasks.

But we would leave this section incomplete if, at the same time, we did not make identical reference to the specific competences which both students (Degree and Masters) should acquire. For this, it is enough to have a look at Table 2 which we present using as a reference and guide the Order (la Orden) ECI/3857/2007, of December 27th (Official State Bulletin (BOE) of December 29th), in which the requisites are established for the verification of official university qualifications which authorize the practice of the professions of Compulsory Secondary Education and “School Leaving Examination” (Bachillerato), Professional Training and Education (Formación Profesional) and Language Teaching (Section 3, points 1 to 11). In both cases the competences which students should acquire are referred to, teacher planning and structured study plans in Modules (Basic Training and Education, Didactic and Disciplinary and Practicum), from which arise the matter and subjects; assigned credits to each Module and competences which should be acquired. For a more complete knowledge, we recommend the careful reading of both Orders in their respective Sections 5 (tables referred to in both Study Plans).

**TABLE 2. Specific guaranteed competences to develop, in order to obtain the qualifications degree and masters.**

FOR DEGREE STUDIES (Elementary Education Teacher)	FOR MASTERS STUDIES (Secondary Education, Professional Training and education and Language Teaching)
1. Know the curricular areas of Elementary Education, the inter-disciplinary relation between them, the evaluative criteria and the body of didactic knowledge which surrounds the procedures of teaching and learning respectively.	1. Know the curricular contents of subject matter relative to the corresponding teaching specialization, like the body of didactic knowledge surrounding the respective processes of teaching and learning. For Professional Training and education knowledge of the respective professions is included.
2. Design, plan and evaluate processes of teaching and learning, individually as much as in collaboration with other teachers and professionals in the center.	2. Plan, develop and evaluate the process of teaching and learning promoting educational processes which facilitate the acquisition of the particular competences of the respective subjects, paying attention to prior level and training and education of students as well as orientation of same, as much as individually as in collaboration with other teachers and professionals in the centre.
3. Efficiently confront language learning situations in multi-cultural and pluri-lingual contexts. Foment reading and critical commentary of texts from diverse scientific and cultural domains contained in the school curriculum.	3. Look for, obtain, process and communicate (oral, printed, audio-visual, digital or multimedia) information, transform it in knowledge and apply it to the processes of teaching and learning in the particular matter for the specialization being studied.
4. Design and regulate learning spaces in diverse contexts which deal with gender equality, justice and respect for human rights and which conform themselves to the values of "civic training and education".	4. Specify the curriculum which is going to be implanted in a teaching center participating in the collective planning of same; develop and apply didactic methodologies, group ones as much as personalized ones, adapted to the diversity of the students.
5. Foment co-existence in the classroom and outside of it, resolve discipline problems and contribute to the pacific solution of conflicts. Stimulate and value effort, constancy and personal discipline in students.	5. Design and develop teaching spaces with special attention to justice, emotional education and values, equal rights and opportunities between men and women, civic training and education and respect for human rights which facilitate life in society, decision taking and the construction of a viable future.

Continuation Table 2.

FOR DEGREE STUDIES (Elementary Education Teacher)	FOR MASTERS STUDIES (Secondary Education, Professional Training and education and Language Teaching)
6. Know the organization of Elementary Education Schools and the diversity of actions which are included in their operation. Perform the functions of tutorials and of orientation for students and their families, paying particular attention to the special educational necessities of the students. Take on board the fact that the practice of the function of teaching must continue improving and adapting itself to scientific, pedagogical, and social changes throughout ones life.	6. Acquire strategies to stimulate effort in students and encourage their capacity to learn on their own and with others, and develop abilities to think and decide which facilitate independence, confidence and personal initiative.
7. Collaborate with the different sectors of the educational community and the social environment. Take on board the educational dimension of the teaching function and foment democratic education for active citizens.	7. Know processes of inter-action and communication in classrooms, have a good command of social skills and abilities necessary to foment learning and living together in the classroom, and confront problems of discipline and solution of conflicts.
8. Maintain a critical and independent relation to learning, values and social, public and private institutions.	8. Design and realize formal and non-formal activities which contribute to making the center a place of participation and culture in the environment where it is situated; develop the functions of student tutorials and orientation in a collaborative and coordinated manner; participate in the evaluation, investigation and innovation of the teaching and learning processes.
9. Value individual and collective responsibility in the achievement of a viable future.	9. Know the institutional and organizational norms of the educational system and quality improvement models applied to educational centers.
10. Reflect on classroom practices to innovate and improve teaching work. Acquire habits and skills for independent co-operative learning and encourage it among students.	10. Know and analyze the historical characteristics of the teaching profession, its present situation, its perspectives and its inter-relation with the social reality of each period of history.
11. Know and apply in classrooms information and communication technology. Selectively discern audio-visual information which contributes to learning, civic training and education and cultural wealth.	11. Inform and assess families about the process of teaching and learning and about the personal, academic and professional orientation of their children.
12. Understand the function, the possibilities and the limits of education in present day society and the fundamental competences which affect Elementary Education Schools and their professionals. Know models of quality improvement applied to educational centers.	

The planning of official university teaching of Degrees, or equivalent, the organization of Study Plans, presents a structure based on modules, competences, subject matter, subjects, credits and Departments, although the Orders (las Órdenes) ECI/3857/2007 and 3858/2007, of December 27<sup>th</sup> (Official State Bulletin (BOE), of the 29th of December) confront this subject matter in a more summarized manner when solely referring to, modules with their corresponding global assignation of credits and competences.

On this occasion, we will present a simple preview, given that the reader can form a more complete idea by examining the indicated normative (table nº 3).

TABLE 3. Planning of Degree Teaching.

Módulo	Competences	Matter	Subjects	Dept.
Basic Training and education (60 ECTS)	1...	1...	1...	1...
	2...	2...	2...	2...
	3...	3...	3...	3...
Didactic discipline (100 ECTS)	1...	1...	1...	1...
	2...	2...	2...	2...
	3...	3...	3...	3...
Practicum (50 ECTS) Including end of Degree work	1...	1...	1...	1...
	2...	2...	2...	2...
	3...	3...	3...	3...

On the other hand, the planning of official university teaching of Masters and their Study plans to practice the professions of Compulsory Secondary Education Teacher, “School Leaving Examination” (Bachillerato) Teacher, Professional Training and Education (Formación Profesional) Teacher and Language Teaching Teacher will present an identical structure although, naturally, with a much more reduced credit weight than that which corresponds to the Degree Study Plans, as one can deduce very well by observing Table 4.

TABLE 4. Planning of Masters Teaching (Secondary Education Teacher).

Module	Competences	Matter	Subjects	Dept.
Generic. (12 ECTS)	1...	1...	1...	1...
	2...	2...	2...	2...
	3...	3...	3...	3...
Especif. (24 ECTS)	1...	1...	1...	1...
	2...	2...	2...	2...
	3...	3...	3...	3...
Practicum (16 ECTS) Including end of Masters work	1...	1...	1...	1...
	2...	2...	2...	2...
	3...	3...	3...	3...

## 5. THE EMERGENT PROFILE OF A NEW TYPE OF TEACHER

The job of a teacher and, with it, the always evolving world of teaching, is today going through, not only the taking on board of new, different and varied competences which must appear in the teacher’s task as guide and facilitator of learning for students, but also, they must inject in everything that they do a good dose of love for this profession and dedication to their students, because in education things do matter and, consequently, one can always do things better because one can always reflect better. Examining the first part of the affirmation, teacher training and education faced with the new framework of learning and teaching through competences, it is understood that to educate in competences is to educate in knowledge because competences are born, are developed and are reproduced through knowledge, “with the usefulness of knowledge and with the knowledge of usefulness” , as the teacher Benjamín Suárez Arroyo, professor at the Catalan Polytechnic University sentences, in an article published in 2005 under the title “Training and education in competences: a challenge for future higher education“(La formación en competencias: un desafío para la educación superior del futuro”). Therefore, there does not exist determined competences or specific competences but determined knowledge (vehicles which transport) and certain intellectual capacity (fuel which moves the ve-

hicle) given that, except on very few occasions, the immense majority of competences need or require for their apparition external stimuli activated through previously specially planned and designed processes.

Definitively, initial and permanent teacher training and education for Elementary and Secondary Education in the acquisition and development of competences of professional and teaching action, must help to shape the profile of these educators who, without a doubt, should be characterized as Le Boterf, G. (2001:92) points out by a “know how to act”, in addition to having at their disposal the necessary scientific knowledge: by a “know how to act in action”, by a “know how to act contextualizing actions” and by a “know how to act with a view to an objective”. All of this, in order to be able to respond with effectiveness and quality to problems which emerge, in an independent and creative manner, to the tasks which the profession demands from the requirements of the post that is carried out, and collaborate in the organization of work in the best climate possible. We are talking about, then, recalling the teacher Echeverría Samanes (2005:22), of developing each competence from an integrated, and at the same time, dynamic vision. Training and education is integrated, because one has to go beyond the solely technical questions, enriching them with methodological, organizational and collaborative aspects and psycho-pedagogical and personal orientation. Training and education is dynamic because it is necessary to accompany the person in the development of said competences throughout their life path and, consequently, professional trajectory.

## 6. DIDACTIC, METHODOLOGICAL AND ORGANIZATIONAL CONSEQUENCES OF THE NEW SYSTEM OF TEACHING CENTRED ON THE ACQUISITION OF PROFESSIONAL AND TEACHING COMPETENCES

After what has been outlined up to now, it is of special interest to point out the consequences which, for present teachers and future students, are anticipated by the changes to which we have alluded, as, necessarily, the following questions are going to be affected in a very important manner (see Figure 5):

- Habitual strategies used in didactic planning of matter or subjects (learning contents).
- Methodologies or ways which teachers act in the development of their teaching activity (the presentation method most frequently used is the lecture class).
- Modalities or ways to organize and develop the collection of teaching and learning processes depending on the purposes or objectives which teachers propose, environments and available resources (the most habitual and characteristic modality of university teaching is a theory class).

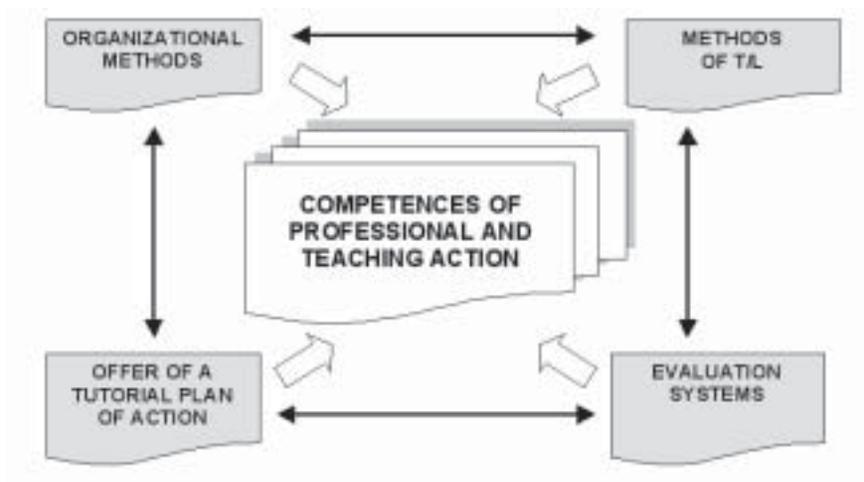


FIGURE 5. Competences: Epicentre of didactic planning.

- Evaluation systems and techniques employed in relation to competences from a vision of constructive alignment (frequently teachers centre on measuring the command of a series of contents loaded with theory).
- The proposal of a Tutorial Action Plan and of psycho-pedagogical support in academic, professional and personal training and education, for all students without exception (in general, Tutorials are understood as a length of time which teachers put at the disposal of students some of their time so that the students can go to their office to ask any kind of question, most of the times being of an academic type).

We have been told about the necessity of a new curricular design whose axial core has to be seated on didactic, innovative and facilitative planning in a series of competences to be acquired by students and to be practiced by teachers in each one of their professional and teaching competences which are didactically structured, thus giving potential to what an individual needs to know, do and be according to the norms of the profession which they are being trained for, observing their preparation for life.

Consequently we will have to:

- Direct our teaching proposals towards the attainment of professional and teaching competences which impact the job market, instead of only thinking in terms of acquisition of knowledge.
- Propitiate different organizational and methodological opportunities to foster learning, such as different teaching environments in addition to the presently usual ones (classrooms, laboratories) to acquire these competences:
  - Seminaries/workshops: Case studies.
  - Practical classes: Problem solving.
  - External Practices: Learning based on problems.
  - Tutorials: Learning orientated towards projects
  - Group study and workshops: Co-operative learning.
  - Study and individual/independent work: Learning contract.
- Significantly restrict the use of theory/exposition classes for the transmission of contents, with the master class as the supreme and only strategy.
- Renovate methods and resources to evaluate students introducing others which are more adequate for the question which we have been advocating, different to traditional exams (self-reports, observation, diaries, portfolios, conceptual maps, etc.).

In accordance with these questions, we propose pointing out what would be some of the methodological actions (see Figure 6) taking into account the global unity which exists and is manifested among its components (didactic, organizational, methodological and psycho-pedagogical support) faced with learning results and acquisition of the identified competences which each student should experiment in different contexts and in connection with time calculated in credits whatever their area of study or qualification is.

	Modality	Method	Objective/Description
Attendance Timetable	Theory Classes	Lecture class	Talk to students
	Seminars/Workshops	Case Studies	Build knowledge through interaction and activity
	Practical Classes	Problem Solving	Show how one should act
	External Practice	Learning based on Problems	Attain professional learning in work contexts
	Tutorials	Learning orientated towards Projects	Personalized attention throughout the training and education process
	Semi-Attendance timetable	Group study and workshops	Co-operative Learning
Independent/Individual study and work		Learning Contract	Develop self-learning capacity

FIGURE 6. Organizational-methodological modalities: Description.

This change affects the planning and execution of the processes of teaching/learning and consequently, implies a radical transformation of the now classic paradigm, primarily centered on teachers work and in lecture halls, as we have already had the occasion to comment, and a change in favor of a model centered on acquisition and development of competences through the execution of an integrated process of teaching/learning.

From this new teacher-learner vision, teachers not only feel like generators of learning, but also must be capable of integrating and articulating different organizational modalities and teaching methods in their professional and teaching practice, sharing time and space which allows them to design active learning experiences and facilitate students the construction of new meanings to apply to situations which arise (see Figure 7).

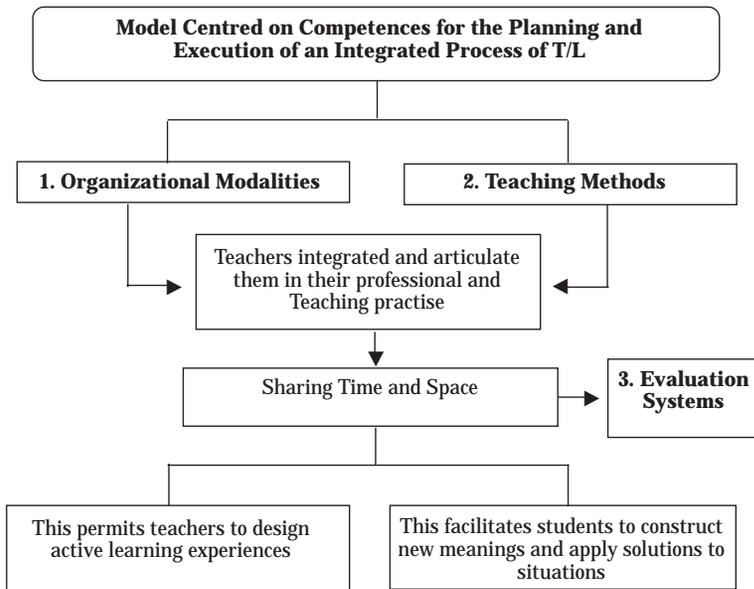


FIGURE 7.

From this perspective, evaluations, as an integrated and integral part of planning and execution machinery in the total process of facilitator for the construction of knowledge, as Lobato Fraile (2006: 191) points out, in addition to verifying the command of the contents, should assess the level in which students have achieved the diverse levels of learning and, above all, the level of command reached in the use of competences and learning strategies. In this sense, it is absolutely necessary to use every resource which is different to the traditional ones and, of course, in harmony with the competences, methodological planning and strategies in question. Among which we consider and suggest are the following as more adequate for the question which we have been defending: observation, field notebook, self-report, portfolios, conceptual maps, self-evaluation, etc.

## 7. SOME NOTES OF INTEREST TO INCLUDE

Spanish universities are confronted with a complicated academic and pedagogical revolution: greater quality with the same resources.

The teaching model of the last 800 years of the oldest Universities has already reached its “expiry date”. With it, final exams will stop being the sole and valid source of evaluation of acquired knowledge because it is more important “to teach to think”, “facilitate reasoning” as D. Daniel Peña, president of Carlos III university would say and “form the basis of learning”, according to the words of Ms Dolors Riba, vice-president of the Autonomous University of Barcelona, and report that the sources of information, “Information and Communication Technologies” (la Tecnología de la Información y la Comunicación (TIC)), will be available in the near future and will be accessible to all students without exception.

The real change, the most ambitious, must be, pedagogic. The division of traditional classrooms in reduced groups to work in seminars will allow a greater and more personalized tutelage and orientation on the part of all teachers. We are not talking about creating, because it would be untrue, new concepts related to the “student being”, nor, of course, of inventing another kind of University. Yes, certainly, this means a different way of conceiving training and education processes, without being simple receptors of knowledge, but it is not easy at all. A University guided by a credible system of quality is essential in the European convergence. So, it will be fundamental, to assure the quality of the new qualifications and, for this, there is no alternative but to admit that the changes should be profound and not just to receive or obtain a favorable report. In this sense, teachers are the corner stone of the higher education system and actions directed towards them (intellectual exchanges with colleagues from other countries), include essential on-going training and education.

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### *Legislation*

- Organic Law (Ley Orgánica) 4/2007, of the 12th of April, which is modified by The Organic Law (la Ley Orgánica) 6/2001, of the 21st of December, Of Universities (Official State Bulletin (BOE) of the 13<sup>th</sup> of April).
- Royal Decree (Real Decreto) 1393/2007, of the 29th of October, in which the re-organization of official university education is established (Official State Bulletin (BOE) Of the 30<sup>th</sup> of October).

