

Competencies: The current reality and perspectives in the Spanish context. A case study research

Competencias: Realidad y perspectivas en el contexto español. Una investigación con estudio de casos.

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RESUMEN:

El Proceso de Bolonia implica cambios en el sistema universitario español que afectan tanto a los planes de estudio, la enseñanza y el aprendizaje, la metodología y evaluación, como a la cultura de la universidad. Por su parte, el lenguaje de las competencias se hace cada vez más presente en la formación.

Este trabajo presenta los resultados de un estudio de casos, realizado en cinco titulaciones universitarias españolas. Explora, además, desde una perspectiva cualitativa, la experiencia y las concepciones de los profesores acerca de la formación por competencias, sus supuestos y sus consecuencias para la educación superior. Los resultados muestran que es necesario reflexionar críticamente sobre las conceptualizaciones de competencias identificadas entre los profesores y responsables académicos. También muestran las dificultades, los aspectos positivos y los desafíos que enfrentan a diario a fin de facilitar la aplicación de este modelo de formación.

Palabras clave: *Competencias, Estudio de Casos, Cambio, Educación Superior, España.*

ABSTRACT:

The Bologna Process involves broader changes in the Spanish higher education system. These changes affect the structure of degrees, syllabuses, teaching and learning methodology and assessment, but fundamentally affect the culture of the university. Meanwhile, the language of competencies is becoming increasingly important in the area of the certification and recognition of learning.

This paper presents the findings of a case study research project conducted with five Spanish university degree programmes. It explores, from a qualitative perspective, the experiences and conceptions of teachers about training by competencies, its assumptions and its consequences for higher education. The results show that it is necessary to critically reflect on the identified conceptions of competencies amongst teaching staff and deans, as well as the positive aspects, difficulties and prospects that they face on a daily basis and which they can anticipate, in order to facilitate implementation of this training model.

Keywords: *Competencies, Case Study, educational Change, Higher Education, Spain.*

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1. Introduction

The creation of the European Higher Education Area (EHEA) has given rise to changes in form and structure in almost all university education systems in the European Union (EU). In addition to the global economic crisis, the situation faced by universities in Europe compared with that of universities in other continents, is characterised by three gaps (Haug, 2006): marketing gaps, management gaps and funding gaps. Furthermore, there has been growth in the number of university admissions and a more diverse student profile because of technological progress. At the same time, there is a twofold trend in education –continuing education and life-long learning– that seeks to ensure that professionals play a hands-on role in their training and a strategic role in their employability.

In Spain, a debate is required which focuses not only on these gaps and trends, but on the principles, objectives and methodologies involved in the Bologna Process. The main traits of the Higher Education system at this time include the lack of an analysis of the learning and teaching process, experiences and traditions (Alba Pastor, 2005), and a lack of resources and clear policies to lead this process of change (Mora & Vidal, 2005). In light of this, the paradigm of competencies, which is supported by its tradition in certification, transference and mobility, competencies are proposed as a response to the challenges faced.

The aim of this paper is to present part of the results of a case study of five university degrees in Spain that adapted their syllabuses to the EHEA via training by competencies. The results show that it is necessary to critically reflect on the identified conceptions of competencies amongst teaching staff and deans, as well as the positive aspects, difficulties and prospects that they face on a daily basis and which they can anticipate, in order to facilitate the implementation of this training model.

2. The Spanish context.

Most of the recent developments in Spanish higher education could be considered to be positive. During the last two decades universities have become autonomous and are more in tune to regional needs and global demands. Nevertheless, there are still many aspects that are still missing in the higher education system. The services

Spanish universities offer students are still poor. Students, who are the most direct beneficiaries, receive few services apart from lectures, which, in too many cases, take place in huge classes (Mora, 2005).

Connections between universities and enterprises, the second major customers of universities as employers of their graduates and as bodies requiring their services (Mora, 2005), is an outstanding issue, and the participation of employers at universities is also limited. In most cases, education planning implies a political negotiation for the distribution of power among the respective academic departments and they do not want the participation of external agents.

In addition, the little individual attention provided to students due to overcrowded classes generates graduates who lack the necessary skills and relevant training. In fact, as shown, there are critical aspects of university training related to competencies that are usually neglected in the Spanish education system (Mora, 2005). To provide a service more oriented to social demands, Spanish universities must work harder to hear other voices and must generate the necessary spaces for voices to be heard.

The Bologna Declaration structures higher education in two cycles and the Spanish university structure should, therefore, be adapted to fit with the European model. The Royal Decrees 55/2005 and 56/2005 (Ministry of Education and Science 2005a, 2005b), that establish and regulate this structural change, come into effect from the 2008-2009 academic year.

In Catalonia, a Spanish Autonomous Community, the Ministry of Universities, Research and Information Society (DURSI) with the collaboration of the Agency for Quality Assurance in the Catalan University System (AQU-Catalonia), developed a pilot scheme to gradually facilitate the awarding of the degrees according to the EHEA from the 2004-2005 academic year. The case study presented in this paper was conducted during 2006-2007 within the legislative and structural limits of the Spanish state described above.

The results discussed in this paper are part of an original research project into the change of the teaching and learning model in the Spanish universities that is currently taking place (Gairín, Armengol, Gisbert, García San Pedro, Rodríguez & Cela, 2009a; Gairín, García San Pedro, Gisbert, Rodríguez & Cela, 2009b; Garcia San Pedro 2007, in progress).

3. On Competencies.

The competencies movement has evolved in conceptual terms in education in the last two decades. A review of the literature on competencies from a hermeneutical perspective also reveals the use of expressions that emphasise their “opaque” dimensions, while at the same time opening up new pathways to interpretation. Expressions such as “metamorphosis of competence”, used by Stevenson (1996) to refer to change and constant conceptual evolution; the semantic game proposed by Boon and van der Klink (2002) between “fuzzy logic” and competence as a “fuzzy concept” that sets out the areas which lack definition and the possibility to consider elements of uncertainty as valid; and, finally, the “conceptual inflation” of competence (Weinert, 2004), in which the lack of a precise definition has resulted in too many meanings being assigned to the term, are examples of the need for a new conceptual foundation of the paradigm.

- Based on the literature review regarding the nature of competencies (Bowden, 1997; Bowden Hart, King, Trigwell & Watts, 2000; Cheetham and Chivers, 1996; Gonczi 1993, 1994, 1997; Gonczi, Hager and Oliver, 1990; Sandberg, 2000; Stephenson & York, 1998 and Velde, 1999 the following aspects can be highlighted:
- The construct of competence has emerged in response to economic and socio-cultural realities. Competence is primarily about the ability to perform effectively.
- As it is largely concerned with the here and now, it is a construct subject to historical variables, inasmuch as it is an anthropological, epistemological and ethical response unique to each moment.
- Conceptions of competencies have evolved over time into more complex models that take into account the person, tasks, workplace and context of work as well as the interaction between these elements.
- Each idea regarding the nature of competencies has specific curricular consequences, and the mapping thereof opens diverse possibilities for university training.

The review of the literature allows for the defining of three traits which are common to any

definition of competencies: multivocality, contingency and historicity (Garcia-SanPedro, 2010). Multivocality highlights that there is no agreement in the conceptualisation of criteria; it changes according to author, educational level and intended recipients. Contingency refers to the fact that definitions tend to address different needs and contextual circumstances, something that need not necessarily be seen as negative but rather something that is unique to its metamorphic nature. Finally, historicity is in response to the fact that its formulation is limited to time and provides a snapshot of a given point in time. As a result, we understand that competence in the university context is an original and personal act that integrates self and knowledge to successfully address the demands of the current context of uncertainty. This context of uncertainty must be understood from the perspective of Barnett (2004).

To go a little further and clarify, competence differs from learning outcomes, graduate attributes and capability. Generic graduate attributes are the qualities, skills and knowledge that a university community agrees its students should develop during their time with the institution (Bowden et al., 2000). These attributes include, but go beyond, disciplinary expertise or technical knowledge. The essence of this concept is its “nature”. That is, the combination of skills and attributes requires each university to establish a sense of openness (towards learning) and the type of knowledge that should be included (Barrie, 2006). Barrie’s phenomenographic investigation revealed that, far from a shared understanding of such attributes as core outcomes, academics hold a variety of disparate understandings of the nature of generic attributes and their place amongst the outcomes of a university education. This variation affects the way academics understand the teaching and learning of such attributes (Barrie 2006, 2007).

Capability is “an integration of knowledge, skills, personal qualities and understanding used appropriately and effectively -not just in familiar and highly focused specialist contexts but in response to new and changing circumstances” (Stephenson & Yorke, 1998). There are three remarkable aspects shown in this conception: the importance of having the confidence to apply the knowledge and skills within unfamiliar and changing circumstances; the relation to lifelong learning; the capacity to take risks and to learn from the experience; the necessity to be educated and to have culture to enrich the judgement of the situation. Capability denotes a broader significance than that of competence, as it is related to developmental aspects which include, but go beyond, the achievement of competence in present day situations (Stephenson & Yorke, 1998).

In the Spanish context, the difference between these nuances is not reflected in practice, given that they are encompassed in one word: competencies. In this sense generic graduate attributes refer to the nuclear and cross-disciplinary dimension of the university learning, the trademark of an institution, and should be developed as a response to contextual needs. In the Spanish context, the graduates attributes are the so-called “competencias nucleares” (core competencies). The term “capability’ is used in a broader sense than competencies. In other words, it is more encompassing and comprehensive, such as the Aristotelian concept of potency. Furthermore, it refers to the possibility of becoming something or someone. Learning outcomes, on the other hand, is more recent, mainly due to harmonization with European terminology and its link to accountability, and is increasingly used as a term to simplify conceptual nuances and focus attention on the learner and their learning. It is used to point to the performance of the student as the result of the learning experience.

From this initial clarification, a path should be marked out for a conceptual construction in the university context. The model presented here expresses the philosophical, educational and didactical implications of training based on competencies for a degree (Figure 1). This figure can be interpreted in two ways.

The first is that it can be observed as two horizontal blocks which, through questions, determine a dialogue between philosophical and educational-didactic perspectives in such a way that it is possible to create an idea of competence that comes from the person, is familiar with his/her foundations and, therefore, defines its purposes. The other perspective is vertical, with three dimensions: onto-anthropological, causal and teleological, making the leap from thought to realisation; in other words, from foundations to decision-making. For example, the ideas of people guide the decision to consider what kind of education we want depending on our reality, without forgetting the pedagogical-didactic context in which this analysis takes place. As we can see, to arrive at an institutional definition of competencies within the framework of this proposal, there must be an environment in which participation and commitment are the protagonists.

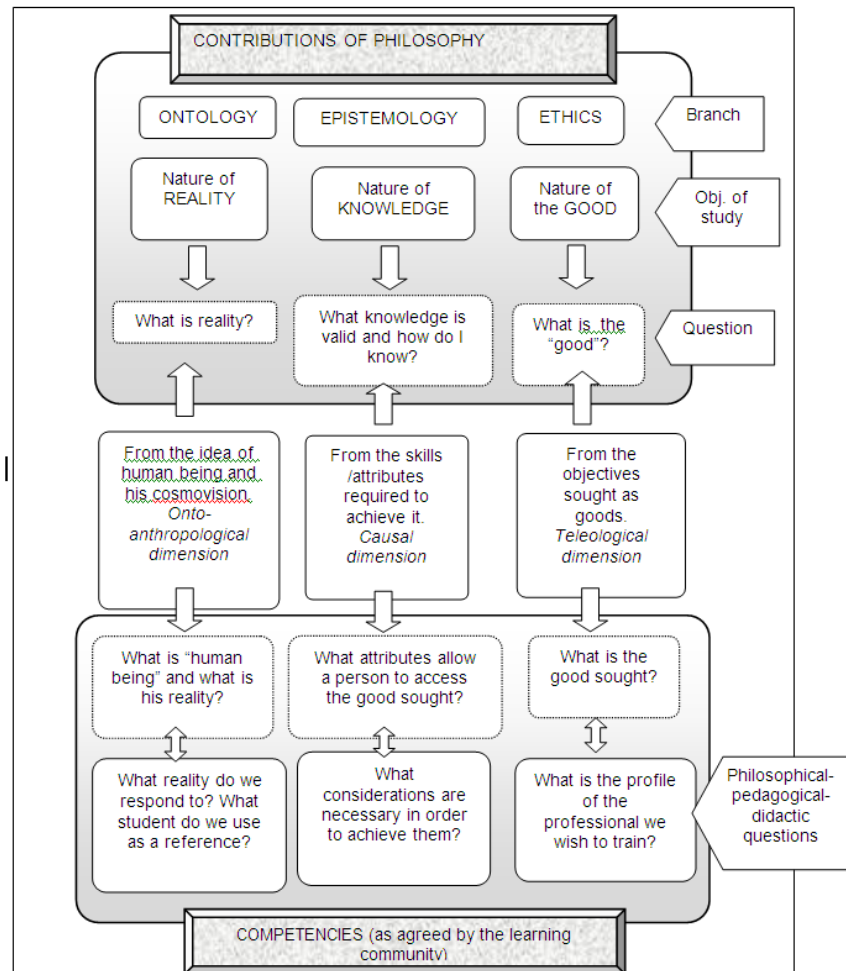


Figure 1
Philosophical, educational and didactical implications of training based on competencies for a degree (García-SanPedro, 2010)

Anthropological, epistemological, ethical and ontological dimensions, which accompany the construct of competencies, refer to the “nature” of the competencies (i.e. Stevenson (1996), as well as the question proposed by Barrie (2006) regarding the nature of the list of attributes that each university establishes). In practice, this suggests the existence of different focuses that determine a specific way of conceiving the nature of competencies through the trinomial made up of cosmovision, the task/work and subject.

Thus, in this paper training by competencies should be understood as the curricular

and organisational decisions and processes implemented by an institution/degree or person in relation to a conception of competencies applied to its students and borne out by ontological, anthropological, ethical and epistemological foundations. This conception encapsulates a vision that challenges the academic tradition perpetuated by Spanish universities and proposes a change in fundamentals, organisational structure, objectives, methodologies and the role of their protagonists, as well as assessment practices and their consequences. It demands not only a new configuration of the teaching-learning model, but also cooperation on an organisational level that promotes a cultural change. Raising awareness and collaboration are the tools that appear to be best in bringing about this change (Barrie, 2005, Bowden et al. 2002).

4. The case study.

4.1 Context and methodology.

The case study as a qualitative research method aims to achieve as full an understanding of the phenomenon as possible (Eisenhardt, 1989). The research assumes a hermeneutics perspective that focuses the relationship between the problem/object of the study and the subject(s) of study as indicative of experience and self-awareness. In this case, the academic staffs become protagonists in a historical-social reality and are able to make decisions and implement change; thus, their actions and understandings (i.e. their experience, history and self-understanding about competencies) can be a “text” to be interpreted, a setting for analysis and research.

In Catalonia, a Spanish Autonomous Community, the Ministry of Universities, Research and Information Society (DURSI) with the collaboration of the Agency for Quality Assurance in the Catalan University System (AQU-Catalonia), developed a pilot scheme to facilitate the awarding of the degrees according to the EHEA from the 2004-2005 academic year.

4.2 Research questions.

The main purpose of this study was to obtain a deeper understanding of the conceptions

of competencies among teaching staff. Firstly, the research questions explored the meaning of competencies among the academic staff. Secondly, the opportunities and limitations that they could identify when faced with the changes brought about by the Bologna Process.

4.3. The respondents.

22 degrees from five universities participated in the pilot scheme. Initially 8 cases were chosen according to theoretical sampling (Eisenhardt, 1989) representing all of the knowledge areas. In the end only five degrees were able to form part of the case study.

As a result, the respondents were members of five Spanish university degrees that were part of the aforementioned Catalan pilot scheme, including Pedagogy, Biology, Statistics, Biblioteconomy and Documentation and Public Administration.

The interviewees were deans involved in the Bologna Process through the pilot schemes who, in turn, suggested professors who were representative of traditional and innovative teaching approaches (snowball sampling) (Patton, 1990). In total, eight interviews were conducted with deans (two per dean) and twelve with professors (three interviews for each degree program).

4.4. Data collection.

Data were collected through semi-structured, one-on-one interviews. Before the interviews began, the key questions were established using the tipology developed by Patton (1990). These questions included: Could you explain to me what you understand by the term “competencies” and how you develop competencies in class? What difficulties and opportunities have you discovered in this model? What factors or elements facilitate or hinder the learning of competencies? What processes have you set to implement this methodology in the degree program? Each interview was adapted to the interviewee, according to their experience and perceptions. Interviews were conducted at the workplace of each interviewee and lasted between 50 and 80 minutes. Each interview was recorded and transcribed in detail. The transcription was emailed to the interviewee with the request to confirm or modified the arguments that

did not reflect his/her ideas.

The study was fundamentally of exploratory interest, so no distinction was made between respondents. The thematic analysis undertaken offers a flexible approach to analyse qualitative data, searching for themes or patterns in relation to different epistemological and ontological positions (Braun & Clarke, 2006; Eisenhardt, 1989). Once the interviews were encoded, the information provided was treated as a whole. As a consequence, the coded statements were treated according to the unit of meaning, i.e. not according to the respondent who gave the response. The phases of thematic analysis that could be identified were (Braun & Clarke, 2006):

1. Familiarizing with data
2. Generating initial codes
3. Searching for themes
4. Reviewing themes
5. Defining and naming themes
6. Producing the report

Once the various themes were identified (i.e. the conceptualisation of competencies, competence's development and the consequences for the syllabi), the second step was to group together these units of meaning according to more generic emerging concepts. Initially, 102 (one hundred and two) issues were chosen. These were studied and reduced in number to 42 (forty-two). It was then possible to group the 42 final codes into broader concepts, constituting seven categories.

As the analysis progressed, it became necessary to pay more attention to the nuances grouped together under each provisional category (Marton & Booth, 1997). In this way, the characteristics particular to each sub-category and features common to the group were identified. This process involved various critical reviews by researchers, as often occurs in this type of educational research (Akerlind, 2005; Barrie, 2007; 2004; Bowden & Walsh, 2000). The contributions in terms of reliability and validity made by Braun & Clarke (2006); Eisenhardt (1989); Goetz and LeCompte (1988), LeCompte and Goetz (1982), Sandberg (1997), were taken into consideration.

5. Results.

The results obtained relate to two essential aspects of the problem: the conceptualisation of competencies and its educational implications as a model for Spanish university education.

The conceptualisation of competencies. This research confirms the need for an in-depth approach when investigating the nature of competencies. The lack of an accepted conceptualisation has fostered the coexistence of different interpretations for a single institutional model, giving rise to inconsistencies and contradictions on a theoretical and practical level; it has also created unnecessary confusion and wear and tear that has affected the climate and institutional culture of degree programs.

“We cannot continue as we are doing now ... as a result of not discussing a competencies model there is a different one being laid out on the table each time, without us clarifying our own model” Professor, Biblioteconomy and Documentation

“We are working without defining the concept and this complicates the levels of understanding and dialogue” Professor, Statistics.

“There are teachers who ask to discuss the model, others who value the process and you see what the response is ...” Dean, Pedagogy.

“... By not defining the model, there are four models” The climate is tense, the opinions are very divided in relation to establishing the basis, but the question is recurring due to the lack of generating the necessary space to formulate it
“(Comment, Field journal)

The relationship between the foundations and nature of competencies among teaching staff has been expressed in three forms:

Denial or the creation of intellectual distance: the issue of competencies is not a topic for concern; nor is its formulation a priority as it is seen as a current trend in education. For example, the following expressions are common: “terminology (...) coming from the field of Pedagogy”, “is empty terminology which is currently in fashion”.

“I believe that this terminology has already spread among teachers, but the content and what it means is totally unknown ...” Professor, Biology.

Acknowledgement (without practical consequences): there is an acknowledgment of the need to establish conceptual foundations, even if this has not occurred in degree programs because of timing, lack of agreement, etc. Nevertheless, there is a need to

specify operational and functional aspects, establishing the much-anticipated “list of competencies”.

“As we are in the process of reforming the curriculum, we have not defined competencies; the idea will be to have blocks of competencies. But now teachers are attending training sessions, but not all are involved in the same way” Dean, Public Administration.

Recognition of the operational dimension of the curricular map of competencies: Recognition of the need to agree what is meant operationally by each type of competence and how it develops and is evaluated. What is interesting about this perspective is the evident fear of giving a complete, definitive, clear definition. The silences, the indirect expressions provide evidence of this difficulty.

“...it is a lot of work... not entirely resolved, although there has been maturation, although I am not very happy with the final list of competencies. The first thing we should have done is be clear about the professional profile ... that is, to define what competencies were most appropriate. “Professor, Pedagogy
“It’s a task which is very...from my point of view...very difficult to define.”
Professor, Biology

“... We realized we had a problem with the terminology ... that each of us reads something different behind each competence” Professor, Public Administration.

With regards to the concept of competencies *per se*, definitions are evasive, general, incomplete and confusing. The debate moves straight from competence to profile, without asking any questions about the leap from one category to another, or even noticing that such a leap has been made.

“It’s not easy to differentiate between skill and competence, and even the theoretical texts that are on this sometimes use a word almost synonymous.”
Professor, Pedagogy

“We confuse competencies with the skills and capabilities with objectives, that sort of thing.” Professor, Biblioteconomy and Documentation

“We used to justify what we do... Discussions are endless... Teachers move the goals of their subject to the professional profile...” Professor, Pedagogy

In fundamental terms, the meanings given can be grouped together under three headings:

Competence as a benchmark of excellence: “We produce students X, and what

we want is for X to be the best”. This vision is found primarily among the deans or coordinators of the degrees. They understand competencies as a whole that must distinguish the future graduates.

“One does not have to demonstrate all that one knows on a theoretical level, rather, one must demonstrate the ability to operate in order to excel in the services we can provide. Because competencies and studies about competencies already exist...” Professor, Biblioteconomy and Documentation
“I think our graduates should have competence to excellence in service to society.” Degree Coordinator, Biblioteconomy and Documentation
“Because we have these three generic competencies and we want our graduates to be distinguishable by the excellence that they achieve in relation to these ...” Dean, Biology.

Competence as an integrating concept: establishes a relationship between knowledge and skills, analysis of practice, links the academic world with the labour market. This vision was held among the teachers who were more related to the professional world, in other words, those who carried out their profession in companies or institutions and combined this with their teaching at the university.

“Competencies so that you know on what to base your practice and why you choose this option and not another. Being a professional is not just about who can do something well, but rather who also knows why she or he does it in one way rather than another, and why she or he chose this method and not another. The university should develop competencies in order to go more in-depth regarding the fundamentals...what theory, what thinking...” Professor, Pedagogy.
“I really value that competencies assist with thinking, to build curriculums that can facilitate the transfer of academic knowledge to professional practice ...” Professor, Biology.

Competence as meta-learning: a supposed deeper conception of learning that goes beyond the objectives of the course. This view is common among teachers who showed more evidence of an integrated education, through active methodologies such as PBL, for example, and applying formative evaluation. The reflection on the meaning of competencies presents a more holistic and integrated approach to different types of knowledge and skills.

“Competencies suggest a deeper level of learning, a more comprehensive and integrated approach which is different from the objectives of the course. Maybe you say that your specific objectives are very clear, but when we talk about competence in a broader sense, for example, how do you manage to

get your students speaking with a scientific vocabulary within a semester? Or that they think according to a scientific method? You can collaborate and deepen various aspects, focus efforts in this direction, but you cannot achieve success.” Professor, Biology.

6. Discussion of results and implications for training.

The language of competencies is used as a vehicle for the internationalisation of higher education and requires permanent supervision of the quality of training it provides (OECD, 2005). Apart from the known difficulties in reconciling the objectives of the academic world and of the labour market, a review of the literature regarding the experiences of countries with a tradition of training by competencies highlights difficulties in three areas: communication, motivation, managing innovation. Communication relates to a lack of dialogue between politicians, the productive sector and leaders in education (Bennett, Dunne & Carré, 1999); motivation relates to the scepticism of instructors, fostered by the lack of clarity, consistency and a well-founded theoretical base for the paradigm (Bennett, Dunne & Carré, 1999). Managing innovation relates to the difficulty in managing and implementing change to foster the optimisation of resources and good practices resulting from the lack of a conceptual consensus (Drummond, Nixon & Wiltshire, 1998).

The visions found in the case studies relate to the aspects mentioned by the international literature and reinforces the importance of clarifying the conceptual base of the training of competencies model. The visions were complementary and useful for mobilizing the aspects of the institutional culture related to competencies. Therefore, if the conception of competence is seen as a benchmark of excellence, institutional values and aspirations (the “ethos”) will play a very important role in determining which competencies are transversal. In turn, they represent a significant motive for the unification of the work of teachers, as the definitive curricular map will have to “take account” of these distinctive values of the institution, be clearly identified and accepted by all stakeholders (students, teachers and other educational agents) (García San Pedro, 2007).

On the other hand, if one begins to conceive of competencies as an integrating element of the theory and practice, the scope of this concept becomes more directly linked to

the curricular map. Here, the pedagogical/didactical dimension of the course receives greater protagonism since the decisions of teachers in this regard are those that define the direction of the integration – at times –dialectic- theory-practice, academic world - professional world. In this regard it is convenient, for example, that practical subjects or the final project of the degree, are designed in light of the entire curricular map, so as to realize the opportunity to implement the competencies acquired from the professional point of view of future graduates. On the other hand, the rest of the subjects / modules should not forget that they contribute towards this integration using their daily methodological proposals, as they are the scenes presented before the final stage is set.

Finally, the vision of competencies as a concept more profound than learning highlights the holistic dimension of this training model, pointing out that the content itself, of any kind whatsoever, is not the end but the means, the opportunity to project within the professional know-how. It is no longer about knowing how to be, or knowing how or what to do in isolation, but rather about concretising such integration in a way which is more profound: professional wisdom, being a citizen, having professional moral sense and commitment in the world and that his/her deontological commitment goes beyond an isolated, decontextualized know-how. This vision is transmitted through teachers committed to their teaching practice that have highly vocational and motivational components, which is echoed in an institutional culture committed to the social dimension of the profession, open to the context from which it feeds.

Given that each way of conceiving competencies constitutes a different training and assessment model, the provision of models in degree programmes is a necessary condition but not sufficient in itself for effective training by competencies (Bennett, Dunne & Carré, 1999). The case study undertaken in the Spanish context cannot be reduced to the findings presented in the previous section; however the results show that the competence training models must be accompanied by a plan for their transference, something that in turn involves training strategies, teamwork and the dissemination of information. Accordingly, the results presented here illustrate the change in the teaching model in Spanish universities.

A serious reformulation of the learning process more orientated to the demands of the students, in conjunction with the professional development of the teaching staff, is important in order to create the conditions to change the training model.

Another crucial aspect for training is to promote holistic conceptions of competencies, which we understand to be more appropriate for university education. In other words, competencies cannot be taught *in vacuo* (Hussey & Simith, 2008) and must refer to specific content (contextualisation); at the same time, they must preserve their abstract nature (generality) to encourage application in other contexts (transference) perfectly aware of the original principles of the learning that has taken place (specificity). Taking these considerations into account, more holistic concepts can respond more appropriately to the current needs of the professional context due to their generic character. Another important consideration regards the awareness of students of their learning as a key element in the acquisition of competencies. The culture of Spanish students is based on traditional education, that is characterized by overcrowded lectures, the reception of concepts and exams in test format. These features alone do not favor the receipt of any competencies. In this case, interpretative approaches (Velde, 1999) and integral or holistic conceptions (Cheetham & Chivers (1996); Gonczi (1993) can be of interest to teaching staff: firstly, in that they emphasise the intentional commitment of the student to their learning; and secondly, in that they take personal creativity into account.

Another aspect to be considered, and which is directly related to the concept of competencies, is the creation of relevant scenarios to promote the transference of learning and its assessment. In Spanish universities, it is not always possible to recreate actual workplace conditions, often due to the lack of resources and training as necessary elements to provide these conditions. This trait is closely linked to the restructuring of learning time (calendar, timetables) and physical spaces that must accompany training by competencies, as well as training given to teaching staff to adopt new ways of collecting evidence of learning process.

Finally, some practical criteria for defining competencies are proposed. These criteria are based on the reflections of teachers and suggest that various risks to a balanced formulation of competencies has been identified and that it would be advisable to avoid: a) *pragmatism* that places excessive emphasis on the practical dimension, performance; b) *fragmentation*, due to an inadequate selection of competencies that dismantles their training and assessment; c) *theoreticism*, which emphasises knowledge, the potential dimension of the competence, without giving a balanced consideration of its actual dimension, its actual realisation; d) *technicism*, which emphasises technical aspects, the skill in execution, without giving due consideration to its relationship with

professional judgment, artistry and creativity in execution (García-SanPedro,2007).

7. Conclusions.

This article presented and contrasted international literature as well as the findings of a case study research project conducted with five Spanish university degree programmes, exploring in depth from a qualitative perspective the perception and conceptions of teachers about training by competencies, its assumptions and its consequences for higher education.

Certainly, these results are only one aspect of a line of research that began in 2005 and which continues at this time. However, they serve as an example to reinforce the idea that the change in the Spanish university education model has had a profound effect and involves several dimensions.

Furthermore, these results reinforce the need to agree on conceptual reference points that unify policies and criteria for action at all levels of curriculum development.

The Spanish government has to design a financial system that facilitates the expected accomplishments, but these achievements must be oriented to reduce the gap between higher education programmes, requirements of employers and social needs. As a consequence, the decisions of educational pioneers and forward thinkers should be involved in three key areas. The first is teacher training to accompany the conceptual and methodological change that involves competencies training. The second is the recognition of university teaching as a profession valid in itself, as it is not the younger sister of research. This will contribute to greater commitment of professors to the teaching profession and towards the recognition that innovative experiences that link the university with the professional world is also part of the professional development of teachers. The third area is the change in infrastructure, regulations and laws that facilitate more flexible adaptation to the new learning model.

The model proposed in Figure 1 illustrates the different bases that guide decisions about the competencies of a degree. These bases may serve as a starting point for enhancing the participation of the learning community in this context. As a result, it should be remembered that to provide a service more oriented to social demands,

Spanish universities must work harder to hear other voices and must generate the necessary spaces for voices to be heard. This point of departure opens the door to a challenge to training and a new participative environment for setting curricula that focuses on competencies and which is critical in the formulation of specific, coherent learning aspirations that are relevant to the professional context. It also heralds a time of change in its demands. It is a time of change for the Spanish context, an opportunity to lay the foundations of a university-centered learning, communicated and committed to society through their future graduates.

REFERENCES.

- Akerlind, G. (2005). Variation and commonality in phenomenographic research methods. *Higher Education Research & Development*, 24(4), 321–334.
- Alba Pastor, C. (Coord.) (2005). La universidad española en el EEES, El profesorado universitario y las tic en el proceso de Convergencia Europea. *Revista de Educación*, (337), 7-11.
- Barnett, R. (2004). Learning for an unknown future. *Higher Education Research & Development*, 23 (3), 247 – 260.
- Barrie, S. (2004). A research-based approach to generic graduate attributes policy. *Higher Education Research & Development*, 23(3), 261-276.
- Barrie, S. (2005). Rethinking Generic Attributes. R. Landbeck (ed.) HERDSA News.
- Barrie, S. (2006). Understanding what we mean by the generic attributes of graduates. *Higher Education*, (51), 215-241
- Barrie, S. (2007). A conceptual framework for the teaching of generic graduate attributes. *Studies in Higher Education*, 32 (4), 439-458.
- Bennet, N., Dunne, E., & Carré, C. (1999). Patterns of core and generic skill provision in higher education. *Higher Education*, (37), 71-93.
- Boon, J. y van der Klink, M. (2002). Competencies: The Triumph of a Fuzzy Concept. *2002 AHRD Conference: Symposium 13. Competencies: Fuzzy Concepts to Context*. Honolulu: Academy of Human Resource Development. (pp. 11-18)
- Bowden J., Hart, G., King, B., Trigwell, K. & Watts, O. (2000). Generic Capabilities of ATN University Graduates. Available at <http://www.clt.uts.edu.au/ATN.grad.cap.project.index.html> (Accesed: 15-04-08)
- Bowden, J. A. (1997), Competency-Based Education. Neither a Panacea nor a Pariah. *Technological Education and National Development (TEND 2000)*. Abu Dhabi,

U.A.E.

- Bowden, J. & Walsh, E. (2000). *Phenomenography*. Melbourne, RMIT.
- Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, (3), 77-101
- Cheetham, G. & Chivers, G. (1996). Towards a holistic model of professional competence. *Journal of European Industrial Training*, 20 (5), 20-30.
- Drummond, I., Nixon, I. & Wiltshire, J. (1998) Personal transferable skills in higher education: the problems of implementing good practice. *Quality Assurance in Education*, 6 (1), 19-27.
- Eisenhardt Kathleen M. (1989) Building Theories from Case Study Research *The Academy of Management Review*, 14 (4), 532-550.
- García-SanPedro, M.J. (2007). *Realidad y perspectivas de la formación por competencias en la universidad*. [Current perspectives in training by competencies in Spanish universities] Master's Thesis. Applied Pedagogy Department, Autonomous University of Barcelona. Available at: <http://hdl.handle.net/2072/8999>
- García-SanPedro, M.J (2010) Diseño y validación de un modelo de evaluación por competencias en la universidad. [Design and validation of a competency assessment model in universities] Ph.Thesis. Applied Pedagogy Department, Autonomous University of Barcelona. Available at: <http://www.tdx.cat/handle/10803/5065;jsessionid=B5A7E5C08372D8F2521B889187E4F3B7.tdx2>
- Goetz, J. P. & Le Compte, M. D. (1988). *Etnografía y diseño cualitativo en investigación educativa*. Madrid: Morata.
- Gonczi, A. (1993). Integrated approaches to competency based assessment. *National Assessment Research Forum*. Sydney, April.
- Gonczi, A. (1994). Competency based assessment in the professions in Australia. *Assessment in Education*, 1 (1), 27-44.

- Gonczi, A. (1997). *Future Directions for Vocational Education in Australian Secondary Schools*. Australian and New Zealand. *Journal of Vocational Education Research* 5 (1), 77-108
- Gonczi, A.; Hager, P.; Oliver, L. (1990). *Establishing Competency-based Standards in the Professions. NOOSR Research Paper No. 1*. Canberra: Department of Employment, Education and Training.
- Haug, G. (2006). *La Universidad y la Construcción de la Sociedad del Conocimiento. VII Foro ANECA: Gobernanza y rendición de cuentas: las universidades ante la sociedad del conocimiento*. Madrid: Aneca. (pp. 7-9) Available at: http://www.aneca.es/estudios/docs/publi_7foro_marzo07.pdf. (Accesed: 15-06-07)
- Hussey, T. y P. Smith (2008). Learning outcomes: a conceptual analysis. *Teaching in higher education*, 13(1), 107-115
- Le Compte, M. D. y Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, (52), 31-60.
- Marton, F. & Booth, S. (1997). *Learning and awareness*. Mahwah, NJ, Lawrence Erlbaum.
- Mora, J. G. y Vidal, J. (2005) Two Decades of Change in Spanish Universities: Learning the Hard Way. In Åse Gornitzka, M. Kogan and A. Amaral (Eds.) *Reform and Change in Higher Education*. Netherlands: Springer.(pp.135-152)
- Organisation for Economic Co-operation and Development, Centre for Educational Research and Innovation (2005). *Guidelines for Quality Provision in Cross-Border Higher Education*. Organisation for Economic Co-operation and Development (OECD)
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Sandberg, J. (1997). Are phenomenographic results reliable? *Higher Education Research and Development*, 16(2), 203–212.

- Sandberg, J. (2000). Understanding human competence at work: an interpretative approach. *Academy of Management Journal*, 43 (1), 9-25.
- Stephenson, J. and Yorke, M. (1998) *Capability and quality in higher education*. London : Kogan Page.
- Stevenson, J. (1996). The metamorphosis of the construction of competence. *Studies in Continuing Education*, 18 (1), 24-42.
- Velde, C. (1999). An alternative conception of Competence: implication for vocational education. *Journal of Vocational Education and Training*, 51 (3), 437-447.
- Weinert, F. (2004). Concepto de competencia: Una aclaración conceptual. In Rychen, D. & Salganik L. (Eds.) *Definir y seleccionar las competencias fundamentales para la vida* (pp. 94-127). México: Fondo de Cultura Económica.