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PARTICIPATORY METHODOLOGIES OF TEACHING-LEARNING IN THE EUROPEAN FRAMEWORK OF HIGHER EDUCATION

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ABSTRACT

Witnessing a process of renewal and innovation in the Spanish university system. With the entry into force of the European Higher Education Area (EHEA) will be major changes not only in the formation process of university degrees, but also in the approach to teaching-learning methodologies to develop basic skills in Spanish professional future. From this perspective the introduction of participatory social character in the classroom can foster meaningful learning, developing skills for self-learning and allow new possibilities for development of teaching. All this, restart innovative learning processes in students and their teachers, causing them to exceed the traditional college class. This communication presents some thoughts on participatory methodologies and techniques or tools for their applicability to university students, with a view to full membership of the European Higher Education Area. Also shown are some limitations and overcome them in the Spanish university context.

1. Introduction

The ´European framework of Higher Education´ (EEES) is an ambitious and complex plan that has been run by countries in the old continent to help education in European convergence (EEES, 2011). Thus, the EEES official web is introduced and it offers specific information about the meaning and the importance of what is called Plan of Bolonia (Buzón and Barragan, 2004). The adaptation of Spanish Universities to this itinerary sets one of the most important purposes that have revolutionized the University context in last years. This process, together with the importance of the quality evaluation, has boosted a movement of pedagogical updating in higher Education of Spain (Florido de la Nuez, Jiménez and Santana, 2009).

The European Convergence sets a new tool of teaching design and academic recognition, that is specified in the establishment of European credits (*European Credit Transfer System*, what is known like ECTS) (Armengol, Castro, Jariot, Massot and Sala, 2010).

This system takes into account the total volume of University students´ work and it is not limited to the numbers of hours in classroom. Consequently, a European credit shows between twenty five and thirty hours of students' work, while, in the previous Spanish system, one credit belongs to ten attendance hours and the personal work of students is not quantified, neither the preparation, nor the execution of exams (Imbernon and Medina, 2008). At the same time, the structuring of the study plans is promoted related to the professional and discipline design of competences that students have to develop when they finish their studies, as well as a meaningful change in the teaching methodology and in the evaluation, so students is the main point of change (Florido de la Nuez et al., 2009). The study plans of the EEES consider the professional competences as key to acquire by students in some degrees and this seems to change the formative perspective and the way to teach (Benito and Cruz, 2007).

In fact, it seems that, among other many things, the EEES propose to look for formulas and different options to the unidirectional transference of knowledge, transforming the passive students' role into participatory and cooperative students who are the main characters of their process of learning. (Armengol et al., 2010).

Professors assume the guide, facilitator and designer roles of new situations for learning and the acquisition of knowledge, abilities and competences. It does not produce a less important role in the professors, but they are responsible to run the situation to transform teaching into a shared action of learning (Ontoria et al., 2006).

In this context, the relationship and cooperation among students is seen as a relevant item for the learning and the classroom is their place. Interchange of knowledge, elaboration of learning projects and sharing for the administration and deconstruction of knowledge are key items for the learning and the improvement of academic achievement, as it is shown in different studies (Adell, 2004; Conde and Shum, 2008; Saa and Martínez, 2008).

Hence, when students work in groups, they take decisions together, share ideas, solve problems, and listen to their partners. The learning is more motivating, dynamic and enriching and we achieve wider purposes than when they work alone. (Conde and Shum, 2008).

From this idea, some educational approaches, of social character and constructivist defend that the social learning can be considered as an active process of build knowledge (Perret-Clemont and Nicolet, 1992) from resources of experience, information and social interaction. Far away of the accumulation of knowledge, social knowledge can develop ability to create new strategic answers that are more adaptative (Carretero, 1994). This is not to forget about the individual nature of the learning. On the contrary, it is added to the observation and the reflection about the own experience with the reading of other people´s works, talks, group work and debates.

2. Innovative methodologies in the current University context.

Some authors (Carretero, 1994; Krause, 2002; Sánchez-Teruel, 2009a) have shown that learning to learn is important nowadays, because in the current sociey that we are continuously bombarded with information, it is necessary to know order this information, select the most important, do it meaningful and know to use it subsequently. Not only acquire information, but also promote a search attitude of meanings in people who guide them to build new performances about their life, knowing how to accede to valid information, how to process it and how to generate new information based on a relation process with their cognitive resources and interaction with other and their context (Sánchez-Teruel, Peñaherrera and Cobos, 2010).

One of the problems in the University framework is that we know classrooms are overcrowded, so we have to set doable options that allow, through a guided practice, see the subjects contents, adjust ways to transmit knowledge and change, when it is necessary, the teaching methodology and the learning activities, hence, the EEES is the best context to the implementation of the before-mentioned methodologies. If we want students to build knowledge by themselves, we promote the acquisition of professional competences according to the specific studies they are taking (Buzón and Barragan, 2004; Ibernon and Medina, 2008).

It is true that, those tasks require to assimilate some strategies to put them into practice and some abilities that make easy the improvement and transformation of knowledge. This way, the participatory methodologies promote the redefinition of the experience in people when interact with other. Learning is contextualized in its routine and it is adjusted to specific things in its development (Krause, 2002).

Those methodologies can be defined as the group of methods, techniques and strategies that boost the cognitive resources, improve the abilities for learning to learn and promote participatory, collaborative and cooperative attitudes (Contreras, 2002).
This methodological approach increases students' self-motivation (Saa and Martínez, 2008), promote the creative reflection of the knowledge, and increase the self-esteem for get directly involved in learning activities (Florido de la Nuez, Jiménez and Santana, 2009), but above all, they allow to adjust the formation to real necessities of future professionals, breaking the tendency to accumulate curricular contents that many times answer more to professionals' interests than professional justifications and work insertion related to addressees (Armengol et al., 2010; Sánchez-Teruel, 2009b).

We find in a moment, the European Framework of Higher Education, that joins to the moment when based studies on this type of methodologies (Conteras, 2002; Florido de la Nuez, Jiménez and Santana, 2009; Krause, 2002; Saa and Martínez, 2008)

The way to pass knowledge, extension and generalization of new technologies of information and communication (T.I.Cs.) are defended, that draw new contexts for learning (Adell, 2004; González and Wagenaar, 2003). Hence, to use participatory methodologies together with the TICs can offer new possibilities to build knowledge inside a convergence framework (EEES, 2011) that boost the development in groups, set virtual communication contexts and bet for more active teaching-learning processes, for professors as well as for students. From this perspective, the developed activities in the classroom are transformed into a main tool for its use in Spanish Universities.

3. New pedagogical objectives in new University contexts.

The participatory methodology oriented toward the Education for the action, is strongly emerging in Higher Education, seeing its participants, not as simple receivers, but as active agents in the construction and reconstruction of knowledge, and the professors as facilitator of processes in the classroom (López-Noguero, 2007).

In a society, that is continuously changing, the science and technology influence have transformed our thoughts, feelings and actions, Higher Education, at last, faces the necessity to set again its contents, objectives, goals, and above all, its didactic. For this reason, the European system and the Spanish one concretely, have to ask itself and set again the teaching-learning process. Some authors (Imbernon and Medina, 2008; López-Noguero, 2007; Zorzano, 2009) made some years ago, some reflection related to the teaching practice in University teaching, inviting to analyse and ask for our educational work. The University teaching model, at present and in the near future, has to integrate in its plans, adapt to people and contexts, go far away of knowledge and be more creative, constructive and transformating. As professionals of Education must not set what to teach, but what we want students to learn and how they can learn it.

The traditional model of teaching (centered on the professor, based on masterly classes, with learnt by heart exams, the practice is in the rehearsal-mistake of the teaching process) appears the participatory model, centered in active methodologies and in students' relevance. The essence of a participatory methodology is seen in the transition of a desire in the first attempt, and this attempt in the practice. How to transform the attempt into action is how to do, that is to say, what methodology we use. Higher Education, despite of its traditional resistance to innovation, is not unknown to changes that are being produced in society and we assimilate in our social and personal life. Last years, the University classrooms have technological resources, but they have been integrated inside systems for other situations and realities. Teaching is still traditional through technological methods and resources to new students, who learn in a familiar and social context, full of digital advances and with a different culture. They are students of these days who are anchored to a traditional methodology. Hence, some authors (Armengol el al, 2011; Carrasco, 2008; López-Noguero, 2007; Imbernon and Medina, 2008; Saa and Martínez, 2008) start to set again what methodologies, contents and traditional procedures are used by the professor to

reflect about the educational action itself. Bearing in mind that the weight of the teaching-learning process is suffered from students, it would have to approach the point of view from this perspective toward the professor to build, make easier and act in the construction of students´ learning (Zabalza, 2007). Although this perspective seems contradictory, it is not, because the professor is the guide and facilitator of all the process, being the student the main character (Ontoria et al., 2006.)

The teaching planning refers to the fact of design and concrete educational intentions and the way to achieve it in a project, that is, the activities that have to be done, so, the activities represent the main item of the teaching-learning process and, we can find two wide types of activities:

The students' activity and the professors' activity. Recent investigations (Armengol el al, 2011; Carrasco, 2008; Imbernon and Medina, 2008; Saa and Martínez, 2008) start to set that the professors, instead of spending so much time selecting, ordering and making contents, they have to point the design of learning processes that allow students to develop analytic, critical, reflective, creative strategies, how to solve problems, etc. In a word, to teach them, to make learning easier and to make possible the process of ´learning to learn´ (Zorzano, 2009). Consequently, it is the student who looks for information, established meaningful links with the familiar information and their previous experiences, builds knowledge (learning contents) with the professors' support as facilitator item and guide of all the educational process (Sánchez-Teruel, Peñaherrera and Cobos, 2010).

4. **Participatory methodologies: Techniques in the University Classroom and some difficulties to its implementation:**

There are some experiences (López-Noguero, 2007; Saa and Martínez, 2009; Zorzano, 2009) that show the participatory methodology can be applied to the University context in some faculties and University schools inside the European Framework of Higher Education. The possibility to split big groups of students in seminars and little groups through the structure of degrees eliminates one of the most important structural hurdles that traditional University Education had (Exley y Dennick, 2007), and it makes easier that professors can dynamize their classes, taking action teaching models that are more participatory and are based on inductive methodologies, in coordination with other professors of the same subject.

This context gives several benefits for the implied people: the students' group participates and they get personally involved in reflection-analysis of formative situations that they live, and it is one of the objectives of the participatory teaching, the reflection: to have the own thoughts and the own experience as object of count (Carrasco, 2008; López-Noguero, 2007; Imbernon and Medina, 2008). The following activities, (didactic method) that are presented are applications or examples of some strategies for reflection. Concretely, the participatory strategy that can be used in University attendance or partly-attendance formation contexts can be made by several tools and techniques (López-Noguero, 2007; Imbernon and Medina, 2008; Zorzano, 2009) that are key for the implementation of participatory learning processes.

Aware that not all the tools that we present now are applicable to the whole University formation, so diverse and dynamic as the proper work market (Sánchez-Teruel, 2009b), but each professor must build, according to this list, those tools which are more applicable inside their context and specific subject. Some of the basic tools of the participatory methodology are the following:

• *Elaboration of a project.*

• *Controlled study.*

• *Controlled debate*

• *Quick discussion*

• *Forum*

• *Demonstration*

• *Role-plays: dramatization and skit*

• *Seminar*

• *Study or case method*

• *Critical incident*

• *Elaboration of previous organizers or organization strategies*

• *Flash or circle of interaction*

• *Simultaneous dialogues*

• *Four technique*

• *Four corners*

• *Group puzzle*

• *Group Rally*

• *Phillips 6/6*

• *Sandwich*

• *Technique to set structures.*

• *Concepts net*

• *Aquarium*

• *Balls glide or concentric circles*

• *Directive text*

• *Brainstorming*

To work with this methodology in the University classroom has also some problems (Imbernon and Medina, 2008; López-Noguero, 2007; Zorzano, 2009).
For example, excess of competition more than cooperation is detected, lack of habit for the work and with other problems from the work culture in the University (Exley and Dennick, 2007). In addition, other authors (Saa and Martínez, 2008) have detected that the demotivated students abandon it quickly. This methodology is very dependent of the group dynamic. There is risk not to boost the students' responsibility when and how they work, the professor is hostage in the process, and students complain in

case of too work (especially when this methodology is used in all the subjects of the course) and suppose a lot of work for the professor.

To try to avoid, in some measurement this situation, we might do the following:

- To explain clearly the objective in the work. The student must have a specific idea of what he/she has supposed to do.

- To keep the type of groups with students (Exley y Dennick, 2007), because a huge group might break the communication. As we have said before, the best would be to do groups with four or five students.

- To remember that group work requires a nice atmosphere in the classroom. We can also find that some people of the group predominate, so we must give concrete roles or apply for actions of the rest of people in the group.

- Other difficulties that we can find related to the participation of students in the classroom are: lack of custom of group work, work in groups means accept some personal renunciations, the context pressures to give more content, without items of participation.

- To discredit the participation when it can be solved more quickly and better with an explanation or a reading, because the conceptual work predominates.

  The professor´s role is key during the interaction process and group work (Ontoria et al., 2006). It can seem that if students participate, the professor has to do nothing and he/she wastes the time. On the contrary, to motivate students to participate requires to prepare better the activity design, a monitoring of its execution and a concrete sharing. All these aspects are key during the application process of participatory methodologies and it cannot be careless anything. The guidelines for the students to do the work must be elaborated correctly, clear and specific. The work monitoring through the questions or the reduced group tutorship is main to produce feedback and as tool of continuous evaluation, what produces fresh air about the students´ motivation. Moreover, some strategy of work in group must always be shared and, if it is possible, the most of the participation of students, for this, it is key a motivating and enthusiastic ability by the professor (Ontoria et al., 2006; Sánchez-Teruel, 2009b).

5. Conclusion.

The participatory methodology is at the peak due to the implantation of the European Framework of Higher Education (EEES), which has been developed as a gale last years (2008-2011), and it is predicted that it is introduce the next years (Benito and Cruz, 2007). This European Framework of Higher Education was defined in the Declaration of Bolonia (1999) and it carries changes in the structure and the curriculum in different degrees and above all, in teaching (López-Noguero, 2007). With this process of European convergence, they want to center the students' teaching, achieve an autonomous learning, as consequence the professor´s role is transformed into an agent of the learning process of students, from professor to guide role. In this European context of competences development, participation, autonomous learning, creativity development, search for information, etc. It appears clearly reflected the participatory methodology profile, the base of this new teaching-learning model. We are immersed in these new

teaching approaches. It implies a change of mind and culture, and very few people is prepared (Zabalza, 2007). For this process of change and adjustment, we need a guide that helps us to change our strategies and, for this, we can be helped by several methodologies that there were some years ago (Carrasco, 2008; Exley and Dennick, 2007; López-Noguero, 2007; Imbernon and Medina, 2008; Zorzano, 2009).

Hence, the new University teaching model, result of the European convergence process requires an effort in the planning of formation sessions, a forecast of personal and material resources and a new distribution, order and use of the educational places. The future will set new goals inside our Universities that professors are going to transform in opportunities for the improvement of students' formation and society in general.

Bibliography and references

Adell, J. (2004). Internet en el aula: Las webquest. *Revista electrónica de Tecnología Educativa, 17*, 1-60

Benito, A. y Cruz, A. (2007). *Nuevas claves para la docencia universitaria en el Espacio Europeo de Educación Superior*. Madrid. Narcea.

Buzón, O. y Barragan, R. (2004). Un modelo de enseñanza aprendizaje para la implantación del nuevo sistema de créditos europeo en la materia de Tecnología Educativa. *Revista Latinoamericana de Tecnología Educativa, 3,* 67-80

Carrasco, S. (2008). Prologo. En F. Imbernon, y J.L. Medina, (2008). *Metodología participativa en aula universitaria. La participación del alumnado* (pp. 5-6). Barcelona. Octaedro Carretero, M. (1994). *Constructivismo y Educación*. Buenos Aires: Aique.

Conde, A. y Shum, G. (2008). Entornos virtuales asíncronos como contextos de aprendizaje colaborativo. *Investigación en la Escuela, 67*, 81-96.

Contreras, R. (2002). La investigación acción participativa (IAP): revisando sus metodologías y sus potencialidades. En J. Durston y F. Miranda (2002) (comp.). *Experiencias y metodología de la investigación participativa* (pp. 9-14). Santiago de Chile. Naciones Unidas Espacio Europeo de Educación Superior-EEES (2011). *Mismo título*. Disponible el 15 de Mayo de 2011 en http://www.eees.es/

Exley, K. y Dennick, R. (2007). *Enseñanza en pequeños grupos en educación superior: Tutorias, seminarios y otros agrupamientos.* Madrid. Narcea.

González, J y Wagenaar, R.(Coords) (2003). Tuning Educational Structures in Europe. Universidad de Deusto

Imbernon, F. y Medina, J.L. (2008). *Metodología participativa en aula universitaria. La participación del alumnado*. Barcelona. Octaedro

Krause, M. (2002). Investigación-acción-participativa: una metodología para el desarrollo de autoayuda, participación y empoderamiento. En J. Durston y F. Miranda (2002) (comp.). *Experiencias y metodología de la investigación participativa* (pp. 41-55). Santiago de Chile. Naciones Unidas

López-Noguero, F. (2007). *Metodología participativa en la enseñanza Universitaria*. Madrid: Narcea.

Ontoria, A., Gómez, J. P.R., Molina, A. y Luque, A. (2006). *Aprendizaje centrado en el alumno: Metodología para una escuela abierta*. Madrid. Narcea.

Perret-Clemont, A. y Nicolet, M. (1992*). Interactuar y conocer: desafíos y regulaciones sociales en el desarrollo cognitivo.* Buenos Aires: Niño y Dávila.

Saa, J.E. y Martínez, A. (2008). Comparación de experiencias en metodologías participativas en el aprendizaje de Estadística. *Comunicación presentada en Jornadas de Intercambio de Experiencias en Innovación Educativa en la UPM*. Madrid.

Sánchez-Teruel, D. (2009a). *Actualización en inteligencia emocional*. Madrid. Editorial CEP

Sánchez-Teruel, D. (2009b). *Desarrollo de estrategias de búsqueda de empleo para técnicos (colección formación para el empleo)*.Madrid. Editorial CEP

Sánchez-Teruel, D., Peñaherrera, M. y Cobos, E.F. (2010). Propuesta de metodologías formativas adecuadas para acciones de formación profesional en trabajadores de baja cualificación. En M. Martín-Puig (2010) (coord).

Situación actual y perspectivas de futuro del aprendizaje permanente (pp. 145-153). Castellón. Servicio de publicaciones de la Universitat Jaume I.

Zabalza, M.A. (2007). *Competencias docentes del profesorado universitario: calidad y desarrollo profesional*. Madrid. Narcea.

Zorzano, L. (2009). *Enseñar a pensar en el aula universitaria. Aplicación práctica en instrumentación electrónica.* Universidad de la Rioja. Servicio de Publicaciones