

## **Moodle and cooperative work: an application to the establishment of a interdisciplinary net in pedagogic innovation**

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## Abstract

In our contribution we show a net of work which promote some instruments of the tool of software Moodle in the cooperative learning. Its application becomes definite in the formation of students of interdisciplinary postgraduate courses in an international area. As an example, we show the planning of an activity that develops it in a module of a postdegree of these characteristics. These events improve the interchange of ideas in this matter among different universities.

## Keywords

International an cross-cultural network. New pedagogical applications in distance learning. Methodological innovation. Collaborative/cooperative work. ITCs. Moodle.

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PAPERS IN MEETINGS AND CONFERENCES

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"International XXIX Technology Education and Development Conference". Valencia (Spain) 2007

Meetings of exchange of:

"Nets and educational teams. UCLM experiences of educational innovation". (I, III) Albacete 2005, Ciudad Real 2007 (Spain). 2006

"The methodological innovation before the EEES". University of Almeria (Spain) 2007

## **1.-Introduction**

Across the nets, a group of professors can share a great quantity of information about new educational resources and so they can incorporate to the learning the ideas of other colleagues to the learning. Regarding to this, different perspectives can be obtained to approach the same question. The collaborative work allows the professors to obtain common results and improve the own professional development.

The cooperative learning is a good educational instrument which is based on a set of strategies of education learning centred on the students who develop their capacities by collaborating with other individuals in tasks constructed and designed with specific purposes. It comes from a wide humanist movement which arises in The United States in the 90s and that has been taking considerable dimensions. This is now managing to stimulate the pedagogic european reflection. Now it seems to be important to return to it, in a moment in which individualism and competition have been seen as natural strategies in our educational practice.

Both the cooperative learning and the cooperative/collaborative work of our net extends to a great extent its possibilities by means of the use of ITCS, which overcome space and time limitations. One of the props of the platform Moodle is the cooperative/collaborative learning, which make it necessary the exploration and creativity to develop the numerous possibilities that it offers.

One of the most interesting applications of it will be the formation of the students of a multidisciplinary postdegree in the international area, semipresencial or only virtually.

## **2.- Aims**

-Constitute an international net, as diversified as possible, for the interchange of new pedagogic experiences with virtual platform.

-Explore Moodle's tools to apply to the cooperative learning: Wikis, Forums, Blogs

-Elaborate some learning material.

-Establish guidelines for the organization of the learning in international posgraduates: application of the cooperative work on line (Moodle) to the module "Aging: public health analysis Spain-Peru"

### **3.-Pedagogical Methodology (framework)**

Moodle is a course management system (CMS) which distribution is free that helps the professors to create communities of learning in line.

The design that we present is an interdisciplinary course among the Nursing School, The High School of Computer Science and the Faculty Economics and Management, all of them belonging to the University of Castilla-La Mancha (UCLM) (Spain) and the Nursing School of the National University of San Antonio in Cuzco (UNSAAC) (Peru).

To develop the course it is created a virtual-course in the virtual platform Moodle. The coordination will be done from the Nursing School of the University of Castilla-La Mancha.

The scheme of the module "Aging: social-health analysis Spain-Peru" that we develop is:

Step 1: Formation of groups of cooperative work and assignment of roles

*Group 1:* 3 Spanish students

Student 1- Coordinator

Student 2- Secretary

Student 3 -Manager of time

*Group 2:* 3 Peruvian students

Student 1 -Coordinator

Student 2- Secretary

Student 3 -Manager of time

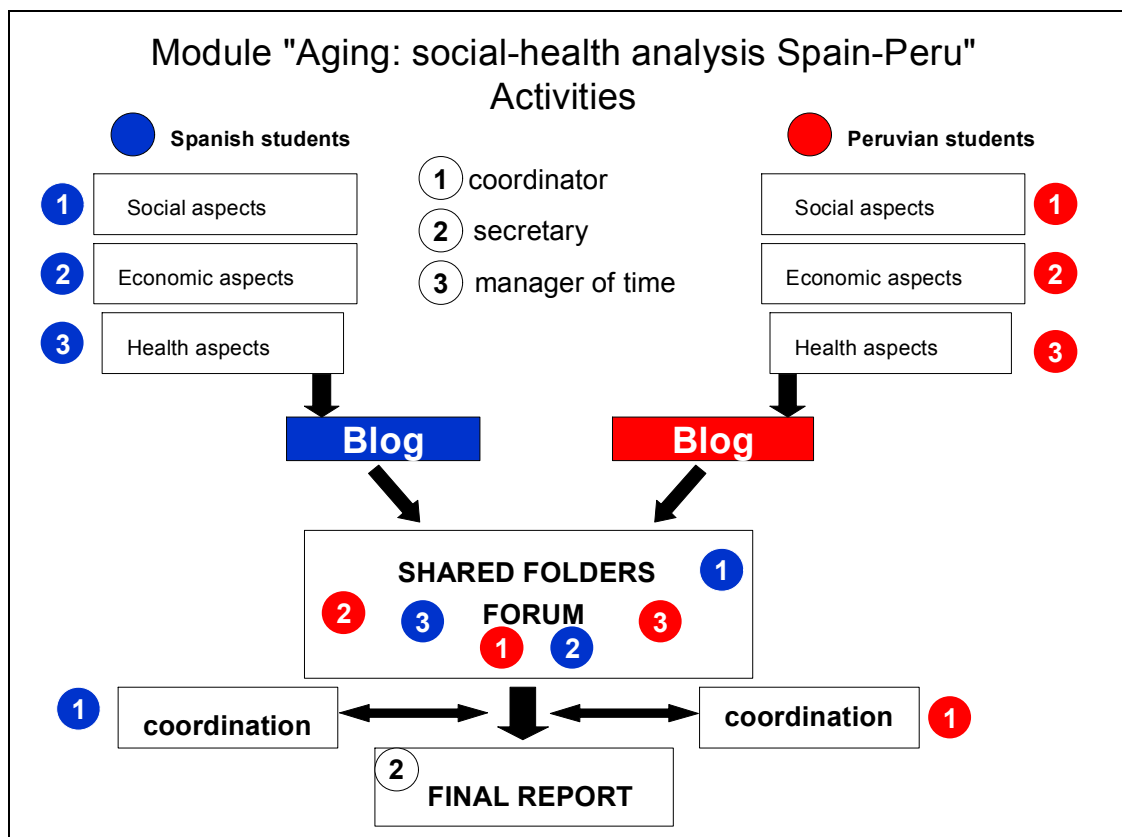
Step 2: Distribution of tasks in each group: social, economic and sanitary aspects

Step 3: Development of Moodle tools for the cooperative work: Blog España, Blog Perú, shared folders

Step 4: Presentation of the work of Spain and of the work of Peru

Step 5: Accomplishment of a forum: idea-sharing sessions

Step 6: Final report



Organization of the module in Moodle:

**3.1.-Access to The Virtual Campus of the UCLM.** *The Virtual Campus* allows the creation of courses across the platform Moodle (Modular Object Oriented Distance Learning Enviroment). To accede to the virtual campus ([http://www.uclm.es/campus\\_virtual/Moodle](http://www.uclm.es/campus_virtual/Moodle)) is precise to identify.



**3.2.-Interfaz of the course.** Creation of the interface of the course (module: Aging: public health analysis Spain-Peru). The coordinating teacher of the Nursing School of the UCLM accedes directly to the course across that the virtual platform of the University allows her.

The rest of teachers of the UCLM accede to from the Administración/profesores/being given of discharge. The teachers of the UNSAAC accede to across Administración/configuration/acceso a invitados/. The students registered in the course appear directly as users of the course.

Later both groups of pupils are formed from Administración/Grupos/, one for pupils of Spain and other one for those of Peru.

The calendar appears in the straight side of Moodle's screen and indicates the dates where both groups must realize the work. The selected period of time is two months.

Later there appears the screen of the such course and the students see.





### **3.3.-Description of the interfaz of the course**

The course consists of:

- General Information of the module " Aging: analysis sociosanitario Spain - Peru". In this space the following pedagogic resources are created: - forum of news - aims of the module.
- Two web pages, one dedicated to a course of cooperative learning represented by computer and other one a Moodle's basic course that it the own UCLM provides.

**3.4.-Program of the module.** There are contributed the topics corresponding to both units in which the module is constructed, as well as an access to Google, to facilitate the access to information.

### **3.5.-Continuous assessment.**

- Glossary. The pupil has the possibility of inserting the concepts that he is using, remaining dependent on the approval of the teacher. This didactic resource arises from the need to coordinate the words in both countries, since though the language is the same, the specific terminology in every country is in the habit of changing.
- Individualized work on line to verify the path of the learning of the estudents
- Work to send: it is a question of the production that both groups of students of both universities must elaborate about the social, economic and sanitary aspects in his country. These works are interchanged between both countries across a file Word. Before, in a Blog, there has been a work among the members of each group.
- Resolution of exercises

### **3.6.-Final Assessment.**

- Lesson, like auto-assessment of them
- Final examination

#### **4.-Assessment of the experience.**

This virtual course will be developed as an pilot experience and so must be carry out a survey to the students and to the teachers participants. The dimensions gathered in the survey will be:

1. Relevancy of the experience for the studies (to consider, among others, coherence of the educational approach, fit to the studies of postdegree and circumstances of the context)
2. Clear definition of aims (they must be centred on learning of the students, though they can include educational aims)
3. Solid foundation of the experience (based on previous observed difficulties, previous similar experiences of other courses, theoretical relevant basis ...)
4. Coordination of the module and attention to the work in educational team
5. Attention to difficulties of the students (forecast of channels of communication, review of educational performances on this basis, estimation of times of work)
6. Adequacy of the project to the aims and procedures (resource to innovative and viable methods)
7. Coordination with the strategic plan of the institution
8. The utilization and possible redistribution of resources (human beings, materials) is creative and allows to see hopefully its future viability
9. Identification and clear description of the methods and used procedures
10. Analysis, presentation and interpretation of results
11. Clear description of opposing difficulties and forecast of procedures to overcome them
12. Extension forecast in the future to other teachers and students of the University

The students and professors will score: 1-Bad, 2-Regular, 3-Good, 4-Very good, and after, the conclusions will be elaborated. The ideas for improvement will be obtained from de results.

## **5.- Interest and Viability.**

- The course is elaborated and dealed by people who are to thousands of kilometres, in cause even of simultaneous form.
- The experience adjusts enough to the international studies of postdegree, though it is possible to improve the educational approach in the design of resources.
- It turns out to be adapted enough to the approaches of the European Space of High Education
- The cost-free status of the platform and therefore, it do not have needs of economic resources, does that the project is totally viable.

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**Manual year Moodle**