

# Experiencia Aprendizaje colaborativo con intercambios on-line: relato de una experiencia

*Collaborative learning with exchanges online: account of an experience*

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## Resumen

El propósito de este artículo es fortalecer la colaboración entre dos instituciones que buscan integrar *e-learning* en sus prácticas más cotidianas y en contextos donde antes no habían tenido experiencia previa. El objetivo principal es acercar a los estudiantes universitarios, en este caso a los usuarios del Banco del Tiempo (BdT) del Ayuntamiento de Terrassa, Barcelona, a las prácticas reales para que obtengan un aprendizaje más significativo,. La experiencia relata el proceso de coordinación, diseño, gestión y valoración desde el punto de vista del aprendizaje en la formación inicial de los estudiantes de grado.

**Palabras Clave:** Aprendizaje, on-line, experiencia.

## Abstract

The purpose of this article is to strengthen the collaboration between the two institutions seeking to integrate e-learning into their everyday practices and contexts where before had not had previous experience. The main objective is to bring college students, in this case to the users of the time Bank (BdT) of the city of Terrassa, Barcelona, to the actual practices so they can obtain more meaningful learning. Experience recounts the process of coordination, design, management and evaluation from the point of view of the initial training of grade students learning.

**Key Words:** learning, online, experience.

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## Introduction

Before going into detail about the experience, it is important to dwell on the theoretical pillars that support the practice. In our case, we start from the constructivism, which recognizes that knowledge is not given or can be transmitted, but yes it can be reconstructed by the student. This current of thought confronts the interaction in the heart of the learning process, between prior to study knowledge and which offers the new context, being able to modify the first according to the second. There are two kinds of Constructivism: the

cognitive, which focuses essentially on the fact of solving problems, and the social (Driscoll, 1999; Jonassen, 1994; Perkins, 1992), which emphasizes more the collaborative interaction between the students and the processes of construction of knowledge through the generation of strategies within authentic or real environments and, therefore, significative. Thus, we can conclude that one of the priority objectives is to bring students to authentic practice, giving you the opportunity to learn the skills required to be most useful to the community. Students can acquire cognitive skills for problem solving, but always with the intention of applying them in real contexts. One of the most paradigmatic examples is to see how we learn our native tongue (Pear y CroneTodd, 2002). This experience is based on social constructivism, strengthened by the practice real and genuine.

In this regard it is important to show the difference between the two types of learning mentioned above: collaborative learning and cooperative learning. According Bruffee (1995), cooperative learning focuses on the development of fundamental knowledge, while focusing on collaborative knowledge as a social artifact. The epistemological orientation of cooperative learning is the structural instruction, whereas in the collaborative is the social construction. The building knowledge collaboratively Origin of work performed (Scardamalia and Bereiter, 2006) with Knowledge Forum tool widely used in various educational contexts. In fact, both are based on the idea that the asynchronous work provides opportunities for collaborative learning, so that educational transactions can be

characterized as dialogic in nature (Weinberger and Fischer, 2006).

Thus, the following proposal is the creation of collaborative social knowledge by applying online tools by two institutions: the University and the users of the Time Bank of Terrassa. At university level it worked influencing the initial training of a group of students, this being a key time to acquire the necessary experience and combine practice with theory is taught daily in the classroom. Undoubtedly, this space is used to bring students to the reality of work which in some cases seems to be quite far from the work done within the classroom- with tools that allow them to function successfully after graduation. One of these spaces is the practicum, where they enjoy the opportunity to collaborate with professionals from various educational institutions for periods, despite its brevity, provide them with the necessary safeguards for subsequent foray into the labor market. It also seeks to improve the various courses for those who choose throughout their education, strengthening.

During the initial professional training in pedagogy, there are several courses where technology is a key component in its approach. In this context the subject of Distance Education arises, which consists of theoretical and practical credits, the latter being where students experiment with theory when designing distance learning modules. In other cases, students have the opportunity to practice the module content in different institutions, which also allows them to analyze their results in actual practice.

However, to describe the experience is worth pausing to consider two different approaches: learning and service. From the point of view of learning, we justify this project and its context by stating that teaching pedagogy offers a good opportunity for future professionals in education started in real projects that later may become lead future professional collaborations with other actors of our immediate surroundings. This is of vital importance and significance when it comes to the initial training given to college students, as some of their concerns focus on the fact that without access to actual practices that provide a more pragmatic view of the theory learned in class. This project seeks to fill this educational requirement in a group of students as part of their on-line theoretical and practical training. Note that this situation is very different for the teaching of science subjects such as chemistry, physics, etc. On the other hand, from the standpoint of service, we can say that the city of Terrassa, within the Program Plan Barrio District II, has had some positive experiences with the work of time banks, because from January 2006 began offering users the opportunity to learn a wide range of classroom activities. This year he sought to complement this offer with others that could be managed remotely. The characteristics of a time bank corresponded perfectly with some of the issues that college students should address, which initiated the collaboration between both entities seeking to provide its users with the online version of a bank time, which until then had not been made in the immediate environment.

In fact, both parties learning and service were reciprocated, which motivated them to participate more. However, our primary goal was to establish mutual cooperation, which began to sketch the description and the phases of the proposal.

Before you begin to explain the objectives and phases, it is important to pause and reflect what banks represent time. From its origins in the seventies, in Canada, and to the current date, has been proposed bartering duty without money. The currency is the service offered. For example, a person can offer knowledge or skill to some activity during a given time teaching a computer application in exchange for learning how to dance salsa. Different institutions represent banks of time, depending on their different aspects, which makes those are of infinite variety. In Italy, for example, there are time banks specialized in various topics, as they can be educational, etc. Users of time banks do not have a specific profile; by contrast, the disparity of ages is one of the properties and the motivation to learn certain skills and providing certain knowledge that the vast majority are quite pragmatic and do not fit with other forms of formal learning.

## **PROJECT OBJECTIVES**

The orientation of learning focuses directly on college students. Its objectives are:

- To train students for the course of distance education, giving them tools to work a module time bank online.
- Design a module with five activities where knowledge is constructed collaboratively between different users.
- Evaluate the design with users of the time bank.

Similarly, the objectives that have to do with the service and, more specifically, with users of the Time Bank, are:

- Actively participate in learning and discussing important issues for modern society.
- Meet online tools, in this case a forum to inter-change information.

As can be seen, the distribution of tasks between the two institutions was clearly defined from the outset. However, since its inception also attended the need to harness the strengths of each institution for the benefit of the other participants. That way, users started from a reality that was totally unrelated study-ing the university, which was to understand the functioning of time banks and the different activities that could offer. However, college students had the opportunity to prepare a distance module activities and forums that would ensure collective participation. His experience was restricted to a few basic tools, but still knew how to pose and design a module where it is actively

involved, being a challenge when you take into account that no participant was known previously and had to analyze team five different topics .

## **PHASES OF THE PROPOSAL**

In 2007 came the desire by both institutions to work collaboratively with the aim of providing an innovative alternative to the eighteen participants, which apply to all. Later this year, after several coordination meetings held between the two institutions began to take shape and milestones proposals. With enthusiasm alternatives that make more functional time bank online users searched. In these first meetings began to suggest the appropriate content for online banks time and that both are of interest to college students. From the interest of both emerged the following five thematic blocks, which eventually formed the module:

- family roots
- cuisines
- languages I know
- Cultural Expressions
- healthy living

In the first meetings of coordination between the participating institutions had to substantiate various required elements, according to the following chronological



order:

***Phase 1: Training and learning for students and users of the time bank. Coordination.***

Neither students nor the users had previous experience in participating and / or knowledge management on-line, nor in the creation of modules, which made it essential that the teacher of the course gave briefings on-line tools to encourage collaborative learning. It also sought to leverage for further collaboration were the free tools at your fingertips. Of all the tools proposed the Flickr application was chosen because it builds-ba presenting visual material and a forum with the active participation of all participants, their access can be locked for exclusive use. Regarding bank users time, the coordinator also conducted briefings were of great help to answer questions about the connection and the direction in which the contributions were channeled. It is important to emphasize that although the application was easy to use for all participants, it was first necessary to work with any doubts and problem solving. Understandably, this phase had a rough time because the participants were students and / or users, depending on the time you devote.

***Phase 2: Building Materials***

To manage the creation of materials module was thought to appoint a

coordinator for each of the five topics presented. Coordinator functions were not only make dynamic discussion and ensure the participation of all members, but also ensure the creation of support materials. Each of the students chose the topic that most attracted him to work it in depth. After following several meetings of the Co-ordination, was found to be necessary to raise discussions with intercultural materials, so that anyone could identify with them or at least not feel alien. One of the details involved in a bank of time is not know for sure who contribute an item until it starts. It is important to note that the materials created were unpublished and that of the time of his visual development experience, etc. was dedicated, as can be seen in the following illustration:



Coordinators assigned work week held meetings to explain the progress of each issue, ensuring that the pace of development between different subjects as identical as possible; for example, all threads started displaying a series of photographs. Although users time not directly involved in the creation of materials, it is also true that during the discussions references to thicken each

thematic proposal provided.

### Phase 3: Participation in the Forum

The actual participation was held for three months. For this first user accounts were created for all participants, who were then able to access the Flickr tool. Once there, they found five themes module presented above with simultaneous treatment, which did not create any problem and helped to flow more global participation. The original idea was to address the module as a systemic whole no matter where more thematic than another. As regards the specific content of the first interventions, focused more on answering questions that establish relationships between the different themes. Some of them seemed to offer a presentation of the theme and how it would work without seeking the construction of knowledge. This is understandable given the lack of experience of the participants and because in any experience of this type is given a few weeks to get used to the operation and management of the different elements of the online platforms. Later, once established some links among participants, the content was enriched by diverse contributions -Reviews, visual materials and collective participation. As shown in the following excerpt, each intervention sought to end with a question for the next contestant may continue or attempt to answer.

**Tema 2: CUINES DEL MÓN**  
Último: hace 4 meses

**Funcionament del Fórum**  
Último: hace 4 meses

**Tema 0: PRESENTACIONES**  
Último: hace 4 meses

**Más...**

O, [Publicar un tema nuevo](#).

però trobarem a cada moment, entre els nostres, no grans, sinó petits, que en tenen el món!

Quines receptes o plats peculiars hem tastat? Ens han agradat? Tenim alguna preferència especial per la cuina d'algun país?  
Publicado hace 6 meses. ( [enlace permanente](#) | [editar](#) | [eliminar](#) )

**cristina\_1 dice:**  
Yo creo que con el tiempo todas estas culturas se fundirán y se harán más unificadas.. Yo soy Baldomero Segura.. Es que hemos entrado con la contraseña de Cristina.  
Publicado hace 5 meses. ( [enlace permanente](#) | [editar](#) | [eliminar](#) )

**cristina\_1 dice:**  
Hola, em dic Àngelsestic totalment d'acord amb la Sara. A més, si partim d'allò tan cert com és, som el que mengem, llavors podríem preguntar-nos: i nosaltres, qui som?  
Publicado hace 5 meses. ( [enlace permanente](#) | [editar](#) | [eliminar](#) )

**cristina\_1 dice:**  
Sóc la Carme bt

El color ens transmet una explosió de sensacions que ens adreça al món de cada indret.  
Color, textura, gust, olor,... la cuina i els seus condiments ens fan entrar en cada cultura.  
M'agrada conèixer el món a partir dels 5 sentits.  
El meu paladar és curtós, cada dia vol descobrir nous indrets.

En el meu món hi han passat al llarg de la història els calçots (aliment tastat al voltant de la meua numerosa família), les costelles de xai a la brasa, les truites de gambes especialitat de la meua mare, les mongetes amb botifarra, el vi negre amb molt cos, la sangria !!!! ummmmmmm.

Som a mig matí i el meu paladar està demanant gaudir d'un bon aliment.  
Publicado hace 5 meses. ( [enlace permanente](#) | [editar](#) | [eliminar](#) )

One of the first items that were detected in forum participation was that students had begun using a fairly academic language to kick the questions and start discussions, as assumed from the beginning that users share with them some prior knowledge. This required a restatement of the first interventions, whichever initiate with visual elements (albums) in which, without saying too many words, users could begin to see the contrasts between the different elements presented. It started from the idea that it was first necessary to ensure the participation of users in order to fit your specific demand to answer questions, etc. This not only made to increase contributions, but also helped reframe issues even before the formal thematic discussion.

At the second meeting of coordinators need to extend the module with a

previous opening theme, ie, one in which all participants to appear before the rest of the group was detected. This space could expose their interests, which would explain why their participation could lead towards certain topics than others. At the same time, it was a great place to learn more about space. Each participant could customize your account with your photograph, which made it easier for visually knew from the beginning. After proposing this new space, at the third meeting other demands made explicit. In many cases, participants were technical and / or management tool problems, lengthening their shares. As this delay affect everyone, a topic called "technical issues" where the most frequent questions were selected were available. Finally, the last initial meeting proposed a final issue that focused on the particular characteristics of Flickr, for the structure of FAQ (Frequent Asked Questions).

#### ***4th. Phase: Follow***

Equally or more important than participation itself, was the continuous monitoring of the experience of all participants. In fact, the possibility of raising doubts over the coordination segment was taken into account for the final evaluation because it made them feel "safe" at all times, reporting every week what had worked, what worked and what do not. Maintaining a weekly rhythm helped not accumulate any problem that could be solved efficiently from the beginning, which resulted in a success during this experience. Each of these reports spoke in detail of the work performed during the week and the problems that had been presented with proposals for settlement be developed for this

table-synthesis problems and solutions.

Among the most important difficulties encountered are the following:

a) Lack Tool forum (Flickr). As pro-setting solution were meetings with the administering, coordinating meetings and reflection by the group.

b) The difficulty of the participants to share each other certain matter-les. It was proposed to change the options for managing the material and status in the forum.

c) The technical problems. It was solved with the creation of a monograph thematic block.

d) Lack of knowledge among participants. Designing a thematic block presentation was raised.

Initially, these reports were quite descriptive on progress, technical problems posed use of the tool, etc., but as the weeks passed were asked students to not only phonecalls problems but also their potential solutions, a way to make them increasingly independent and analytical time. This was done gradually, going from the most complex to the simplest. On the other hand, each time was analyzed weekly report made both at each topic and globally, seeking the collaboration to solve problems peers, ie, from our own management also chose

a collaborative approach, largely helped give them more options SOMO act effectively with a general overview.

## **ASSESSMENT**

The building knowledge collaboratively is not a quick or easy task. It requires dedication and, most importantly, believe in it. We can have it as a theoretical reference but when concretize a more pragmatic level required of an effort to avoid falling into neglect. That is why it is sometimes necessary to overcome stages of uncertainty without falling into simplicity. The stages of uncertainty can not be foreseen nor can we prepare ourselves to face them with "standard" solutions; on the contrary, we must reflect deeply and analyze the possible contexts in which we like. This applies, for example, students ask us the solution to your problems without first attempting to search for themselves. However, for them it will be a very significant learning if they start in the future to create their own designs as education professionals.

All participants have described the experience of satisfactory taking into account the initial conditions and subsequent development. The areas of coordination of the two participating institutions share both general and specific elements. Then some of them are mentioned to provide its overview, starting with those identified by users of the time bank. First, note the importance of initial training as a group on the premises of City Hall, where they provided data to have free access to Flickr from any Internet access point, highlighting the

ease of use of this tool, its free and secure character. Above all, we managed not require a personal or installing certain programs that limited their potential in future computer connection and participation. As college students, it is good to note that a general began to be aware of how to raise and try to solve the im-provided alone (which was made possible through weekly meetings with the teacher / administrator). Their decisions were significant factors in users, so they should start thinking for the whole group. At first, they walked alone with timid steps, but later were able to walk on their own. Moreover, beyond the occasional glitch, faced with the difficulty of knowing how to manage a forum, ie knowing implying that participants work collaboratively, the way the questions are posed, how increase participation without it being a mere act of questioning, etc., all of which demand have more time.

As for the rating of all participants performed together, the topics chosen were a structural intent. For example, the simultaneous provision of different themes proved a success in that pose a systemic forum where everyone could contribute equally anytime. Also, the need to increase the time spent participation to transcend the initial stages of problem solving and provide more concrete contributions was detected; even raised as a continuation with the same participants to take advantage of this first period. Finally, new themes that arose from the dynamics of the forum, ie the consensus of all participants were incorporated, which drives us to continue with similar experiences of collaborative work within the framework online.



## Bibliography

BRUFEE, K. (1995). "Sharing our toys: cooperative learning versus collaborative learning", en *Change*, 1 (1) págs. 12-18.

DRISCOLL, M. (1999). *Psychology of learning for instruction* (2nd ed.). Toronto: Allyn and Bacon.

JONASSEN, D. H. (1994). Thinking technology: toward a constructivist design model. *Educational Technology*. 34(4), págs 34–37.

PERKINS, D. (1992). "What constructivism demands of the learner" In T. Duffy & D. Jonassen (Eds.), *Constructivism and the technology of instruction* (págs 161–165). Hillsdale, NJ: Lawrence Erlbaum Assoc.

PEAR, J., CRONE-TODD, D., (2002). "A social constructivist approach to computer-mediated instruction" in *Computers and Education*, 38, págs. 221-231.

SCARDAMALIA, M., & BEREITER, C. (2006). "Knowledge building: Theory, pedagogy, and Technology" in K. Sawyer (Ed.), *Cambridge Handbook of the Learning Sciences* (págs. 97-118). New York: Cambridge University Press.

WEINBERGER, A., FISCHER, F., (2006). “A framework to analyze argumentative knowledge construction in computer-supported collaborative learning” in *Computers & Education* 46 (2006), págs. 71–95.