Abstract
The aim of the present submission is to show the results of the study carried out with 199 students of journalism degree from the University of Valladolid. This experience evaluates to what extent blogs promote individual and group competences and skills, with the goal to determine the advantages and disadvantages of collaborative learning in the virtual environment of the blogosphere. New hybrid weblogs, audioblogs and tvblogs, have been used for practical on the subjects of News on Radio and News on Television for two consecutive courses. The experience has shown great usefulness not only in building the horizontal knowledge about the journalistic work from the classroom, the labs, and in their individual work outside the university environment, but it has also contributed positively to their community integration, enhancing negotiated decision-making and respect for the work of the others. These multimedia logs have enabled students to participate in the creation of content, in the production process, corporate design, bringing out and social media distribution, while learning to organize every element in harmonious and consistent way in order to create an independent audiovisual product related to other webs that can be used as documentary, specialized or critical complement. This collaborative experience has joined creativity, initiative, self-assessment and knowledge of online news production.

Resumen
El propósito de la aportación es mostrar la experiencia llevada a cabo con 199 alumnos del Grado de Periodismo de la Universidad de Valladolid para analizar hasta qué punto los blogs potencian habilidades y competencias individuales y grupales, con el objetivo de determinar las ventajas y los retos del aprendizaje colaborativo en el entorno virtual de la blogosfera. Para ello se han utilizado nuevos formatos híbridos, «audioblogs» y «tvblogs», con los que se han construido las prácticas para las asignaturas de Radio y Televisión Informativa durante dos cursos consecutivos. La experiencia ha demostrado una notable eficacia no sólo en la construcción horizontal de su conocimiento sobre la profesión periodística desde el aula, los laboratorios y su trabajo individual fuera del entorno universitario, sino que ha contribuido positivamente a su integración comunitaria, potenciando la toma de decisiones negociadas y el respeto al trabajo de los demás. Estas formas multimedia han permitido a los alumnos participar en la creación de los contenidos, en el proceso de producción, diseño corporativo, edición y distribución social, mientras aprendían a organizar cada elemento de forma armónica, coherente, para construir un producto audiovisual indepen-
1. Introduction and state of the question
The Internet has provided 21st century citizens with new communication tools to allow them to construct information and take part in the very process of message delivery. In the media ecology, following the emergence of the Web at the start of the 90s, blogs are now considered to be the most significant landmark in Internet history (Islas-Carmona, 2008). These binnacles of the Net enable the personal expression of individual experiences without the need for computer skills, journalistic editing or content production which, as a result, enhances the socializing power of the World Wide Web among citizens around the world.

The blog perhaps represents the first breakdown of the public-private citizen space in the face of the communicative fact, with this opening-up of the virtual space in which participation with other individuals is continuous. Through the publication of one’s own or others’ content, and the power to share this content rapidly via the social networks, the use of blogs has spread in recent years to reach across all social environments.

One of the settings where blogs have demonstrated great potential has been in education. As Lara (2005) points out, «weblogs, as well as education, are by their very nature, processes of communication, socialization and knowledge construction». Here knowledge is constructed from the bottom up because the student participates in the project which is global, open and collaborative. Although the mere use of blogs does not guarantee efficacy in education, their transparency can make a significant contribution. «The digital literacy that the new generations need demands that they learn to read and write via links, so weblogs are a more transparent tool to achieve this» (Orihuela, 2006: 172-173).

In collaborative pedagogy, the student is the center, just like the Web 2.0 user. If the user is the king in this setting, the student should be likewise in Education 2.0. The teacher as learning facilitator organizes the activities and supervises the project that the students carry out in an independent and more flexible way. So this is a constructivist model of knowledge in which the student constructs his own knowledge.

The student’s sense of autonomy and the confidence placed in him as the actor in his own learning process that is interdependent with the group means that collaborative learning projects can also help to enhance motivation and self-esteem.
As Vélez (1998) states, «trust is placed in the educating and in his capacity to explore his world, which in turn motivates and awakens the desire to develop competences and skills in the search to bring out the best in himself».

Among the technologies and tools that can be applied to the practice of so-called «Computer Supported Collaborative Learning» (CSCL) wikis and blogs are the most widely used, especially on university courses in education (Santos & al., 2009; Rubia, 2010). And podcasts are a recent addition. For Gómez, Palomares & Pino (2010) «the collaborative tools in the current development of Web 2.0, such as wikis and blogs or virtual environments for learning/work (Moodle, Google Docs) are a tremendous aid for collaborative work in teams, groups and for people who come together to share, work and learn in a common virtual space to achieve their goals».

The positive results of CSCL have come about through fruitful group interaction (Solano & Amat, 2008), based on techniques that provoke disagreements, such as providing conflicting information and role distribution, as Dillenbourg (2012) points out.

One of the weaknesses of collaborative learning is that «most studies on the subject center on the tools rather than the educational or social processes that occur as a consequence of their use» (Pérez-Mateo & Guitert, 2009: 221). The recent creation of the Thematic Network on Collaborative Learning in Virtual Environments is aimed at precisely that, to focus on «the learning processes beyond the context in which they are developed or the technological tools used» (Guitert & Pérez-Mateo, 2013:14). The «Guide to Collaborative Learning in Virtual Environments» provides examples of good practice through guidelines for the design of this type of projects.

1.1. Background to the question: collaborative practices in current education

The fundamental characteristics of blogs make them an attractive tool for educating citizens in the process of digital literacy in the society of knowledge. In the educational environment, blogs represent a support to «E-learning», they create virtual external settings, establish an informal communication channel and direct interaction between student and teacher; they promote social interaction and give the student a personal medium for experimentation. But they also provide a personal space which is open to the public that gives the student a sense of responsibility when posting online, helps him to focus on improving output and stimulates him to read other blogs and participate in other content through his responses to comments or weblog «trackbacks», and he is obliged to broaden the personal information he presents to keep his page updated. The student in the weblog constructs his new knowledge knowing that he is being observed and corrected by colleagues, teachers and others who are online but outside the educational environment.

In Spain, the GSIC-EMIC group (Cooperative Intelligent Systems Group; Education, Media, Computing and Culture) and the TACEV group (Working and Learning in Cooperation in Virtual Environments) of the UOC are both well-known for their research and pedagogical proposals, with technology at the heart of collabo-
The most important precedent in terms of the impulse towards best collaborative practices is a tool created in 2006 called «Bersatide: Best Practices Collaborative Design Editor». Jorrín, Rubia & García Pérez (2006) presented it as «a web tool to help design collaborative learning scenarios based on CSCL principles».

Apart from Education courses, the first «weblogs» experiences in Journalism and Communication were those promoted by Orihuela & Santos (2004), in Audiovisual Design at the University of Navarra, and by Lara (2005, with Journalism students at the Carlos III University of Madrid in 2004/05.

In Málaga, Blanco (2005) set up a learning project with blogs as tools. Blanco (2005: 159) emphasized «the increase in interrelationships among students who did not relate before, as a result of the exchange of comments on articles published by their colleagues, both on their pages and in the classroom, which made the debate much more enriching». Also in Málaga, Gómez, Palomares & Pino (2010) engaged students of Publicity and Public Relations in an experience in publicity material using collaborative 2.0 tools. At the American University of Acapulco (Mexico) Noguera (2007) got students to produce a thematic blog on the coverage of an aspect of local news.

1.2. The hybridization of weblogs: new opportunities

The hypertext format of blogs has evolved into new multimedia formats that integrate audiovisual content that can be posted via the net to mobile supports such as tablets and smart phones. The various forms of content publication on the web each have their own name: audioblogs, radioblog, vblogs (videoblogs), tvblogs, moblogs, edublogs, etc.

Blogs have become more complex with the introduction of multimedia messaging; they allow users to share the link on social networks. Syndication makes content distribution to the weblog public even easier. It incorporates metadata that enable the user –man or machine– to interact with the web objects via collaborative tagging or the tag cloud (Foulonneau & Francis, 2008).

An audioblog can be a blog consisting mainly of clips either recorded by the creator, shared by syndication or an aggregator, using podcast technology. These contributions include listeners’ text and comments as well as those from the blogger, which all serve to complement the audio broadcast. Prior to this format, and the emergence of personal websites, we had bitcasters, Mp3 and various other audio distribution formats such as streaming and «peer-to-peer» networks: Napster, Audiogalaxy, Soulseek, Emule, etc. WebTV blogs, videoblogs and tvblogs are blog formats based on presenting information as image, specifically video clips tvblogs which, according to placement and organization on the page, take the form of a blog of videos similar to a video channel like YouTube of Vimeo, or which are similar to a television program selection.

Students studying Publicity and Public Relations at the University of Alicante carried out a podcasting experiment on the Print Media and Communication course in which they produced podcasts for the «Comunic@ndo» university cybermedia. Iglesias and González-Díaz (2013) compiled other podcasting initiatives at universities abroad –the IMPALA project at the universities of Leicester and Kingston–
and in Spain –the University of Salamanca, applied by Notario to Philosophy studies. Professor Fernando Rosell-Aguilar (2013) of The Open University has worked with podcasts as a tool for learning foreign languages, as have Ramos and Caucel (2011) at the University of Granada, whose goal was to help students improve their level of spoken foreign languages at the Faculty of Educational Sciences. Yet experiments with tvblogs or videoblogs are far fewer at university. In fact, we have not found a single collective project that uses a hybrid tvblog format in higher education.

Mobile phones and tablets were reported to be the most significant technology to be used for learning this year, according to the «NMC Horizon Report 2012», with gaming to come to the fore in learning in the next two to three years. The report indicates one particular challenge that affects teachers: «the changes in university teaching mean that the majority of universities now regard teacher competence as a strategic element in the quality of education» (Durall & al., 2012: 2).

2. Material and methods

Information and Communication Technologies (ICT) are inseparable from the new reality, and institutional support for these tools in the classroom is now seen as essential for the new generations to become digitally literate. And it is even more vital in the case of communication courses to give students the appropriate knowledge to enable them to understand the digital revolution that has taken place in the media environment and also to comprehend the impact this is having on culture and a society in transformation.

This study presents an innovative teaching experience involving 199 students studying a Journalism degree course at the University of Valladolid in order to analyse how far blogs («audioblogs» and «tvblogs») can boost individual and group skills and competences in a relevant collaborative environment within the European Higher Education Area (EHEA), and to discover the advantages and challenges of learning within the virtual environment of the blogosphere.

The main hypothesis is that students, by means of the collaborative construction of an audiovisual project –which employs all kinds of audiovisual, text and metadata elements for possible posting and sharing on the Internet through the social networks– would show a proactive attitude in terms of team work, and rate their own and the work of their colleagues more positively, enhance their ability to express ideas and defend them and increase their sense of responsibility when publishing their own personal creations, by contributing to a coherent form of learning that reflects on the knowledge acquired in the classroom and in their own individual study spaces.

The main aim of the project was to determine to what extent the new digital tools based on the creation of «weblogs» proved useful for team work on the compulsory «Radio reporting and television reporting» compulsory courses (6 ECTS) that were part of the Journalism degree¹ (2009-10 study plan).

The verification statement on the Journalism degree course² states that the aim of the two subjects, «Radio reporting and television reporting», as taught at the University of Valladolid, is to provide students with the following specific skills and competences (in simplified form): to know the fundamentals of social com-
munication and the national and international media system, to be able to create ideas, plan and execute news projects and tasks, to be able to communicate in language suitable for each type of news medium and to be aware of the importance of Journalism as a vital tool for acquiring knowledge and a balanced judgement of the reality of today’s society, as well as behaving with the responsibility that this entails.

All these points are covered in the group practice carried out on the two courses, and the use of the two weblog formats proposed, «audioblogs» and «tvblogs», is aimed at achieving specific fundamental objectives:

- To encourage debate and participation on the net.
- To enhance discourse organization.
- To increase student awareness of and responsibility for what is published in their name.
- To construct a personal identity and be responsible for that identity.
- To encourage personal criteria (choices and comments); to accept criticism and take others’ opinions into account.
- To acquire knowledge and know how to handle new ICT and the Internet
- To become familiar with the production process of journalism (as well as its digital settings).
- To work as part of a team, to collaborate; to organize and distribute tasks among all group members and take responsibility for keeping the group together in order to reach a common goal.
- To carry out individual tasks (which can be done anywhere, and enables the student to continue constructing)
- To help students to manage their time and energy, and learn how to plan work.

These objectives are designed to understand the construction of knowledge as something global, not compartmentalized, so that to think in a critical way, to get information, to edit, compress and upload to a server, to syndicate and share content based on team decisions become a complete, didactic and entertaining form of practical work that draws students closer to the real professional world where journalism is multimedia and increasingly collaborative in its functioning.

The experience consists of constructing a project-idea for a 30-minute news program on radio and / or television, including digital recording and editing, to be broadcast in its entirety on a weblog (audioblog/videoblog or tvblog) as it is assembled over the final 10 weeks of the teaching period. All content was to be produced separately as independent units which, when put together in a specific order, would form a coherent program for broadcast on Internet. Despite its broadcast on the Net, the program was to be recorded on a television set or at a radio station depending on the content. The continuity elements also had to be original.

The collaborative project for the organization of the practice was structured in these phases:

- «Briefing» on the project and explanation of the goals to be achieved (teachers and students).
• «Brainstorming» among students of each group to reach unanimous decisions on the title, form and content of the project.

• Team Meeting 1: tasks shared out and time schedule drawn up for each stage to be completed.

• Team Meeting 2: dates set for production in the radio studio or on the television set, for editing suites, recording, exteriors, etc.

• Creation of a blog on which to post project content and transform it into an audioblog or tvblog, for syndication and social networks.

• Team work and field work supervision: meetings, decision-taking, planning of tasks for the week, recording live, provision for unexpected events, digital editing and staging, and publication on the weblog.

• Completing the project and presentation of program to the general public.

• Discussion on the final report and assessment.

The aim of this structure is based on the need to familiarize students with the professional routines and habits of journalism such that they gradually assimilate the production process of content from as broad a perspective as possible. The students received specific tutorial sessions in which professors provided guidance and advice on production and presentation. This project accounted for 50% of the student’s overall mark in both subjects.

The applied qualitative methodology was based fundamentally on direct observation of how the students handled this experience. So, a timetable was drawn up for each individual student to cover the entire practice period, taking one real time week of practical work in the lab as a single unit of data collection. The students were divided into teams of 10-12 and each assigned a task or professional routine in radio or television, depending on the medium chosen, for which they were responsible until the practice was concluded.

To evaluate whether these objectives had been reached, a screen was designed to contain all the relevant data on each group: members’ names, task for which they were individually responsible in the final project, contact address, interests, photo of the student, project title, general structure, objectives, content synopsis and a rough schedule for each of stage of the works to be carried out.

At the end of the project, the students were to hand in a report explaining their experience based on four central themes which they had to grade from 1 to 5, 1 denoting the lowest level of intensity and 5 the highest, according to the category: technical difficulties in production, advantages and disadvantages of working in a team (problems of coordination and responsibility), the knowledge applied to the job based on theory taught, and an overall assessment of the learning experience.

3. Analysis and results
A total of 31 projects were carried out and assessed to the first four months of 2013. There were 11 groups in 2011-12 and 10 in 2012-13, and each group produced two projects, one every four months for either radio or TV. Each group consisted of between 10 and 13 members. It should also be noted that the bigger groups were assigned the television projects to facilitate task distribution since fewer people are required for content production in radio.
The students did their practical work with free or open access tools: screens for the design and creation of the start-up blog (Blogger and Wordpress were the most widely used), cloud storage for audio and video content –podcasts, videos and images– via Podomatic and Soundcloud hosting sites and personal accounts that each student had to enable them to work from home or anywhere outside the university.

All the students learn in class about the multimedia they need to create a blog and later they elect one of the members to represent the group. They also choose a webmaster to be responsible for updating the blog each week. With this distribution of the learning exercises, from the individual to the collective, the group’s virtual pages were configured by all participants, hence the debate and discussion were permanent and ongoing. This exercise in negotiation among equals with different tastes was extremely important in terms of the structuring and defence of the student’s individual identity; also very positive was the evolution of the students’ attitude within the group, the increased self-confidence in the personal work done, and the greater respect shown towards other colleagues as the project progressed. One piece of data that confirms this is the number of recommendations of the respective blogs by colleagues in the different groups on each course, which was considerable. This usually occurred via the two social networks most widely used by the students, Facebook and Twitter, to recommend an audioblog or tvblog put together by other groups. Three out of five students included a link to other groups’ work in their pages, and two out of five linked them all.

As the virtual environment was being created, the students constructed a physical collaborative environment to simulate a real journalistic work space or a digital editing room. All groups planned listings of radio or television programs, whichever was applicable to them, and these were distributed as they were to appear in the listings in the order in which it was thought they would appeal to the type of viewing or listening public that the programs were aimed at. This listing format was to act as a nexus between all the programs and obliged the students to think about a specific «target», possible competition in the market and the justification for and real interest in their proposal, and the possible success or failure of the project, etc. The programs chosen were (by year and subject): a news service, one or two magazine-type programs, one or two «infoshows», a sports program and a fiction format.

When the practice period finished, the leaders or directors of each group presented the report on the work they had carried out as well as their virtual environment they had created to their colleagues and the teacher, each defending the validity of the project and giving their overall assessment. This presentation was followed by an open debate and questions were taken so that the opinions of the rest of the group could be heard regarding the presentation, the things they could have done better, and the strong and weak points of the project. The overall evaluation of the practice was positive as the following table, which shows the final ratings of the students, demonstrates:
Students' opinions in the reports and final evaluation of the education practice.

The item rated lowest in the practice referred to coordination and technical difficulties. The former relates to the continuous effort students needed to reach agreement on questions such as who would be a member of the group, sharing the tasks, supervision of the work done by their own colleagues, the choice of program content or the need for all members to finish their own particular task on time. Drawing up the initial deadline schedule was not difficult but sticking to it week-by-week was (absence of a group member during the practice, low productivity in certain members or failure to complete the job assigned to them as part of a group task).

The technical problems related to the lack of technical and digital infrastructure at the UVA campus in Valladolid which only has a fledgling radio station and a television set with limited resources. The technicians at the radio station are same students and teachers on the course. This was a constant challenge for students and teacher, which acted as a spur to imagination and the ability to overcome problems, and obliged them to make decisions quickly. Sometimes this brought the group closer together and even made it easier for the teacher to integrate as one of the group.

The academic results showed that 70% of the students got a B grade in both subjects.

The main feature of the collaborative environment created by teacher and students was its open space, in which «feedback» between both was continuous as the teacher was actively present in the virtual setting established for the group members to work as a team; the teacher was also on hand to offer permanent assistance in the tasks being carried out (correction of scripts, texts, videos, audio material, theme presentation, production tips, suggestions on how to improve or change something, etc.) accompanying and interacting with the students, forming part of the group not as a leader but as a «users’ manual». The work of the teacher here was to provide support, constant tutoring (via the day-to-day practice work that took place and on the university’s virtual platform –Moodle) showing students that they can be more independent by active involvement in the con-
struction of their own knowledge, taking their own decisions and negotiating with the other group members who occupy the same shared learning space.

There is not enough space to show all the data or images from the projects, but here are some of the weblogs that demonstrate the work done during the practice phase:
For the students, the experience was positive, as quotes from their «weblogs» testify: «We have learnt a lot», «Now we know how to work in today’s media», «It has been hard work but worth it», «We have been on edge and we have argued a lot but we had a great time», «I will miss this feeling when I am on other courses», «Now I know I am capable of working in the profession I love»…

4. Discussion and conclusions
The project was designed as a collaborative work model: it is a process coordinated by the teacher, a shared and interdependent process for the students with the result that the group constructs knowledge via the creation of an audioblog or tvblog, in effect a common project. The use of these «weblogs» enables students to learn how to develop an idea for an audiovisual program in a virtual environment and comprehend the need to work as a team in order to see a media project through to the end. They also get to practice using the typical media techniques of production, correction, editing and framing of messages and news, and to value the opinion of other group members and the rest of the class. They realize the importance of individual work in the construction of a collaborative project, getting increasingly more involved and taking responsibility for undertaking tasks, and submitting to self-criticism where necessary in the development of a real journalistic project.

The social and educational processes that derive from the project were what really enriched the project. And as Johnson & Johnson (1987) point out, the main features of collaborative learning are the autonomy of the groups to define the role of the teacher as supervisor only, with shared decision-making and student responsibility as an individual and as a group member, since the final result and the grade achieved by the group is based on the sum of all the parts, which entails a sense of co-responsibility. Yet there is no guarantee that collaborative learning alone will be effective just because it is used, as Dillenbourg (2012) says, and our experience confirms this. The positive results achieved were based on a fruitful group interaction that deployed techniques such as role distribution.

The practice also had its limitations and some problems arose which we have already alluded to. Future challenges will be:

- The difficulty in making students aware that what they are going to post on the weblog on the Internet will be seen by everybody, and this means taking on an important ethical and social responsibility; although incorrect or inappropriate content can be changed at any moment, somebody might have already seen it.
- Updating content came to a halt in practically all cases once work on the two subjects had finished, so these tools provided insufficient motivation for the students to use them as channel for communication or instruction after the conclusion of the practice.
- The journalistic work posted in the virtual environments or on the platforms was also insufficiently interesting for the students to revisit once the subjects had finished. These tools were used only occasionally while activities in real spaces prospered.
• The content is shared on the social networks, which are also used by students to communicate among themselves, especially by mobile phone apps rather than by e-mail, «weblog» comments or even telephone.

• As an idea for adapting higher education to the technological evolution, we emphasize the common ground between this experience and the conclusions of the «2012 Horizon Report» which underlined the value of collaborative work, «collective intelligence» (Johnson, Adams & Cummins, 2012: 4), as a valuable competence for the job market.

The new multimedia forms, the new blog formats such as «audioblogs» and «tvblogs» have enabled students not only to participate in content creation but also in the processes of production, corporate design, and the editing and distribution of entire content on the weblog, including possible financing, while at the same time learning to organize each element in a harmonious, coherent form to construct an independent audiovisual product that relates to other blogs and websites that can serve as a specialist or critical documentary complement. In conclusion this collaborative experience, through its creative production, has developed in the students a sense of initiative and continuous activity, critical reflection, the correct use of digital tools, self-assessment and a knowledge of professional journalistic production on the Internet.

Notes
1 Study plan for 2011-12 and 2012-13.

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