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E-innovation Platforms in Journalism Teaching: Cybermedia as a professional educational tool

Abstract

This paper analyzes changes in the training of college students within the implementation of the European Higher Education Area (EHEA) with particular emphasis on teaching of future communication professionals. I focus on two cyberjournals, launched at Universidad Complutense de Madrid. During five academic courses a total of 2.349 students have participated in this project, with retention rates above 96 percent. In the period studied, the cyberjournals have generated 1.526 multimedia indepth reports giving rise to more than 16.756 comments from media readers. Additionally, there have been 2.828 videos, now all online on the cyberjournals YouTube channel, which have received more than 400,000 views. This analysis concludes that there has been a real increase in teaching hours above the notion of ECTS credit, and that this situation is accepted by students without problem. On the other hand, based on the descriptive method used, it is shown that students accept and participate in the formation of journalistic projects in the digital environment that comply with the general regulations of the EHEA, and in the particular guidelines that each University can develop.

Keywords

Cyberjournalism, journalistic didacticism, learning environments, teaching practice, web 2, EHEA.

1. Introduction

The European Higher Education Area (EHEA) is based on a set of statements by the European Union's education authorities, among which those regarding Bologna (19 June 1999), Prague (19 May 2001), Berlin (19 September 2003) and Bergen (19 and 20 May 2005) are particularly relevant.

The first step in implementing these statements is summarized in the so-called Tuning Project, initiative, funded by the European Commission within the Socrates Programme framework. This project was the origin of the document Tuning Educational Education Structures in Europe, led by the universities from Deusto and Groningen and involving experts from universities throughout the European Union¹.

¹The Tuning Project consulted, through questionnaires, graduates, employers and academics in seven subject areas: business, educational sciences, geology, history, mathematics, physics and chemistry. A total of 101 university departments from 16 European Union countries took part in the initiative. The consultation, which focused on generic and discipline-specific skills and competences, was answered by 7,125 people (not counting the informal working teams, reflection and debate that emerged at departmental, disciplinary and national levels).

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The Tuning Project defines the notion of competence. This element should be seen as a collection of knowledge, skills, abilities and aptitudes, collectively capable of carrying out activities with a sufficient standard of quality and effectiveness. At the same time, it makes explicit the dual classification of these competencies (González & Wagenaar, 2003, pp. 33–41): technical or professional (related to the professional profile of a certain academic career); and generic or transversal (those which make more efficient, participatory, comprehensive and intelligent management in a changing world, where communications, information and exchange possibilities are unlimited).

The Tuning Project represents a shift from knowledge to know-how, and involves at least seven major changes with unique impact on the training process in university studies (Sánchez and Gairín, 2008, pp. 21-26): a deep discussion on teaching, in particular the topics –new degrees and subjects—; a change of educational perspective, based on teaching-learning; a substantial change in evaluation methods and systems; transparency regarding educational systems and degrees disciplines and their homologation in every country; competitiveness in training and research; an increase in student mobility; and, finally, quality accreditation.

Regarding the Spanish case, the process of convergence of the educational system is led by the Agencia Nacional de Evaluación de la Calidad y la Acreditación (National Agency for Quality Assessment and Accreditation) (ANECA), on the basis of two documents with the title "Programa de convergencia europea. El crédito europeo" (European Convergence Programme. The European Credit); and "El programa de convergencia europea de ANECA 2003–2006" (The European Convergence Programme of ANECA 2003–2006), published in 2003 and 2006, which are subsequently completed by various reports, recommendations, studies and activity reports.

Transformations that result from active use of new information and communication technologies (ICTs) by teachers, in which you can find four main added values are of particular importance. As described by Boyle (2002, p. 1):

Universalistic: it should not be proposing a particular ideological position, however attractive this may seem. It should be able to assimilate valid knowledge generated from quite different research traditions (e.g. constructivism and ISD). Expandable and Open: This area is expanding rapidly. The conceptual base ought to be able to capture new developments in a form that relates them in a clear, structured way to the established body of theoretical knowledge. Formalisable: the framework should support increasing precision in the representation of concepts and their relationships. Useful: the systematic representation of knowledge cannot be just about educational design, but ought to be also for educational design. It should provide a deep knowledge base to guide the design process. There have been two.

Hernando considers that this process of ICTs implantation implies a new organisational learning for both teachers and students, in which the university must assume four different functions (2005, p. 211): to make technological knowledge visible, to increase this knowledge, to provide the necessary infrastructure, and to create a specific culture.

Regarding journalism training, the EHEA environment was specified in the *Libro Blanco de Título de Grado en Comunicación* (White Paper on Communication Degrees), a strategic document that a committee of Spanish professors prepared for the ANECA organisation. The White Paper, which referred both to Journalism studies (at that time more than 60% of the total students enrolled) and to Audiovisual Media Studies (Comunicación Audiovisual) and Publicity and Public Relations (Publicidad y Relaciones Públicas), distinguished four major relevant professional profiles to explain the relationship between the university environment and journalism companies: editor of journalistic information in any type of media; editor or media relations executive; researcher, teacher and communication consultant; and web manager and content editor.

That text tries to combine the adaptation to this new common educational scenario with the requirements of the industry, as summarized by Pestano, Rodríguez and Del Ponti (2011, p. 408): "while the legal and political discourse speaks about information and knowledge society, in the executive time, regulations and Administration apply mere economy of knowledge principles, in terms of search of the effectiveness and the efficiency."

In order to understand the difficulties of combining the liberalization of the university model with the maintenance of quality levels in training future media professionals, it is enough to take into account quite different proposals made, over almost a decade, by different Spanish institutions where journalism studies are taught, which results, as Sánchez-García (2016, p. 139) emphasizes:

The renewal of journalism studies programs to include teaching in new media can still be considered limited. This is because although this type of subjects are incorporated in all the new degree programs, actually there is a relative increase from an average between 1-2 topics in the degree to a range between 2-3 obligatory subjects in the 4 years of the degree. This data refutes the second part of the hypothesis of this research, in the sense that the change to the bachelor's program has not been used more decisively to introduce digital and multimedia training, so that it use to be relegated to optional or alternative itineraries. Thus, it depends on the choice of each student to reach or not specialized profiles in new media.

The general objective of this research is to establish a new vantage point for new strategies needed for teaching journalism in the new digital environment. These should be based on what we have called teaching-learning that aims to generate competitiveness in the two fundamental fields of university education: training and research, also taking on account Tuning's initiative framework for moving from knowledge to know-how, as described above.

Among the specific objectives of this project we can point out the detailed description of how these dynamics take place through a concrete applied experience. The project is carried out mainly considering the differentiated functions indicated by Hernando (2005), as we have pointed out, and in accordance with the indications of the White Paper on Journalism Studies.

2. Materials and methods. Journalism teaching projects in a digital environment

Ortiz (2009, p. 45) states that in the new European Higher Education Area, it is not only training by skills that indicates a change in direction in this new educational scenario:

From now on, the portrait of the student and the teacher will change drastically. Teaching methodologies will also be transformed and modern educational tools will be used. Today the focus is on a kind of student who can organize his training under the tutorship of the teacher in a scenario in which, alongside the masters classes, other forms of learning are incorporated, such as teamwork, seminars, training outside the classroom and use of the internet as a vehicle for training and participation. Somehow, a student with more initiative is called for, who seeks and implements his training with activities that go beyond the traditional lectures. From this point of view, the teacher/student relationship, the figure of the teacher and his role in the student's learning process are transformed. In the new educational model, the lecturer not only does contribute his knowledge to the student, but also accompanies, guides, and discovers the paths of his formation, beyond the mere exhibition in the classroom.

At the same time, we are witnessing an environment in which foundations are being laid for a greater audience involvement in the processes of production and distribution of content, working with the added value of the interactivity of these audiences. As Cebrián (2010, p. 18) emphasises: "Interactivity breaks with the classic models of linear communication to enter into others of real dialogue. It is no longer about feedback, but about a physical, expressive and intellectual activity of the users using the machines to receive messages and, moreover, to produce them."

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The EHEA implementation has led to the growth of scientific literature studying, both internationally and nationally, and changes in the training of communication professionals. In the global scenario, the contributions made by Buckingham (2007), Jung (2011), and Anderson and McGreal (2012) are particularly relevant; while focusing Spain, we should highlight the work of De-Pablos (2009), Pérez-Tornero and Sanagustín (2011), Sandoval and Aguaded (2012), Marta and Grandío (2013), and Clará and Barberá (2014), among others.

In this research we have developed a descriptive method in which we aim to show the properties of the teaching experience, with reference to the framework described i.e. within the creation of journalistic projects in the digital environment. This is a qualitative strategy within an inductive method in which we have built the description process from the experience itself and the analysis and collection of data offered by the teaching experience, always related to the EHEA documentation frame exposed.

Based on the four profiles defined in the White Paper on Communication Degrees mentioned above, the Facultad de Ciencias de la Información (Information Sciences) of the Complutense University of Madrid (UCM) launched a new academic plan that began during the academic course 2010–2011. Within the scope of the new plan, the subject Tecnologías de la gestión periodística de la información digital (Technologies of Journalistic Management of Digital Information) was established and taught in the fourth-degree year for one semester, as a compulsory subject. The description of what should be taught is clearly stated (2013):

The subject analyses from a theoretical-practical perspective how the new information and communication technologies are contributing to the modification of the journalistic information industry, influencing professionals, companies' managers and public since a new perception that the digital phenomenon represents. On a theoretical level, it analyses the process of diachronic evolution of this phenomenon, studying the background, process of construction, strengths and weaknesses, as well as its expectations for the future in the short, medium and long term. In this way, students are provided with a complete knowledge of the set of procedures involved in the journalistic management of digital information. On a practical level, it provides the key points to undertake journalistic projects of this nature, adapting to this new technical reality, enabling students to develop their professional activity in this field, both from the professional and in the researching field, by mastering its different ways of expression.

The building up of the subject established a reference framework in which three classes of competencies were distinguished: (1) Specific (both professional and academic), in which explicit reference was made to the capacity and ability to use communication technologies and techniques in the different media or media systems combined and interactive (multimedia), as well as in the use of computer systems and resources and their interactive applications (hypertextuality) referring to digital media; (2) Transversal competencies, which should lead to providing the key points to effectively solving complex problems in the field of ICTs and designing journalistic news; and (3) Nuclear, with particular emphasis on the design of the academic and professional project itself as it is presented at university.

In order to adapt to this set of skills and in view of the large number of students distributed in the morning and afternoon shifts (in a total of eight groups and over 600 students registered), as of the 2013-2014 academic year, two cyberjournals were created (both with their own domain on the Internet), whose complete development of content would correspond to the students and would be managed directly by the teachers of the subject: Generación Dos Punto Cero (http://generaciondospuntocero.com) and Variación XXI (http://variacionxxi.com).

The main characteristics of the proposed cyberjournals were as follows: they worked from the content management software (CMS) WordPress, selected among the different CMSs available on the market for free, its flexibility and ease of use and for having a large community of developers that allows its constant evolution; the contents generated would be addressed

to the whole Spanish-speaking university community (hence the selection of the respective name, the first one encompassing a new generation of journalists and the second one as a variation or exercise of journalistic style for the present century); the journalistic genre corresponding to the contents generated would be the in-depth multimedia report, as it is considered to be the journalistic genre that offers the greatest possibilities for professional development and opens the path to investigative journalism as pointed out by Hunter (2013, p. 66):

Investigations go beyond the typical structure of a news story, which only offers us the famous where and why (in English, who, what, when, where and why). All information includes these elements, but in a much deeper and broader sense, and involves characters who have motivations, physical characteristics, personal stories, and other characteristics that exceed any title or opinion. The research is carried out in places with specific characters and stories of their own, and shows us a past where the story began, a present where the story has been revealed, and a future that will result from the revelation. In short, it is a rich narrative, and if you want it to work, you must give it a structure.

The contents were organised around five sections. In the case of Generación Dos Punto Cero: acervo cultural (cultural heritage), área de servicio (service area), día a día (day-to-day life), estilos de vida (lifestyles) and intrahistoria (intern history); and another six sections of equal substance and intention but different denomination in Variación XXI: Tu Prensa (Your Media), Tu Solidaridad (Your Solidarity), Tu Actualidad (Your News), Tu Cultura (Your Culture), Tu Área de Servicio (Your Service Area) and Tu Tecnología (Your Technology). The reason for this denomination (instead of the more traditional thematic one) was to facilitate the subsequent process of SEO positioning of the reports that would be prepared by the students.

A decision was also made to implement an existing design template (the Aggregate theme included in the Elegant Themes product suite) to provide better visibility to the cyber newspapers from the outset, incorporating various plugins that are compatible with both WordPress and the design template: Acunetix, to provide basic levels of security; Akismet, to protect against cases of spam; Broken Link Checker, to verify the existence of links that are no longer operational; Disqus Comment, which facilitates the management of potential comments to the content generated; Google XML Sitemap, whose mission was to optimize the search processes from any search engine; and WP Super Cache to minimize page crashes in the event of peaks of high user traffic.

The choice of a news genre such as in-depth multimedia reporting involved a process of restructuring the students groups, based on the following strategic basis: each class group was divided into student's *news teams* of 3-4 persons; Each of these subgroups had their individual CMS access key; each team proposed to the teacher an initial list of three topics to be dealt with in the form of a multimedia report; From this list, the professor chose an initial topic to work with and proceeded to identify possible sources and resources of information, as well as the infrastructure needed for the further development of the proposal (this includes requesting permission for the use of video cameras, microphones and tripods owned by the Facultad de Ciencias de la Información of the UCM, as well as access to the recording studios of the institution when determined relevant).

Based on a process of choice, each news team began the tasks of obtaining textual documentation and graphic elements, determining a set of relevant possible interviewees and the pertinent questionnaires to be posed to them, recording and editing videos with interviews and other resource materials, producing additional graphic elements and writing texts. Under the guidance of the teacher, the elements of the project agreed: the approach or focused elements, style writing of the report, documentary and testimonial resources, structure and balance and distribution of the narrative layers –text, photography and video–. Each team generated a minimum of two in–depth multimedia reports during each semester.

When these elements were approved by the teacher, the students of each team added their material into the CMS using the previously provided access key. In addition, always under the guidance of the teacher, they carried out the placement of SEO elements, understanding this technique in a bilateral direction, internal and external, distinguished by Yalçin & Köse (2010, p. 489): "Internal web site optimization includes web site design, meta tags, keywords that are necessary for the web site, page names, pictures, links, content texts in each page and styles that used for the related texts, site map, RSS feeds, pages in different languages...etc."

Once this part of the process had been completed, the teacher scheduled the publication of the in-depth multimedia report, as well as its dissemination on the social networks of the cybernewspaper (both media have their own Facebook profile, an account on Twitter and a YouTube channel). In addition, the students spread the contents generated through the various social networks in which they are present, as it is considered essential to manage them in a socio-productive environment particularly prone to the socialization of journalistic content, as highlighted by Garcia-Galera & Del-Hoyo (2013, p. 114):

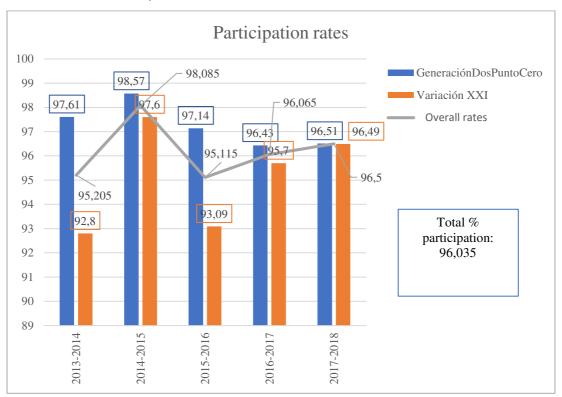
Without doubt, the adaptation of the individual to new ways of socializing, communicating and managing their relationships of sociability, is certainly one of the most significant consequences of this unstoppable progress of the network society. It is producing a high level of connectivity and changes, of significant importance, in the areas, actors and mechanisms involved in the traditional socialisation process of the individual, inaugurating an unprecedented space of virtual socialisation, with a potential impact on the transmission of norms, values, attitudes and personal and social behaviour.

3. Results and Analysis

For the cybernewspaper Generación Dos Punto Cero, an initial testing period was established, which was carried out during the 2011-2012 academic year (with two groups of students from the Master en Periodismo Multimedia Profesional offered by the Department Periodismo II of the Complutense University of Madrid) and in the 2012-13 (two groups of students from the last year of the degree course, before the launching of the new degree courses EHEA). During this trial period, the website did not have an internal visit counter, nor were Google Analytics metrics used, as these were considered to be outside the educational objectives. The cybernewspaper Variación XXI was still online throughout the testing period.

During the 2013-2014 academic year, the contents of the cyberjournal were generated by the students of the previously mentioned Digital Information Management Technologies course (already within the EHEA-compliant degree programme). The second of the cyberjournals, Variación XXI, was also launched to accommodate the majority of the groups of students in the Bachelor of Journalism degree. The distribution was as follows: academic year 2013-14, 7 student groups; academic year 2014-15, 7 groups; academic year 2015-16, 7 groups; academic year 2016-17, 7 groups; academic year 2017-18, 8 groups.

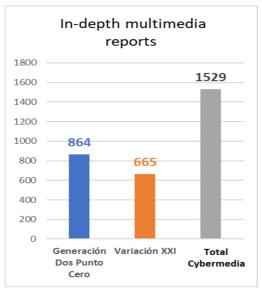
Table 1: Participants and percentage in the project. (First part: cybernewspapers students participants; Second frame: participation percentage). Students Degree on Journalism 4th course, Facultad of Ciencias de la Información UCM.



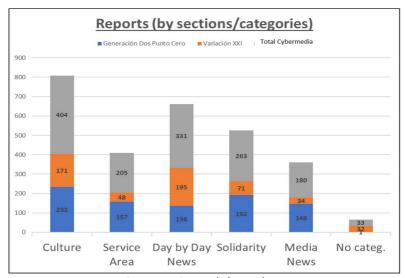
Source: Own elaboration.

Since the beginning of the activity in 2011 until July 2018 –conclusion of the 2017–18 academic year—, a total of 864 in–depth multimedia reports were made in Generación Dos Punto Cero, with the following distribution by thematic categories: Acervo Cultural (Cultural Heritage): 233 reports; Área de Servicio (Service Area): 157; Día a Día (Day–to–Day Life): 136; Estilos de Vida (Lifestyles): 192; Intrahistoria (Intern History): 146. A specific entry was added to this issue to correct a piece of information. The reports received more than 13,000 comments from the newspaper's readers. In Variación XXI, 551 in–depth multimedia reports were generated, with the following distribution by thematic categories or sections Tu Actualidad (Your News) (195 reports); Tu Área de Servicio (Your Service Area): 48; Tu Cultura (Your Culture): 171; Tu Prensa (Your Media): 34; Tu Solidaridad (Your Solidarity): 71; Tu Tecnología (Your Technology): 32. The reports produced received more than 3,500 comments from the readers. In this cyberjournal we added a section dedicated to presenting the members of the editorial staff, in which a brief text with photograph was dedicated to each students news team, applied from the academic year 2015–2016, and which generated 114 entries.

Table 2: In-depth multimedia reports (between Oct 2013 and Jun 2018). (First part: number in-depth reports; Second frame: reports sorted by sections). Students Degree on Journalism 4th course. Facultad de Ciencias de la Información UCM.



Source: Own elaboration.

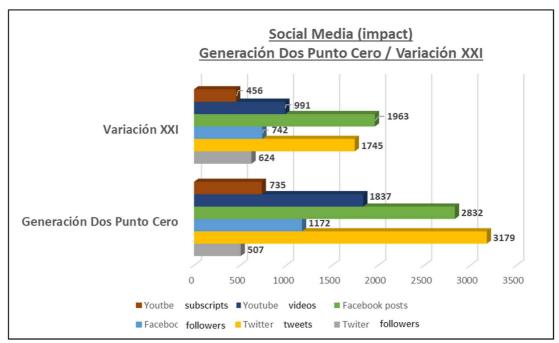


Source: Own elaboration.

Although both are independent media, the structure in both cases is identical, and only the denomination of the categories or sections varies. However, it can be said that the following are similar: Cultural Heritage – Your Culture; Service Area – Your Service Area; Day to Day – Your News; Lifestyles – Your Solidarity; Intrahistory – Your Press. The only unpaired section was Your Technology in Variación XXI, but for the purposes of accounting or data management we have equated this with the corresponding uncategorized section in Generación Dos Punto Cero. In addition, 2,828 videos were made, which are currently posted on the YouTube channel of both cybernewspapers. These videos have received more than 522,000 views: Generación Dos Punto Cero (187,331) and Variación XXI (334,915).

The project's impact on social networks, with data from September 2018, is as follows: more than 1,900 followers of the cybernewspaper profile on Facebook, 1,131 followers of both accounts on Twitter and approximately 1,200 subscribers on the respective YouTube channels.

Table 3: Cyber newspapers impact on social networks (data) social media impact. Students Degree on Journalism 4th course, Facultad of Ciencias de la Información UCM.



Source: Own elaboration.

The combination of Google Analytics metrics, for the case of Generación Dos Punto Cero and the internal visit counter of the cybernewspaper offers the following traffic data to the website: 30,747 unique visitors between 1 October 2013 and 30 September 2014 (corresponding to academic year 2013–14), 34,337 unique visitors between 1 October 2014 and 30 September 2015 (corresponding to academic year 2014–15) and 36,723 unique visitors between 1 October 2015 and 25 September 2016 (corresponding to academic year 2015–16); 37,134 (2017–18); and 37. 622 (2017–18); the number of pages viewed was 98,751, 114,989, 122,330, 123,008 and 123,217 over the five referred courses; the average duration of each visit was 77; 65; 61; 71 and 68 seconds over the five respective courses; and the bounce percentage was 37.59; 34.15; 38.23; 39.04 and 37.7 percent over those five academic years.

In Variación XXI the results were similar, taking into account the differences in the number of students and groups taught respectively. In this way, and on the same dates analysed for Generación Dos Punto Cero, the results were: single visitors 25,532 (2013–14); 30,333 (2014–15); 38,259 (2015–16); 35,669 (2016–17); and 37,524 (2017–18). Finally, the number of pages visited in Variación XXI was 52,052; 100,122; 115,856; 101,215 and 107,560 throughout the five aforementioned courses.

During the development of the project, it has always been made clear to the students the essential need to maintain the highest levels of quality of the contents produced beyond the audience generated by them. From this point of view, we have tried to overcome the usual hesitations about the true scope that audience participation should have in the process of shaping the journalistic product, as summarized by Marchionni (2013: 128):

Journalism-as-a-conversation appears to be a powerful, multidimensional phenomenon in the audience experience but far from monolithic and somewhat difficult to predict. Explicitly telling audiences how and why citizens informed coverage seems key, and possibly so does the use of video to help convey journalists" humanness." In addition, if audiences are looking to co-orient with journalists around news by finding intellectual and demographics similarities, then newsrooms ought to consider posting short

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biographies and videos of each journalist on their websites. This gives audiences a deeper sense of who the journalists behind the news are. Finally, journalists should take care not to come across in stories as overly friendly or casual with citizens, at least if audience trust is a goal.

Regarding important elements in each project report, we should consider the choice of topics made by each team guided by the teachers. Practical considerations of topic choice are important, ideally with topics that can be approached easily and are amendable to in-depth multimedia reporting. The topics raised are therefore issues close to the students themselves, which affect them directly. Although, as we have seen above, there are a limited number of sections in each cybernewspaper, the teacher-directed approach means that each can be framed within a given section. The difficulty in presenting the results of this research lies in the fact that the criteria for the inclusion of the reports in the sections is subjective and depends on some elements such as the approach of the content, the point of view or the style of writing with which each topic is dealt with. Nevertheless, we show these results as a guide to some of the most recurrent themes. The creation of in-depth reports requires this, since one of the main characteristics of the news genre is the construction of the story based on testimonies, making use of audiovisual interviews that reinforce the information offered and complement the documentation obtained.

We have also seen above, in a qualitative manner, the different reports assigned to each section. Thus, the largest section in Generación Dos Punto Cero is the one dealing with Solidarity management and projects, while in Variación XXI it is the one dedicated to Culture. In both cases we observe a remarkable coincidence in the subject matter dealt with by many of the reports, which because of their different focuses, achieves a variety of treatment that makes it much more attractive to readers. In undertaking the study, we have selected some that give an idea of the issues that most concern university students in general, and our students in particular.

In the lifestyles/Your Solidarity section there are many topics associated with the LGTB world, currently LGBTIQ+. This different nomenclature is due to the fact that in the first reports that appeared it was still limited to the above-mentioned LGTB, even with the last two letters changed to LGBT. Thus, issues related to transsexualism, working conditions and jobs for LGBT minorities, associationism, history of certain minorities, overcoming social exclusion, socialization, campaigns and demonstrations, among others, appear frequently. The degree of presence of these themes has been notable throughout the life of the publications, sometimes exceeding 15% of the reports made in one academic year. Along the same editorial lines, there are other themes in the field of cooperation and solidarity that have occupied a great deal of space: with the action of volunteers; animal abuse; groups and minorities not made visible; emigration and various labour and social problems. Within this section, although often focused from the point of view of current events, everything related to gender violence and the abuse of women has been treated with special interest.

The service area/Your Service Area has dealt with matters related to the management of studies by the students enrolled, with special emphasis on professional trainees and all the problems that are generated around them. This subject has accounted for almost 10% of the two publications during some academic courses. An additional topic of special impact is University Sports, often focusing on the female sections of both faculties and amateur clubs; topics dedicated to inclusive sport, adapted to disability have special interest in this section. Since this content appears in both the Sports and the Solidarity sections, we cannot offer an exact quantification of each one of them. We can also mention here several reports dedicated to the adaptation to disability within the University itself, with the attention disabled students and their access to facilities.

The intern-history/Your Press section has been used to introduce all the topics that have to do with the journalistic profession, newsrooms, that were of special interest to the

students. As with the other sections, it has undergone variations throughout the academic courses in which we have been developing the project. The main topics have been divided between experiences in the professional practice of journalism in its various specializations to the practices that students develop in the media. The latter has also been included, on occasions, in the service area section/Your Service Area, when they were focused from the point of view of carrying out curricular or non-curricular traineeships, or of the management and help from the University itself when setting up the various programs to facilitate access. The inclusion of this type of report should also be noted, given the special motivation due to the vocational nature of the journalism career. Work in television, above all other media, has been the topic most discussed by students within the section. On the other hand, the journalistic specialization of sports has also been a reason for occupation by many of the editorial teams in both publications.

The cultural heritage/Your Culture section is also an area to which students devote a lot of attention, as it is also quite attractive for many of them, mainly in Variación XXI. All questions related to cinema, exhibitions, theatre, the world of books and in general everything related to shows make up an important part, especially when taking into account the quality of the published pieces, of the total of topics dealt with. Historical themes with documented reports have also been part of this section and, although they are not huge, they do reflect a particular interest shown by some teams.

The Your Technology section, unique in the cybermedia Variación XXI, has included everything related to technological advances in general. Also included in this section are reports on new technological specialisations within journalistic activity, including those oriented towards work on social networks, such as community managers or social network marketing professionals. The reports, also of notable quality, dedicated to influencers have aroused much interest among many students (instagramers, youtubers, etc.). A particular case taken up in this section and related to the above has been everything related to the new esports world, also with the new thematic television channels dedicated to this issue. In the case of the cybermedia Generación Dos Punto Cero these themes have been framed in other sections as "intern-history" as they relate to the journalistic profession, or service area as the students themselves are often the protagonists of the approach and the testimonies in the stories.

Finally, we have used the section day by day/Your News to collect a number of diverse topics that have in common the feature of current events and that are the object of the students' interest. Although, given the infrastructure of these cybermedia, it is a complex task to collect very valuable content ideas that teams wanted to pursue but were unable to due to lack of resources. In other words, the objective of the project is to collect topics that are close to the audience and that are not treated by the rest of the media, rather than trying to be aggregators of content and impossible competitors with media already established in the industry. Even so, very interesting topics have appeared and have been treated in depth by the students, such as Islamic terrorism or rare diseases, among others.

In dealing with in-depth reporting and with the particular structure of the new development of news genres on the web, each team has worked in three directions. First of all, in addition to an appropriate and approachable topic, an approach is selected to be able to carry out the development of the topics. Second, a unique point of view is decided upon based on testimonies and documentation as a fundamental part of the stories to be told and reported. Finally, the third element to consider is the style of the writing, which depends on the two previous elements. In general, the critical tone has been the most used writing style and as we could demonstrate the main topics are focused on solidarity practices and denouncing injustices. Although the style of reporting is the one that most appeals to future journalists, and although it has been attempted on many occasions, it is more appropriate for investigative reporting that has not been possible, with very few exceptions. Criticism has

therefore been the most integrated of the styles used, on the other hand to the same extent many of the works have a correct and objective informative style with the information they contain. The use of a humanitarian writing style for certain reports, such as those on rare diseases, disability, treatment of minorities or abuse, is also an objective of the editorial teams. Nor has the humorous and ironic tone of some of them escaped on rare occasions.

4. Discussion

The experience accumulated during these courses has determined that the participation of students in the cybernewspapers is over 96 percent of those enrolled, despite the obligatory attendance of classes. The distribution has been as follows: academic year 2013-14, of 419 registered, 403 followed the program, which is 95.205 percent; academic year 2014-15, 414 / 404, 98.085 percent; academic year 2015-16, 428 / 410, 95.115 percent; academic year 2016-17, 489 / 470, 96.065 percent; academic year 2017-18, 599 / 572, 96.5 percent.

Of all the students enrolled during the 2013-14 to 2017-18 academic years who took part in the internship programme at the cybernewspaper, a total of 2,259 remained committed until its conclusion, with very few withdrawals (in all cases due to expulsion from the respective working groups after previous meetings with the interested parties and their group colleagues). This represents an effective commitment rate of 96.035%.

At the same time, an aspect has been detected as the increase of the teaching load above the notion of ECTS teaching credit established in the EHEA. Although the subject has six teaching credits, which would be equivalent to 150 hours of group work by the teacher, the reality shows a workload that exceeds 300 hours. In the field of topic choice, the themes related to solidarity were preferred, and the style of writing preference is criticism against some attitudes involved in these matters.

During the First Latin American Meeting of Communication Professors organized by the Observatory for Research in Digital Media, held in Valencia in July 2016, the need to give continuity to these kind of projects and to reinforce their strategic importance, established the following triple scenario: In the short term, to increase the presence in networks such as LinkedIn or iVoox and to commit to a redesign more adapted to devices such as mobile phones and electronic tablets. In the medium term, to extend collaboration in this initiative to professors in the faculties of journalism/information science/communication science throughout Spain, as well as to develop a specific mobile application to be downloaded on all types of operating systems, most of which will be launched in the following academic years. In the long term, collaboration with journalism teachers from outside Spain belonging to the Spanish-speaking community was suggested, as well as the broadcasting via streaming of radio and television content that would reinforce the multimedia nature of the final product.

In conclusion, Generación Dos Punto Cero and Variación XXI have become an online platform for the practical teaching of journalism that is used by more than 400 students of the course Tecnologías de la gestión periodística de la información digital each year. The results obtained give continuity to the project, and the commitment is to extend it beyond the current boundaries of the Facultad de Ciencias de la Información of the Complutense University in Madrid.

References

Agencia Nacional de Evaluación de la Calidad y la Acreditación (2003). *Programa de convergencia europea. El crédito europeo*. Madrid: ANECA. Retrieved from https://goo.gl/RRjnaT

Agencia Nacional de Evaluación de la Calidad y la Acreditación (2005). *Libro Blanco de los Títulos de Grado en Comunicación*. Madrid: ANECA. Retrieved from https://goo.gl/Kt426H

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- Agencia Nacional de Evaluación de la Calidad y la Acreditación (2006). *El programa de convergencia europea de ANECA (2003–2006*). Madrid: ANECA. Retrieved from https://goo.gl/Tyv6KR
- Anderson, T. & McGreal, R. (2012). Disruptive Pedagogies and Technologies in Universities. *Educational Technology & Society*, 15(4), 380–389. Retrieved from https://goo.gl/tVN7MV
- Boyle, T. (2022). Towards a theoretical base for educational multimedia design. *Journal of Interactive Media in Education*, 2002(2), 1-16. http://www.doi.org/10.5334/2002-2
- Buckingham, D. (2007). Digital Media Literacies: Rethinking Media Education in the Age of the Internet. *Research in Comparative and International Education*, *2*(1), 43–55. Retrieved from https://goo.gl/WKowDH.
- Cebrián, M. (2010). Desarrollo del periodismo en Internet. Sevilla: Comunicación Social.
- Clará, M. & Barberá, E. (2014). Three Problems with the Connectivist Conception of Learning. *Journal of Computer Assisted Learning*, 30, 197-206. https://www.doi.org/10.1111/jcal.12040
- De-Pablos, J. (2009). Tecnología educativa: la formación del profesorado en la era de Internet. Málaga: Aljibe.
- Facultad de Ciencias de la Información de la Universidad Complutense de Madrid (2013). Ficha docente de la asignatura Tecnologías de la gestión periodística de la información digital. Retrieved from https://goo.gl/ddF8Ue.
- García-Galera, M. C. & Del-Hoyo, M. (2013). Redes sociales, un medio para la movilización juvenil. *Zer Revista de Estudios de Comunicación*, 34(18), 111-125. Retrieved from http://goo.gl/NtmR62
- González, J. & Wagenaar, R. (Eds.) (2003). *Tuning Educational Structures in Europe Informe Final Fase Uno*. Bilbao: Universidad de Deusto. Retrieved from https://goo.gl/mKlyGb
- Hernando, F. (2005). El uso de las nuevas tecnologías en el aula universitaria en el marco del EEES. In M. C. Chamorro & P. Sánchez (Eds.), *Iniciación a la docencia universitaria* (pp. 209-257). Madrid: Instituto de Ciencias de la Educación de la Universidad Complutense de Madrid.
- Hunter, M. L. (2013). *La investigación a partir de historias. Manual de periodismo de investigación.* Montevideo: UNESCO.
- Jung, I. (2011). The Dimensions of e-learning Quality: From the Learner's Perspective. *Educational Technology Research and Development*, 59(4), 445–464. https://www.doi.org/bbp6fg
- Marchionni, D. M. (2013). Measuring Conversational Journalism: An Experimental Test of Wiki, Twittered and "Collaborative" New Models. *Studies in Media and Communication*, 1(2), 119–131. https://www.doi.org/10.11114/smc.v1i2.260
- Marta, C. & Grandío, M. (2013). Análisis de la competencia audiovisual de la ciudadanía española en la dimensión de recepción y audiencia. *Communication & Society, 26*(2), 114-130.
- Ortiz, M. A. (2009). La reconversión de la formación en comunicación desde el Espacio Europeo de Educación Superior. *Icono 14, 7*(3), 35-49. https://www.doi.org/10.7195/ri14.v7i3.301
- Pérez-Tornero, J. M. & Sanagustín, P. (2011). De la lectura superficial a la lectura profunda: una escala de las operaciones de lectura en un contexto TIC. *Lenguajes y Textos, 34*, 17–28. Retrieved from https://goo.gl/CEo2en
- Pestano, J. M., Rodríguez, C. & Del Ponti, P. (2011). Transformaciones en los modelos de formación de periodistas en España. El reto europeo. *Estudios sobre el mensaje periodístico*, 17(2), 401-415. https://www.doi.org/10.5209/rev_ESMP.2011.v17.n2.38122
- Sánchez, P. & Gairín, J. (2008). *Planificar la formación en el Espacio Europeo de Educación Superior*. Madrid: Instituto de Ciencias de la Educación de la Universidad Complutense de Madrid.

- Sánchez-García, P. (2016). Los efectos de la primera fase del EEES en la enseñanza del periodismo en España: mayor especialización y formación práctica. *Communication & Society*, 29(1), 125-143. https://www.doi.org/10.15581/003.29.1.sp.125-143
- Sandoval, Y. & Aguaded, I. (2012). La competencia mediática en la era de la convergencia. *Icono14, 10* (3), 08–22. https://www.doi.org/10.7195/ri14.v10i3.197
- Yalçin, N. & Köse, U. (2010). What is search engine optimization: SEO? *Procedia Social and Behavioral Sciences*, 9, 487–493. https://www.doi.org/10.1016/j.sbspro.2010.12.185