THE EDUCATIONAL RADIOPHONY OF UNIVERSITY RADIOS: TRANSFORMING THE ENTERTAINMENT IN ALTERNATIVES OF TEACHING-LEARNING
Marcelo Mendonça Teixeira¹, Juan José Perona Páez²

Abstract
The first university radio in the world appeared on 19th November 1923 in Argentina – it was called the Radio Universidad. Since then, university radios followed up the evolutionary course of the common radio over the decades, representing the interests of the academic community. Such as web educational and training radio projects that emerged in the late 90’s, the online broadcasters, brought up in the university departments, and the university radios began to supply a range of services and applications that did not exist till then. Unlike conventional radio, Internet radio immediately sparked the interest of the broadcasting companies, once it did not impose limits on the listener’s geographical range, nor on the exclusive audio format programming. These radios have not delayed in employing the technological resources of web radio, fact that can be sustained by the quantitative growth of online platforms, through which people can have access to the ordinary programming in real time by means of a great variety of devices connected to the Internet. This investigation considered it important to analyze the educational potentialities of web radios in the Spanish and Portuguese academic universe. For that purpose, we made a selection of some experiments using Perona’s selection criteria of “Modalities of Educational Radio”. In Portugal, the study was deeper and wider so that we were able to identify the differences and particularities of the six university radios available on the Web, described in more detail on the Rádio Universitária do Minho case study.

Keywords
University Radios, Online Education, Multimedia Interfaces, Interactivity, Flexibility.
1. Introduction

The new technological interfaces brought facility of access to communication by the increase of storage capacity of news and by the processing speed of information in real time, promoting their educational applications inside and outside classrooms, with the possibility of sharing and storing contents in audio, video, image or text. Now, more than ever, the institutions are making intensive use of technological resources in virtual learning environments based on a new communicative paradigm. Thereby, the global interaction based on the sharing of information and knowledge, and advances in communication technologies, have changed the concept of economy and society - consumers become producers, and producers become consumers of content, goods and services in a new global economic model, without restrictions or barriers, induced by a process of massive collaboration (Tapscott and Williams, 2008).

In this sense, emerges the concept of Educommunication, which can be defined as a set of actions inherent to planning, implementing and evaluating processes, programs and products designed to create and to strengthen communicative ecosystems in real or virtual educative spaces as well as to improve the communicative coefficient of educative actions, including those related to the use of informational resources in learning processes (Soares, 2000). Such practices allow communicative resources to be inserted in the educative environment, not only as didactic interfaces (educative technologies) or objects of analysis (critical reading of the media) but mainly as a way to express oneself and to produce cultural practices, argue Horta and Eliany (2006).

However, the Educommunication demands a new way of thinking about the pedagogic models and new strategies to intervene in society; strategies that could respond to media and education contemporary processes. This demand is valid because both the technological development and the social and economic changes, as producers of new cultural patterns, have caused the school to realign itself regarding what is demanded from it: Intentional actions that prepare people to insert themselves with a critical posture towards society.

Commenting on the link between information and learning, Pinto (2002: 185) says that “Information is present, more and more complex and frequent, in the environment surrounding the learner. His/her perceptions build in a structured manner (education) an
informational model that he/she uses to survive in this very environment”. When it comes to mass media that develop sociocultural activities of informal and non-formal education, they almost always include formal programs when oriented directly to the school’s curriculum. That is the case of school and college web-broadcasted radio stations, which have an informative nature, but are very much biased towards formativeness, establishing mixed-type educommunicative configurations.

As well as in Portugal, in Spain also co-exists a reasonable number of academic broadcasters which are primarily characterized by a great range of varied programming, including numerous fields in which it is possible to find all kinds of genres and issues. In addition, university radios are broadcasters that foster radio-creation becoming themselves real alternatives to the general radio dominant content, as they offer a vast collection of Information, Education, Culture and Entertainment. They are also a clear alternative to those contents which have a leading role in the specialized offers field.

We will proceed with the presentation of the results in accordance with the objectives of this research, now analysing the web radios in the spanish and portuguese academic universe.

2. Research Methodology
The investigation from which this communication originated considered important analyze the educational potentialities of the university radios in Spain and Portugal. Given the characteristics of the study, the research methodology used was qualitative and empirical-descriptive, using as techniques and instruments for data collection: Information survey on the web; document analysis (through the technique of content analysis – program grids), on the second semester of 2010. The selection of web radios in Spain and Portugal was based on “Radio Educational Modalities” of Perona Páez (2009).

We also used the classification of radio-phonic categories from Filho (2003), which could be categorized in: *Journalistic* (note, news, bulletin, reporting, interview, comment, editorial, chronicle, journalistic documentary, round-tables or debates, police program, sportive and techno-scientific programs); *Educative-Cultural* (autobiography, educative-cultural documentary, thematic program); *Entertainment* (musical program,
fictional program and artistic event); Publicity (spot, jingle, testimonial, promotion piece); Advertising (public action radio-phonic piece, electoral and religious programs); Service (notes of public utility and service); Special (children’s program, varieties program), described in more detail on the Rádio Universitária do Minho (RUM) case study.

Investigations through case studies contemplate multiple sources of evidence and different techniques of field research, which could involve the observation of the phenomenon during its occurrence, studies and document analysis, interviews, measurements and qualitative and quantitative surveys inherent to the case, argue Yin (2009) and Simons (2009), and which will be discussed in this work.

3. The University Radio Stations in Spain

In some countries, the web radio is being used as an educational interface in virtual learning environments responsible for the divulging of various cultural activities on schools or universities, with programs dedicated to music, theater, cine, education, science, technology, politic, poetry, literature, economy, news and transmission of popular festivals. It is this way that the university radios, functioning as a social communication vehicle of local communities and as a valuable space for the divulgation, socialization and popularization of science and technology, produced by different departments at the teaching institutions.

As mentioned before, the spanish academic radios are characterized by presenting a programmatic heterogeneous grid with respect to content, thus emerging as another option to the ordinary programming of the major conventional broadcasters. In fact, among the generalist spanish radios, the information and the entertaining and cultural magazines hold 70% of the total offers, while sport only represents little more than 10%. The remaining percentage is reserved for Music and participation spaces and, to a lesser extent, for Education, Religion and other minority genres, such as Fiction (20%), with only a sporadic presence on university radio stations. This programmatic uniformity becomes even more apparent if we bear in mind that the different networks choose to transmit the same contents at the same time schedule, affecting a vast majority of broadcasters, including those that have been managed in recent years (Perona Páez and Barbeito Veloso, 2007).
Table 1. List of Radios in 2010

<table>
<thead>
<tr>
<th>Web Radio</th>
<th>University</th>
<th>Localization</th>
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<tbody>
<tr>
<td>Onda Villanueva</td>
<td>Universidad Camilo José Cela</td>
<td>Madrid</td>
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<tr>
<td>Villaviciosa Radio</td>
<td>Universidad Europea de Madrid</td>
<td>Madrid</td>
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<tr>
<td>Uniradio</td>
<td>Universidad de Huelva</td>
<td>Huelva</td>
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<tr>
<td>Radio UMH</td>
<td>Universidad Miguel Hernández</td>
<td>Alicante</td>
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<tr>
<td>Radio UNED</td>
<td>Universidad Nacional a Distancia</td>
<td>Madrid</td>
</tr>
<tr>
<td>98.3 Radio</td>
<td>Universidad de Navarra</td>
<td>Pamplona</td>
</tr>
<tr>
<td>UPV Radio</td>
<td>Universidad Politécnica de Valencia</td>
<td>Valencia</td>
</tr>
<tr>
<td>UPF Ràdio</td>
<td>Universidad Pompeu Fabra</td>
<td>Barcelona</td>
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<tr>
<td>Radio Girona Campus</td>
<td>Universitat de Girona</td>
<td>Barcelona</td>
</tr>
<tr>
<td>Radio Universidad</td>
<td>Universidad de Salamanca</td>
<td>Salamanca</td>
</tr>
<tr>
<td>Vox UJI Ràdio</td>
<td>Universitat Jaume I</td>
<td>Castellón de la Plana</td>
</tr>
<tr>
<td>UDEC 99.5 FM</td>
<td>Universidad de Cartagena</td>
<td>Murcia</td>
</tr>
<tr>
<td>RUAH 104.7 FM</td>
<td>Universidad de Alcalá de Henares</td>
<td>Madrid</td>
</tr>
<tr>
<td>Radio URJC</td>
<td>Universidad Rey Juan Carlos I</td>
<td>Madrid</td>
</tr>
<tr>
<td>Radio Complutense</td>
<td>Universidad Complutense de Madrid</td>
<td>Madrid</td>
</tr>
<tr>
<td>Radio Universitaria</td>
<td>Universidad de León</td>
<td>León</td>
</tr>
<tr>
<td>EUB Ràdio</td>
<td>Universidad de Barcelona</td>
<td>Barcelona</td>
</tr>
<tr>
<td>Radio Campus ULL</td>
<td>Universidad de La Laguna</td>
<td>Tenerife</td>
</tr>
<tr>
<td>Onda Campus</td>
<td>Universidad de Extremadura</td>
<td>Badajoz</td>
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<tr>
<td>Blanquerna Radio</td>
<td>Universidad de Ramón Llull</td>
<td>Barcelona</td>
</tr>
<tr>
<td>Radio UC3M</td>
<td>Universidad Carlos III de Madrid</td>
<td>Madrid</td>
</tr>
<tr>
<td>Radio Autónoma</td>
<td>Universidad Autónoma de Madrid</td>
<td>Madrid</td>
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Programs with training characteristics also have a highlighted presence on Spanish academic radios offer, especially on *Radio UNED* programming, through which it is possible to have online access to spaces dedicated to people studying, among others, Hispanic and English Philosophy, Philology, Economics, Business Administration,
Tourism and Business Sciences and Law. They also provide Continuous Education contents (Ponte al Día), access to the University (Access Course) and general information on higher education (University Newsletter).

In addition to the services offered by Radio UNED, it is also possible to find, in the remaining academic broadcasters, educational spaces, some of which are directed not only to the students themselves, but also to all people who are interested in accessing to the radio on a virtual level. As an example we indicate some programs: Con Ciencia en los bolsillos y Don de lenguas (Universidad de Salamanca), Aula 21 (Universidad de León), Ona ciència (Universitat Pompeu Fabra) Aula salud (Universidad Autónoma de Madrid), Echando la vista atrás (an instruction space dedicated to History), Es de justicia (Law), Economía y empresa, Historia de las ideas (Phylosophy), La biblioteca (Literature), Tirando de la lengua, Pensar la Fe (Theology), Nativos digitales or A Ciencia Cierta (Universidad de Navarra).

Information about current events and news produced by universities are also present in the grid, with magazines such as Buenos días (Universidad de Navarra) or El quiosc de La Rambla (Universitat Pompeu Fabra). However, the most common are reports focused on literature, theatre, music and, above all, on cinema, such as: Entrada Lliure (Universitat Pompeu Fabra), La siesta del fauno (Universidad Politécnica de Valencia), Efecte Dominó (Universitat de Barcelona), Clásicos de cine, Carta de libros y Patio de butacas (Universidad de Navarra) or Buscando leones entre las nubes (Universidad de Salamanca). Along with a worldwide trend and according to researches carried out within this area, online radios should not be restricted to “generalist” functions, but should also be a combining tool with a complementary interface aimed at people’s education, whether it is instructive or informative.

Therefore, the alternative nature of the analysed broadcasting companies is marked by the exploitation of contents that can hardly be found in other grids, such as programs dealing with the problem of social exclusion, those which make science and knowledge popular, as well as those that emphasize less commercial music or that bring together cinema, literature and art. On the other hand, it presents a wide range of educational programs, ranging from formal and informal classes to professional and technical
training courses and languages, thus providing an alternative and complementary teaching and learning background (Teixeira and Perona Páez, 2009).

**Figure 1. 98.3 Radio (Website)**


For students, it represents an extension of knowledge and an interactive room outside the traditional classrooms, approaching Lévy’s concept on “Cyberculture”, or even, on the virtualization process society faces nowadays, in which the virtual is not opposed to reality, but it complements it (Lévy, 2010).

**4. The University Radio Stations in Portugal**

According to research done on 1st September 2010, on ERC, “Entidade Reguladora Para a Comunicação Social” (Media Regulatory Authority) website – a portuguese government agency that regulates and supervises entities media activities on that country – no specific laws for Internet radio broadcasting were found. Radio Law in Portugal draws a distinction between generalist radios and thematic ones; the first ones are those whose content includes a vast array of themes, and the second ones are those that simply obey to a certain model, addressing a specific content, such as music, information or other, being ERC responsibility their respective classification.
Alongside with the radios already mentioned, there are university radios produced for and aimed at university populations (Teixeira and Silva, 2009a).

In Portugal, contrary to in other European countries, the university radios on the web appeared at the end of the 90’s, and today, after almost two decades, few remain active in the national scenario. The radio researcher Paula Cordeiro, says that, in Portugal, in 2005, there were four university radios with FM emission and few projects of university radios in the web. Leão (2007) also shares the same information, identifying the Rádio Universitária de Coimbra – from Universidade de Coimbra; the Rádio Universitária do Marão – from the Trás-os-Montes and Alto Douro Region; the Rádio Universitária do Algarve – from the Universidade do Algarve; and the Rádio Universitária do Minho – from the Universidade do Minho, as the portuguese university web radios (Ibidem).

Besides these, from the research performed for this work, we have identified the presence of other two university radios – the Rádio Universitária Beira do Interior – from the Universidade Beira do Interior, and the Radio Zero – from the Instituto Superior Técnico. In global terms, it is possible to assert that they share similar objectives, but have different structures of operation (Cordeiro, 2005).

**Table 2. List of Radios in 2010**

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<thead>
<tr>
<th>Web Radio</th>
<th>University</th>
<th>Localization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rádio Universitária de Coimbra</td>
<td>Universidade de Coimbra</td>
<td>Coimbra</td>
</tr>
<tr>
<td>Rádio Universitária do Marão</td>
<td>Univers. de Trás. e Alto Douro</td>
<td>Vila Real</td>
</tr>
<tr>
<td>Rádio Universitária do Algarve</td>
<td>Universidade do Algarve</td>
<td>Faro</td>
</tr>
<tr>
<td>Rádio Universitária Beira do Interior</td>
<td>Univers. da Beira do Interior</td>
<td>Covilhã</td>
</tr>
<tr>
<td>Radio Zero</td>
<td>Instituto Superior Técnico</td>
<td>Lisboa</td>
</tr>
<tr>
<td>Rádio Universitária do Minho</td>
<td>Universidade do Minho</td>
<td>Braga</td>
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</table>

The Rádio Universitária de Coimbra (RUC) exists since 1986 and was one of the first university radios in Portugal with web emission. Nowadays, it develops its activities based on the following categories: the formative, the informative, the academic and the cultural-educative. The formative category is established through periodic courses of formation and recycling for speakers, editors/speakers and technicians, besides the realization of didactic programs in collaboration with public and private institutions.
The informative category is a space focused on the debate of questions related to the Universidade de Coimbra and to up-to-date news. About the academic life at the Universidade de Coimbra, the RUC dedicates an ample space in its program grid, transmitting the main occurrences of the learning institution. Finally, the cultural category is responsible for the divulging of various cultural activities going on in Coimbra, at the North Region or in the rest of the country, with programs dedicated to music, theater, cinema, poetry, literature and the transmission of concerts, shows and popular festivals.

The Rádio Universidade do Marão (FM Universidade) gave its first steps in the virtual world in 2000 (Cordeiro, 2005), and since then the objective of the broadcasting station was to become the first university radio totally digital in Portugal. However, for technical reasons, this evolution to the web was only firmed in posterior years. Presently, the Rádio Universidade do Marão is focused on the academic public of the Trás-os-Montes and Alto Douro Region, with a purely informative focus.

In 2003, the Rádio Universitária do Algarve (RUA) arouse in a partnership between the Academic Association and the Universidade do Algarve. In the web, it has as an objective to divulge and promote the academic activities and cultural and musical events of the South Region in Portugal. Different from “RUC” and “RUA”, it is grounded in three pillars to develop its activities: the Academy, the Culture and Alternative Music. The objective of the programs directed to the Academy is to show to the national Portuguese community the contributions that the Universidade do Algarve offers to the region and to the country, related to teaching and research. The Culture is centered on the promotion and divulging of cultural events that take place in the Algarve Region (popular festivals, concerts, shows, cinema, literature, theater). The Alternative Music programs promote the work of artists and bands unknown to the public in general and to the communication means.

Still in 2003, the Rádio Universitária Beira do Interior (RUBI) was created as a laboratory of the discipline radio-phonic Journalism at the Universidade Beira do Interior, only with an internal character. In 2004, the RUBI starts to emit its radio-phonic program on the web, and started to be called “RUBIweb”. But only in 2006 that
the RUBI decided to bet on the diversity of categories in its program grid, aggregating multimedia interfaces to its web radio platform, such as the podcast and e-mail.

According to the Filho’s (2003), the Rádio Universitária Beira do Interior is exclusively generalist and informative, functioning as the “voice” of the Departments from the Universidade Beira do Interior, as well as of the local community, Covilhã.

The Radio Zero is part of the Association of the Instituto Superior Técnico (IST), with its headquarters in Lisbon (before 2006 it was called RIIST – Internal Radio of IST). Being originally a radio of university character, its objectives are centered in offering radio-phonic formation to the students interested in working in radio, as well as inform the “IST” academic community about the main events going on at the university, in a cultural, scientific and educative ambit. It has more than 40 programs on its online program grid of journalistic, cultural-educative and entertainment character (in its majority).

However, among the mentioned radios, the Rádio Universitária do Minho stands out presently for its diverse and segmented program on the web, dedicated to the promotion and divulgation of cultural, scientific and support activities to the lectures of the Universidade do Minho, representing, at the same time, some of its departments and academic unities, as well as a strong cultural intervention in the local communities of the Braga and Porto Districts (Teixeira and Silva, 2009b).

The Rádio Universitária do Minho (RUM) exists since 1989, and since 2006 it started to transmit via web, with a clearly heterogeneous program offer, on which spaces of purely formative-instructive character are mixed with others that explore different categories and formats, closer to some ongoing experiences in Europe. According to Leão (2007), the RUM launched two crucial interfaces in the context of its strategy to conquer and gain the loyalty of new public: the website and the online emission. The consolidation of the online emission, particularly, revealed as an alternative to the “conventional receptors”, emphasizing culture, debates on education, science, economy, politics, news, local informs, chronicles, interviews, and specialized reports.

In its relationship to the Universidade do Minho, the RUM makes available the virtual space and a group of technological interfaces for the lecturers to divulge their scientific
works, suggest readings, stimulate the debate on themes related to their disciplines (discussion forums), to inform grades, tests, interviews, divulge local, national and international academic events (congresses, seminars, talks, colloquiums, meetings…), store lectures in podcast (in a way that the student can have access to the discipline contents in any part of the world), besides the possibilities of synchronous and asynchronous communication with the broadcasting station, through E-mail, Blog, Messenger, Twitter, Facebook, Hi5 or Myspace.

Besides, it is on the program grid that the RUM is most different from other Portuguese university radios, for its thematic diversity and of the programs dedicated to the educational-cultural and journalistic categories:

**Caixa de Ferramentas** (Tool Box) and the **Diferença em 1º Plano** (Difference in 1st Level) – debates and interviews and the promotion of specialized support services to attend the peculiarities of people with special needs;

**Ciência para Todos** (Science for All) and the **Universidade Sem-Muros**; (No boundaries University) at the **Democracia Viva** (Living Democracy) – promotion and divulging of the university’s cultural and scientific activities;

**Campus Verbal** - serves as a radio-phonic laboratory, where the students from the Institute of Literature and Science of the Universidade do Minho, of French and German areas, produce radio programs based on what they have learned in the lecture rooms, and store the contents at the university’s website in a podcast format;

**Olhar no Feminino** (View on the Feminine) – discusses themes related to the female world;

**Magazine da Educação** (Education Magazine) and the **Livros com RUM** (Books with RUM) – information and reflection on the Portuguese and international literary situation, with interview from critics, authors and specialists in literature;

**Praça Município / Café com Blogs** (Municipal Square / Coffee with Blogs) – debate about the Portuguese political scenario;
Eco RUM (Ecology RUM) – program focused on the protection and conservation of the environment;

Rumo Económico (Economic Route) – interviews and reports on the national and international economic panorama;

Cultura Impressa (Printed Culture) – the main topics of printed media are debated on the program;

Cultura Crónica (Chronics Culture) – program focused on stage arts, cinema, literature and shows; and the Escola de Rádio (Radio School), where courses on the radio-phonic universe are developed (the courses are given by communication experts from the Rádio Universitária do Minho and lecturers of the Universidade do Minho), with more than 50 specialized programs divided by categories and for all public.

This is the RUM online, functioning as a social communication vehicle of local communities and as a valuable space for the divulgation, socialization and popularization of science and technology, produced by different departments at the teaching institutions. As says Cordeiro (2005), the contribution and influence of university radios in the development of the future professionals’ formation, allied to the importance in the context of radio-phonic communication in general are incontestable, and, in a context where the main concern is the profit-making of the station, university radios appear as elements that offer alternatives of program and formation.

It is also reasonable to argue that teachers’ new space and time perceptions, as well as those of the teaching and learning process as a whole, are of a crucial importance in establishing a school under new paradigms, achievable through the application of electronic age concepts, such as E-learning, Open School, University Without Walls (UWW) and Social Web, i.e. the socialization phenomenon already taking place at a global scale in an environment of sharing experiences, information and online learning (Correia and Tomé, 2007).
5. Conclusions
The universities and schools through a web radio can provide educational programs for different courses or areas of knowledge, which will be available online and can be accessed at anytime and anywhere in the world. Through this technological resource, there is no possibility of losing the program if the person is busy, the programs are available online and can be accessed when necessary or possible. However, the understanding of the web radio as an educational-communicative media has been followed by some difficulties related to the international academic community, in face of the still restricted investigation about the potentialities of online radio. Besides that, due to the similarity of its basic characteristics, it is common for the student public to confound podcast with web radio.

Another question to be considered is the need to create its own identity as a means of mass communication on the web, once it comes from a traditional media format. Even though it is still in need of a solid methodological-theoretical basis, the use of the web radio as a formative interface has been expanding significantly in the world.
As well as in Spain, in Portugal the university radios have been converted into real alternatives to the big generalist radio stations programming, extremely motivated by a huge expertise and homogeneity which prevails in relation to the contents to which they refer. In this way, the analysis made has revealed that university radios clearly have a heterogeneous offer, in which programs of educational and instructive character are mixed with others exploring different genres and formats. Consequently, emerges a range of options, in which topics are dealt under different approaches that are dominant in the conventional model, favouring the development of a critical and solidary perspective. Taking advantage of the Internet interactive potentials, university radio stations seem to demonstrate a certain sensitivity in ensuring the rights of access and participation, something that has been increasingly neglected in other communicative fields.

Thus, it becomes evident the need to more fully investigate the teaching and learning process through the web radio in educational institutions. In the contemporary context, explore web radio educational potentials seems to be a new challenge for educators and communicators.

References


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