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The educational potential of the podcast: an emerging communications medium educating outside the classroom*

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ABSTRACT

This research work addresses the educational potential of the podcast, an emerging digital communications medium. This audio format brings together producers and listeners (broadcasters and users) through very specific contents. In effect, it permits sharing and broadening knowledge of a subject, together with the construction of learning communities. Consequently, the research focus is based on educommunication, an interdisciplinary field combining communications and education. The main aim of the work is an in-depth study of the educational potential of podcasting. The hypothesis is that its educational nature is beneficial to everyone, schoolchildren and adults. The research is proposed from a qualitative perspective; it combines several different methods such as content analysis, interviews and case studies so as to obtain innovative results. It is hoped that this research will contribute knowledge in order to

improve the educational potential of podcasting, a useful tool in the full development of people and communities.

CCS CONCEPTS

• Social and professional topics • Computing education

KEYWORDS

Podcast, education, educommunication, digital media

ACM Reference format:

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1 Context and motivation that drives the dissertation research

In our globalized society it is indispensable to promote education on digital technologies, information management and mass media communication. Internet is transforming the way in which we communicate [1], and information and communication

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technology (ICT) arises as an integration of communications, information technology and microelectronics [2]. In fact, communications and education are two closely linked concepts. Altarejos & Naval [3] states that teaching is a type of communication which must be intentional. Thus, in the learning process, communications function through elements which affect the intellectual and effective facets of the individual [4]. Consequently, the media do not merely have an informative role, but may also mediate in educational actions.

The field of education, the irruption of mobile devices and their linked media have driven schools to adopt e-learning strategies such as mobile or blended learning [5, 6, 7, 8]. In addition, including the technology in formal education will help future adults to manage information, and make for a civic society which will be more purposeful and committed to human development [9, 10]. In this sense, the open education paradigm offers access to information and educational contexts as it turns the media and contents into Open Educational Resources [11, 12, 13, 14, 15, 16].

Educommunication is an interdisciplinary academic field, which addresses areas such as education, communications, linguistics and psychology. Recently, educommunication has experienced new impetus with the ICT revolution [17]. The birth of internet led to an explosion of media which people could not only consume but also use to share information. Such is the case of blogs, vlogs, social networks and podcasting, and many others.

This research aims to explore the educational potential of podcasting, an emerging media which uses audio as its main means of communication [18, 19, 20, 21]. It is a tool which, from an educommunication perspective, offers learning to a society where the traditional sources of education are turning towards other areas, particularly towards internet [22]. The research question is posed intuitively in accordance with the arguments set forth: How do the environmental, philosophical and technical features interrelate with the human interaction in podcast communities so as to offer solutions with educational potential?

This research project contextualizes podcasting through Web 2.0 and media convergence paradigms and finds its educational dimension in the framework of educommunication. After the state of the art, the hypothesis that guides the approach of the study has been exposed; consequently, the main objectives that are pursued have also been enumerated. The research methods selected to carry out the fieldwork were detailed: the sampling strategy, the data collection instruments, the categories of analysis, the sources of information and the protocol for analyzing the results. Finally, the progress made, the current state of the research, and the expectations of the potential of the project in the future have been presented.

2 State of the art

The users of mass media have traditionally shown themselves to be passive in relation to the products of the industry. But today society is immersed in a particularly dynamic context. Modernity is shaken and upset, and nothing seems to be as it

should; indeed, the eminent social theorist Bauman [23] indicted this process in much of his work and coined the term Liquid Modernity. This is a period marked by the surge in digital ICT, together with fast-moving socio-cultural changes; it is identified by the free and pervasive flow of information [24].

Social and technological progress provides the public with boundless resources. Internet and its digital universe are the greatest example of this, and more specifically, the mass media which has overturned the traditional publishing industry. Long gone are the days when communication was designed and produced unilaterally by this industry. On the one hand, it has been immersed in a convergency process since the end of the 20th century, which, according to Salaverría, García-Avilés & Masip [25], means the disappearance of traditional limits and gives rise to its fusion with internet formats. In fact, Salaverría [26] announced a compendium of publications and channels which had closed down, aborted journalistic projects and layoffs. In short, challenges like the proliferation of social networks and free competition on the web led the traditional communication media to a crisis of the system [27].

Since the dawn of Web 2.0, there have been innumerable transformations which are responsible for increasing the hopes placed in it; such successful social phenomena as YouTube, Facebook or Twitter, where the users have taken on an active role. Indeed, the platforms are now free as the footprint that we, the users, leave — our data — has become the main business of the Web 2.0 companies. These rapid transformations have also brought about problems such as what is called *fake news*. Over the last few years there has been a growth of unfounded rumors and false news which, due to massive reverberation, have affected social debate and even electoral processes. According to Allcott & Gentzkow [28], this is because the traditional media have lost their reputation and have lower barriers to entry, and the social networks promote the mass spread of information.

2.1 Media education and participation

Aguaded [29] states that “the challenge for audiovisual society is none other than the integration of mass media into educational processes in order to reflect on them, on their languages, on the way they inform about the world, together with their powerful weapons for its re-creation and construction” (p. 27). According to Fainholc [30] technical skill is not sufficient to get along in a society with these characteristics, therefore she considers it vital to use skills to manage the enormous quantity of information and so to go beyond a merely leisure role. This is the main aspiration of media education [31], which establishes the acquisition of multiple skills for people’s optimum development in the knowledge society.

The users of mass media have traditionally been considered as passive vis-à-vis the audiovisual products which the industry offer them. Regarding this conception of the industry, Jenkins [32] refers to the emergence of committed user groups for TV products: fan communities. However, everything changed with the phase transition brought about by the digital world. Levy’s [33] concept of collective intelligence describes it as a network of dynamic, delocalized interpersonal connections, portraying a

web-like hyper-connected society. And again, Rheingold [34] refers to the symbiotic needs of the nodes of the web as multiple intelligences. Surowiecki [35] believes that this interconnection may result in currents of knowledge which will improve wisdom of the crowds.

Thus, precisely, is how the tools of Web 2.0 allow for citizen participation in internet, by shaping privilege spaces for social participation [36]. In this regard, Casacuberta y Gutiérrez-Rubí [37] point out that Web 2.0 is not merely technology, but also a recreational, organizational, aesthetic and ethical proposal. For Jenkins et al. [38], it is the prime example of a participative culture, which is present in all areas of society. Educators are becoming more and more interested in subjects linked with communication through the new digital media, such as blogs, vlogs and podcasts.

2.2 Podcasting

Podcasting emerged as an amateur digital communication medium shortly after O'Reilly [39] set out the principles of the Web 2.0 paradigm. It is informally called the «radio by internet», due to its similarity to the veteran medium. Indeed, the podcast format is an audio communication space where, on the one hand, we have a speaker with a microphone, and on the other, a listener who receives the message. However, podcasting is the product of a notably technological context which inherently uses the innovations of Internet, such as automatization and immediacy [40]. It is an atypical digital radio where one can listen on demand anytime and anywhere; there is no live broadcast, but rather a vast library of archives.

Podcasting is an entity in its own right as it is surrounded by a very particular community, amateur podcasters, who are enthusiastic about forging virtual links with their listeners, to whom they offer their reflections and knowledge [41]. They form a group whose main ideals are sharing and participating, as they are ruled by their enthusiasm to promote knowledge. This format is a clear exponent of social participation and the transmission of knowledge. This is strengthened because the podcasters encourage their audience to comment on the episodes and stimulate discussion communities on the social networks by creating communities on the informative contents. In fact, authors such as Aguaded & Martín [42], Marta & Martín [43] and Marta & Ortiz [44] believe that internet will broaden the possibilities for spreading knowledge on academic institutions and the diffusion of scientific knowledge.

Podcasting is an emerging communication medium, and both its contents and its audience grow year by year. According to studies by the consulting companies Edison Research [45], Nielsen [46] and PwC [47], at the beginning of 2019, 29 million podcast episodes had been broadcast in over 100 different languages; the most popular subjects are culture and society, business, health, news and comedy. 22% of Americans listen to podcasts weekly on their smart phones; 70% of listeners are between 18 and 24 years old; in addition, listeners are 68% more

likely to be postgraduates. Clearly these are figures which reflect the immense potential of podcasting.

Podcasts can be very valuable tools to consolidate people's lifelong learning attitudes, an indispensable objective for social education as it is linked to the development of a cognitive society in which the subject must be capable of taking the initiative and managing his/her own ongoing learning [48]. Podcasters can address subject matter which is normally not included in commercial radio contents. There is a transition from a culture based on mass consumption to one where the quality of the contents takes precedence and is organized in highly specialized niches; the podcasters are experts in meticulously selecting and developing subject matter [49]. For this reason, listening to podcasts is a highly formative process and may become a powerful tool in the integral education of adults and children.

3 Hypothesis

The podcast is an area in which rich personal interaction, exchange of knowledge and learning are produced. Due to the medium, a communicative link occurs between the broadcaster and the listener. Additionally, little by little learning communities take shape around the podcasts and contribute to creating an environment for the exchange of knowledge.

The podcast has hypothetical educational virtuality with great potential to support learning environments: on the one hand, from the perspective of the participating agents, and, on the other, because the podcast in itself may be an educational resource. For this reason, an educommunication study is relevant as it may reveal everything that the podcast can offer.

4 Research and objectives/goals

The main objective of this research is to identify the characteristics which make podcasting into a source of education for people in all areas, both academic and social, so as to establish a theoretical qualitative model which will be applicable to pedagogical and innovative educational practice.

In addition, the following specific objectives of the study are proposed:

- ❖ Identification of podcast categories of educational interest, in accordance with the literature of reference and the initial theoretical proposal.
- ❖ Study of the educational nature of the structures which are created in the podcast communities based on human interaction.
- ❖ Integration of the environmental, philosophical, technical and content features in the definition of an educational podcast.
- ❖ Suggestion of guidelines for the educational community in order to make the most of podcasting as an Open Educational Resource or an educommunication object.

5 Research approach and methods

The podcast format and education has not yet been researched as much as other educommunication resources such as MOOCs [50, 51, 52, 53]. For this reason, it is relevant to carry out a fundamental qualitative character study, which will give an in-depth explanation of the objective of the study. Thus, the project uses multiple qualitative methods to puzzle out the educational potential of podcasting through triangulation [54]: content analysis, qualitative interviews, case studies and virtual ethnography.

5.1 Population and sample

The subjects are the podcasts themselves, cultural products which have been recorded and broadcast. Furthermore, the podcasters and listeners also form part of the sample in order to complement the research.

Despite being a new area, podcasting already has some published reviews. However, they either deal with its application in other areas or are not up to date [55, 56]. Therefore, it is motivating to make an in-depth study of the most recent literature to obtain a state of the art, thus permitting the establishment of a starting line from which to advance.

A systematic mapping of the literature has been carried out to define the most recent (5 years) research in databases on educational podcasts: a secondary research method many authors consider a descriptive definition prior to the systematic mapping of the literature technique [57, 58, 59].

5.2 Analysis categories and instruments

The following analysis categories on broadcasting have been considered:

- ❖ Topic approach.
- ❖ Length.
- ❖ Podcast format (interview, monologue, chat, etc.).
- ❖ Communication style.
- ❖ Level of content specialization.
- ❖ Relationship with the listeners and opportunities to participate in the contents and their production.
- ❖ Transmedia digital channels (blog, forums, videos, social networks, etc.).

The above-mentioned fields are studied with these tools:

- ❖ Content analysis: this is the whole procedure which permits interpretation of communication products from the original source: messages, texts and discourse [60]. In this research a discriminated sample of pre-published podcasts are applied, so as to find emerging points related with educational action. The data are analyzed by means of pre-analysis, computer encoding, categorization and inference, in accordance with the criteria recommended by Bardin [61].
- ❖ Qualitative interviews: their aim is to understand the behavior of members who participate in a specific context. This method has been used previously in research on podcasting [62]. One of the new trends in interviewing is the narrative approach, based on the concept of the participants answering questions by telling a story [63]. This approach is

applied in the interviews with the agents intervening in the production/hearing of podcasts. The objective was to find how they construct their experience of participating in podcasting.

- ❖ Case studies: a frequently used method in qualitative research to explore and analyze specific realities or collections of realities. It is very useful in researching podcasts (where the producers and listener communities intervene) and in contrasting the results with the content analyses and the interviews. Collier's classification system [64] is used to delimit case typologies: a podcast is a generic, typical, contemporary case. In addition, as this is a hypothesis, other results have been studied analytically for their comparison and to test a theory.
- ❖ Virtual ethnography: podcasting is a multiplatform communications media and part of its action spreads to social networks, blogs and internet forums. It is assumed that internet is a cultural artifact and the connections between the real and virtual worlds are explored ethnographically [65].

5.3 Information sources

The data has been obtained from the following three main sources of information:

- ❖ Podcasts: programs produced and published on the main databases.
- ❖ Podcasters: the content creators and presenters who produce the podcasts.
- ❖ Multiplatform channels on internet: internet areas where the audience participates on the subject of the contents addressed in the podcasts.

5.4 Data collection and analysis

Due to the nature of the object of study, data shall be collected from the primary and secondary sources mentioned above. This has been planified with particular awareness of the individuals involved. Beforehand, all participants will be clearly informed of the objectives of the study and of all the consequences arising from their participation. The data gathered shall be safeguarded scrupulously and anonymized in order to preserve the privacy of the participants.

6 Results to date and their validity

In accordance with the progress made in the state-of-the-art definition, there has been little research into the bases of podcasting. This is the conclusion stemming from the literature review carried out.

7 Disertation status

Currently, progress is being made in their contextualization of the research plan and the preparation of fieldwork. On the one hand, a historical, sociological and educommunication contextualization has been made. On the other, mapping has

been carried out on the object of study in order to substantiate the level of development. Moreover, the qualitative skills needed for the fieldwork are being learned and improved.

8 Current and expected contributions

This research aims to optimize the educational use of podcasting as a social communications medium. This format permits children and adults to continuously learn new things in a more natural and flexible manner than the traditional system of education. Moreover, the contributions of this study aim to make an in-depth study of the educational potential of podcasting in order to maximize social participation and to promote new channels for the creation of networks in civil society.

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