# From Theory to Practice: Student Podcasting through Online Learning Environments in Political Science

# Ximena Alvarenga Fournier

ximena.alvarenga@ucr.ac.cr https://orcid.org/0000-0002-9348-0853 Universidad de Costa Rica, Costa Rica

# Ronald Sáenz Leandro

ronald.saenz@ucr.ac.cr https://orcid.org/0000-0001-8717-1870 Universidad de Costa Rica, Costa Rica

#### **Abstract**

This work aims to advance on the systematization of teaching experiences in the formulation of evaluation activities, mediated by ICT, for academic and professional training in the field of Political Science. It explores the usefulness of student podcasting as a didactic strategy for theoretical-active learning in digital university environments during COVID-19 pandemic. Based on the design of an assessment questionnaire and a non-probabilistic convenience sampling strategy, a survey has been administered to N=40 students from two theoretical undergraduate courses of the School of Political Science at the University of Costa Rica, taught during two semesters in 2020. The article reviews the related results according to the degree of satisfaction with podcasting as a way of evaluating the appropriation of theoretical content. It is concluded by arguing that this teaching-learning methodology helps to facilitate among students' new ways of "putting theory into practice", this through the exercise of creative, reflective skills and theoretical-conceptual argumentation according to the creation of student-made podcasts, based on work on theoretical lines and conceptual proposals of relevance to Political Science.

### **Keywords**

Active learning; online environments; political science; political theory; podcasting.

#### I. Introduction

Political Science is not a discipline very accustomed to thoughtful reflection of its didactic and pedagogical strategies. This has led university professors in this discipline interested in sharing both their findings and their good learning experiences in classrooms, to have very few specialized options to make them known and put them up for discussion with academic peers through specialized means, such as academic publication.

The Anglo-Saxon field has been aware of this void and from the American Political Science Association (APSA), the main body that brings together political scientists in the United States, in recent decades has promoted the development of writing on aspects related to the pedagogy in political science, mainly through two of its official media, namely: initially in some publications and special issues of the classic journal PS: Political Science & Politics, founded in 1968, and more recently with the specialized Journal of Political Science Education, founded in 2005.

As is to be expected, in Latin American academia, and even in Ibero-American, advances in this direction within political science are barely incipient. It is enough to carry out a brief review through the search filters of the aforementioned journals to verify that the contributions from these regions are practically nil. Although recently there is some important antecedents for the Ibero-American case (see Betti, et al., 2020; Ferreiro, 2020), it is pertinent to point out that these are still scarce, while they have not been able to actively integrate the component of communication and information technologies (ICT) in the application of didactic possibilities.

In the opinion of the authors of this article, the incorporation of ICT in classrooms is a fundamental component to consider, especially for the exercise of university teaching based on the virtuality imposed by the COVID-19 pandemic. At this juncture, some authors have proposed taking advantage of the global context as an ideal opportunity for the implementation of educational innovation in accordance with the gradual advance of non-face-to-face teaching methods, as well as to rethink the implementation of pedagogical learning strategies active in online environments (Moreno-Correa, 2020; Rogers et al., 2020).

For these reasons, this work aims to advance in the line of the systematization of teaching experiences in the formulation of evaluation activities inspired by the application of ICT-mediated didactic strategies, for academic and professional training in the field of political science (Mancillas and Brusoe, 2016). Among many possibilities for the incorporation of ICT in university education, the new aural culture created by podcasts in times of digitization (Llinares et al., 2018) constitutes a novel tool that can be used in higher education at least in two ways, namely, as didactic podcasting, contributing to an alternative and concise medium for the transmission of content on a specific relevant topic to a class (Facer & Abdous, 2011; Morris, 2010; Moryl, 2014; Moryl & Jiang, 2013; Piñeiro-Otero & Caldevilla, 2011; Piñeiro-Otero & Costa-Sánchez, 2011), but also as a mechanism for evaluating learning and generating engagement in the student body (Bolliger et al., 2010; Laaser et al., 2010; Moryl, 2013).

The use of the podcast as a didactic strategy in university education has been widely defended by various specialists (Piñeiro-Otero, 2011, 2012; Piñeiro-Otero & Caldevilla, 2011; Piñeiro-Otero & Costa-Sánchez, 2011; Quintana et al., 2017; Ramos & Caurcel, 2011), who generally agree that "the incorporation of new information and communication technologies into the educational field has led to a reconceptualization of the teaching-learning process" (Piñeiro- Otero, 2011, p. 1). Similarly, podcasts, emerging at the time of development of the so-called web 2.0 (which is broadly defined as the transition from passive "Internet user" to active "prosumer"), bring with them the essence of proactivity and the collective construction of knowledge (Salmon & Edirisingha, 2009; Solano & Sánchez 2010).

In this way, in this article it is assumed that podcasting helps to facilitate among students a new way of "putting theory into practice", this through the exercise of creative, reflective and theoretical-conceptual argumentation skills (Murphy, 2017; Pleschová, 2010), according to the creation of popular student podcasts based on the work on theoretical lines and conceptual proposals of relevance to political science. Specifically, it is proposed that it is possible to establish a dialogue between the narrative potentialities of the podcast and the epistemological and theoretical positions of the social and political sciences that during the last decade have come to affirm that:

[...] the narrative offers possibilities of opening and of meaningful encounters between an introspective self, criticism of the academy, rigorous knowledge about an object of study (which is no longer a simple object but a set of interrelations) and the attempt to write in a thoughtful and attractive way at the same time. These encounters enrich the social sciences, their methods, themes and analytical capacity (Ravecca & Dauphinee, 2016: i).1

On this issue, today there are many more voices that have joined the idea that it is possible to insert narratives within academic creation: thus an autoethnographic current arises with a different objective than competition with traditional forms of argumentation. Instead, it seeks openness to new types of questions and concerns, as well as the establishment of a new understanding of theory as a fabric capable of connecting personal experiences and academic research processes (Rhodes, 2021).<sup>2</sup>

Under this general proposal, the present work aims to evaluate the usefulness of student podcasts as a didactic strategy for theoretical-active learning in virtual university environments in political science, implemented during the COVID-19 pandemic. Specifically, it seeks to share the results obtained through the incorporation of the podcast as an evaluative item in two theoretical courses taught during the two academic semesters of 2020 at the School of Political Sciences-University of Costa Rica (ECP-UCR), these are: the course of CP-4001 Contemporary Political Theory I and CP-5004 Theories and Authors in Political Science Research, corresponding to the seventh and tenth cycle of the curriculum of the degree in Political Science.

The structure of the article is divided into five next sections. First, a review of the literature is presented according to the applications of podcasting in university contexts, emphasizing the uses and benefits of aural formats for teaching and learning processes, and also briefly systematizes some trends around the growing relationship between podcasting and the discipline of Political Science. Next, a description of the didactic strategy and the training sessions with the students is elaborated. Third, the analysis methodology to be followed in the study is specified according to the application of a questionnaire to the students of both courses. The fourth section presents, analyzes, and discusses the results obtained with the student assessment consultation. Finally, the conclusions take up some strengths and opportunities for the future application of similar strategies in political science courses.

<sup>&</sup>lt;sup>1</sup> Own translation

<sup>&</sup>lt;sup>2</sup> The combination of podcast, narrative, and academic reflexivity is widely portrayed in the work of Anna Williams (2019), who presented the first doctoral thesis defended in podcast format at the University of Iowa. This recent antecedent is an important incentive for the pedagogical lines that have been looking for open spaces in the university cloisters for years to try alternative forms of teaching, learning and dissemination of knowledge.

## II. The Role of Podcasting in Teaching-Learning Processes

The audio-type resource, as a learning material, has been around since the incorporation of school radios, the use of tape recordings and audioconferences in the educational field (Solano & Sánchez, 2010). Recently, the use and exploitation of the podcast as a sound archive with educational content has had a significant peak in recent years.

The direct connection between the podcast and orality has led this tool to be well received, especially in language departments. Hence, its most widespread use within universities has been in the learning of second languages, in that it allows direct evaluation of skills such as pronunciation and verbal expression (Cássia & Lupion, 2009; Facer & Abdous, 2011; Ramos & Caurcel, 2011; Santiago & Bárcena, 2016). Despite the above, podcasts are also a prolific source for the development of stories and narratives (storytelling), which, despite the wide suspicion that they have historically received in the field of science, have recently been able to demonstrate their ability to facilitate understanding and interest in university work, improving the traditional communication processes of scientific and academic communication (Dahlstrom, 2013; Dantas-Queiroz, et al., 2018; Harris & Park, 2008; Lara & Del Campo 2018; MacKenzie, 2019; Quintana & Heathers, 2021).

In this context, podcasting has re-emerged as a useful technological tool for the transmission of information by professors in their virtual learning environments. Thus, it has been positioned as a methodological option that teaching staff can count on for multiple functions; such as, the recording of classes or lectures, the distribution of complementary material, class or post-class explanations and discussions or short explanatory lessons, among other possibilities (Laaser et al., 2010; Saborío, 2018).

The application of these new tools evidently requires specific training of teachers as producers of aural content. In the case of podcasting, this feature should not be a limitation for podcast use in classrooms. Since, according to Saborío (2018), podcast software is easy to install and use, and does not require high levels of specialized technical knowledge that make it impossible to implement.

In addition to the low learning curve that incorporating the podcast as a teaching tool implies, it has other advantages from the point of view of the student body that is consumer of this type of content. By means of a consultation with the students; Bolliger, Supanakorn & Boggs (2010), showed that students appreciate the use of the podcast to listen to discussions regarding the subject of class, or to receive complementary information to the one studied. Additionally, they verified that this tool facilitates the understanding of the subject by the students, in such a way that it helps to internalize concepts; in addition, it improves the levels of attention, and the students value the possibility of accessing the content and reproducing it as many times as they wish.

At this point, some of the advantages of using the podcast as a teaching tool for the distribution of content and audio-type material have been outlined. For the interest of this article, it is now convenient to point out those benefits that the podcast offers to the student body as a content generator; in other words, as an audio producer and not just a receiver of them. It is therefore the highest cognitive level, following Bloom's taxonomy; in which the student creates something new, based on what he already knows, and the understanding of the information collected. This type of learning, in which the student is the protagonist of their own learning process, is the model that has been favored in the literature on virtual education (Sierra, 2013; Castro et al., 2007).

The use of podcasting as a mechanism for the construction of knowledge on part of the student body, is according to McGarr (2009), the least frequent mentioned in the literature. The fact that students make their own podcast requires, according to the author, a deep level of understanding

of the subject and represents a significant challenge regarding critically examining the content to which they have been exposed in the course. In general terms, when it is the student body who is faced with the production of a podcast, they consider it challenging, interesting and above all useful for their learning processes (Lazzari, 2009). Additionally, it has been proven that this type of assignment enhances technological skills in the creation and manipulation of digital media. Likewise, when the podcast is assigned as a group-type activity, collaborative teamwork and participation capacities are reinforced (McGarr, 2009).

Despite recent documentation regarding the benefits of using podcasts in the classroom, authors such as Lazzari (2009) insist on the need for research to address the real impact of podcasts (whether student are consumers or producers of the podcasts) in their learning processes. The above taking as a reference that podcasting by itself does not necessarily represent an innovative educational change; rather, it requires teaching staff to put it into practice and enrich any learning methodology with continuous training in technologies (Saborío, 2018). Therefore, the success of this type of practice will depend on whether or not the goals and learning objectives proposed by the educator are achieved.

In the field of Political Science, podcasting has generated renewed interest in terms of its didactic possibilities (see McMahon, 2021; Ralph et al., 2009, 2010; Roberts, 2008; Shulman, 2015; Taylor, 2009), but also of the informative and professional uses that are currently being given to podcasts created, or produced, by academics in this discipline (Barker et al., 2020; Bosetta, 2020; Sciubba, 2020). This recent attention to podcasts is reflected in the fact that the prestigious APSA magazine, PS: Political Science & Politics (Vol. 53, Issue. 2), devoted an entire special section (called "Spotlight") to reflect on the intersections between political science and podcasts from different angles.

In general terms, Williams (2020) argues that the advancement of podcasting within political science in its two main variants, scholarly and public orientation, has helped to abandon to some extent the "ivory tower" in which it is often found academic work and contribute to the formation of mostly informed currents of public opinion. Thus, it is possible to identify a list of predefined podcasting formats based on the review of specialized literature.

In this regard, there are podcasts of educational interviews and lengthy conversations with political scientists who have written notable books or major magazine articles, podcasts focused on reviews or comments on books and specialized publications, and podcasts for discussion and analysis of political news or topics considered of current affairs, which are often called by the name of "political podcasts." Likewise, most of the productions identified cover a variety of fields within political science, such as: national politics, comparative and international politics, and political theory: from this review, particularly calls out the predominance of the "political podcast" as a genre of podcasting more developed.<sup>3</sup>

Considering the previous academic and disciplinary antecedents regarding the convenience of incorporating podcasting into university classrooms, the following sections give an account of the evaluation methodology and the results obtained from the implementation of student podcasts as a

<sup>&</sup>lt;sup>3</sup> In the English-speaking world, even podcast playlists have been systematized based on the focus and frequency of publication of chapters (see the site: https://politicsguys.com/political-science-podcasts/). At the University of Costa Rica, the recent projects of the Center for Political Research and Studies (CIEP-UCR) stand out with the podcasts "Desde el CIEP", "Frijolar" and "Historias del Presente", "Política del Mar" and "Fuera de la Caja" which combine different genres of podcasting, from the classic political podcast to the radio novel (see the site: <a href="https://ciep.ucr.ac.cr/nuestros-podcasts/">https://ciep.ucr.ac.cr/nuestros-podcasts/</a>). Likewise, the UCR also highlights the production of podcasts from other research centers, such as "El Zapato Aprieta", "Sin Punto Final" and "Café Radioactivo", podcasts from the Social Research Institute (IIS-UCR) (see: <a href="https://repositorio.iis.ucr.ac.cr/handle/123456789/455">https://repositorio.iis.ucr.ac.cr/handle/123456789/455</a>). In most cases, these podcasting projects were born because of the COVID-19 pandemic.

didactic strategy to promote the apprehension and appropriation of political theory in two courses of the Political Science career.

# III. Description of the teaching strategy

Broadly speaking, the didactic strategy consisted of students taking advantage of the assignments carried out in the course (essentially three: follow-up reports on the theoretical framework, theoretical discussion forums and argumentation exercises) related to their undergraduate research work, to adapt all the concerns, opportunities and reflections arising from those to a more affordable sound format for a not necessarily specialized audience, with the help of digital resources.

The didactic training was divided into two sessions, properly, and in a tutorial period open to the request of the students: the first training session revolved around the theoretical, methodological and technical foundations of academic podcasting, while the second session was a technical guide to making podcasts. According to the first, it was considered that given the novelty in the application of an evaluation of this nature, it was more than necessary to open a space dedicated to the exhibition, discussion, and reflection on the teacher's didactic proposal.

This was carried out in session, under the following generating theme: "Rethinking the role of academic outreach in political science research." The didactic foundation of this session was based on four postulates, namely: i. Explore "the practical dimension of theory"; ii. Strengthen logical argumentation skills; iii. Test alternative forms of academic outreach; and iv. Put into practice "the creative sense".

During the first session, the different didactic and/or informative uses that are currently being given to podcasts created or promoted by political science professionals were explored, as explained in the previous section. And in addition, attention was drawn to the predominance of the "political podcast" (Espinosa de los Monteros, 2020) as the predominant podcasting genre inside and outside the classroom. This finding was of particular interest since it allowed generating a collective discussion around the scope and limitations of the podcasts listened to by the students.

In the second session, a workshop on "podcast production" was held. The teachers' strategy was based on sharing recommendations on the use of specialized software and other issues of interest for audio editing and the search for sound resources: here priority was given to working with free and open-source software Audacity and exploring audio repositories licensed under Creative Commons Attribution. This decision was based on facilitating as much as possible the process of recording, collecting, organizing, and converting sound material, regardless of the operating system used.

The didactic closure concluded with the delivery of podcasts. The teachers set out to compile all the products with the aim of setting up a website (on the free platform site123.com) that would be accessible for quick consultation and playful socialization of the podcasts. The created website 4gives an overview of the student projects, this based on a fictitious class podcast, in which each student or group contributed with a "chapter of the season".

The site created has a first main section, where it is possible to observe the names of the students, their profession, a small image alluding to the content of the product and the number and name of the chapters, as well as a small button for "More information", which redirects to a new tab where

<sup>&</sup>lt;sup>4</sup> Available for consultation on the following link: https://5f05ea099238f.site123.me/cp-5004-1

the synopsis of the respective chapter can be consulted. At the bottom of the page a playback tool is displayed where it is possible to listen to all the chapters.

Finally, the teachers designed and applied a student evaluation questionnaire on the didactic strategy with which they concluded the application of the didactic strategy. In the following sections, this stage is elaborated, and the results obtained by the instrument are discussed.

#### IV. Method and materials

This is a cross-sectional study with an exploratory and descriptive scope. In the first place, it delves into the application of a novel didactic strategy, trying to map and promote pedagogical antecedents in the theoretical teaching mediated by ICT in political science, in the second instance, it tries to build evidence according to the satisfaction of the students with conducting podcasts for theoretical-active learning in the discipline. Therefore, the research does not start from the formulation of hypotheses, nor does it have an explanatory claim, although it is expected to serve as a point of reference for future work in the exercise of the discipline in the Latin American region.

Based on that articulated strategy between both authors, the semi-structured questionnaire instrument was used to collect data. Specifically, a student assessment questionnaire was designed, which was applied, through a non-probabilistic sampling strategy and for convenience, to a population of N=40 students enrolled in the two theoretical undergraduate courses of the ECP-UCR, taught during the regular semesters of the year 2020. The questionnaire was made with the help of the Gmail extension, Google Forms, and was shared by email to all students enrolled in both courses, who gave their answers voluntarily.

The evaluation instrument had 32 items (with different levels of measurement) distributed in four main sections: the first seeks to record the contextual data of the student ("Data of the student person); the second aims to evaluate previous experience and podcast consumption habits at a general level ("Experience with the consumption of podcasts")<sup>5</sup>; while the third introduces the items that seek to map the general evaluation of the podcast as an evaluation strategy in a political theory course ("General evaluation of the podcast as an evaluation strategy"); the fourth, finally, develops some questions that allow us to approach the possible relevance of the usefulness of podcasting for the apprehension and appropriation of a theoretical framework ("Assessment of the podcast as a way of" putting the theory into practice").

The validity of the instrument was performed through a reliability analysis with Cronbach's alpha coefficient, for sections III and IV. This, specifically for the 18 items in which scales were used to assess student satisfaction. The obtained value  $\alpha=0.9$  indicates that the questionnaire applied has good internal consistency.

Thus, it is possible to appreciate that the instrument provides for an exhaustive analysis around the link between the student context, consumption habits and compliance with the didactic strategy. However, since the study consists of a first approach to the application of this specific didactic strategy in the context of the ECP-UCR, it is pertinent to postpone an inferential study until it is possible to replicate the strategy under a representative sample, as well as collecting the experience of students with a longitudinal perspective. For the reasons, the results presentation section only takes up some items from the second, third and fourth sections, which according to

<sup>&</sup>lt;sup>5</sup> For the preparation of the items in this section, the teachers were based on the study "Encuesta Pod 2019: a collaborative study to know the audience of podcasts in Spanish". For more information, consult the official site: <a href="https://encuestapod.com/">https://encuestapod.com/</a>

the authors' criteria are the most pertinent to the objective of the article. Finally, for the data analysis, descriptive statistics tools are used through the R software.

# V. Results, Analysis, and Discussion

With the didactic strategy called "Podcasting in Political Sciences", it was sought to exploit the concepts of narrative, new orality and audio, as novel formats for the dissemination of scientific-political research through the implementation of the theoretical-argumentative capacity of the students.

Given that a project of this type evidently leaves the field of specialty and training of the Political Science career, primarily the substantive aspects were taken into account for the evaluation, that is: the initial narrative argumentation of the podcast (be it a national and international story or phenomenon) that introduces the topic, the theoretical-conceptual discussion achieved and its articulation with the documentary / written part of the assignment, in addition to the appropriate use of theoretical terminologies seen in class.

In sum, this assignment evaluated the students' ability to translate debates and broad topics into accessible explanations, that is, the apprehension and application of the theory in concrete cases. In addition to the podcast-type episode, the delivery had to be complemented with written documentation as the bibliographic basis for the product.

In the following lines, it is intended to condense the student assessment from the delivery of a podcast-type episode, as part of the evaluation of courses CP-4001 and CP-5004, both belonging to the formative branch of political theory of the ECP -UCR.

Course Acronym	Enrolled Students	Answers to the Questionnaire
CP-4001	37	23 (62,2%)
CP-5004	18	17 (94,4%)
Total	55	40 (100%)

Table 1. Composition of the Sample

Source: author created.

Table 1 describes the composition of the population sample: it was made up of N=40 students consulted and enrolled in both CP-4001 (23) and CP-5004 (17). For the first course, there was a response rate of 62.2%, while for the second the questionnaire was answered by 94.4% of the enrolled student population.

In terms of the demographic composition and academic load of the sample, 90% of the students belong to the age range of 18 to 25 years of age, while the remaining 10% are between 26 and 35 years of age. Likewise, at the time they were enrolled in the courses, the didactic strategy was carried out, 67.5% of the students stated that they enrolled between 4 and 6 courses, 17.5% between 1 and 3 courses, and only 15% was taking more than 5 courses simultaneously.

	Yes	No	Total
Consuming podcasts	33(82,5%)	7(17,5%)	40(100%)
Producing podcasts	3(7,5%)	37(92,5%)	40(100%)

Table 2. Previous Experience with Podcasting

Source: author created.

Table 2 shows that although a large majority of the interviewed students (82.5%) had had the opportunity to listen to podcasts before the course; only 7.5% had done a podcast-type episode. The foregoing reflects that, for the experiences reported here in both courses, most students faced the execution of an audio product of this type for the first time.

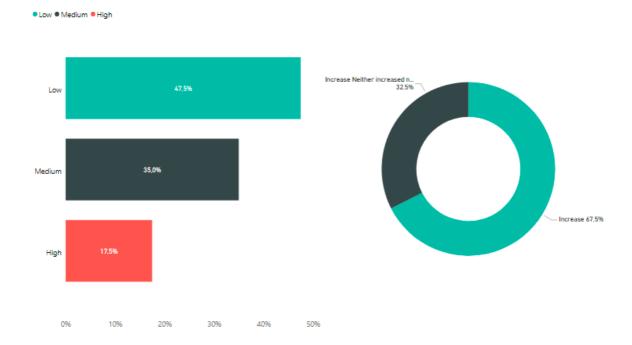


Figure. 1. Interest in Podcasts Before and After the Course

Note: The quadrant on the left answers the question: What was your level of interest in podcasts before enrolling in the course?; The quadrant on the right answers the question: You would say that after taking the course, your level of interest in podcasts ...

Source: author created.

Regardless of whether students were consuming or producing podcasts before enrolling in the courses, they were asked about their level of interest in podcasts. The results show that 47.5% of students expressed a low level of interest before enrolling in the course. However, after taking the subject, student interest in podcasts increased (67.5%), as reflected in Figure 1. Although it is not possible with the data to affirm that it was the product of this assignment that the interest on the part of the student body increased, it is worth noting that none of the people surveyed responded that their interest regarding podcasts decreased after this experience.

Therefore, even though most of the students faced such an assignment for the first time, it is considered that this experience introduced them to podcasts in a positive way. Additionally, these types of assignments increased the interest of the students in the subject and the course in general, with which it is possible to affirm that these assignments had a favorable impact on the motivation of the students in their learning processes.

	Effort Required	Technical Knowledge Required		
High	22(55%)	7(17,5%)		
Medium	16(40%)	28(70%)		
Low	2(5%)	5(12,5%)		
Total	40(100%)	40(100%)		

Table 3. Perception of the Level of Effort and Technical Knowledge for Podcast Production Source: author created.

Assigning a podcast-type episode as an evaluative product is new and uncommon from a career in Political Science. For this reason, the student body was invited to reflect on the degrees of academic and technical demand that are required to successfully comply with the request. To do this, the level of effort required to comply with the assignment was first evaluated compared to more traditional evaluation experiences such as end-of-course essays. So, as shown in Table 3, 55% stated that the level of effort required to comply with the evaluation was high. This perception is consistent with other research that highlights how challenging but, at the same time, interesting that it is for students to face assignments of this type (Lazzari, 2009; McGarr, 2009).

This type of assignment also requires certain technical requirements regarding the recording and editing of the audios. This since one of the latent concerns in the vast majority of the systematizations of experiences consulted, and that have been taken as a precedent for this work, is the "technical barrier" (Ralph et al., 2009, 2010; Taylor, 2009, McMahon, 2021). The specialized literature does not ignore this issue because the curricula of university degrees in Political Science do not usually include training related to audiovisual production.

The results help to qualify to a certain extent the consideration pointed out by the bibliography: 70% stated that, in terms of recording and editing the audio, the assignment required a medium level of technical knowledge to be able to be achieved successfully. The percentage of students who indicated that they require a high or low level is actually lower (Table 3).

Regarding the last question, it is important to draw attention to overcoming the stereotypes commonly associated with the so-called "digital natives", namely, technological expertise, the tendency to multitask, social recreational consumption patterns, among others (Martínez & Piñeiro-Otero, 2014). Given this situation, and following Shulman (2015), it is advisable when working with millennial generations is to reconsider the didactic strategies based on the assertive communication of the expected pedagogical objectives, as well as the most appropriate ways to achieve them. Therefore, in the face of future similar approaches, some type of technical training is essential, either given by the teacher in charge of the subject, or by an external person with adequate knowledge.

Degree	Percentage		
Increase	30(75%)		
Increase Neither increased nor decreased	9 (22,5%)		
Decreased	0(0%)		
DK/NA	1(2,5%)		
Total	40(100%)		

Table 4. Student Assessment of the Degree of Interest in the Course in relation to the Didactic Strategy

Source: author created.

Another widely explored assumption in the literature has to do with the advantages of incorporating information and communication technologies (ICT) in the evaluative field (Fox & Ronkowski, 1997; Zweekhorst & Maas 2015; Auxier, 2020). In this regard, this issue was explored according to the interest generated by the didactic strategy within the course. When analyzing the results (Table 4), it can be argued that there would be a positive effect, in terms of interest in the subject, after the incorporation of an evaluation of this nature within the dynamics of the course: while 75% affirm that their degree of interest increased, 29.6% did not report a substantial change according to their personal criteria. It is noteworthy that on this aspect there was not a single negative answer, which can be complemented with the answers to the question about the particular context in which the didactic strategy was applied.

It is important to highlight that in the two evaluated courses there was a relevant difference on this aspect. The CP-5004 course included a training session on programs and recommendations for editing podcast-type audio, especially the use of Audacity software; while the CP-4001 course did not include any activity of this type in its schedule. Therefore, it is highly recommended that advisory spaces of this type be dedicated, especially for students who are facing assignments like this for the first time. In fact, this aspect was mentioned several times by the students when they were asked about improvement opportunities for this assignment specifically in the course of the acronym CP-4001.

On the other hand, the academic profile of the Political Science career at the University of Costa Rica<sup>6</sup> highlights certain skills that should be promoted in the training of professionals in this area. That said, the students were asked to assess the exercise or implementation of these skills in the podcast creation process.

As reflected in Figure 2, these types of assignments are highly compatible with desirable skills for a Political Science professional. Therefore, based on these student evaluations, it is considered that the podcast as an evaluative product in a course of this career is highly effective in the development and promotion of desirable skills in the student body.

<sup>&</sup>lt;sup>6</sup> The Guidance Office of the University of Costa Rica documents in the following file the desirable skills and the list of tasks to be performed in the Political Sciences career: http://orientacion.ucr.ac.cr/fichaprofesiograficacienciassocialescienciaspoliticas/

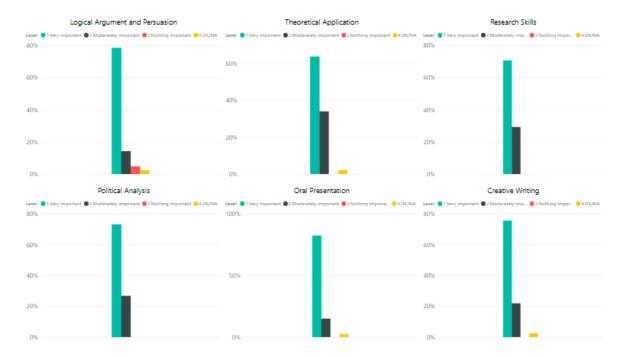


Figure. 2. Perception of the Importance of the Skills Exercised with Podcasting for the Performance of a Professional in Political Science Source: author created.

Additionally, the students highlighted some other useful competencies on a personal and professional level, based on their experience of creating the podcast (Figure 3). The perception of the participants in this aspect reveals that, despite how challenging it was to create their own podcasts; students identify several practical uses after this experience. In particular, they highlighted that this evaluation helped them to improve their ability to synthesize, while developing their creative and communication skills in the transmission of ideas. The integration of new knowledge and the management of technologies were other of the most outstanding elements on the part of the student body.

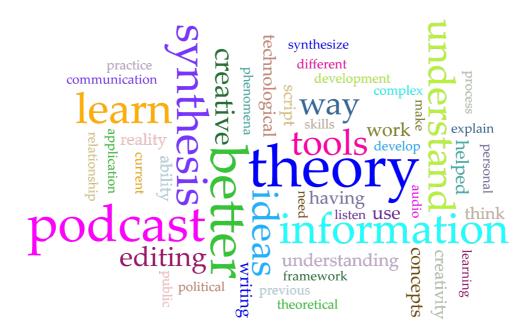


Figure. 3. Word Cloud. Student Assessment of the Usefulness of Podcasting on a Personal and Professional Level
Source: author created.

Additionally, the student evaluation reflected that through an evaluation of this type, the integration of the theory with the explanation of political phenomena or concrete examples was successfully achieved. So, it was advantageous for the apprehension of concepts, while the podcast required a high level of understanding of the theory, capable of being used for their oral explanations. Therefore, the podcast-type assignment was a complex assessment that required and, in turn, enhanced multiple competencies. This is precisely one of the many advantages attributed to the creation of podcasts by students (Alvarenga, 2021).

During 2020 and 2021, a lot has been written about the institutional and teaching challenges for the non-interruption of educational processes, despite the unprecedented context caused by the COVID 19 pandemic. At this juncture, Moreno-Correa (2020) in a propositional line frames the situation as an ideal opportunity for the implementation of educational innovation in accordance with the gradual incorporation of virtuality, as well as to rethink the implementation of active learning pedagogical strategies in virtual environments.

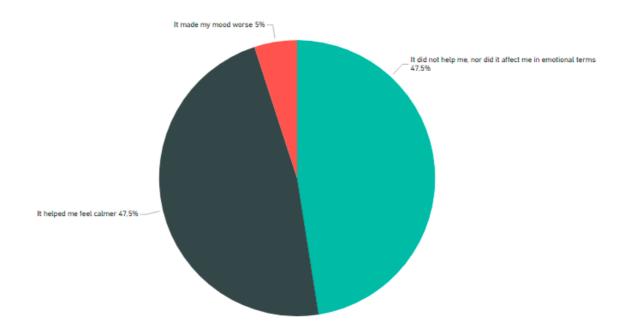


Figure. 4. Student Assessment of the Strategy in Relation to the Emotional Load and the Pandemic Context Source: author created.

However, from a self-critical exercise, this author also makes a call to "evaluate the quality of the teacher-student relationship in this modality, as well as stress, time management and health effects for both teachers and students" (Moreno Correa, 2020, p. 25). The visualization of Figure 4 is based on this consideration, where the responses of the students to the possible emotional effects generated by the delivery of the evaluation are represented in a context that combines the health and social crisis with the adaptation to new study habits and inequities in access to education.

In this regard, close to half (47.5%) of the students affirm that they have not felt affected in emotional terms by the podcast, while the other 47.5% affirm that the evaluation generated peace of mind. Although the percentage of responses in a negative direction was really low (5%), it is pertinent to note that the students who expressed this position agreed that the nature of the assignment as "final project of the semester" was to the detriment of their own academic performance.

The proposal to opt for innovative learning methodologies, and with a high technological component, presents the challenge of successfully achieving the execution of the proposed learning goals and objectives (Saborío, 2018). In this experience, the main pedagogical intention in both courses was to ensure that students improve their understanding and theoretical application to real concrete examples. Therefore, they were asked about their evaluations regarding whether or not the podcast facilitated these learning objectives.

In general terms, as shown in Figure 5, student perception was mostly in favor of the argument that podcasting improved understanding and practical application of the theory. Finally, the student body was consulted about their perception regarding the use of the podcast as a teaching-learning strategy in Political Science. In this regard, 80% of the students consulted stated that they strongly agreed that it should be used more in the career.

	Degree					
Statement	5	4	3	2	1	Total
It helped me improve my understanding of the theory	27(67,5%)	8(20%)	4(10%)	0(0%)	1(2,5%)	40(100%)
Helped me apply the concepts or topics covered in the course to real life examples	29(72,5%)	7(17,5%)	3(7,5%)	0(0%)	1(2,5%)	40(100%)
It helped me to put the theory in dialogue with cases or problems of interest to political science	29(72,5%)	8(20%)	2(5%)	0(0%)	1(2,5%)	40(100%)
Political Science should use podcasting as a teaching-learning strategy	32(80%)	5(12,5%)	1(2,5)	1(2,5%)	1(2,5%)	40(100%)

Table 5. Degree of Compliance with Different Statements about Podcasting

Note: Items on a scale from 1 to 5, where 5 represents the highest degree of conformity and 1

the minimum.

Source: author created.

The documentation of these student evaluations are useful for the validation of this didactic strategy and its convenience in the Political Science career. With these experiences from both courses, it is highlighted that the creation of podcast-type episodes by students fosters useful skills and abilities both on a personal and professional level. These capabilities are also highly congruent with the vocational profile of a career such as Political Science. Therefore, the application of an alternative assessment method such as this is recommended in other courses, especially of a theoretical nature.

### **VI. Conclusions**

The wealth of educational innovation resides in the dual flow of learning-teaching between the teacher and the student body. In this sense, the elaboration of a didactic strategy proposal like the one developed in this document implied a first moment of approach with the same tools and uncertainties that the students later experienced in the framework of the podcasting project. This situation allows for the development of an empathetic, broad, and self-reflective sense around experimentation firsthand with the "evaluator's evaluations".

The main objective of the didactic strategy proposed here was to carry out a project of theoretical and critical reflection, for most it constituted a first experience of putting into practice the skills expected by the School of Political Sciences in terms of the professional exit profile promoted. So, in general terms, both the applied assessment instrument and the student teaching exchange throughout the semester; with this experience, the good use of the strategy has been verified to elicit the skills of logical argumentation and persuasion, of theoretical application, of investigative ability, of oral presentation, among others.

Therefore, it is considered that this didactic strategy is highly compatible with the professional profile of Political Sciences; since, it fosters a variety of desirable skills in the students of this career. In addition, it is considered that this evaluation was well received by the students, who identified many of the advantages that podcasting offers, based on their personal experiences. It is also highlighted that this type of evaluation contributes to learning objectives aimed at promoting the application of the theory in the analysis of political phenomena in the student body. This, while stimulating the students' motivation without harming their moods. This is particularly relevant for online education in complex personal and social contexts caused by the COVID-19 pandemic.

Within the projections of future use, it would be pertinent to contemplate the redoubled efforts on the creative sense and technical training in the production of podcasts. This can be exercised, in the first place, with previous evaluations that allow developing the ability to establish analogies and dialogues with cultural objects in the first instance considered "non-academic", and, in the second instance, contemplating at least two sessions of work and familiarization with ad hoc software (Audacity).

Although we are aware of the limitations of the data, that is not representative of the entire political science student population due to the size of the sample, according to the literature review, this empirical exercise is just one of the first carried out within this discipline in Latin American university settings, where its contribution lies.

After this experience, the authors recommend the application of this strategy in line with a continuous process of reflection and exchange always based on the learning content. Only in this way is it possible to guarantee a good reflective use by the students.

#### References

- Alvarenga, X. (2021). Aula 3.0. El podcast de la innovación y las TIC aplicadas a la educación (Cap. 5. Podcasting como herramienta de enseñanza y aprendizaje) [Podcast].https://podcast.app/podcasting-como-herramienta-de-ensenanza-y-aprendizaje-e136474296/
- Auxier, B. (2020). Examining Motivations and Strategies for Integrating Social Media Technologies Into the Classroom. *Journalism & Mass Communication Educator*, *75*(2), 164-176. https://doi.org/10.1177/1077695819873803
- Barker, P. W., Chod, S. M., & Muck, W. J. (2020). Political Science, Public Intellectualism, and Podcasting. PS: *Political Science & Politics, 53*(2), 326-327. https://doi.org/10.1017/S104909651900163X
- Betti, A., García, A., & Biderbost, P. (2020). Flipping the Classroom in Political Science: Student Achievement and Perceptions. *Revista de Ciencia Política, 40*(3), 589-615. https://doi.org/10.4067/S0718-090X2020005000102
- Bolliger, D. U., Supanakorn, S., & Boggs, C. (2010). Impact of Podcasting on Student Motivation in the Online Learning Environment. *Computers & Education*(55), 714-722. https://doi.org/10.1016/j.compedu.2010.03.004
- Bossetta, M. (2020). The Professional Benefits of Podcasting Politics. *PS: Political Science & Politics, 53*(2), 328-329. https://doi.org/10.1017/S1049096519001628
- Cássia, R. de, & Lupion, P. (Eds.). (2009). Handbook of Research on E-Learning Methodologies for Language Acquisition. IGI Global.
- Castro, S., Guzmán, B., & Casado, D. (2007). Las TIC en los procesos de enseñanza y aprendizaje. *Laurus,* 13(23), 213-234.
- Dahlstrom, M. F. (2014). Using Narratives and Storytelling to Communicate Science with Nonexpert Audiences. *Proceedings of the National Academy of Sciences, 111*(4), 13614-13620. https://doi.org/10.1073/pnas.1320645111
- Dantas-Queiroz, M., Wentzel, L., & Queiroz, L. (2018). Science Communication Podcasting in Brazil: The Potential and Challenges Depicted by Two Podcasts. *Anais da Academia Brasileira de Ciências, 90*(2), 1891-1901. https://doi.org/10.1590/0001-3765201820170431

- Espinosa de los Monteros, M. J. (April 13, 2020). Diez "podcasts" políticos para la cuarentena. *El País Digital*. https://elpais.com/elpais/2020/04/13/dias\_de\_vino\_y\_podcasts/1586790943\_943889.html
- Facer, B. R., & Abdous, M. (Eds.). (2011). *Academic Podcasting and Mobile Assisted Language Learning:*Applications and Outcomes. IGI Global.
- Ferreiro, L. (Ed.). (2020). *Metodologías activas en las aulas de Ciencia Política y Relaciones Internacionales.*Simulaciones de procesos políticos en organizaciones internacionales y nacionales. Tirant lo Blanch.
- Fox, R. L., & Ronkowski, S. A. (1997). Learning Styles of Political Science Students. *PS: Political Science and Politics*, *30*(4), 732. https://doi.org/10.2307/420402
- Harris, H., & Park, S. (2008). Educational Usages of Podcasting: Colloquium. *British Journal of Educational Technology*, 39(3), 548-551. https://doi.org/10.1111/j.1467-8535.2007.00788.x
- Laaser, W., Jaskilioff, S., & Rodríguez, L. (2010). Podcasting: ¿Un nuevo medio para la Educación a Distancia? Revista De Educación a Distancia, 23, 1-10. https://revistas.um.es/red/article/view/111681
- Lara, A. de, & Del Campo, E. (2018). El podcast como medio de divulgación científica y su capacidad para conectar con la audiencia. *Revista Mediterránea de Comunicación, 9*(1), 347-359. https://doi.org/10.14198/MEDCOM2018.9.1.15
- Lazzari, M. (2009). Creative use of podcasting in higher education and its effect on competitive agency. *Computers & Education, 1*(52), 27-34. https://doi.org/10.1016/j.compedu.2008.06.002
- Llinares, D., Fox, N., & Berry, R. (2018). Introduction: Podcasting and Podcasts. Parameters of a New Aural Culture. En D. Llinares, N. Fox, & R. Berry (Eds.), *Podcasting: New Aural Cultures and Digital Media* (pp. 1-13). Springer International Publishing. https://doi.org/10.1007/978-3-319-90056-8\_1
- MacKenzie, L. E. (2019). Science Podcasts: Analysis of Global Production and Output from 2004 to 2018. *Royal Society Open Science*, 6(1), 180932. https://doi.org/10.1098/rsos.180932
- Mancillas, L. K., & Brusoe, P. W. (2016). Born Digital: Integrating Media Technology in the Political Science Classroom. *Journal of Political Science Education*, *12*(4), 375-386. https://doi.org/10.1080/15512169.2015.1096792
- Martínez, X., & Piñeiro-Otero, T. (2014). Sintonizando con la generación digital. La expansión de los organismos de juventud a las plataformas 2.0. *Historia y Comunicación Social, 19*(1), 265-278. https://doi.org/10.5209/rev\_HICS.2014.v19.44956
- McGarr, O. (2009). A Review of Podcasting in Higher Education: Its Influence on the Traditional Lecture.

  Australasian Journal of Educational Technology, 3(25), 309-321. https://doi.org/10.14742/ajet.1136
- McMahon, J. (2021). Producing Political Knowledge: Students as Podcasters in the Political Science Classroom. *Journal of Political Science Education, 17*(3), 448-457. https://doi.org/ 10.1080/15512169.2019.1640121
- Moreno-Correa, S. (2020). La innovación educativa en los tiempos del Coronavirus. *Salutem Scientia Spiritus,* 6(1), 14-26. https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1087909
- Morris, N. P. (2010). Podcasts and Mobile Assessment Enhance Student Learning Experience and Academic Performance. *Bioscience Education*, 16(1), 1-7. https://doi.org/10.3108/beej.16.1
- Moryl, R. (2013). T-shirts, Moonshine, and Autopsies: Using Podcasts to Engage Undergraduate Microeconomics Students. *International Review of Economics Education, 13*, 67-74. https://doi.org/10.1016/j.iree.2013.02.001
- Moryl, R. (2014). Podcasts as a Tool for Teaching Economics. *The Journal of Economic Education, 45*(3), 284-285. https://doi.org/10.1080/00220485.2014.917915
- Moryl, R. L., & Jiang, S. (2013). Using Economics Podcasts to Engage Students of Different Learning Styles. *International Advances in Economic Research, 19*(2), 201-202. https://doi.org/10.1007/ s11294-013-9396-1
- Murphy, M. (2017). Using Active-Learning Pedagogy to Develop Essay-Writing Skills in Introductory Political Theory Tutorials. *Journal of Political Science Education, 13*(3), 346-354. https://doi.org/10.1080/15512169.2017.1328683
- Piñeiro-Otero, T. (2011). La utilización de los podcast en la universidad española: entre la institución y la enseñanza. *Hologramática*, 4(15), 27-49. https://www.cienciared.com.ar/ra/usr/3/1282/hologramatica\_n15v4pp27\_49.pdf
- Piñeiro-Otero, T. (2012). Los podcast en la educación superior. Hacia un paradigma de formación intersticial. Revista Iberoamericana de Educación, 58(1), 1-12. https://doi.org/10.35362/rie5811462
- Piñeiro-Otero, T., & Caldevilla, D. (2011). Podcasting didáctico. Una aproximación a su uso en el ámbito de la universidad española. Sapiens. *Revista Universitaria de Investigación, 12*(2), 14-30. http://ve.scielo.org/pdf/sp/v12n2/art02.pdf

- Piñeiro-Otero, T., & Costa-Sánchez, C. (2011). Potencialidades del podcast como herramienta educativa para la enseñanza universitaria. Etic@net: Revista científica electrónica de Educación y Comunicación en la Sociedad del Conocimiento, (11), 124-136. https://revistaseug.ugr.es/index.php/eticanet/article/view/
- Pleschová, G. (2010). Review of Teaching Theory and Academic Writing. A Guide to Undergraduate Lecturing in Political Science. *Journal of Political Science Education*, 6(1), 91-92. https://doi.org/10.1080/15512160903467398
- Quintana, D., & Heathers, J. (2021). How Podcasts Can Benefit Scientific Communities. *Trends in Cognitive Sciences*, *25*(1), 3-5. https://doi.org/doi.org/10.1016/j.tics.2020.10.003
- Quintana Guerrero, B., Parra Duque, C., & Riaño Peña, J. P. (2017). El podcast como herramienta para la innovación en espacios de comunicación universitarios. *Anagramas rumbos y sentidos de la comunicación*, 15(30), 81-100. https://doi.org/10.22395/angr.v15n30a4
- Ralph, J., Head, N., & Lightfoot, S. (2009). Engaging Students Beyond the Classroom: The Experience of the Pol-Casting Project. *Enhancing Learning in the Social Sciences, 1*(3), 1-24. https://doi.org/10.11120/elss.2009.01030010
- Ralph, J., Head, N., & Lightfoot, S. (2010). Pol-Casting: The Use of Podcasting in the Teaching and Learning of Politics and International Relations. *European Political Science*, *9*(1), 13-24. https://doi.org/10.1057/eps.2009.38
- Ramos, A. M., & Caurcel, M. J. (2011). Los podcast como herramienta de enseñanza-aprendizaje en la universidad. Profesorado. *Revista de Curriculum y Formación del Profesorado, 15*(1), 151-162. https://www.ugr.es/~recfpro/rev151ART11.pdf
- Ravecca, P., & Dauphinee, E. (2016). Narrativa (y) Política: Ideas que solo se pueden contar. Crítica Contemporánea. *Revista de Teoría Política, 6*, i-iv. https://www.colibri.udelar.edu.uy/jspui/bitstream/20.500.12008/9120/1/CC\_Introducci%2b%c2%a6n\_2016n6.pdf
- Rhodes, R. A. W. (2021). Autoethnography as Narrative in Political Studies. En R. A. W. Rhodes & S. Hodgett (Eds.), *What Political Science Can Learn from the Humanities* (pp. 107-128). Springer International Publishing. https://doi.org/10.1007/978-3-030-51697-0\_5
- Roberts, M. (2008). Adventures in Podcasting. *PS: Political Science & Politics, 41*(3), 585-593. https://doi.org/ 10.1017/S1049096508080797
- Rogers, D., Herbert, M., Whitzman, C., McCann, E., Maginn, P. J., Watts, B., Alam, A., Pill, M., Keil, R., Dreher, T., Novacevski, M., Byrne, J., Osborne, N., Büdenbender, M., Alizadeh, T., Murray, K., Dombroski, K., Prasad, D., Connolly, C., ... Caldis, S. (2020). The City Under COVID-19: Podcasting As Digital Methodology. *Tijdschrift Voor Economische En Sociale Geografie, 111*(3), 434-450. https://doi.org/10.1111/tesg.12426
- Saborío, S. (2018). Podcasting: Una herramienta de comunicación. *Innovaciones Educativas, 20*(29), 96-103. https://doi.org/10.22458/ie.v20i29.2254
- Salmon, G., & Edirisingha, P. (Eds.). (2009). *Podcasting for Learning in Universities*. Open University Press. Santiago, R., & Bárcena, E. (2016). El potencial del podcast como recurso didáctico para el desarrollo de las destrezas orales de segundas lenguas con dispositivos móviles. *Porta Linguarum*, 53-64. https://doi.org/10.30827/Digibug.54089
- Sciubba, J. D. (2020). Podcasting Politics in an Era of Fatigue. *PS: Political Science & Politics, 53*(2), 327-328. https://doi.org/10.1017/S1049096519001641
- Shulman, H. C. (2015). Rethinking the Way We Communicate about Politics with Millennials. En S. M. Chod, W. J. Muck, & S. M. Caliendo (Eds.), *Technology and Civic Engagement in the College Classroom* (pp. 89-122). Palgrave Macmillan. https://doi.org/10.1007/978-1-137-50451-7\_4
- Sierra, C. A. (2013). La educación virtual como favorecedora del aprendizaje autónomo. *Panorama, 5*(9), 75-87. https://doi.org/10.15765/pnrm.v5i9.37
- Solano, I. M., & Sanchez, M. M. (2010). Aprendiendo en cualquier lugar: el podcast educativo. *Pixel-Bit. Revista De Medios Y Educación, (36)*, 125-139. https://recyt.fecyt.es/index.php/pixel/article/view/61340
- Taylor, M. Z. (2009). Podcast Lectures as a Primary Teaching Technology: Results of a One-Year Trial. *Journal of Political Science Education*, *5*(2), 119-137. https://doi.org/10.1080/15512160902816249
- Williams, A. (2019). My Gothic Dissertation: A Podcast [PhD Thesis, The University of Iowa]. https://doi.org/ 10.17077/etd.8a8q-65dh
- Williams, L. (2020). Political Science and Podcasts: An Introduction. *PS: Political Science & Politics*, 53(2), 319-320. https://doi.org/10.1017/S1049096519001677

Zweekhorst, M., & Maas, J. (2015). ICT in Higher Education: Students Perceive Increased Engagement. *Journal of Applied Research in Higher Education, 7*(1), 2-18. https://doi.org/10.1108/JARHE-02-2014-0022

# De la teoria a la pràctica: el podcasting estudiantil als entorns d'aprenentatge en línia a Ciència Política

#### Resum

Aquest treball pretén avançar en la línia de la sistematització d'experiències docents en la formulació d'activitats d'avaluació mediades per TIC, per a la formació acadèmica i professional en el camp de la Ciència Política. Té per objecte explorar la utilitat del podcasting estudiantil com una estratègia didàctica per a l'aprenentatge teòric-actiu als entorns virtuals universitaris durant la pandèmia de COVID-19. A partir del disseny d'un qüestionari de valoració i una estratègia de mostreig no probabilístic per conveniència, s'ha administrat una enquesta a N=40 estudiants de dos cursos teòrics de grau de l'Escola de Ciències Política de la Universitat de Costa Rica, impartits durant els dos semestres de l'any 2020. L'article revisa els resultats relacionats d'acord amb el grau de satisfacció amb el podcàsting com a forma d'avaluar l'apropiació de continguts teòrics. Es conclou argumentant que aquesta metodologia d'ensenyament-aprenentatge ajuda a facilitar entre els estudiants noves formes de "portar la teoria a la pràctica", això a través de l'exercici d'habilitats creatives, reflexives i d'argumentació teoricoconceptual d'acord amb la creació de podcasts estudiantils de divulgació, basats en el treball sobre línies teòriques i propostes conceptuals de rellevància per a la ciència política.

#### Paraules clau

Aprenentatge actiu; entorns virtuals; ciència política; teoria política; podcàsting.

# De la teoría a la práctica: el podcasting estudiantil en los entornos de aprendizaje en línea en Ciencia Política

#### Resumen

Este trabajo pretende avanzar en la línea de la sistematización de experiencias docentes en la formulación de actividades de evaluación mediadas por TIC, para la formación académica y profesional en el campo de la Ciencia Política. Tiene por objeto explorar la utilidad del podcasting estudiantil como una estrategia didáctica para el aprendizaje teórico-activo en los entornos virtuales universitarios durante la pandemia de COVID-19. A partir del diseño de un cuestionario de valoración y una estrategia de muestreo no probabilístico por conveniencia, se ha administrado una encuesta a N=40 estudiantes de dos cursos teóricos de grado de la Escuela de Ciencias Política de la Universidad de Costa Rica, impartidos durante los dos semestres del año 2020. El artículo revisa los resultados relacionados conforme al grado de satisfacción con el podcasting como forma de evaluar la apropiación de contenidos teóricos. Se concluye argumentando que esta metodología de enseñanza-aprendizaje ayuda a facilitar entre los estudiantes nuevas formas de "llevar la teoría a la práctica", esto a través del ejercicio de habilidades creativas, reflexivas y de argumentación teórico-conceptual conforme a la creación de podcasts estudiantiles de divulgación, basados en el trabajo sobre líneas teóricas y propuestas conceptuales de relevancia para la ciencia política.

## **Palabras clave**

Aprendizaje activo; entornos virtuales; ciencia política; teoría política; podcasting.

Date of publication: 30/12/2022

The articles published are under a <u>Creative Commons Attribution-NonComerical-NoDerivs 4.0 Spain License</u>. Authors retain all rights.

