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DIGITAL COMPETENCIES IN THE JOURNALISM CURRICULUM: CASE ANALYSIS OF A CENTRAL AMERICAN UNIVERSITY

Competencias digitales en el Currículo de Periodismo: análisis de caso de una Universidad Centroamericana

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ABSTRACT

This case analysis is a study proposal on digital competencies in the journalist training curriculum, a model proposed from the intersection of Ferrés and Piscitelli's proposal on the dimensions of Media Competence and DigComp developed by the European Commission. The object of study was the Bachelor of Social Communication at the José Simeón Cañas of El Salvador Central American University due to its tradition of studies in journalism and its curricular adjustment in 2019 proposing a double presence and assuming the virtual before the pandemic.

As a method, content analysis was used from the dimensions of digital competencies in their study plan. The results show that there is no deepening of the concept of competence is equivalent to skill and there is no description of what is understood as image and digital competence, limited spaces where students can generate elements of assessment and criticism of the use of the fourth screens, no topics were found that address content related to copyright, collective intelligence and especially Internet security as forms of protection of identity and personal information on the web and social networks, abuses and/or dependencies created by technology and personal care about the abuse of technologies.

Keywords: Journalist training; University curriculum; Higher education; Information and communication; Media education; Information literacy; Digital competence.

RESUMEN

Este análisis de caso presenta un estudio sobre las competencias digitales en el currículo de formación de periodistas, a partir del modelo planteado como cruce de la propuesta de Ferrés y Piscitelli sobre las dimensiones de la Competencia Mediática y las DigComp desarrolladas por la Comisión Europea. El objeto de estudio es la Licenciatura en Comunicación Social de la Universidad Centroamericana José Simeón Cañas del Salvador, programa de formación con tradición en estudios en periodismo en este país, que a partir del ajuste curricular del año 2019 propone una doble presencialidad, la cual se convierte en tendencia durante el contexto de pandemia. Como método de investigación se utilizó el análisis de contenido de las dimensiones de las competencias digitales en su plan de estudios.

Los resultados muestran que no hay una profundización en el concepto de competencia, y no existe descripción de lo que se entiende como imagen y competencia digital, limitados a espacios donde generar en los estudiantes elementos de valoración y crítica al uso de las cuartas pantallas, no se encontraron temáticas que aborden contendidos sobre derechos de autor, inteligencia colectiva y, en especial, seguridad en la Red como formas de protección de la identidad y la información personal en la web y redes sociales, abusos y/o dependencias creadas por la tecnología y los cuidados personales sobre el abuso de las tecnologías.

Palabras clave: Formación de periodistas; Plan de estudios universitarios; Enseñanza superior; Información y comunicación; Educación sobre medios de comunicación; Alfabetización informacional; Competencia digital.

COMPETÊNCIAS DIGITAIS NO CURRÍCULO DE JORNALISMO: ANÁLISE DE CASO DE UMA UNIVERSIDADE CENTRO-AMERICANA

RESUMO

Esta análise de caso apresenta um estudo sobre as competências digitais no currículo de formação de jornalistas, com base no modelo proposto como um cruzamento entre a proposta de Ferrés e Piscitelli sobre as dimensões da Media Competence e o DigComp desenvolvido pela Comissão Europeia. O objeto de estudo é o Bacharelado em Comunicação Social da Universidade Centro-Americana José Simeón Cañas do Salvador, um programa de formação com tradição em estudos de jornalismo neste país, que a partir do reajuste curricular de 2019 propõe um duplo presencial, que se torna uma tendência durante o contexto da pandemia. Como método de pesquisa, utilizou-se a análise de conteúdo das dimensões das competências digitais nos planos de estudo.

Os resultados mostram que não há aprofundamento no conceito de competência, e não há descrição do que se entende por imagem e competência digital, limitando-se a espaços onde os alunos possam gerar elementos de avaliação e crítica ao uso de quartas telas, não foram encontrados tópicos que abordam conteúdos sobre direitos

autorais, inteligência coletiva e, principalmente, segurança na Internet como formas de proteção de identidade e informações pessoais na web e redes sociais, abusos e/ou dependências criadas pela tecnologia e cuidados pessoais no abuso de tecnologias.

Palavras-chave: Formação de jornalistas, Currículo universitário, Ensino superior, Informação e comunicação, Educação para a media, Competência em informação, Competência digital.

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1. INTRODUCTION

The construction of study plans for education programs in communication and journalism usually starts from a need extrinsic to knowledge, which is related to the practical level in the professional field. Hence, there is a strong contextual coherence consistent with relations with the market, labor demands, and even social needs. The selection of the contents tends to adapt to these needs and purposes.

In the current context, the importance of the role of the journalist is determined by the increase in information consumption that occurs through the multiple digital platforms that appear as new media outlets of the network society, with renewed potential and new user profiles, where the information is combined or distorted, according to the domain of the user (Soep, 2012).

Technological progress happens at a great speed that still does not have repercussions with the same speed in the field of education, that is why the role of the school must be much more proactive in the face of the media and technology that have caused great transformations and changes in the way we communicate, but in the educational field it has not been adequately systematized and progress has not been verified against the policies that educational organizations build (Pérez-Rodríguez and Delgado-Ponce, 2012).

Technology advances faster than education does. The media and technology change the way we communicate but these changes are not reflected with the same speed in the classroom because the educational field has not been adequately systematized and the advances in the face of the policies that educational organizations build are not noticed (Pérez-Rodríguez and Delgado-Ponce, 2012).

Likewise, the pedagogical use of ICT makes it easier to acquire knowledge and share it through learning communities (Romero and Patiño, 2018). ICTs offer a wide range of possibilities to communicate, more extensive than traditional methods, and drive a pedagogical transformation in educational processes, promoting experiences and activities that lead to broader and more interactive learning. Similarly, educational policies and pedagogical trends have encouraged the use of technology inside and outside the classroom to complement academic training (Vázquez-Cano et al., 2020) and its didactic use is considered necessary for the effective development of current education.

Consequently, today's society requires a restructuring of the educational approach, in which students are required to have knowledge and skills to develop their full potential, take advantage of new technologies to enhance their full learning capacity, and prepare to function in a competitive, technological, and constantly changing work world in the future (Rodríguez-Sánchez and Revilla-Rodríguez, 2016). In this context, we are facing a paradigmatic change regarding the training of professionals (López-Meneses and Vázquez-Cano, 2013; Vázquez-Cano, 2015).

From this perspective, education focused on obtaining a professional degree in communications should focus its educational intentions on increasing the skills of its students. According to various authors, competence is defined as a process in which problems are solved creatively, activities are carried out, solutions are sought, analyzes are carried out, reflections are made, ideas are generated in which knowledge is applied to respond to the demands of a real situation. (Serrano et al., 2016; Ramos et al., 2017).

The concept of competence was born associated with the work and business world; it gradually became integrated into the academic world until it became the conceptual axis of educational reforms in most countries of the world. Competence is usually understood as "a combination of knowledge, skills, and attitudes that are considered necessary for a given context" (Ferrés and Piscitelli, 2012, p. 76).

From the American pragmatic educational approach that gave rise to the curricular theory and the theory of learning objectives, it has been taken as a competency-based approach because this model, in its expression in the 70s, allowed the formulation of labor competencies but closely linked to establishing verbs as done in the theory of objectives. These proposals, then, infer since there is no distinction between competence and the curricular proposal for behavioral objectives (Díaz-Barriga, 2011).

In Latin America, an example of the transition from work to education is found in the so-called Tuning project. The behavioral approach from this perspective is very close to the idea of the origin of twentieth-century American pedagogy. This modern curricular model is formulated from the theory of behavioral objectives and the analysis of task performance. This approach talks about general and specific competencies as supported by the Tuning project, which establishes knowledge from particular professions and abilities or skills.

The elaboration of educational plans and curricula based on their structure had a very important influence because the curricular planning and classroom activities were shaped from knowledge, skills, and attitudes.

This exercise of curricular analysis is limited to the concept of digital competence as it is considered one of the key competencies of the modern citizen. The European Commission (2018), since 2006, proposed that citizens should possess key skills to be able to actively participate in society and to continue learning throughout life.

The European Parliament and the Council of the European Union in 2006 defined a

European reference framework of key competencies for lifelong learning and these competencies are defined as a combination of knowledge, skills, and attitudes appropriate to the context (Official Journal of the European Union, 2006).

From this perspective, they define that the key competencies are those that all people need for their personal fulfillment and development, as well as for active citizenry, social inclusion, and employment. Its importance is that each of them can contribute to success in the knowledge society. This is how they establish eight key competencies: 1) communication in the mother tongue; 2) communication in foreign languages; 3) mathematical competence and basic competencies in science and technology; 4) digital competence; 5) learn to learn; 6) social and civic skills; 7) sense of initiative and entrepreneurship, and 8) awareness and cultural expression (Official Journal of the European Union, 2006).

This document defines digital competence as the safe and critical use of information society technologies (ISTs) for work, leisure, and communication. It is based on basic ICT skills (use of computers, information management, and collaboration through the Internet). It also requires a good understanding of the nature, role, and opportunities of IST in everyday situations in private, social, and professional life. Also, understand the possibilities that ISTs offer as a tool to support creativity and innovation, and handle the validity and reliability of the information, its legal and ethical principles (Official Journal of the European Union, 2006).

Among the necessary capacities are those of searching, obtaining, and processing information, using it critically, systematically, and evaluating its relevance. Also, the ability to use complex information production and understanding tools, effectively using the Internet, relying on critical thinking, creativity, and innovation. In this new moment, a critical and reflective attitude is required regarding the available information and responsible use of interactive media. This competence is also based on the interest in participating in communities and networks for cultural, social, or professional purposes (Official Journal of the European Union, 2006).

Digital competence includes technological, informational, multimedia, and communicative aspects that favor the critical, responsible, and creative use of technology, essential in the learning and participation processes of 21st-century society (Gallego et al., 2019; Esteve et al., 2016; Napal et al., 2018).

The learning perspective proposed by the European Union for a digital society proposes a basic competence for education that all students must have acquired once they have completed compulsory education, to develop as people and be able to integrate properly into this society (Gordillo et al., 2019).

For its learning, it is important to clarify that digital competence is not inherently acquired by having access to the Internet and using technology but rather specific training is necessary. Posing the danger of a new digital divide, not because of the lack of access to technology but because of the lack of digital competence (Gordillo et al., 2019; Pérez-Escoda et al., 2016; Van-Deursen and Van-Dijk, 2011).

In general terms, digital competence refers to the skills and literacies necessary for the average citizen to be able to learn and browse in the digitalized knowledge society (Ilomäki et al., 2016), hence the interest in the construction of policies that develop it.

From an educational perspective, digital competence is defined as the set of skills, attitudes, strategies, and knowledge that are required when ICT and digital media are used to perform tasks, solve problems, communicate, manage information, collaborate, create and share content, and build effective, efficient, appropriate, critical, creative, autonomous knowledge, with flexibility, in an ethical, reflective manner for work, leisure, participation, learning, and socialization (Ferrari, 2012).

Digital competence interacts with many other competencies of the 21st century, since it cuts across other competencies, through the active and critical use of ICT. This reveals the challenge and reflection of the mainstreaming of digital competence in education (Martínez-Bravo et al., 2021).

To test the proposed model of curricular analysis and analyze the implementation of changes in the study plan with a view to digitalization, the program of the Bachelor of Journalism of the Central American University José Simeón Cañas - UCA is reviewed. This training program with a tradition in journalism studies decides to make a curricular adjustment in 2019 with a view to a double attendance and the possibility of taking more subjects from virtuality without projecting the trend of this decision in the context of the pandemic.

The adjustment focuses on including a new focus on skills in its study plan, expanding them beyond critical and cultural thinking, and also addressing technique, service, and mastery of languages. This leads to considering new subjects linked to the field of transmedia production and digital humanities (UCA, 2019). In this way, they include these subjects, which bring this line closer to the proposed plan, to a possibility of developing digital competence.

This program began in 1990, has a duration of five years distributed in ten academic cycles, a total of 42 subjects are studied, and value units are used for what in other countries is called academic credit, students must complete between 162 and 172 value units, depending on the number of electives they choose. Among the changes they have made, in 2002 they removed script and emphasis of journalism from the degree (UCA, 2019).

In the curricular update document they describe how the transformation of communication and journalism, since 2016, has put them in the academic spotlight with the emergence of terms such as "post-truth" which, according to the Oxford dictionary, post-truth or emotional lie is a neologism that refers to a particular circumstance in which emotions and beliefs influence more than objective facts. Similarly, daily life has been entirely transformed with the penetration of social network platforms and the convergence of different technologies in a single device that condenses many communication experiences: the mobile phone (UCA, 2019). In

the same document, they present a very interesting professional line for the subject of research and it is educational communication to propose educational projects in Salvadoran reality.

For the presented proposal, they reviewed curricula and perceptions of graduates of the degree, they also studied for six months the profiles of job offers, to define a Bachelor's degree of a comprehensive vision of communications, emphasizing journalism, organizational communication, and educational communication. For the update, the offer of subjects on creative work and new itineraries according to the current reality is expanded.

Within the analysis of the subject of study, is journalism and digital skills, for this reason, the first point that is identified is that, although the Bachelor's degree in its name no longer carries the title of journalist, journalistic work is not ruled out as part of its fundamental lines of education.

2. OBJECTIVES

The purpose of this case study is to determine the digital skills that are present in the formation of the professional profiles of communicators and journalists of the Bachelor of Social Communication of the José Simeón Cañas Central American University of El Salvador from the identification of objectives and curricular contents that develop digital competencies and their classification according to the dimensions of digital competencies in the study plan. Similarly, to apply the model proposed in the study for the review of digital skills in the curricular contents of the education of journalists, and, finally, to generate recommendations for the strengthening of the curricular structure of this program.

3. METHODOLOGY

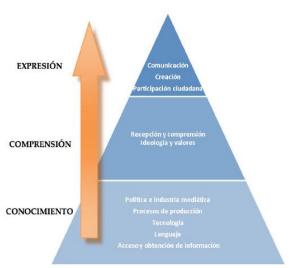
3.1. Analysis from digital skills in the curriculum

The following analysis is carried out from the categories of the research model based on two proposals from an edu-communicative approach, understood as education that goes beyond training or media literacy and is understood as an education that includes the critical analysis of the messages received in different technological media and, in the same way, the ethical and responsible creation of content to strengthen the interaction and understanding of all citizens as active agents and of their environments with a democratic sense (Marta-Lazo, 2018).

The first base model is the one proposed by Ferrés and Piscitelli (2012) on the Dimensions of Media Competence understood as the domain of knowledge, skills, and attitudes related to six basic dimensions whose indicators have to do with the scope of participation as people who receive messages and interact with them (field of analysis) and as people who produce messages (field of expression).

Digital competencies in the Journalism Curriculum: case analysis of a Central American University.

Figure 1Dimensions of media competence



Source: Pérez-Rodríguez and Delgado-Ponce, 2012

This proposal born from the concept of media education is focused on a form of «empowerment», a way to help citizens take control of media production (Ferrés and Piscitelli, 2012) and to make the most of the opportunities it offers.

As a second base model, the digital competencies or DigComp developed by the European Commission within the strategy of a Europe adapted to the digital age have been taken as a reference framework to explain what it means to be 'digitally competent'. Furthermore, it focuses on developing digital competence as a safe, critical, and responsible use and commitment to digital technologies for learning, work, and participation in society.

Digital competence includes the potential to support the development of (1) data and information literacy, digital competence for all, and can be adapted, and (2) communication and collaboration, aimed at supporting different skill levels, needs (3) digital content creation (4) security, and (5) problem-solving.

Figure 2

Areas of digital competence



Source: European Commission, 2020

Within the DigComp Framework, proposed by the Member States, in which they recognize that educators need a set of digital skills specific to their profession that allow them to take advantage of the potential of digital technologies to improve and innovate education.

The pedagogical proposal of the DigComp in point six, information and media literacy, intends to facilitate the development of digital competence in students and proposes to incorporate learning activities, in which students express their needs for information, resources in digital environments, their ways of finding, organizing, processing, analyzing, and interpreting information, and their strategies for comparing and critically evaluating the credibility and reliability of information and its sources.

The crossing of these two measurement proposals and indicators of media and digital competence have generated six categories of analysis on digital competencies in the curriculum.

Each competence has a curricular content that defines it and for content analysis, the codes or subgroups that interpret it within the curricular plans are found. 38 descriptor contents and 34 codes or subtopics were used.

Table 1Categories of the curricular analysis of digital competencies

Categories Topic groups	Curricular content that defines the category
Language, communication, and collaboration	- Information practices that focus on different systems and digital content according to the communicative function and interlocutor.
	Digital image and semiotics analysis.
	Analysis of the new narratives and digital platforms.
	Analysis of media ecology.
	Ethical use of information.
	Media, democratic participation, and social development.
	Forms of expression and languages used in digital relations.
Technology, digital content, and creation.	- Creation of digital content and construction of informative pieces in multimedia languages.
	Knowledge and application of copyright.
	Elaboration and re-elaboration of digital content.
	Analysis of multimodal and multimedia interactive audiences.
	History of the Information Society.
Digital production and dissemination.	Use of programs to generate content and digital information.
	Production of information in digital media and roles of the digital communicator.
	Copyright.
	Production processes and infrastructure for digital news productions.
	Analysis of content production on digital platforms.
	Collective intelligence and work on the web.
Interaction and critical data analysis	Skills to browse, organize, store, manage, and evaluate digital content and information.
	Critical analysis of content and digital information.
	Analysis of digital messages and audience.

	Production of multimedia pieces with a social focus.
	Management of editing techniques and re-editing of messages.
	Selection of information and types of messages.
	Collective intelligence and work on the web.
	Society technologies and their effects.
	Relationships in hypermedia, transmedia, and multimodal environments.
	Assessment of the positive and negative effects of interaction with screens.
Identity, values, and security	Criteria for the selection of an infodiet or content.
	Personal information on social networks, online/offline identity, and control of own or others' private data.
	Analysis of the problems of abuse in social networks.
	Personal and group care actions against excesses in the use of ICT.
	Context analysis in interaction processes.
	Assessment of the effects on learning through digital platforms.
Aesthetics, digital content, and creation	Production of content and digital information.
	Management of editing techniques and reissue of content and digital information.
	Copyright.
	Production of digital content with aesthetic and artistic elements.

Source: Own Elaboration

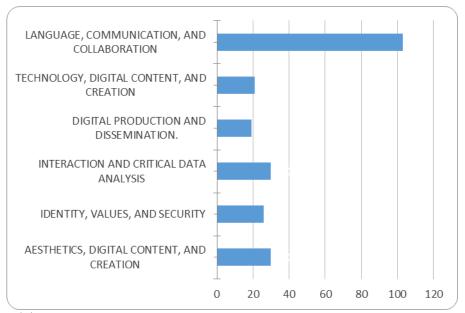
For the analysis, the Atlas T.I program was used as a technological tool for the analysis and interpretation of information from the curricular documents and contents of the study plan based on the search for the previously defined categories and the keywords identified in their definitions. From there, the following items are found.

4. RESULTS

4.1. Curricular contents according to the dimensions of digital competencies

Each category yielded several references that are identified from the keywords in the curriculum documents as follows:

Figure 3References on digital competence in the journalism curriculum of the UCA



Source: Own Elaboration.

4.1.1. Language, communication, and collaboration

This category includes content with topics that are related to information practices in different systems and digital content, analysis of the digital image, new narratives and digital platforms of media ecology, content on the use of social networks, forms of expression, and languages used in digital relationships, digital theory, ethical use of information, the media, democratic participation, and social development.

In the review, the content was identified in the subjects of multimedia production and journalism, social media, data analysis, transmedia storytelling, class projects focused on publishing material on the web, writing on the web and searching for information on the web, workshop on multimedia journalism, formation of the new media and fiction for cinema, communication applied to the organization, media workshop, and communication supports.

In the analysis, there are no specific references to digital image or semiotics, the related topics are in the same courses of multimedia content and transmedia, contemporary art, the manipulation of photography.

On the ethical use of information, they are found as part of the methodological strategy and in subjects such as introduction to journalism, communication ethics, negotiation and effective communication, journalistic photography, psychology applied to the company.

In the topics of the media, democratic participation, and social development, there are descriptors in the career and subject objective such as: narratives and formats of

the new media, design and critical thinking, introduction to human rights, contemporary debates on society and culture. Regarding communication for social change, the subjects are pedagogical-didactic fundamentals of educational communication and (audiovisual) media history.

4.1.2. Technology, digital content, and creation

The five descriptors that define this category are: the creation of digital content and construction of informative pieces in multimedia languages, knowledge and application of copyright, elaboration and re-elaboration of digital content, analysis of multimodal interactive audiences, and, finally, history of the information society.

They are present in the search: introduction to digital humanities, introduction to multimedia programming, validation workshop, logical and rhetorical evaluation, media and communication supports workshop, introduction to digital humanities, and animation workshop.

Regarding the topic of knowledge and application of copyright, there is only one bibliographic reference in the introductory course to digital humanities, so it is content absent from the curriculum.

4.1.3. Digital production and dissemination

This category is defined from six contents: use of programs to generate content and digital information, production of information in digital media and roles of the digital communicator, copyright, production processes and infrastructure for digital news productions, own content production analysis on digital platforms, and collective intelligence and work on the web.

The previous contents are found in subjects such as introduction to multimedia programming, program profile, marketing of multimedia projects, multimedia journalism workshop, data journalism and visualization, history of cinema, photographic theory and production.

Regarding contents concerning the critical vision in the use of the fourth screen, no direct references were found, and in the subject of collective intelligence and work on the web, no correlation was found anywhere in the program document.

4.1.4. Interaction and critical data analysis

This category is defined based on ten curricular contents: skills to browse, organize, store, manage, and evaluate content, digital information, critical analysis of content and digital information, analysis of digital messages and audience, production of multimedia pieces with a social focus, techniques for editing and re-editing messages, selection of information and types of messages, collective intelligence and work on the web, technologies and their effects, relationships in hypermedia, transmedia, and multimodal environments, and assessment of the positive and negative effects of interaction with screens.

The references are found in the subjects of: administration for communicators and market intelligence; marketing of multimedia projects; data collection tools and media legislation; use of computer-assisted text analysis; discourse analysis and analysis of literary texts; and methodologies that encourage critical analysis and contemporary debates on society and culture.

Regarding the critical analysis of content and digital information and assessment of the positive and negative effects of interaction with screens related to critical vision, there are no references. Analysis of digital messages and audience are not referenced with the digital approach, but in audience analysis, there are the validation and evaluation workshop and the media and communication support workshop subjects.

Regarding the production of multimedia pieces with a social focus, there is no direct reference but the closest one is the educational innovation subject. And concerning content on collective intelligence and relationships in hypermedia, transmedia, and multimodal environments, there are no direct or close references.

4.1.5. Identity, values, and security

It is curricularly defined based on six contents: criteria for the selection of an "infodiet" or content; personal information in social networks, online/offline identity and control of private data; analysis of the problems of abuse in social networks; personal and group care actions against excesses in the use of ICT: analysis of the context in the interaction processes; and assessment of the effects on learning through digital platforms.

There are the subjects design of educational scientific dissemination projects, educational innovation, photographic theory and production.

On the assessment of the effects on learning through digital platforms, the related edu-communication code was used in the program profile and the subjects: design of educational scientific dissemination projects, pedagogical-didactic foundations of educational communication, and debates in educational communication.

No content is found in the program on topics such as security and technology regarding the uses and forms of protection of identity and personal information on the web and social networks, problems concerning the uses, abuses, and dependencies with technology, personal and group care actions against abuse of technologies.

4.1.6. Aesthetics, digital content, and creation

With four contents which are: production of content and digital information; management of editing techniques and reissue of content and digital information; copyright; and production of digital content with aesthetic and artistic elements.

Besides what was previously referenced in the subject ICT and art regarding creation, analysis of art and technology, references were found in the subjects of art history, aesthetics and social communication, and music history.

5. DISCUSSION

5.1. On the concept of competence

The professional profile of the Bachelor of Social Communication is established in the formation of knowledge, skills, and attitudes. In the document "Career Study Plan" 2019 version, no concept or competency approach is defined, it is only described that the Tuning project is adopted, from the approach that raises the general and specific competencies that knowledge establishes from particular professions and abilities or skills.

There is no description or inference about digital competence, only as a proposal in the adjustment document, it is proposed "to underpin the competencies, not only of critical and cultural thinking, but also of technique, service, and command of languages. This leads to considering new subjects linked to the field of transmedia production and digital humanities" (UCA, 2019).

5.2. The curriculum

This approach to the curricular proposal of the Bachelor of Social Communication at the José Simeón Cañas University was made from the review of the study plan in contrast to the model of research on digital skills in journalism curricula.

From this perspective, there is a curricular proposal that has been adapted to the contextual demands of journalism today in the face of the inclusion of information and communication technologies within informative practices.

The social approach that includes participatory communication and educommunication as contents that strengthen the professional profile and present identity of the degree is also highlighted.

The teaching of journalism must include practices such as data journalism in its university curriculum, which although it is present, its inclusion in the study plans has been slow, it is necessary to include tools and techniques that allow data journalism to reach a priority level in study plans (Anton-Bravo and Serrano-Tellería, 2021).

5.3 Training strategies in digital skills

Regarding the educational practices of communication, this program includes chairs within the area of educational communication, such as pedagogical-didactic foundations of educational communication where one of its objectives is to reflect on the pedagogical mediation in educational communication, using case studies and the critical analysis of didactic and pedagogical practices for the transformation of accompaniment in educational processes. Another subject is: educational innovation, which has as one of its purposes to understand the pedagogical relationship between the components that make up education and communication with an emphasis on the development of coherent and strategic socialization processes in the Salvadoran

context, in the same way they include topics such as the pedagogical function of the audiovisual arts.

Although training in digital skills is not specified at any time, their practices in the multimedia areas propose it and their emphasis on edu-communication is clear.

5.4 Digital skills in the curriculum

The plan has subjects that focus on the analysis of the context and production of the image but it is necessary to include topics of analysis of the digital image and its semiotics. In the same way, generating elements of assessment and criticism of the use of fourth screens, as well as analysis of current digital audiences, in students.

An important issue to include and that is currently vital for the development of digital competence is the issue of copyright since no specific content is found, only a bibliographic reference.

Regarding the issue of collective intelligence and work on the web, no reference was found, this is another content that becomes very important in the conception of digital competence and as a basic element in the development of current technological projects.

There is an approach to the issue of educational innovation but the contents on social uses of ICT, social networks, and social movements on the network must be strengthened.

In the current context, it is important to generate content around topics such as the use of digital environments with positive results in their relationships, forms of protection of identity and personal information on the web and social networks in terms of abuses and dependencies created by social networks and technology regarding personal and group care on the abuse of technologies, since no reference information was found in the proposal of the degree.

6. CONCLUSIONS

By determining the digital skills that are present in the formation of the Bachelor of Social Communication at the José Simeón Cañas Central American University in El Salvador, it was first possible to identify that it is necessary to build the skills approach, delimited to digital skills and that it be clear in its training purposes. Understanding that digital competence includes technological, informational, multimedia, and communicative aspects that favor the critical, responsible, and creative use of technology, fundamental in the learning and participation processes of the 21st-century society (Gallego et al., 2019; Esteve et al., 2016; Napal et al., 2018).

Similarly, in terms of curricular content that develops digital skills, topics such as copyright, a cross-cutting theme for the areas of interaction; critical analysis of data with content on ICT social appropriation; collective intelligence; digital relations, and critical view of the consumption of fourth screens should be included. From the perspective that the function of the media is to serve as channels for citizen

participation, political and educational functions must include promoting a critical understanding of communication phenomena (Marta-Lazo, 2018).

In terms of identity, values, and security, the contents must include topics on the management of personal information on social networks, online/offline identity, and control of own or others' private data. As well as analysis of the problems of abuse in social networks and actions of personal and group care against excesses in the use of ICT. Understanding students from their role as consumers who know how to use the media effectively and safely, who from training are competent people in the use of the media, and who will be able to make informed choices, understand the nature of content and services, take advantage of the full range of opportunities offered by new communication technologies, and better protect their families and themselves against harmful and offensive content (Marta-Lazo, 2018).

It is necessary to prepare the new communication professionals to face an increasingly tough sector, due to the stress inherent in the job of exercising freelance journalism, which, although it allows greater labor flexibility, at the same time leaves communicators exposed to greater risk of precariousness (Marín-Sanchiz and González-Esteban, 2021).

Finally, the purpose of this case analysis was to test a study model on digital skills in the journalist training curriculum, which was successfully achieved and is evidenced in the feedback with the curricular team of the Bachelor of Social Communication of the José Simeón Cañas Central American University of El Salvador by taking these observations and beginning to make adjustments to the current curriculum. In this way, the proposal becomes a benchmark for future applications in other journalism curricula in different universities and countries.

7. REFERENCES

- Antón-Bravo, A. & Serrano Tellería, A. (2021). Innovación en la docencia del periodismo a través de la ciencia de datos. *European Public & Social Innovation Review*, 6(1), 70-84. http://78.47.86.236/esir/article/view/150
- Comisión Europea (2020). *Digital Education action Plan* 2021-2027. https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=SWD:2020:209:FIN&rid=3
- Crusafón, C. (2012). El EEES en los estudios de periodismo: análisis de caso en la Universidad Autónoma de Barcelona. *Vivat Academia. Revista de Comunicación*, 117E, 1226-1238. https://doi.org/10.15178/va.2011.117E.1226-1238
- Diario Oficial de la Unión Europea. (2006). Recomendación del Parlamento Europeo y del Consejo de 18 de diciembre de 2006 sobre las competencias clave para el aprendizaje permanente. https://bit.ly/2]TJLDr
- Díaz-Barriga, Á. (2011). Competencias en educación. Corrientes de pensamiento e implicaciones para el currículo y el trabajo en el aula. *Revista Iberoamericana de Educación Superior, II*(5), 3-24. https://www.redalyc.org/articulo.oa?id=299123992001

- Esteve, F. M., Gisbert, M. & Lázaro, J. L. (2016). La competencia digital de los futuros docentes: ¿Cómo se ven los actuales estudiantes de educación? *Perspectiva Educacional*, 55(2). https://doi.org/10.4151/07189729-Vol.55-Iss.2-Art.412
- Fernández-Márquez, E., Vázquez-Cano, E., López-Meneses, E. & Sirignano, F. (2020). La competencia digital del alumnado universitario de diferentes universidades europeas. *Espacios, 41*(13), 1-15. https://www.revistaespacios.com/a20v41n13/20411315.html
- Ferrés, J. & Piscitelli, A. (2012). La competencia mediática: propuesta articulada de dimensiones e indicadores. *Comunicar*, 38, 75-82. https://doi.org/10.3916/C38-2012-02-08
- Ilomäki, L., Paavola, S. & Lakkala, M. (2016) Digital competence an emergent boundary concept for policy and educational research. *Educ Inf Technol*, 655-679. https://doi.org/10.1007/s10639-014-9346-4
- López-Meneses, E. & Vázquez-Cano, E. (2013). WEB 2.0 Tools for social Educator training in Higher Education. *International Journal of Research in Social Sciences*, 3(2), 1-13.
- Marín-Sanchiz, C. & González-Esteban, J. (2021). Análisis de la formación universitaria en periodismo freelance: la perspectiva de los profesionales españoles. *Estudios sobre el Mensaje Periodístico*, 27(2), 569-578. https://doi.org/10.5209/esmp.70532
- Marta-Lazo, C. (2018). El marco teórico de la alfabetización mediática: orígenes, fundamentos y evolución conceptual. En Fuente-Cobo, Carmen; García-Galera, María-del-Carmen; Camilli-Trujillo, Celia-Rosa (eds.). *La educación mediática en España*. (pp. 47-54) Universitas Editorial.
- Marta-Lazo, C., Grandío Pérez, M. del M. & Gabelas Barroso, J. A. (2014). La educación mediática en las titulaciones de Educación y Comunicación de las universidades españolas. Análisis de los recursos recomendados en las guías docentes. *Vivat Academia. Revista de Comunicación*, 126, 63-78. https://doi.org/10.15178/va.2014.126.63-78
- Martínez-Bravo, M. C., Sádaba-Chalezquer, C. & Serrano-Puche, J. (2021). Metamarco de la alfabetización digital: análisis comparado de marcos de competencias del Siglo XXI. *Revista Latina de Comunicación Social*, 79, 76-110. https://doi.org/10.4185/RLCS-2021-1508
- Napal, M., Peñalva-Vélez, A. & Mendióroz, A. (2018). Development of digital competence in secondary education teachers' training. *Education Sciences*, 8, 104. https://doi.org/10.3390/educsci8030104
- Ordóñez-Olmedo, E., Vázquez-Cano, E., Arias-Sánchez, S. & López-Meneses, E. (2021). Las Competencias en el uso de las Tecnologías de la Información y la

- Comunicación en el alumnado universitario. *Pixel-Bit. Revista de Medios y Educación*, 60, 153-167. https://doi.org/10.12795/pixelbit.74860
- Organización de las Naciones Unidas [ONU] (2015). *Transformar nuestro mundo: la Agenda 2030 para el Desarrollo Sostenible. Resolución aprobada por la Asamblea General el 25 de septiembre.* https://unctad.org/meetings/es/SessionalDocuments/ares70d1_es.pdf
- Pérez-Escoda, A., Castro-Zubizarreta, A. & Fandos-Igado, M. (2016). Digital skills in the Z Generation: Key questions for a curricular introduction in primary school. *Comunicar*, 49(24), 71-79. https://doi.org/10.3916/c49-2016-07
- Pérez-Rodríguez, A. & Delgado-Ponce, Á. (2012). De la competencia digital y audiovisual a la competencia mediática: dimensiones e indicadores. *Comunicar*, 39, 25-34. https://doi.org/10.3916/C39-2012-02-02
- Ramos, G., Chiva, I. & Gómez, Ma. B. (2017). Las competencias básicas en la nueva generación de estudiantes universitarios: Una experiencia de Innovación. *Revista de Docencia Universitaria*, 15(1), 37–55. https://doi.org/10.4995/redu.2017.5909
- Redecker, C. (2017). European Framework for the Digital Competence of Educators: DigComp Edu. Ideas. https://ideas.repec.org/p/ipt/iptwpa/jrc107466.html
- Rodríguez-Sánchez, M. & Revilla-Rodríguez, P. (2016). Las competencias generales y transversales del Grado en Logopedia desde la perspectiva del alumno. *Educatio Siglo XXI*, 34(1), 113-136. https://doi.org/10.6018/j/253241
- Romero, M., & Patiño, A. (2018). Usos pedagógicos de las TIC: del consumo a la cocreación participativa. *Revista Referencia Pedagógica*, 6(1), 2-15. https://rrp.cujae.edu.cu/index.php/rrp/article/view/137
- Serrano, T. A., Biedermann, A. M. & Santolaya, S. J. (2016). Perfil, objetivos, competencias y expectativas de futuro profesional de los estudiantes del Grado en Ingeniería en Diseño Industrial y Desarrollo de Producto de la Universidad de Zaragoza. *Revista de Docencia Universitaria, 14*(1), 69-96. https://doi.org/10.4995/redu.2016.5908
- Soep, E. (2012). Generación y recreación de contenidos digitales por los jóvenes: implicaciones para la alfabetización mediática. *Comunicar*, 38(19), 93-100. https://doi.org/10.3916/C38-2012-02-10
- Tejedor Calvo, S. & Cervi, L. (2017). Análisis de los estudios de Periodismo y Comunicación en las principales universidades del mundo. Competencias, objetivos y asignaturas. *Revista Latina de Comunicación Social*, 72, 1626-1647. https://doi.org/10.4185/RLCS-2017-1238
- Unión Europea (2018). *DigComp: The European Digital Competence Framework*. https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework

Agudelo-González, L. E., Marta-Lazo, C., & Aguaded, I. (2022).

Digital competencies in the Journalism Curriculum: case analysis of a Central American University.

Universidad Centroamericana José Simeón Cañas-UCA (2019). Plan de Estudios de la Licenciatura en Comunicación y Periodismo. https://uca.edu.sv/carrera/licenciatura-en-comunicacion-social/

Van-Deursen, A. & Van-Dijk, J. (2011). Internet skills and the digital divide. *New Media and Society*, 13(6). https://doi.org/10.1177/1461444810386774

Vázquez-Cano, E. (2015). El Reto de la formación docente para el uso de dispositivos digitales móviles en la Educación Superior. *Perspectiva Educacional*, 54(1), 149-162. https://doi.org/10.4151/07189729-Vol.54-Iss.1-Art.236

Vázquez-Cano, E., Gómez-Galán, J., Infante-Moro, A. & López-Meneses, E. (2020). Incidence of a NonSustainability Use of Technology on Students' Reading Performance in Pisa. *Sustainability*, 12(2), 749. https://doi.org/10.3390/su12020749

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