Transmedia literacy competences of Journalism students: production and editing of informative multimedia content

Competencia digital informacional, alfabetización mediática y periodismo. Un análisis de caso a través del proyecto "La Prensa en las escuelas"

Competências de informação digital, Alfabetização mediática e jornalismo em Espanha: o projeto "A Imprensa nas Escolas"

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Abstract

This article analyses the development of digital information competence with journalism as a didactic tool. A review of the educational regulation and digital competence is carried out, as well as its relationship with media literacy. Different authors defend the need to train students with critical and reflexive capacity, so as the access and the compression of the information are fundamental. Thus, our approach places journalism as a didactic tool in the classroom for all subjects and raises the possibility of a specific subject linked to digital information literacy and media literacy. To justify this study, 107 teachers from 32 secondary schools in Seville, who have participated in the project "The Press in Schools", have been surveyed. The fundamental objective is to demonstrate that media literacy is an important axis of digital information competence and that it is directly related to the comprehension of journalistic content.

Key Words: *Digital competence; Informational digital competence; Media literacy; Journalism; Press; Information literacy*

Resumen

Este artículo analiza el desarrollo de la competencia digital informacional con el periodismo como herramienta didáctica. Se realiza una revisión de la regulación educativa y la competencia digital, así como su relación con la alfabetización mediática. Diferentes autores defienden la necesidad de formar estudiantes con capacidad crítica y reflexiva, para lo que el acceso y la compresión de la información son fundamentales. Así, nuestro enfoque sitúa el periodismo como herramienta didáctica en el aula para todas las materias y plantea la posibilidad de una asignatura vinculada a la competencia digital informacional y la alfabetización mediática. Para justificar este estudio, se ha encuestado a 107 docentes de 32 institutos de Sevilla, que han participado en el proyecto "La prensa en las escuelas". El objetivo fundamental es demostrar que la alfabetización mediática es un eje prioritario de la competencia digital informacional y que está directamente relacionada con la comprensión de contenidos periodísticos.

Palabras clave: *Competencia digital; Competencia digital informacional; Alfabetización mediática; Periodismo; Prensa; Alfabetización informacional*

Resumo

Este artigo analisa o desenvolvimento de competências de informação digital, utilizando o jornalismo como ferramenta didáctica. Efetua-se uma revisão da regulamentação educativa e das competências digitais, assim como da relação das mesmas com a literacia mediática. Diferentes autores defendem a necessidade de formar estudantes com uma capacidade crítica e de reflexão, pelo que o acesso à informação, e consequente compreensão, são fundamentais. Assim, a nossa abordagem consiste em inserir o jornalismo como ferramenta didáctica nas salas de aula de todas as disciplinas e levanta a possibilidade de um tema vinculado às competências de informação digital e de literacia mediática. Para justificar este estudo, foram entrevistados 107 docentes de 32 institutos de Sevilha, que participaram no projecto "A Imprensa nas Escolas". O objectivo principal é demonstrar que a literacia mediática é um eixo fundamental das competências de informação digital e que está directamente relacionada com a compreensão de conteúdos jornalísticos.

Palavras chave: *Competências digitais; Competências de informação digital; Literacia mediática; Jornalismo; Imprensa; Literacia informal*

1. Introduction

At a time when it is essential for people to use the Internet and have digital access, it is appropriate to discuss how students deal with web content. Professors Valverde, De Pro-Bueno & González (2018) offer the following perspective from the field of experimental science:

"It must be assumed that students learn science not only [sic] in the classroom but also from sources such as the Internet, TV, cinema or journalism and the science behind these is not easy to relate with much of the scientific knowledge we cover in formal education (p. 2015-3).

Studies on Digital Competence (hereinafter DC) coincide with regard to the prioritised use of the technological factor (Gutiérrez and Tyner, 2012; Colomer, Sáiz and Bel, 2018).

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After carrying out an analysis using the TPACK framework, Colomer, Sáiz and Bel (2018) conclude that there is a lack of pedagogical content knowledge when DC is applied, which "really limits the ability of Social Science teachers to create a critical teaching method and, also relevant, to include technology in one of the means used to make it" (Colomer et al., 2018, p. 124).

On the basis of these observations, this paper has two objectives:

- To further study the area of DC in schools, with a particular focus on the information element (Area, 2010a).

- Establish how the education regulation defines DC, before outlining the concept of Digital Information Competence (hereinafter DIC) using existing scientific literature.

- Relate DIC with Media Literacy (hereinafter ML) so as to encourage social responsibility and critical analysis among students.

- Consider whether DIC can be developed through media and journalistic tools from a critical point of view. To do this, we will use a case study based on surveys completed by teachers from Compulsory Secondary Schools which participated in the "Press in Schools" project in 2018, an initiative promoted by the Seville Press Association, with the support of La Caixa Foundation and the Regional Government of Andalusia.

1.1. Education regulation and digital competence

Within the field of education, UNESCO established the basic pillars of lifelong learning in 1996, setting the scene for competency-based learning (Delors, 1996). However, the DeSeCo Project (Definition and Selection of Competencies), of the Organisation for Economic Cooperation and Development (OECD), would be the first to define competence in education: "Key competencies involve a mobilisation of cognitive and practical skills, creative abilities and other psychosocial resources such as attitudes, motivation and values" (OECD, 2003, p. 7).

In 2012, the report by the Council and European Commission on the implementation of the ET 2020 Strategic Framework (OJ C70, 2012) expands the areas for

educational cooperation and envisages the need for ML. The report argues that we have to "address the literacy challenges of using a variety of media, including digital, for all" (p. 17), and lists "teaching entrepreneurship, e-literacy, media literacy and innovative learning environments" as transversal key competences (p. 18).

Another joint report, this time adopted by the Council of Education Ministers and the European Commission (OJ C417, 2015), states that basic skills must be accompanied by other key competencies and attitudes, including "sense of initiative, digital competences, competence in foreign languages, critical thinking including through e-literacy and media literacy" (p. 27). Referring to digital skills, it makes clear that learning them goes beyond information and communication technology skills (hereinafter ICT) and involves the safe, collaborative and creative use of said technologies.

In Spain, Organic Law 2/2006, of 3 May, on Education (LOE), uses the term "basic competences" for the first time in Spain, echoing the eight competences established by the Recommendation (2006/962/EC). However, the term "key competences" will not be applied until Organic Law 8/2013 of 9 December is passed for the Improvement of Educational Quality (LOMCE), which is still in force. In accordance with the European reference framework, the LOMCE modifies the eight basic competences of the curriculum set by the LOE and establishes seven key competences: 1. Communication in foreign languages; 2. Mathematical competence and basic competences in science and technology; 3. Digital competence; 4. Learning to learn; 5. Social and civic competences; 6. Sense of initiative and entrepreneurship; 7. Cultural awareness and expression.

Subsequently, Order ECD/65/2015, of 21 January, which describes the relationships between competences, content and assessment criteria, states that "given that competency-based learning is characterised by being transversal, dynamic and comprehensive in nature, the competency-based teaching-learning process must be approached from all areas of knowledge" (O. ECD/65/2015, p. 6987). This Order expands on the above-mentioned competences. Of these, and given the subject matter of this article, our focus is on clarifying how DC is understood from a regulatory point of view. This is defined as "the creative, critical and safe

use of information and communication technologies to achieve goals related to work, employability, learning, leisure, inclusion and participation in society" (O. ECD/65/2015, p. 6994).

The teaching-learning process involves not only knowledge about computer applications but also "requires the development of various skills related to accessing information, processing and use for communication, content creation, safety and problem solving" (O. ECD/65/2015, p. 6996). In this way, the Order focuses primarily on factors related to the access and use of technology when it refers to DC. In our study, however, we will be interested in expanding this narrow interpretation in order to relate DC, including its information elements, with ML and the possibility of using journalism as a didactic tool. Comprehensively teaching a student is achieved in part through school but also through the many communicative stimuli they receive via the virtual world (Aparici and Osuna, 2010; Gutiérrez, 2008). Knowing how to access technologies is relatively easy compared to the need to clearly, truthfully and critically decode the messages coming from online environments, including the media which has a growing presence in the virtual world.

1.2. Digital information competence and media literacy

In order to be able to introduce and scientifically prove our point of view, we move towards the concept of DIC. In this regard, Area and Guarro (2012), drawing on the contributions of various experts (Cope and Kalantkzis, 2009), first approach the concept of literacy:

(…) nowadays, it is a more complex process than simply training to know how to use digital hardware and software and the objective of literacy must be to teach the public new codes and ways of communicating in digital culture (Gutiérrez, 2003). This new concept of literacy therefore focuses on the acquisition and mastery of skills regarding the use of information and communication and not so much on the skills needed to use technology (p. 51).

This stance is directly related to the way we are approaching our own objective: demonstrating that properly developing DIC begins with current ML in order to make students responsible citizens with respect to the time and society they live in. Valverde, De Pro-Bueno and González (2018), clarify the nuances that unite and differentiate digital and information skills:

(…) the information element of digital competence -information competence- is a mixture of knowledge, procedures and attitudes needed to jointly search, select, evaluate and manage information coming from digital sources and the Internet and transform it into knowledge so as to make decisions and solve problems in varied and emerging contexts at a personal and social level. Although it is part of digital competence, this also incorporates other things beyond the field of information (p. 2105-5).

As Culver and Jacobson (2012) have also pointed out "democratic governance requires both informed citizens and citizens who are free to express opinions" (p. 74). It is not only a matter of knowing how to use information and digital resources (Frau, 2006; Pérez and Delgado, 2012; Aguaded, Ferrés, Cruz, Pérez and Sánchez, 2011; Ferrés, Aguaded and García-Matilla, 2012), but also of allowing thought and critical awareness to be developed by using the media as "tools for freedom of expression, pluralism, intercultural dialogue and tolerance" (Wilson, Grizzle and Cheung, 2011, p. 25).

Since Masterman's arguments were accepted (1993; quoted in Muñoz and González, 2012, p. 211) on the role of the media in our society, we must emphasise the need to stimulate critical and reflective thinking, as well as the public's analytical action towards ICT, making use of the technology to encourage more participatory individuals in the public sphere. This dimension has been fundamental since some authors (Jaimes, 2015, p. 107) identified that a utilitarian understanding of ML does not contribute to encouraging creative and independent thinking. We must transcend the simple "technological and instrumental dimension" and move towards "awareness and critical thinking when using and appropriating the media" (Villegas, 2014, p. 39).

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For Osuna, Frau and Marta (2018), media education implies that people can "interpret and make informed judgments as media consumers, but also become media producers in their own right" (p. 38). The ML framework emphasises the need to move towards an empowering use of digital and information competences (Pérez, Samy and Pulido, 2018; Lotero, Romero and Pérez, 2018). In order to achieve this, it is essential to strengthen the role of schools and teachers so that they can adapt to vertiginous changes and therefore close the gap between what students learn from their surroundings, thanks to contact with the media, and the knowledge they gain in an educational setting (Muñoz and González, 2002).

Although the current audiovisual regulation in Spain (art. 6.4 LGCA) and education legislation recognise media education as part of the curriculum (Moreno, Gabarda and Rodríguez, 2018), through the Common Digital Competence Framework for Teachers (INTEF, 2017), the Digital School Culture Plan, the Strategic Framework for Teacher Professional Development and initiatives of programmes such as "Press in Schools", "Athena", "Mercury", "Communicate" or the Mediascope-Press Project, many support including every competence related to ML in the sense that we have been defending. That is, as a tool that serves to empower students as critical, active and participatory citizens (Council of the European Union, 2016), banishing the idea that media education requires sophisticated technology or more computers in the classroom, as criticised by Area (2010b, p. 78), and supporting teaching innovation and changes to traditional teaching systems.

Requests include calls for more teacher training, support for school management teams and more effective collaboration (Scott, 2011, p. 55) between schools and the media (Frau and Torrent, 2009). The aim is to relocate students' teaching-learning process by opening up "to the idea that it (the school) is no longer the only great information centre and must respond to the innumerable contributions that the media has to offer" (Muñoz and González, 2002, p. 227), recognising the validity of what students already know about the media (Frau, 2006, p. 43).

In this regard, Villegas (2014, p. 58) asserts the need for formal ML education against the informal circuit of the more pleasant and visual, less coercive

and effort-free "media school", which happens during students' entertainment and leisure time. This premise coincides with Marzano and Boogren's approach (2012), who insist on developing skills that emphasise critical information as part of knowledge acquisition. In this task specifically, DIC appears related to activities that mean the students' have to search for information and reflective analysis on the Internet.

Area and Guarro (2012, p. 66) develop this idea of school as a place which encourages complex thought when they refer to the dimensions of DIC: instrumental, cognitive, communicative, axiological and emotional. The authors discuss access to information as an essential step for building knowledge and achieving meaningful learning. Therefore, using media tools is vital to achieving ML and the complex process of DIC today. The aim is to integrate journalism as a resource for developing students' civic engagement by encouraging schools to include a "media and information curriculum to engage students in concepts of democracy and governance, freedom of expression, editorial independence, and diversity in media" (Culver and Jacobson, 2012, p. 75). This will make it possible to achieve quality journalism based on the relationship of trust established between media professionals and empowered, active and critical citizens capable of participating in the public sphere through creative and challenging means of communication (UAB, 2018).

An idea also held by the German philosopher Jürgen Habermas (1999), who believes that quality journalism requires a "population accustomed to the conflictive process of opinion formation" (Hermoso, 2018), as opposed to the commercial practices used by the media, manipulation strategies and misinformation caused by fake news that makes for a toxic public sphere.

2. Materials and methods

In order to explore the relationship between ML, DIC and the use of informative journalism resources as educational tools, we have analysed the teaching experience through the "Press in Schools" project. We chose to conduct an online survey of the teaching staff of the 32 secondary schools that participated in this initia-

tive in 2018. The main objective was to draw results on the degree of knowledge, value and use of journalistic tools as part of DIC. Specifically, this was a quantitative survey in which most questions were closed and answers were either single (dichotomous and polytomous) or multiple, plus Likert scale questions with five options in order to measure frequency. Open-ended questions were added to the questionnaire in order to collect information that is difficult to classify, such as the type of media resources used by teachers in the classroom.

The survey was available online, via a direct link, between 8 November and 1 December 2018, using the SurveyMonkey program, which allows answers to be instantly collected through a hyperlink. In this way, we ensured that the questionnaire was sent directly and exclusively to the teachers in the centres selected, thus guaranteeing the reliability of the answers given.

"Press in Schools" is a project which has been carried out by the Seville Press Association since 2010 with the aim of encouraging critical thinking among students, as well as an interest in current affairs offered by the media. The project, which has the collaboration of the Ministry of the Presidency of the Regional Government of Andalusia and La Caixa Foundation, is mainly aimed at students in the last two years of Compulsory Secondary Education at schools in the city and province of Seville.

Specifically, this "socio-educational" project consists of workshops taught by journalists themselves who come to the schools to teach students theoretical knowledge related to the origin of journalism, the legal and ethical framework the profession is governed by and the types of media that exist. In addition to theory, there are also practical activities such as debates on current affairs or analyses of the media's treatment of certain information. The journalists cover issues such as freedom of expression or the right to information and all workshops include a module on the attitude towards gender in journalism.

In Table 1 below, we list all the centres that participated in the project in 2018 and where we carried out the survey.

Centre	Location
I.E.S. Aguilar y Cano	Estepa (Seville)
I.E.S. Antonio Machado	Seville
I.E.S. Azahar	Seville
I.E.S. Bajo Guadalquivir	Lebrija (Seville)
I.E.S. Camas	Camas (Seville)
I.E.S. Cañada Rosal	Cañada Rosal (Seville)
I.E.S. Dolmen Soto	Trigueros (Huelva)
I.E.S. El Majuelo	Gines (Seville)
I.E.S. Federico Mayor Zaragoza	Seville
I.E.S. Ítaca	Tomares (Seville)
I.E.S. Joaquín Turina	Seville
I.E.S. Juan Ciudad Duarte	Bormujos (Seville)
I.E.S. Llanes	Seville
I.E.S. Los Álamos	Bormujos (Seville)
I.E.S. Los Alcores	Mairena del Alcor (Seville)
I.E.S. Maestro Diego Llorente	Los Palacios (Seville)
I.E.S. María Moliner	Seville
I.E.S. Mateo Alemán	San Juan de Aznalfarache (Seville)
I.E.S. Miguel de Mañara	San José de la Rinconada (Seville)
I.E.S. Miguel Servet	Seville
I.E.S. Nervión	Seville
I.E.S. Olivar de la Montilla	Dos Hermanas (Seville)
I.E.S. San Fernando	Constantina (Seville)
I.E.S. San Isidoro	Seville
I.E.S. San Pablo	Seville
I.E.S. Tartessos	Camas (Seville)
I.E.S. Triana	Seville
I.E.S. Velázquez	Seville
I.E.S. Vicente Aleixandre	Seville
I.E.S. Virgen del Rosario	Benacazón (Seville)
I.E.S. Vistazul	Dos Hermanas (Seville)

Table 1: *List of centres where "Press in Schools" was carried out in 2018*
Source: Own creation

A total of 107 responses were collected from every school listed, based on an initial split of teachers into four major subject areas: social-linguistic, science-technology, the arts and vocational training. The contents of "Press in Schools" can be implemented in these four teaching areas, given that ML and DIC are transversal, so all of them have been taken into account. In order to group the teachers, we have used Royal Decree 327/2010, of 13 July, as a reference, which approves the Organic Regulation of Secondary Education Institutes, both of which establish the aforementioned areas of competence in centres.

3. Analysis and results

Of the 107 people who responded to the survey, 63.21% were women and 36.79% were men. As can be seen in Figure 1 on distribution by age, the largest number of responses collected are from people aged between 46 and 55 years old, although all age groups have been represented in the survey.
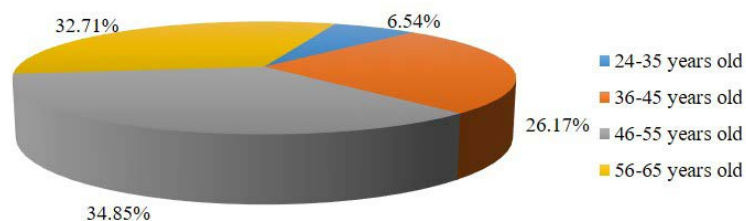

Figure 1: Distribution of surveys by age
Source: Own creation

Likewise, there are more responses from teachers with between 11 and 30 years work experience in Andalusia. These two variables are related, meaning that younger people tend to have less experience and vice versa, as can be seen in Figure 2.
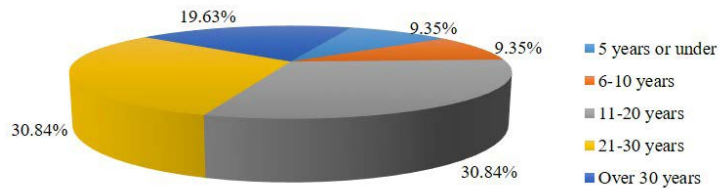
Figure 2: *Distribution by teaching experience in Andalusia*
Source: Own creation

Finally, with respect to the distribution of surveys to teachers by area of competence, the social-linguistic area stands out (63.73%) while the arts (4.9%) was the area least represented in the survey.
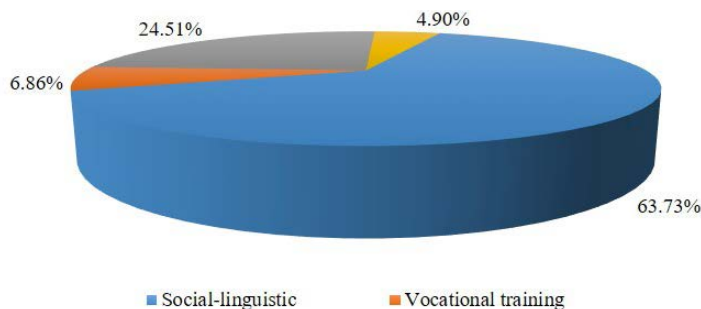

Figure 3: *Distribution by area of competence*
Source: Own creation

Having established the respondents' gender, age, teaching experience and area of expertise, we focused on their digital competences and views on the need to include journalistic resources in the learning process. First, we asked about the characteristics that make up DIC. Respondents were able to pick all the options they considered appropriate from an exhaustive list, which is reproduced in Figure 4.
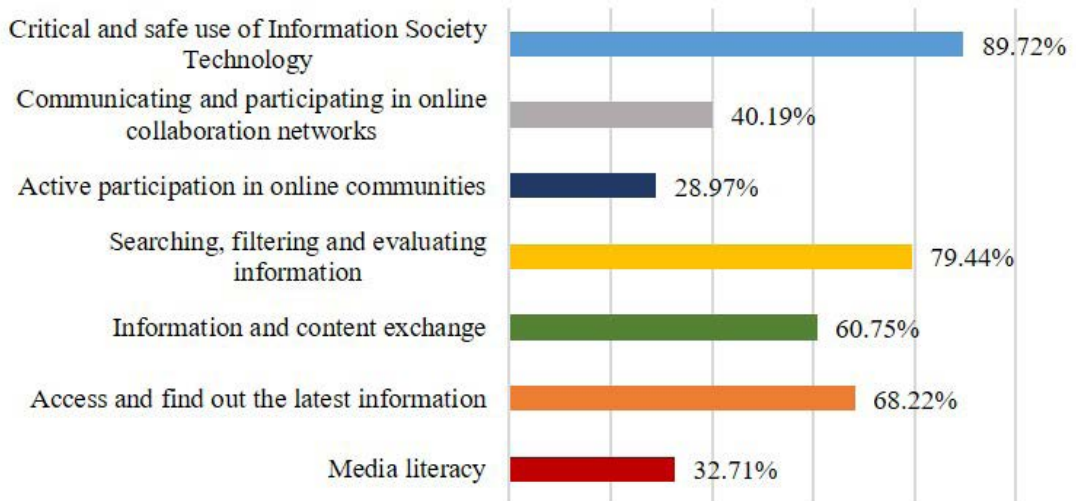
Figure 4: *Characteristics that make up DIC*
Source: Own creation

There is a clear difference between some variables and others. For example, the critical and safe use of Information Society Technologies was the most popular option (89.72%), while ML was only chosen by 32.71% of respondents, which is contradictory. Likewise, it is striking that 68.22% considered it important to relate DIC with access to and knowledge of current affairs, which would be linked to the relevance of using journalistic content in the classroom.

In our survey, we asked teachers whether they felt that DIC could facilitate students' understanding of the subjects they teach. A large majority (94.34%) said yes; just 1.89% said no and 3.77% chose "Don't know/No reply". Moreover, the few respondents who did not think DIC can be useful in their subjects are in the science-technology and arts areas.

To expand on this topic, we asked: "Do you consider journalism to be a useful teaching resource for teaching your subject?" In this case, an even larger majority (96.26%) said yes and the few negative responses (3.74%) came mostly from the science-technology area and, to a lesser extent, vocational training. Contrastingly, all the answers linked to the social-linguistic and arts areas were positive.

However, when we asked whether they actually use journalistic resources in their classes, the figures lowered, as can be seen in Figure 5. On this topic, instead of a single-bounded dichotomous choice question (Yes/No), we opted for a Likert scale with five options, listed in Figure 5, to measure how often the respondents use journalistic resources in their subjects.
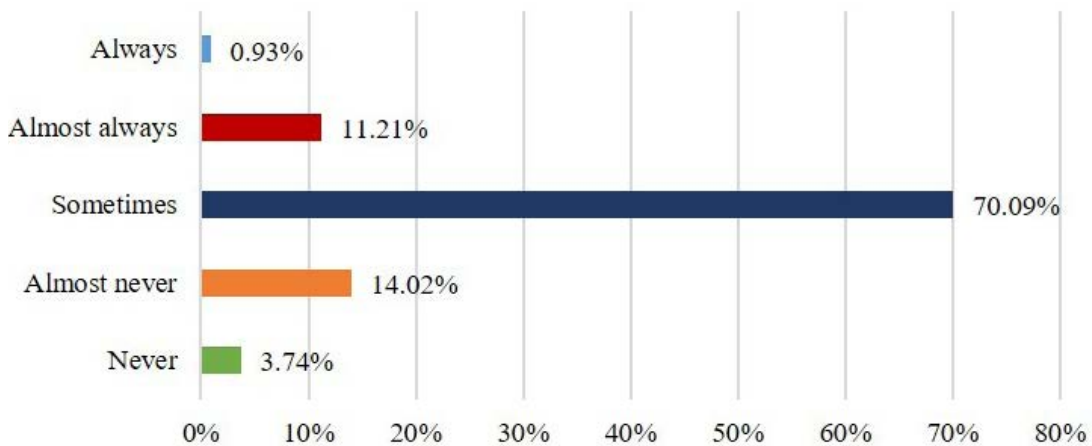

Figure 5: Use of journalistic resources in the classroom
Source: Own creation

The 3.74% who chose "Never" are from the social-linguistic, science-technology and arts areas. Moreover, it can be seen how, although more than 96% of the people surveyed defend the usefulness of journalism in their classes, only 0.93% say they use journalistic resources "Always" and only 11.21% say they do so "Almost always".

Turning to the use of journalistic tools, we included an open question and asked participants to specify what resources they used and for what purpose. By far the most common medium is the newspaper, whether printed or digital. Also noteworthy is the use of specialist magazines and publications and, to a lesser extent, audiovisual resources. In terms of journalistic genres, the most widely used are news and opinion articles and, to a lesser extent, reports, interviews, opinion columns and editorials. Documentaries and audiovisual resources, as well as graphs and statistical data were also occasionally given as answers.

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In terms of using these resources, it is worth noting the use of news and press articles, whether printed or in digital format, to "teach journalistic and advertising texts", "comment on texts", "inform students of current affairs" or "as an introduction to a debate". As for language teaching, we discovered the use of newspapers and magazines in English and French so that "students read them in class and see in context the grammar and vocabulary they learn in class". In maths and statistics there is a significant use of information resources with graphs and also "any news about mathematicians, records or proofs of famous theorems".

Moving on to the next part of the questionnaire, 98.11% of teachers confessed not to having carried out any project related to ML. This is a logical result if we take into account that only 32.71% of the people who responded to our survey considered ML to be part of DIC.

On the other hand, although 96.26% of those surveyed acknowledged the usefulness of incorporating journalism into classes, the percentage of teachers who would like to be trained in journalism falls to 42.06%. 26.17% openly admitted to not wanting to study this type of content and almost a third (31.78%) chose "Don't know/No reply", thereby avoiding giving a clear answer to this question. In addition, we can see a clear distinction according to the respondents' gender, age and teaching experience. In general, women and younger teachers are more willing to be trained in this area.
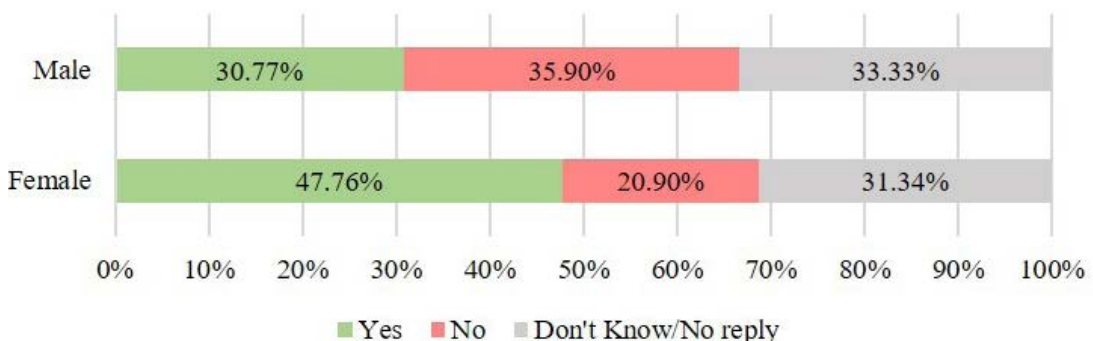

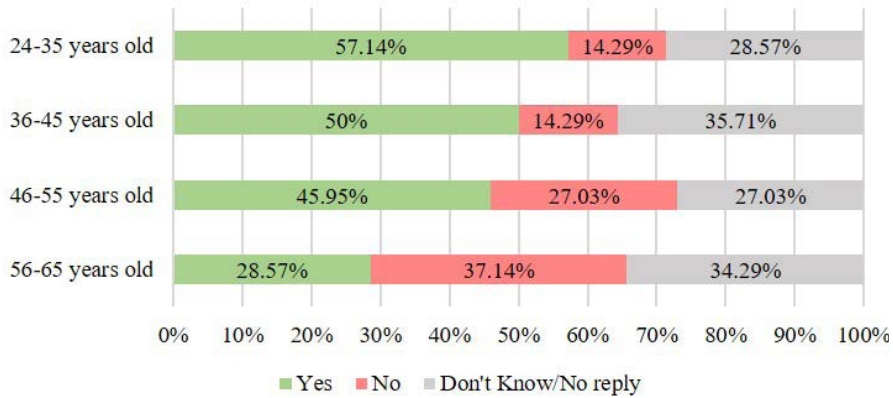**Figure 6:** *Willingness to be trained according to gender*
Source: Own creation

Figure 7: *Willingness to be trained according to age*
Source: Own creation

Figure 8: *Willingness to be trained according to teaching experience*
Source: Own creation

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However, when asked if young people should be taught how to deal with the media, 99.05% said yes. In fact, 96.26% said that young people do not know how to identify fake news. According to the respondents, the main reason for this is that students "are not critical and believe everything they see or read". This was the most common reason, although other people felt it is due to "the overload of information in today's society and immediacy" or because "sensationalism wins over reality".

When asked "Do you think it would be good to have a subject about journalism and the media in Compulsory Secondary Education?", 56.60% said yes. As can be appreciated, that is more than half, but there does not seem to be a clear consensus, as 22.64% said no and 20.75% chose "Don't know/No reply".

Finally, we ended the questionnaire by asking teachers if they were aware of the "Press in Schools" project, since it had taken place in their schools. 57.01% said they had heard of it, while 38.32% did not know anything about it. Furthermore, we found a clear inverse relationship between the respondents' age and experience and their familiarity with the project. As Figure 9 shows, a higher proportion of teachers with more years of experience know about this project and vice versa.
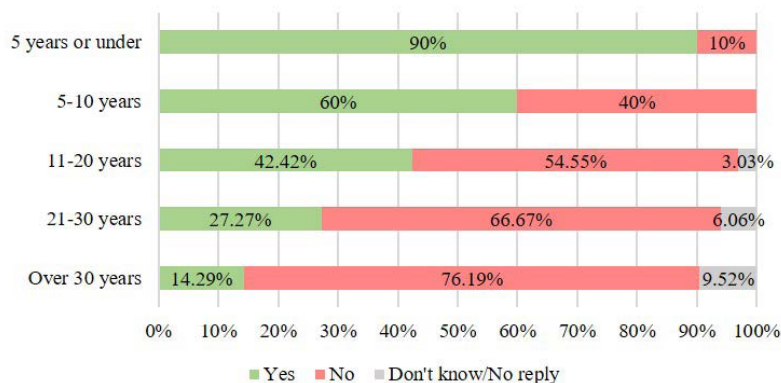

Figure 9: *Knowledge of "Press in Schools" according to teaching experience*
Source: Own creation

4. Discussion and conclusions

The approach of the "Press in Schools" project addresses the need for ML at a time when the saturation of virtual stimuli coexists with "fake news" in the so-called post-truth era. In this respect, the theoretical framework we began with has served as a basis for the analysis carried out in schools and has led us to draw interesting conclusions.

Thus, although the technological factor is still a vital characteristic when we talk about DIC, it is important to find out how the teachers in our study have taken into account access to current information as another important variable. Moreover, when asked directly about the use of journalism as a teaching resource, teachers have widely accepted this possibility. More worrying is the fact that less of them relate ML with DIC. There is also no effective use of information resources in classes in order to develop subject content.

This lack of correlation between the positive recognition of using journalistic tools in the classroom and their effective use as part of DIC can be explained by the following answers. On the one hand, almost 100% of teachers believe that students should be taught how to use media, hence the need for ML in school, above all so that they are able to think critically about the truth of what they see, hear and read in the media.

However, teaching ML and how to use DIC with journalistic resources in class is not accompanied by a majority recognition by teachers of their own need to master skills in this field and link them to DIC. Almost all the teachers admitted to not having participated in ML-related projects. The generation gap also seems to be a decisive factor, as there is a greater willingness among younger teachers (24 to 35 years of age) to be trained in this area, with a downward curve as the age of teachers increases.

One of the questions that our study may not have been able to answer is whether we would have had similar responses in other centres where the "Press in Schools" project did not take place. This will evidently be the next step in our

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analysis which, at the moment, has been able to draw some conclusions as a result of reflecting on theory and through the results obtained:

1. DIC continues to have an important link with technological aspects but both the schools and teachers in this study see the need to develop skills related to accessing information as a teaching resource.

2. The relationship between DIC and ML means incorporating journalistic tools into classes with the aim of developing students' critical and reflective skills, although teachers do not usually use these resources. In other words, although there seems to be a consensus, again, between the scientific literature and teachers who participated in the surveys, there is no evidence of journalism-related tools being used in everyday classes.

3. There is a positive response from more than half of the teachers in the study about the opportunity to add classes on journalism and the media to Compulsory Secondary Education. In this respect, teachers consider ML essential to promote critical thinking among students.

This final conclusion could be considered as a possible topic when designing future curriculum for students. To reinforce this idea, we are widening our research to analyse DIC and ML in the areas of "Plastic, Visual and Audiovisual Education" (2nd, 3rd and 4th year of Compulsory Secondary Education) and "Information and Communication Technologies" (4th year of Compulsory Secondary Education and Baccalaureate). These subjects are categorised under the specialities of Information and Technology (RD 665/2015, pp. 59864-5). Teaching staff do not have specific qualifications related to the media and would be focusing DIC exclusively on the technological dimension. Consequently, the Spanish Federation of Press Associations (FAPE) calls for the need to create a Journalism subject in all Compulsory Secondary Education courses in order to develop a pluralistic society (Europa Press, 2018). This has also been recognised by the Audiovisual Council of Andalusia, which insists on the need to provide students with the appropriate tools to be able to interpret journalism, awaken their critical nature and thus protect young people from this turbulent digital environment (El Mundo, 2017).

In the future, we will need to analyse what significant changes are happening with respect to DC and ML the new educational reform, which has already taken a step forward with the recent approval by the Council of Ministers of the proposed Organic Law for the Modification of the Organic Law on Education (LOMLOE).

We have been awarded grants by the Ministry of the Presidency of the Regional Government of Andalusia in order to continue this work and implement ML projects. Among them, the Assembly of Women Journalists of Seville city and province, as well as the Press Associations of Cadiz, Jerez and Malaga. The aim is to find out what journalistic resources are used in other Andalusian public schools and how their teachers interpret DIC.

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References

Aguaded, J.I., Ferrés, J., Cruz, M.R., Pérez, M.A. y Sánchez, J. (2011). *El grado de competencia mediática en la ciudadanía andaluza. Memoria de investigación*. Huelva: Grupo Comunicar, Universidad de Huelva, Grupo Ágora.

Aparici, R. y Osuna, S. (2010). Educomunicación y cultura digital. En R. Aparici (Coord.), *Educomunicación: más allá del 2.0* (pp. 307-317). Barcelona: Gedisa.

Area, M. (2010a). El proceso de integración y uso pedagógico de las TIC en los centros educativos. Un estudio de casos. *Revista de Educación,* (352), 77-97. l Retrieved from https://bit.ly/1pYgOc8

Area, M. (2010b). ¿Por qué formar en competencias informacionales y digitales en la educación superior? *RUSC. Universities and Knowledge Society Journal, 7*(2), 2-5. Retrieved from https://bit.ly/2ROBd55

Area, M. y Guarro, A. (2012). La alfabetización informacional y digital: fundamentos pedagógicos para la enseñanza y el aprendizaje competente. *Revista Española de Documentación Científica*, Nº Monográfico, 46-74. doi: 10.3989/redc.2012.mono.977

Colomer, J.C., Sáiz, J. y Bel, J.C. (2018). Competencia digital en futuros docentes de Ciencias Sociales en Educación Primaria: análisis desde el modelo TPACK. *Educatio Siglo XXI, 36*(1), 107-128. doi:10.6018/j/324191

Council of the European Union (2016). Conclusions of the Council of the European Union on the development of media literacy and critical thinking through education and training. 9068/16 EDUC 147 JEUN 37 AUDIO 63 SOC2 65. Retrieved from https://bit.ly/2DdJpCz

Cope, B. y Kalantkzis, M. (2009). *Ubiquitous Learning*. University of Illinois Press.

Culver, S. y Jacobson, T. (2012). Alfabetización mediática como método para fomentar la participación cívica. [Media Literacy and Its Use as a Method to Encourage Civic Engagement]. *Comunicar, 39*(XX), 73-80. doi:10.3916/C39-2012-02-07

Delors, J. (1996). Los cuatro pilares de la educación. En UNESCO, *La educación encierra un tesoro. Informe a la UNESCO de la Comisión internacional sobre la educación para el siglo XXI* (pp. 91-103). Madrid: Santillana/UNESCO.

El Mundo (17 de noviembre de 2017). El CAA aboga por incorporar la alfabetización mediática al sistema educativo como una disciplina más. *Elmundo.es*. Retrieved from https://bit.ly/2tiHEzq

Europa Press (27 de agosto de 2018). Una asignatura de periodismo en los institutos contra la "avalancha" de 'fake news'. *Europapress.es*. Retrieved from https://bit.ly/2tkXg5e

European Union. 2012 Joint Report of the Council and the Commission on the implementation of the strategic framework for European cooperation in education and training (ET 2020). "Education and training in a smart, sustainable and inclusive Europe". *Official Journal of the European Union*, 08 March 2012, C 70, pp. 9-18. Retrieved from https://bit.ly/2RUdnVx

European Union. 2015 Joint Report of the Council and the Commission on the implementation of the strategic framework for European cooperation in education and training (ET 2020). "New priorities for European cooperation in education and training". *Official Journal of the European Union*, 15 December 2015, C 417, pp. 25-35. Retrieved from https://bit.ly/2HgLfrB

Ferrés, J., Aguaded, I. y García-Matilla, A. (2012). La competencia mediática de la ciudadanía española: dificultades y retos. *Icono 14, 10*(3), 23-42. doi:10.7195/ri14.v10i3.201

Frau, D. (2006). *Media education: a kit for teachers, students, parents and professionals*. París: UNESCO. Retrieved from https://bit.ly/2IuR8NJ

Frau, D. y Torrent, J. (Eds.). (2009). *Mapping media education policies in the world: visions, programmes and challenges*. New York: The United Nations-Alliance of Civilizations in co-operation with Grupo Comunicar. Retrieved from https://bit.ly/1nwPJfh

Gutiérrez, A. (2003). *Alfabetización digital. Algo más que ratones y teclas*. Barcelona: Gedisa.

Gutiérrez, A. (2008). Educar para los medios en la era digital. [Media education in the digital age]. *Comunicar, 31*(XVI), 451-456. doi:10.3916/c31-2008-03-034

Gutiérrez, A. y Tyner, K. (2012). Educación para los medios, alfabetización mediática y competencia digital. [Media Education, Media Literacy and Digital Competence]. *Comunicar, 38*(XIX), 31-39. doi:10.3916/C38-2012-02-03

Habermas, J. (1999). *Teoría de la acción comunicativa*. Madrid: Taurus.

Hermoso, B. (30 de mayo de 2018). Jürgen Habermas: "¡Por Dios, nada de gobernantes filósofos!". *El País Semanal*. Retrieved from https://bit.ly/2jzz6iC

INTEF (2017). *Marco Común de Competencia Digital Docente*. Madrid: Ministerio de Educación, Cultura y Deporte/Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado. Retrieved from https://bit.ly/2jqkssz

Jaimes, J.E. (2015). Competencia informacional de profesores y estudiantes: estado del arte y prospectiva. *Acción pedagógica, 24*(1), 104-112. Retrieved from https://bit.ly/2QVoadA

Lotero, G., Romero, L.M. y Pérez, M.A. (2018). Fact checking vs Fake news. Periodismo de confirmación como componente de la competencia mediática contra la desinformación. *Index.comunicación. Revista científica en el ámbito de la Comunicación Aplicada, 8*(2), 295-316. Retrieved from https://bit.ly/2yBldIU

Marzano, R. y Boogren, T. (2012). *Becoming a reflective teacher*. Bloomington, Estados Unidos: Ed. Marzano Research.

Masterman, L. (1993). *La enseñanza de los medios de comunicación*. Madrid: De la Torre.

Moreno, M.D., Gabarda, V. y Rodríguez, A. M. (2018). Alfabetización informacional y competencia digital en estudiantes de magisterio. *Profesorado. Revista de Currículum y Formación de Profesorado, 22*(3), 253-270. Retrieved from https://bit.ly/2QWHHKv

MONOGRAPH

Muñoz, J.M. y González, M. (2002). La formación de ciudadanos críticos. Una apuesta por los medios. *Teoría de la educación*, (14), 207-233. Retrieved from https://bit.ly/2CqyHIy

OCDE (2003). *La definición y selección de competencias clave. Resumen ejecutivo*. DeSeCo. Retrieved from https://bit.ly/2eILmLD

Order describing the relationship between competences, content and evaluation criteria of primary education, compulsory secondary education and the baccalaureate (Order ECD/65/2015, 21 January). *Spanish Official State Gazette*, nº 25, 2015, 29 January, pp. 6986 -7003. Retrieved from https://bit.ly/1Y8oPsf

Organic Law on Education (LOE) (Organic Law 2/2006, of 3 May). *Spanish Official State Gazette*, nº 106, 2006, 4 May, pp. 17158- 17207. Retrieved from https://bit.ly/1vUxjGx

Organic Law for the Improvement of Educational Quality (LOMCE) (Organic Law 8/2013, of 9 December). *Spanish Official State Gazette*, nº 295, 2013, 10 December, pp. 97858- 97921. Retrieved from https://bit.ly/18yHrs1

Organic Regulation of Secondary Education Institutes (Royal Decree 327/2010, of 13 July). *Official Gazette of the Autonomous Government of Andalusia*, nº 139, 2010, 16 July, pp. 8-34. Retrieved from https://bit.ly/2Hu8pdZ

Osuna, S., Frau, D. y Marta, C. (2018). Educación mediática y formación del profesorado. Educomunicación más allá de la alfabetización digital. *Revista Interuniversitaria de Formación del Profesorado, 91*(32.1), 29-42. Retrieved from https://bit.ly/2AKQHxd

Pérez, J.M., Samy, S. y Pulido, C. (2018). ¿Cómo afrontar las noticias falseadas mediante la alfabetización periodística? Estado de la cuestión. *Doxa Comunicación*, (26), 211-235. doi:10.31921/doxacom.n26a10

Pérez, M. A. y Delgado, A. (2012). De la competencia digital y audiovisual a la competencia mediática: dimensiones e indicadores. [From Digital and Audiovisual Competence to Media Competence: Dimensions and indicators]. *Comunicar, 20*(39), 25-34. doi:10.3916/C39-2012-02-02

Royal Decree developing certain provisions relating to teaching in Compulsory Secondary Education, the Baccalaureate, Vocational Training and special education systems and to initial teacher training and the specialities of Secondary Education teaching bodies (RD 665/2015, of 17 July). *Spanish Official State Gazette*, nº 171, 2015, 18 July, pp. 59861- 59873. Retrieved from https://bit.ly/2thq2Uz

Scott, M. (2011). *Guía para radio y televisiones sobre la promoción del contenido generado por el usuario y la alfabetización mediática e informacional*. Barcelona: Editorial UOC. Retrieved from https://bit.ly/2T0yXVI

UAB (2018). Departamento de Periodismo y de Ciencias de la Comunicación. (31 de mayo de 2018). La Cátedra UNESCO MIL para la Calidad del Periodismo será presentada en la MILID Summer School. Retrieved from https://bit.ly/2TWBZKt

Valverde, D., De Pro-Bueno, A., y González, J. (2018). La competencia informacional-digital en la enseñanza y aprendizaje de las ciencias en la educación secundaria obligatoria actual: una revisión teórica. *Revista Eureka sobre Enseñanza y Divulgación de las Ciencias, 15*(2), 2105-1-2105-15. doi:10.25267/Rev_Eureka_ensen_divulg_cienc.2018.v15.i2.2105

Villegas, I.M. (2014). *Alfabetización mediática y cultura escolar. Adquisición y uso de las competencias mediáticas dentro y fuera del entorno escolar*. Trabajo Fin de Máster. Barcelona: Universidad Autónoma de Barcelona. Retrieved from https://bit.ly/2FzS7P8

Wilson, C., Grizzle, A. y Cheung, C.K. (2011). *Alfabetización mediática e informacional: curriculum para profesores*. París: UNESCO. Retrieved from https://bit.ly/2CrwA7m