

## Article

# Digital and Social-Civic Skills in Future Primary Education Teachers: A Study from the Didactics of Social Sciences for the Improvement of Teacher Training in Competences

Rafael Guerrero Elecalde , Javier Contreras García, Antonio Luis Bonilla Martos and Begoña Serrano Arnáez

Social Sciences Department, University of Granada, 18011 Granada, Spain; jcontreras@ugr.es (J.C.G.); sanbonilla@ugr.es (A.L.B.M.); bserrano@ugr.es (B.S.A.)

\* Correspondence: rgelecalde@ugr.es

**Abstract:** The use of technology, especially among young people, is providing new possibilities, including in the academic field, and requires teacher training through the development of skills and competences. At this point, Social Science Didactics plays a fundamental role, as it prepares future teachers to teach social knowledge in order to achieve useful and meaningful learning for students and society. Using an online questionnaire, structured with the Likert scale, which had previously been validated and published by Professors Peart, Gutiérrez-Esteban, and Cubo-Delgado, 156 students of the Degree in Primary Education of the subject Didactics of Social Sciences at the University of Granada (Spain) participated (academic year 2023–2024), with the aim of investigating the digital and socio-civic competences of trainee teachers in order to seek ways to improve their training. The results were processed in the IBM SPSS Statistics 25 programme, carrying out a descriptive statistical analysis, considering the mode and the variance ratio. The participating students mainly use digital environments to communicate with acquaintances and, although they know and value a democratic society, they do not exercise their citizenship on the Internet. This makes it even more necessary to train future teachers in digital competences, based on digital and socio-civic skills, as only in this way will they be able to train citizens capable of facing the challenges of the knowledge society.

**Keywords:** didactics of social sciences; teacher training; primary education degree; digital skills; social-civic skills



**Citation:** Guerrero Elecalde, R.; Contreras García, J.; Bonilla Martos, A.L.; Serrano Arnáez, B. Digital and Social-Civic Skills in Future Primary Education Teachers: A Study from the Didactics of Social Sciences for the Improvement of Teacher Training in Competences. *Educ. Sci.* **2024**, *14*, 211. <https://doi.org/10.3390/educsci14020211>

Academic Editors: Ana María Martín-Cuadrado, Lourdes Pérez Sánchez, Begoña Mora Jauregualde and Silvia Lavandera-Ponce

Received: 31 December 2023

Revised: 15 February 2024

Accepted: 17 February 2024

Published: 19 February 2024



**Copyright:** © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

It is undeniable that we live in a highly technologized society. The use of the Internet and digital social platforms has reconfigured how public opinion is created (information, communication, and expression) and has altered the roles traditionally assigned to politicians, media, and citizens.

In fact, in recent years, political and social leaders have used these media to launch communiqués, create news, and even incite mobilisations. In parallel, there has been a wave of civic and social uprisings to influence policies, where the use of digital and social media has been a key aspect of fostering and demonstrating citizen engagement [1–3].

To this end, for example, social networks are full of hashtags that launch various media campaigns for social or political causes, which are then used mainly by young people with a high level of digital and socio-civic skills. Likewise, they are increasingly involved as creators and contributors of online content [4–6]. The use of technology, especially among young people, provides new possibilities not only for retrieving information but also for creating, sharing, communicating, and fostering critical thinking. The latter is becoming exponentially more necessary due to the effects of misinformation and data manipulation [1,7].

It is worth noting that, according to the data from the National Institute of Statistics (2018) [8], people between 16 and 24 years of age use the Internet, and the main activity

they perform is participation in social networks. In this sense, technological development has also implied transformations in the forms of communication and media literacy in educational contexts [9].

Digital competence encompasses the ethical, responsible, creative, critical, and safe use of information and communication technologies (ICTs), while simultaneously having the ability to adapt to a new set of knowledge and attitudes needed in this era to be competent in a digital environment. In addition, the development of socio-civic competences is a combination of attitudes, knowledge, and social, emotional, and cognitive skills aimed at interacting with the public and expressing solidarity and interest in solving community problems. Moreover, like digital competences, it involves critical reflection to be active participants in a community and in decision-making processes [3,10,11].

Digital citizenship is an ever-expanding concept and is already defined as the ability to locate, access, use, and create information effectively and to act actively, critically, sensitively, and ethically in digital environments, being security conscious, and acting responsibly. However, alongside this, there must also be a reflection on citizen literacy as a right within the educational policies aimed at equal opportunities [12].

This highlights the growing importance of ICTs in various social spheres, including academia, and the need for teacher training through the development of digital and citizenship competences [2,13]. A breakthrough in the identification of digital competences for teachers in the EU context came with the introduction of the European Framework of Digital Competences for Citizenship (DigComp), a tool developed by the European Commission [14]. This framework not only became a reference for the development and planning of digital competence initiatives at the European level and in member states but also served as a prelude to the DigCompEdu framework.

The DigCompEdu framework is specific to digital competence for teachers at all levels of education, from early childhood to higher and adult education. This includes general and vocational education, special needs education, and non-formal learning contexts [15]. It identifies twenty-one competences and organises them into five areas. In addition, it establishes eight levels of depth to define the knowledge, skills, and attitudes required to be digitally competent. This structured approach provides a clear framework for the assessment and development of teachers' digital competences in the educational context [16].

In the Spanish context, the Common Framework for Digital Competence in Teaching (INTEF, 2017) has been established as the reference context for the diagnosis and improvement of teachers' digital competences. On 16 May 2022, the Directorate General for Evaluation and Territorial Cooperation published the Agreement of the Sectoral Conference on Education on the reference framework for digital competence and teaching [17]. It referred to the importance of digital technologies in all areas of society as being key in teaching and learning processes. In addition, the first article of the document included an agreement between the Ministry and the Regional Education Ministries to use the digital competence framework as an essential instrument for improving their educational policies in relation to the digital competence of teachers. Furthermore, it was established that the curriculum should foster the development of technical competences, global awareness, and other complex skills, such as networking, critical perspective, and online political activism [18,19].

In this sense, in the same way that the LOE (2006) [20] takes into account the influence of the Key Competences for Lifelong Learning developed in that year by the European Commission [21], the LOMLOE of 2020 includes a revision of the Key Competences of 2018, recognising the existence of a general use of ICTs, which makes their integration into education of great importance. From this perspective, and in line with the key role of digital competences in human development, the preamble calls for a change of approach that recognises the social and personal impact of technology [22], thus expressing the widespread importance of information and communication technologies (ICTs) and the need for their integration in education.

Furthermore, in primary education, as in subsequent stages, the LOMLOE adds to its regulatory framework the concern for the risks derived from the use of ICTs. In other words, it considers the development of digital competence in teachers and pupils not only in terms of the access and use of technologies but also as the prevention of inappropriate use of ICTs and safety training. Therefore, attempting to define digital competences from a purely instrumental perspective limits not only their definition but also their implications for the daily lives of citizens who use technology. For this reason, it is necessary to link it to citizenship competence, another key competence, which “contributes to enabling students to exercise responsible citizenship and participate fully in social and civic life, based on an understanding of social, economic, legal and political concepts and structures, as well as knowledge of world events and active engagement in sustainability and the achievement of global citizenship” [22].

In line with this, the various decrees establishing the organisation and curriculum of the different types of education point out and call for the incorporation of information and communication technologies in the curricula, the appropriate use of these technologies, and the promotion of digital competence in all areas of education. They also empowered the head of the competent regional ministry for education to issue as many provisions as necessary for the development and implementation of their provisions (see Decree 101/2023, of 9 May, which establishes the organisation and curriculum of the Primary Education stage in the Autonomous Community of Andalusia) [23]. For this very reason, it is necessary to try to understand how to educate young people in participation and how to improve education for digital citizenship through the development of socio-civic competences [24,25], especially in the field of social sciences.

Although there is a prolific literary field related to digital skills and specifically linked to tool development, more work remains to be performed on digital age skills, how technology is used for social and civic actions and engagements, and how digital skills affect youth participation and society as a whole [3,26–28].

Within a conceptual model, the integration of digital competences in teacher education is based on the need to prepare future teachers to face the challenges of an increasingly technological educational environment. The theory of digital pedagogy stresses the importance of harnessing technologies to improve teaching and learning processes.

However, digital competence refers to the ability to use, accept, and critically evaluate information and communication ICTs. Therefore, it is not limited to technical knowledge but encompasses the ability to apply this knowledge in varied contexts, adapting to the changing demands of the digital society [11]. This competence involves digital literacy, the handling of digital tools and platforms, the ability to assess the credibility of online information, and the development of communication and combination skills in digital environments.

The development of the ethical paradigm supports the idea that educators play a crucial role in the formation of digitally accountable and aware citizens. From a pedagogical point of view, models such as the project approach and problem-based learning provide contexts conducive to the development of digital and citizenship competences. Citizenship competence refers to an individual’s ability to participate in society effectively and responsibly. It involves an understanding of citizenship rights and responsibilities and a focus on democratic values. It also encompasses skills such as participation in democratic processes, informed decision-making, respect for diversity, and the ability to address social problems [26].

In the digital context, citizenship competence extends to digital citizenship, which involves the ability to participate ethically and reflectively in a digital society. This includes understanding online rights and responsibilities, privacy management, constructive participation in online communities, and the ability to critically evaluate digital information [27].

Constructivist theory supports the idea that students, and in this case, future teachers, learn most effectively when faced with authentic and contextualized challenges. Both sociocultural theory and citizenship education emphasize the importance of training future teachers in digital citizenship skills that focus on the ability to participate effectively and

ethically in the digital society, including aspects such as privacy, online safety, and critical evaluation of information on the web.

From these assumptions, the Didactics of Social Sciences plays a fundamental role because it prepares teachers to conduct their practice by making reasoned decisions about the best way to teach social knowledge to achieve useful and meaningful learning for students and society. Let us remember that this discipline approaches teaching and learning from specific problems, linked to the nature of the different subjects of study, their contents, and methods, which entail particular difficulties and potentialities [29]. In addition, the proposed readings and activities will contribute to the development and implementation of mechanisms of analysis, critical reflection, and creativity, which are essential for proper professional practice within the field of education [30].

One of the fundamental goals of Social Science Education is to train democratic citizens [31] capable of living democratically with others, actively participating in the social, cultural, economic, and political life of the community around them, seeking to improve it, and fully exercising their citizenship [32,33]. Thus, considering the society in which we live and the needs it imposes, the teaching of social sciences must be useful for understanding today's world and for developing social and civic commitment [34].

To understand a process as complex as the teaching of social sciences, it is essential to reflect on the crucial role of teacher training as a necessary element for transformation. The main challenge lies in finding a new teaching model that integrates the new social reality, emerging teacher training, and profiles, as well as new professional competences [35–37].

Undoubtedly, in relation to the methodological principles that currently underpin teaching, we assume that 21st century teachers must base their teaching actions on the understanding and analysis of diverse realities, as well as on a critical interpretation of how to approach them. Beyond the personal interest in developing their digital competence, primary education teachers have a crucial responsibility in the development of students' technological skills at these stages [38].

The development of digital competence is not only limited to the mastery of devices and applications; it also implies the responsibility to use them in a pedagogical way, promoting collaborative work, respect for people and the environment, and responsible, critical, and safe use of technology. It is also concerned with preserving personal and socio-familial privacy, as well as the protection of personal data, among many other aspects [39,40].

Citizenship education constitutes the perspective that gives meaning to the various dimensions of historical and social knowledge. To achieve this, it is essential to acquire skills in communication, decision-making, and social action [34,41]. Thus, we argue that values' education involves cultivating respect for one's own life and that of others, as well as fulfilling responsibilities as an integral element of citizenship, thus contributing to the construction of democratic processes.

Therefore, our professional practice must be connected to the civic and democratic principles that govern our community and should guide us all to contribute to the betterment of society. Against this background, it is imperative to create solutions that allow for an accurate diagnosis of the situation and consequently to rethink many of the approaches to teaching practice. It is essential to shed light on the causes and, as far as possible, establish a model and processes that contribute to positively reshaping this educational context [42,43].

However, to acquire competences, understood as the knowledge and skills that guide you to be successful in a job, it is necessary to develop prior skills (or specific capacities) that, once assimilated, through experience, learning, and practice will provide the adequate foundations to be competent to achieve specific objectives in particular contexts. They involve the successful application of skills in practical, real-life situations. It could be argued that learning skills is the stepping stone to acquiring competence.

In general, little attention is paid to skills' learning, although in our view, it is an essential component of education and human development. It should not be forgotten that skills are fundamental components of competencies, and both are essential in education to prepare students (and teachers) with the necessary capabilities to face challenges in life

and work. While skills focus on specific abilities, competencies address the ability to apply those skills effectively in broader and more complex contexts.

Therefore, skills not only impact personal success (self-efficacy, self-confidence, and self-esteem) but also contribute to building a citizenship with competences to form a stronger and more resilient society (with values related to empathy, solidarity, commitment, and effective communication).

In these pages, an initial investigation is carried out to determine and analyse the state of digital and socio-civic skills of training teachers of primary education, based on Didactics of Social Sciences, taught in the Faculty of Education Sciences at the University of Granada (Spain). In this way, a series of indicators are studied to serve as a starting point for a profound exercise of reflection with the aim of improving the preparation of future teachers for the important challenges that lie ahead in the 21st century, as an essential element for the necessary social transformation.

However, this is not a process that is completed in a day, a few months, or a few years [44] because the university teaching function is a complex activity that involves a set of skills and competences to achieve a reasonable level of success. For this reason, with this work, we do not aim to achieve magic formulas that provoke an immediate reaction in students regarding the acquisition of competences (something evidently impossible), who also carry with them erroneous concepts and acquired practices that are difficult to eradicate, but to establish a starting point to provoke synergies in the teaching staff of the subject of Didactics of Social Sciences, so important in these matters, which will help to improve joint working methodologies from year to year in order to achieve a more adequate preparation of the teachers of the future.

## 2. Materials and Methods

### 2.1. Research Design

Survey studies are common in the field of education because they are used to understand various issues and collect information on several variables [45]. Using a structured questionnaire according to the Likert scale and an ordinal qualitative variable ranging from 1 (strongly disagree) to 5 (strongly agree), a descriptive observational study was conducted. Nowadays, it is still a very common procedure to transform ordinal variables into variables on a numerical scale and then apply dispersion measures such as variance or standard deviation. However, this procedure is inadequate and may lead to illogical or incorrect conclusions [46–48]. It is also very common to find the use of entropy, which is typical of nominal qualitative variables, to measure the variability of a data set of ordinal qualitative nature [49].

This type of procedure provides an opportunity to understand and address questions of a descriptive nature related to the variables, which guarantees the rigorousness of the data obtained [50,51].

This research comprised four phases that occurred during the first semester of the 2023–2024 academic year. The first phase consisted of the selection and adaptation of the data collection instrument. Once selected and adapted to the interests of the study, the instrument was administered during class hours (face-to-face), but its completion was completely voluntary. In addition, to collect information, students were contacted through the Virtual Classroom of the University of Granada (PRADO) tool, and a reminder was sent after the first pass to increase the number of responses received. The data were then analysed, and the report and the results disseminated.

### 2.2. Objectives

The general objective (GO) of this research is to investigate the digital and socio-civic skills of training teachers of primary education, who are taking the subject Didactics of Social Sciences taught in the Faculty of Education Sciences at the University of Granada (Spain), in order to improve our professional practice with the interest of training future primary school teachers, connected with the principles of citizenship to improve society.



To understand a process as complex as the teaching of social sciences, it is essential to reflect on the crucial role of teacher education as a necessary element for transformation. The main challenge lies in finding a new teaching model that integrates the new social reality, emerging teacher training and profiles, and new professional competences. The following specific objectives (SOs) can be broken down from the aforementioned GO:

1. To analyse the capacity of training teachers in the management and use of information and data as well as their communication skills.
2. To determine the level of primary education students in the creation of digital content, management and security of information and digital content, and digital ethics and responsibility.
3. To learn, through the practices of future teachers, about social and political attitudes and behaviour, digital empathy, and social and digital commitment.
4. To extract knowledge about critical thinking, democratic attitudes, and pro-social behaviours of the student body.

### 2.3. Participants

The research involved 156 ( $n = 156$ ) students of the Degree in Primary Education enrolled in the second year subject Didactics of Social Sciences at the University of Granada (Spain), in the academic year 2023–2024, who are part of Groups B, C, E, F, and H.

This subject is part of the Teaching and Learning of Social Sciences module with 9 ECTS credits, which is compulsory and taught entirely in the first semester of the second year of the degree. It is also the students' first important incursion into the area of social sciences, since previously, in the first year, they had a subject of a transversal nature dedicated to heritage. The research sample consisted of forty-five men (28.8%) and 109 women (69.9%), which indicates that, as is usually the case in Teacher Training Degrees, the female gender predominates. This representative portion was chosen using non-probabilistic convenience sampling techniques, considering the criteria of accessibility to the subjects and suitability for the purposes of the research [52].

### 2.4. Instrument for Collecting Information

For data collection, we used a validated instrument published by Professors Mark Thomas Peart, Prudencia Gutiérrez-Esteban, and Sixto Cubo-Delgado of the University of Extremadura (Spain) on the Development of digital and socio-civic skills (DIGISOC). The main objective of this questionnaire was to measure the development of the digital and socio-civic skills of young people, specifically those aged 16–35 years in Spain and the United Kingdom [3] (see Appendix A).

To develop it, they drew on the work of several authors [21,53–55] to develop an instrument with scientific guarantees. To this end, the authors conducted a validation process using a questionnaire in which specialists judged important issues such as sufficiency, clarity, and relevance [3].

The online instrument was created on the Google Forms platform and was translated from English to Spanish by experts (see Table 1). This instrument was self-administered, i.e., the survey was completed by the respondent themselves, without the presence of an interviewer, with prior informed consent.

Furthermore, this method of data collection collects perceptions of young people along the lines of self-perceived skills, which do not necessarily coincide with the actual level of skill possessed by each participant. The security and confidentiality of the data and the participants in this study were respected in accordance with Organic Law 3/2018, of 5 December, on Personal Data Protection and guarantee of digital rights and the General Data Protection Regulation 2016/679 (Spain).

In the first block, this instrument includes a section of socio-demographic questions (gender and age) and several blocks dedicated to two dimensions. Next, it deals with the digital skills dimension, which aims to collect data on a person's level of information

and media literacy and the ability to locate, store, retrieve, apply, synthesize, and evaluate information, as well as to recognise and evaluate the quality of the media being transmitted.

**Table 1.** Definitive version of questionnaire used.

Socioeconomic Data		Gender
		Age
Dimension	Sub-Dimension	Item Number
Digital skills	Management and use of information and data	3, 8, 14, 16, 17, 51, 58, 59
	Communication skills	19, 20, 21, 25
	Digital content creation	30, 32, 36
	Management and security of information and digital content	5, 31, 33, 37, 39, 41
	Ethics and digital responsibility	24, 34, 35, 38, 50
Socio-civic skills	Social and political behaviours and attitudes	1, 2, 6, 27, 28, 29, 49, 52, 64, 66, 70
	Digital empathy	23, 26, 47, 63, 71, 72, 74
	Social and digital engagement	54, 55, 68, 73, 75
	Critical thinking	12, 40, 46, 57
	Democratic attitudes	10, 43, 67
	Prosocial behaviour	15, 56, 62

Source: [3]

Finally, it is concerned with citizenship dimensions, which serve to measure a person's knowledge, skills, attitudes, values, and social and civic behaviour. As explained by the experts and following the considerations of the expert evaluators, the instrument consisted of 59 items, with a very acceptable internal consistency according to Cronbach's Alpha test: for the digital dimension,  $\alpha = 0.906$  and for the socio-civic dimension,  $\alpha = 0.902$ . Therefore, the analyses conducted indicate that the data fit the model well and correspond to key analytical dimensions in the field of social sciences teaching [3].

### 3. Results

The results were processed using IBM SPSS Statistics 25. First, a descriptive statistics analysis was performed for the Likert scale variables of the questionnaire, including the establishment of the mode and variance ratio.

It should be pointed out that, as expected, the age of the respondents corresponds perfectly to the standards established for the preparation of the questionnaire, since the majority of students in the Didactics of Social Sciences subject in the academic year 2023–2024 are between 18 and 29 years old, with the vast majority being between 18 and 20 years old (78.8%), followed by those between 21 and 23 (16%) and students between 24 and 26 years old (3.2%).

In the first part of this analysis, the focus is on the dimension related to the perception of their digital skills (see Table 2).

In relation to the sub-dimension linked to the management and use of information and data, most participants in the study seek and access information in digital environments (71.8%), while only 7% never or almost never obtain it through digital media. It is also noteworthy that 21.2% were neutral to the question (see Figure A1 in Appendix B).

They also said that they understand the information they get from the Internet (62.2%) (32.7% were neutral), and along the same lines, they also understand the information and messages transmitted by the media (61.5%), with 33.3% giving a neutral answer. According to the information provided, few (7.7%) do not critically evaluate the media (or do so very little), while approximately half of the respondents (56.7%) do so quite a lot (32.1%) or always (24.4%). Of the total number of participants, 35.9% were neutral.

**Table 2.** Digital skills dimension: statistical results.

Dimension	Sub-Dimension	Item Number	Mode	Sub-Dimension Mode	Variance Ratio	
Digital skills	Management and use of information and data	3	5	4	0.61	
		8	4		0.52	
		14	4		0.54	
		16	4		0.66	
		17	3		0.64	
		51	4		0.68	
		58	4		0.57	
	59	4	0.59			
	Communication skills	19	4	4	0.52	
		20	4		0.47	
		21	4		0.49	
		25	4		0.58	
	Digital content creation	30	5	5	0.64	
		32	5		0.67	
		36	3		0.66	
	Management and security of information and digital content	5	4	3 and 4	4 and 5	0.67
		31	5			0.60
		33	4			0.59
		37	5			0.71
		39	5			0.55
41	5	0.49				
Ethics and digital responsibility	24	5	4	0.58		
	34	4		0.67		
	35	3		0.67		
	38	4		0.62		
	50	4		0.56		

Source: own elaboration.

In addition, 62.6% always or almost always used dialogue to resolve conflicts in digital environments, making decisions (74.3%), and solving problems using relevant information (74.3%).

The mode of information and data management and use is 4, indicating that the “medium-high” category is the most frequent among students. Regarding the sub-dimension related to communication skills, the participants considered that they have excellent (19.2%) or good (48.1%) communication skills. On the other hand, 3.2% of people had none or almost none of these skills and 29.5% were neutral (see Figure A2 in Appendix B).

The vast majority (53.2%) know or perfectly know (28.2%) how to communicate in different ways (images, text, videos, etc.) and transmit constructive messages in different environments regularly (42.3%) or very often (23.1%). It is also very common for them to communicate their ideas to people they know (81.4%). Only 3.2% of respondents said that they almost never do this.

The mode of the sub-dimension related to communication skills is 4, indicating that the category medium–high is the most common among students’ responses.

Regarding their skills in digital content creation, the data obtained indicate that they share information and content with other people through electronic devices frequently (33.3%) or very frequently (35.9%), while only 13.5% never or almost never do so.

To this end, they use different digital content to express themselves in digital environments (64.7%), and to this end, not so many modify or include digital content habitually (30.1%) or very habitually (17.9%) in their publications on social networks.

Thirty-four percent were neutral on this issue. The mode of digital content creation is 5, the highest of all categories. Regarding the sub-dimension related to the management and security of information and digital content, few respondents said they do not use or hardly use tools to store and manage information (10.2%).

On the other hand, there are many who know (37.2%) or know perfectly (39.7%) different ways to create and edit digital content (videos, photographs, infographics, texts,



animations, etc.) and can transform (41%) or transform perfectly (28.2%) the information and organize it in different digital formats.

However, according to the data obtained, they do not excessively share materials created by themselves or others (never: 9.6%; almost never: 10.3%; frequently: 28.8%; and very frequently: 22.4%) (see Figure A3 in Appendix B). Similarly, most configure their devices to protect their privacy (78.9%) and are careful with their personal information (85.9%).

This time, the modes of management and security of information and digital content were 4 and 5, respectively, indicating that the highest categories were the most frequent among the students' responses.

Regarding the last dimension, ethical and digital responsibility, the participating students expressed that they are careful (39.1%) or very careful (42.3%) that their messages do not bother others. Only 4.4% expressed that they never or almost never pay attention to these issues. Participating students develop and publish digital content considering the rights of individuals (63.4%) and intellectual property rights (57%), although 33.3% were neutral on this issue.

Regarding the latter, 14.7% never or almost never take it into account when making their publications, and likewise, in the case of developing new digital content, 20.5% do not say where or from whom the information comes from. However, in general, they do think about the possible consequences before performing a digital activity (uploading a photo, commenting, etc.) (75.7%). Regarding the mode of this sub-dimension, ethical and digital responsibility, the most common is 4, indicating that the "medium-high" category is the most frequent among students.

In the second part of this study, the focus is on the dimension related to the perception of civic skills (see Table 3). With regard to the sub-dimension linked to social and political attitudes and behaviour, 31.4% of the students participating in this study affirmed that they are politically involved, while 26.9% were neutral on this question.

Furthermore, they consider it important (37.2%) or critical (35.9%) for young people to know about political life (political parties, electoral programmes, electoral procedures, etc.), while 6.4% think that it is not important.

Also, most young people frequently or very frequently interact with other people through social networks (79.5%), with just over half using digital technologies to exercise their citizenship (51.9%). On this point, 31.4% opted for a neutral stance. At the same time, 25.6% said that they participate in digital activities organised by other people or entities, while 49.4% said that they do not do so. Twenty-five percent gave a neutral response. Among the information collected, 26.6% said that they keep up to date with political and social news, while 19.9% confirmed that they are not or almost not at all. It is worth noting that the majority (40.4%) were neutral on this question.

To keep up to date with what is happening, 37.2% have applications that are configured to keep up to date with the news and 31.4% do not have apps for this purpose.

In addition, 21.2% search frequently or very frequently (33.3%) for information on the Internet about social and/or political issues, while 16.7% of students hardly ever do so or never (5.8%).

On the other hand, 19.9% confirmed that they are part of a social networking group that discusses political issues, while 65.4% said that they do not participate in any group. Similarly, 30.1% of respondents belong to a social networking group that discusses social issues, whereas 52% do not. Finally, 11.5% confessed to being very engaged and taking action on social issues, while 34.6% said they are engaged. In this sense, 39.1% responded neutrally.

In turn, 14.7% responded that they were not committed and did not act to solve social problems, and 39.1% responded neutrally. The mode of social and political attitudes and behaviour was 3, indicating that the "neutral" category is the most frequent among the participants. On the other hand, concerning the digital empathy of future primary school teachers, the students participating in the survey stated that they help other people (82.7%), are able to put themselves in other people's shoes (86.5%) (only 0.6% say this is difficult), and respect others (93.6%).

**Table 3.** Socio-civic skills dimension: statistical results.

Dimension	Sub-Dimension	Item Number	Mode	Sub-Dimension Mode	Variation Ratio
Socio-civic skills	Social and political behaviours and attitudes	1	3		0.60
		2	3		0.68
		6	4		0.67
		27	1		0.45
		28	1		0.59
		29	1	3	0.67
		49	3		0.73
		52	5		0.59
		64	4		0.63
		66	3		0.61
	70	2 and 4		0.68	
	Digital empathy	23	4		0.54
		26	4		0.52
		47	5		0.58
		63	5	5	0.58
		71	5		0.39
		72	5		0.26
	74	5		0.52	
	Social and digital engagement	54	5		0.53
		55	4		0.62
		68	4	5	0.62
		73	5		0.37
	75	5		0.51	
	Critical thinking	12	4		0.53
		40	5		0.61
		46	4	4	0.65
		57	4		0.63
Democratic attitudes	10	5		0.59	
	43	5	5	0.45	
	67	5		0.58	
Prosocial behaviour	15	4		0.62	
	56	5	4	0.55	
	62	4		0.63	

Source: own elaboration.

Moreover, in general, they explained that they inform themselves before commenting on an issue (80.7%), that they listen to other people when they present opinions contrary to their own (88.4%), and that they politely argue their opinion (84.6%).

Finally, 77.6% avoided behaviour that is harmful to their health and well-being on social networks and 3.2% do not.

On the other hand, the mode of digital empathy is 5, indicating that it is the highest category among those presented. Regarding the sub-dimension of social and digital engagement, students answered that they mostly adopt and defend an opinion on different issues (85.9%), listen to both sides of a disagreement (84.6%) (almost never, 1.3%), consider the opinion of others (89.7%), and try to listen to opinions that differ from their own before making decisions (82.7%) (not at all, 1.9%). They also confirmed that they work towards a diverse and multicultural society (63.1%), while 7% do not and 28.8% responded neutrally.

In this case, the mode of the sub-dimension social and digital engagement is 5, the highest category among all of them. When asked about critical thinking, the participating students expressed that they are critical of the information they have (67.3%) (5.8% were not and 26.9% were neutral) (see Figure A4 in Appendix B) and make judgements about the new information they receive (62.9%) (9% were not and 31.4% were neutral).

In addition, they identified harmful behaviours that may affect their health and well-being on social networks (62.9%) (neutral, 26.3%) and reflected on whether a digital environment is a safe space (73.8%) (not at all, 6.4%). The mode of critical thinking is 4, indicating that the “medium-high” category is the most frequent among students.

When asked about their democratic attitudes, their responses show that, in general, they value and defend democratic values (freedom, equality, justice, solidarity, tolerance, etc.) (75.5%), with only 2.5% not valuing or defending them.

Likewise, they are concerned about fake news and disinformation on the Internet (79.9%), whereas 5.8% are not. Finally, 80.7% avoid having discussions in digital environments and 3.2% do not.

In this case, the mode of democratic attitudes is 5, indicating that the highest category is the most common in the responses. Regarding the last sub-dimension (pro-social behaviour), students consider volunteering to be a fundamental activity for young people (71.2%) (3.9% think it is not and 25% answered neutrally) and criticise and reject any kind of violent behaviour (78.2%), and 3.2% say they do not (18.6% answered neutrally).

There is also a majority that appreciates the importance of accessing media in different formats (press, radio, television, Internet, etc.) (66.6%) (7.7% do not appreciate it and 25.6% were neutral). Finally, the mode of the sub-dimension on pro-social behaviour is 4, indicating that the “medium-high” category is the most frequent.

#### 4. Discussion

Most students in the subject of Didactics of Social Sciences in Primary Education at the University of Granada access information from digital environments, mainly the Internet and social networks, just as young university students do [56]. These data confirm the work of Arab and Díaz [57], who state that it is influenced by personality traits, disciplines of study, gender, and the type of digital action. Furthermore, young university students tend to make intensive use of a limited set of services and sources [58], which contradicts the concept of “digital natives” due to their presumed technological literacy [59].

Note that a good part of them understand the information they receive in general, but it seems that a critical evaluation of everything that comes from the Internet and the media does not prevail. The latter conforms to the conclusions of Catalina-García et al. [56], which argue that it is intensive users who make more extensive use of these digital services and place a higher degree of trust in digital information. This casts doubt on their critical thinking and problem-solving skills, as argued by Gutiérrez and Cabero [60].

This is a major conceptual issue, as the intersection between digital and citizenship competences is found in the notion of digital citizenship, which implies the ethical and accountable use of technology to participate meaningfully in society. Holistic education theory supports the integration of these competencies, recognizing the need to develop well-rounded and socially engaged individuals. The interconnectedness of these competences is manifested in the ability to use technology as a tool for citizen empowerment, social problem-solving and effective participation in online communities [3].

Similarly, several studies indicate that youth currently have an optimal level of technological skills, including the use of devices such as computers, tablets, and mobile phones, as well as participation in social networks. However, they lack a critical attitude towards the media [39]. From the theoretical framework, a critical attitude toward the media can be realized through several dimensions involving the ability to analyse, evaluate, and reflect on media information. The ability to break down and examine media content into its fundamental components, identifying key messages, narrative approaches, and argumentative structures enables individuals to learn how information is presented, what elements are highlighted, and how narratives are constructed in the media [7].

This leads to a strengthened ability to discern the reliability and credibility of information sources in the media and helps to distinguish between accurate and biased information, appropriately contextualising and determining its relevance. It also favours the recognition of the authority of sources, avoiding the uncritical acceptance of a single point of view, thus promoting a more complete and balanced understanding of the issues [1]. This conceptual framework is linked to the development of cognitive and emotional skills that enable people to interact in an informed and critical way with the media, promoting a more active and conscious citizen participation.

For their part, future primary school teachers emphasise, as is the case with young people their age, that they understand that they have good skills related to information management and communication competences [61], especially in more basic tasks [62].

In reality, they use social networks and the Internet to communicate with people they know, and they can do so in a variety of ways, although they do not modify digital content. On one hand, as the most specialised studies respond, the greatest difficulties are associated with content creation, creativity, or innovation [60,63], although many of the respondents confirm that they know how to create and edit digital content and can transform and organise information in different formats.

However, it is important to highlight that several studies [39,64,65] support the differences between students' perceptions of their digital competence levels and actual skills. This issue has been referred to as competence idealisation [66]. These differences may be due to their daily use of technology and a positive attitude towards it [67].

Nevertheless, they are not digital creators, and everything seems to indicate that these skills are not exploited because they do not feel the need to put them to use, since the training teacher makes utilitarian use of the Internet and social networks and does not find in them a resource for developing their creativity or showing social or political commitment. Related research also proposes a conceptualisation of youth in terms of digital competences and civic participation. At one extreme, there is a small group of young people who are able to acquire these skills but, for various reasons, do not use them autonomously to engage in civic activities [68].

The data analysis and the results of the study indicate that the most prominent digital competence among the participating students was related to safety. This is also affirmed by other studies on future teachers [66], who exercise an important responsibility in digital environments with empathy and digital commitment. Future teachers should be responsible and develop ethical behaviour when using the Internet or social networks, taking care with their actions to disturb other users and bearing in mind the consequences of their digital publications. However, it is worth noting that, as the students themselves have stated, they usually use digital environments to communicate with acquaintances and friends, which always leads to a more cordial relationship with those with whom they have an affinity, even previously, outside the Internet.

According to the information collected, a large proportion of the undergraduate students surveyed considered the rights of individuals and intellectual property rights when acting in digital environments. In our opinion, these results are the result of answers with a social desirability bias, where students have not expressed their true opinions or behaviour; since in our experience, they are not always so respectful of these rights when preparing their coursework, in which, among other issues, they must cite the authors and works consulted accordingly. Perhaps much more in line with reality are the responses of the third of respondents who say that they do not stop to think about these issues when they are in digital environments. This is also in line with the study by Gabarda et al. [39], which states that young people have a low level of awareness of copyright and licencing. It is important to work on this issue with the aim of building a conceptual basis that helps to realize the dynamics between creators, their works, and how they can be used and shared within society, balancing authors' rights with access to and dissemination of culture.

It is particularly interesting to note that most participants are neither socially nor politically involved, although it is striking that they do state that it is important for young people to be aware of political life. Along these lines, they do not participate in organised digital activities, few have applications configured to follow current information, nor are they part of groups that comment on or debate political and social issues. It should also be borne in mind, as mentioned above, that most of the time young people spend in digital environments is spent socialising with their friends and peers.

In this analysis, the future teachers, although they do not act to reinforce and disseminate them, value democratic values very positively (except for a small percentage which should make us think). In this line, they show little or no interest in the consumption of

non-news media. A key question can be explored to obtain data on the reasons why they do not feel attracted by information about what is happening in their community or in the world, as confirmed by Catalina-García et al. [56].

In reality, it is a question of behaviour that goes beyond the digital environment, since, as most of them confirm in their replies, they are not committed to or do not act in relation to social or political issues. Consequently, they do not exercise citizenship when they are on the Internet or social networks, which is in line with their habitual use of these new technologies. This type of behaviour is closely linked to the disaffection of young people towards institutions and political life and, consequently, a decrease in the levels of democratic participation. Instead, a goal of compulsory education systems should be to ensure that learning democratic values and political participation is promoted to prepare people for active citizenship [69].

As can be seen, they know, value, and aspire to a fully democratic society, but the aim of education must be to promote reflection and critical thinking, which is the basis for a commitment to responsible action to improve society and the world around them. These objectives should also be addressed in digital environments, which are becoming increasingly important and influential in our daily lives. Both the Internet and social networks are no longer tools that serve only to communicate with friends and family or passively contemplate what is happening there, but it is necessary to use these instruments to develop digital citizenship in a free, dignified, critical, and creative way. Therefore, digital literacy education is closely related to social and civic skills, and it is increasingly necessary. Both digital and citizenship competences are essential skills in contemporary society, and their integration into educational training aims to prepare individuals to be informed and ethical participants in an increasingly digital and complex world.

Therefore, training teachers in technology is of relevance to ensure the effective development of students' digital skills. Only teachers who are digitally competent can educate citizens capable of facing the social, political, and economic challenges of a knowledge society [70].

As teachers of Social Science Didactics, we will insist on the implementation of active methodologies that take advantage of the potential of digital environments to actively involve students in understanding and tackling social and political problems, while promoting essential digital skills. These include procedures that work with technological tools and encourage active participation in digital environments closely. It is increasingly necessary to develop collaborative online projects, where students can work together in identifying, researching, and presenting solutions to social and political problems; to create educational blogs where students can analyse, research, and discuss current issues, as well as consult current news through traditional media in digital format (press, TV, documentaries, etc.); to integrate the use of social networks and social media in the learning process; to integrate the use of social networks or online discussion forums, so that students can discuss issues, share their own resources, and collaborate on projects related to social and political problems; as well as encourage the creation of educational podcasts where students research, interview experts, and present solutions to specific problems in their environment.

This paper cannot end without identifying some of its limitations. First, the use of anonymous, perception-based questionnaires carries some risks, such as insincerity, with the risk of social desirability bias, where respondents may answer in a way that reflects what they consider socially acceptable rather than expressing their true opinions or behaviours; lack of conscientious responses, where it is impossible to determine whether the respondent has adequately reflected on the questions before answering, which may affect the quality and accuracy of responses; and differences in understanding and interpretation, which may lead to inaccurate responses due to misunderstandings. Overall, the instrument seems suitable for drawing initial conclusions on the issues that have been addressed.

Another limitation is the selection of the sample rather than its size, as this was a purposive sample based on the ease of access to the participants. Also, derived from the



latter, is the lack of generalisation of the results obtained to other contexts, such as other Andalusian or Spanish universities, which would serve to compare the results.

The last point is linked to the time of data collection. In this sense, this study was conducted during class hours (face-to-face) and on a voluntary basis; therefore, the data obtained were related to the attendance received on those days. Simultaneously, the questionnaire was administered at the beginning of the academic year, which may have affected the arguments that many may have put forward due to their lack of teaching experience and lack of relationship with the educational field, as they have not yet begun their work experience in primary schools.

## 5. Conclusions

There is still some way to go, and the training received by prospective primary school teachers seems to be insufficient to cope with their curricular responsibilities, especially compared with international standards widely accepted by the academic community. This is a significant issue that highlights the importance of reviewing and improving teacher education programmes to ensure that educators are adequately prepared for their roles in the classroom. The process of teacher education at the university is of great importance for future professional teaching practices. Therefore, it is essential to guide the subject of Didactics of Social Sciences from a real practice of the methodologies that we are teaching if we really seek to transform the practises that will be carried out in schools. To achieve this, it is essential to work from a reflective, comprehensive, and analytical perspective of social knowledge (also from digital environments), integrating our own knowledge with the realities surrounding the students.

In short, our purpose in this work has been to explore the reality of our students with the aim of preparing future educators equipped with critical and reflective skills in the digital environment. This analysis highlights the fact that, although a great deal of progress has been made in this area, there is still a long way to go. However, it must be recognised that digital citizenship encompasses the ability to generate opportunities for growth and, at the same time, can contribute to minimising risks in digital environments. This is crucial for today's educators, and more research is needed (also from the area of Social Science Didactics) to especially address the impact of digital citizenship development and other related aspects. On the other hand, issues such as the digital gap or science introspective from a gender perspective, which have not been the subject of this study, should be addressed and are still pending in places and contexts that are not so far away.

**Author Contributions:** Conceptualization, R.G.E. and J.C.G. methodology, R.G.E., A.L.B.M. and B.S.A.; software, J.C.G. and R.G.E.; validation, B.S.A. and A.L.B.M.; formal analysis, R.G.E., J.C.G., A.L.B.M. and B.S.A.; investigation, B.S.A.; resources, J.C.G.; data curation, A.L.B.M.; writing—original draft preparation, R.G.E., A.L.B.M. and B.S.A.; writing—review and editing, R.G.E., J.C.G. and B.S.A.; visualization, A.L.B.M.; supervision, J.C.G. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** Data are contained within the article.

**Conflicts of Interest:** The authors declare no conflicts of interest.

## Appendix A

### Questionnaire

Dimension digital skills

Questions

3. I search for and access information in digital environments.

8. I understand the information that I find on the Internet.

14. I understand the information and messages transmitted by the media.
16. I understand the role of the media.
17. I critically evaluate the media.
51. I use dialogue to resolve conflicts in digital environments.
58. I make decisions using relevant information.
59. I solve problems using relevant information.
19. I have good communication skills.
20. I know how to communicate in different ways (images, text, videos . . .).
21. I communicate my ideas to people that I know.
25. I transmit constructive messages in different environments.
30. I share information and content with other people via electronic devices.
32. I use different digital content to express myself in digital environments.
36. I modify and include digital content in my own posts on social networks.
5. I use tools to store and manage information.
31. I know different ways to create and edit digital content (videos, photographs, infographics, texts, animations . . .).
33. I can transform information and organize it in different formats.
37. I share materials created by myself and by other people.
39. I configure my devices to protect my privacy.
41. I am careful with my personal information.
24. I am careful and try to ensure that my messages do not upset others.
34. I develop and publish digital content taking into account people's rights.
35. I develop and publish digital content taking into account intellectual property rights.
38. In case of developing new digital content, I say from where or whom the information comes.
50. Before doing a digital activity (upload a photograph, commenting . . .), I usually think about the possible consequences.

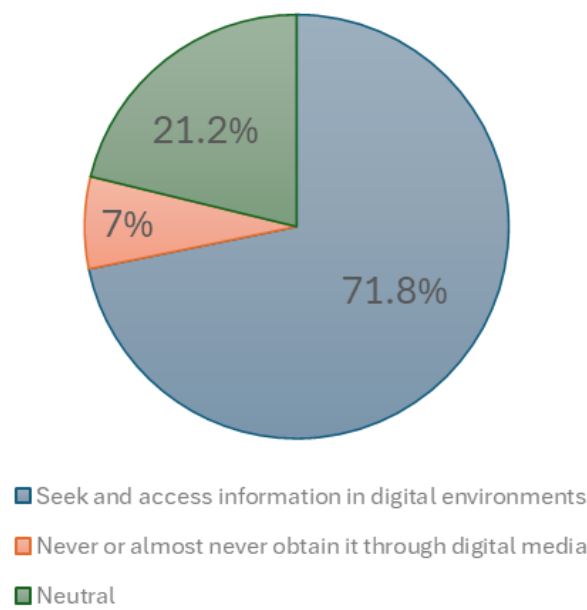
#### Dimension socio-civic skills

##### Questions

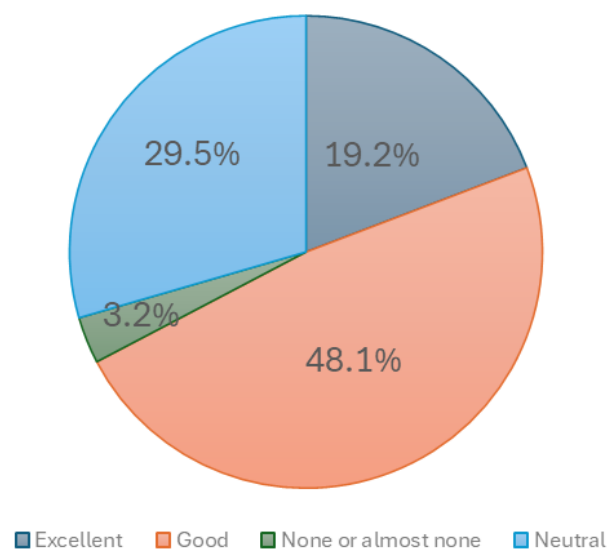
1. I keep myself informed of current political and social issues.
2. I have apps that are configured to keep me up to date with the news.
6. I look for information on the Internet about social issues and/or politics.
27. I am part of a social network group that talks about political issues.
28. I am part of a social network group that talks about social issues.
29. I participate in digital activities organized by other people or entities.
49. I am a politically involved person.
52. I engage with other people through social networks.
64. I consider it important that young people know about political life (political parties, electoral programs, election procedures . . .).
66. I am engaged and act on social problems.
70. I use digital technologies to exercise my citizenship.
23. I listen to other people when they present opinions contrary to my own.
26. I argue my opinion politely.
47. I avoid behaviours that are harmful to my health and well-being on social network.
63. I help other people.
71. I am able to put myself in other people's shoes.
72. I respect other people.
74. I get informed before commenting on a topic.
54. I listen to both sides of a disagreement.
55. I try to listen to opinions that differ from my own before making decisions.
68. I work to achieve a diverse and multicultural society.
73. I take into account the opinion of others.
75. I adopt and defend an opinion on different topics.
12. I am critical of the information that I have.

- 40. I reflect on whether a digital environment is a safe space.
- 46. I identify harmful behaviours that can affect my health and well-being on social networks.
- 57. I make judgments about new information that I receive.
- 15. I appreciate the importance of accessing media in different formats (press, radio, television, Internet ...).
- 56. I am critical of and reject any type of violent behaviour.
- 62. I consider volunteering a fundamental activity for young people

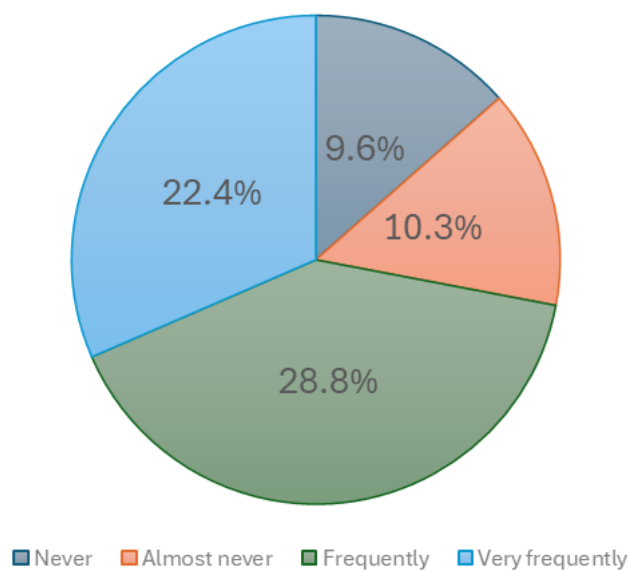
**Appendix B**



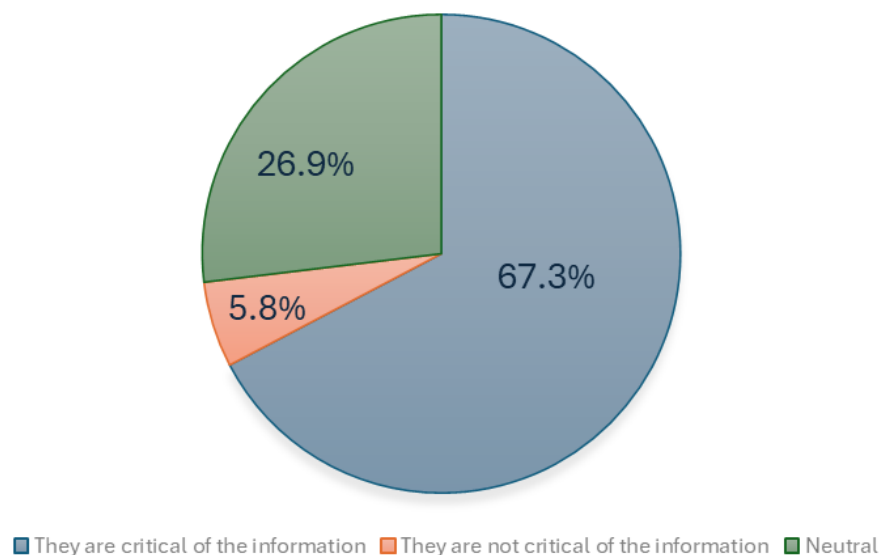
**Figure A1.** Management and use of information and data.



**Figure A2.** Communication skills.



**Figure A3.** Share materials created by themselves or others.



**Figure A4.** Critical thinking related to digital information.

## References

- Boulianne, S. Social media use and participation: A meta-analysis of current research. *Inf. Commun. Soc.* **2015**, *18*, 524–538. [CrossRef]
- Castells, M. *Networks of Outrage and Hope. Social Movements in the Internet Age*; Wiley Publishers: Chichester, UK, 2012.
- Peart, M.T.; Gutiérrez-Esteban, P.; Cubo-Delgado, S. Development of the Digital and Socio-Civic Skills (DIGISOC) Questionnaire. *Educ. Technol. Res. Dev.* **2020**, *68*, 3327–3351. [CrossRef]
- Tariq, R.; Zeib, F. Empoderamiento político entre jóvenes votantes: Redes sociales, partidismo y papel moderador del interés político. *Comun. Rev. Cient. Comun. Educ.* **2023**, *74*, 101–112. [CrossRef]
- Lenhart, A.; Guddan, M.; Perrin, A.; Stepler, R.; Rainie, H.; Parker, K. *Teens, Social Media & Technology Overview 2015*; Pew Internet & American Life Project: Washington, DC, USA, 2015.
- Nacu, D.C.; Martin, C.K.; Pinkard, N.; Gray, T. Analyzing educators' online interactions: A framework of online learning support roles. *Learn. Media Technol.* **2016**, *41*, 283–305. [CrossRef]
- El Soufi, N.; See, B.H. Does explicit teaching of critical thinking improve critical thinking skills of English language learners in higher education? A critical review of causal evidence. *Stud. Educ. Eval.* **2019**, *60*, 140–162. [CrossRef]
- Instituto Nacional de Estadística. *España en Cifras. 2018. Madrid: Catálogo de Publicaciones Oficiales de la Administración del Estado*; Instituto Nacional de Estadística: Madrid, Spain, 2018; Available online: [https://www.ine.es/prodyser/espa\\_cifras/2018/](https://www.ine.es/prodyser/espa_cifras/2018/) (accessed on 1 December 2023).
- Martínez Lirola, M. *El Análisis Crítico del Discurso y la Pedagogía Crítica*; Comares: Granada, Spain, 2022.

10. European Commission. Council Recommendation 2018/C 189/01 of 22 May on Key Competences for Lifelong Learning for Lifelong Learning. Official Journal of the European Union, from 4 of June of 2018. 2018. Available online: [https://eur-lex.europa.eu/legalcontent/ES/TXT/PDF/?uri=CELEX:32018H0604\(01\)&from=SV](https://eur-lex.europa.eu/legalcontent/ES/TXT/PDF/?uri=CELEX:32018H0604(01)&from=SV) (accessed on 27 November 2023).
11. McNaughton, S.; Rosedale, N.; Ngairé-Jesson, R.; Hoda, R.; Teng, L. How digital environments in schools might be used to boost social skills: Developing a conditional augmentation hypothesis. *Comput. Educ.* **2018**, *126*, 311–323. [CrossRef]
12. Ramírez-García, A.; González-Fernández, N. Media competence of teachers and students of compulsory education in Spain. *Comunicar* **2016**, *49*, 49–58. [CrossRef]
13. Abad-Segura, E.; González-Zamar, M.D.; de la Rosa, A.L.; Gallardo-Pérez, J. Gestión de la economía digital en la educación superior: Tendencias y perspectivas futuras. *Campus Virtuales* **2020**, *9*, 57–68.
14. Ferrari, A. *DIGCOMP: A Framework for Developing and Understanding Digital Competence in Europe*; Joint Research Centre Reports; Publications Office of the European Union: Luxembourg, 2013; Available online: <https://digcomp.org.pl/wp-content/uploads/2016/07/DIGCOMP-1.0-2013.pdf> (accessed on 13 October 2023).
15. Redecker, C.; Punie, Y. *European Framework for the Digital Competence of Educators: DigCompEdu*; Publications Office of the European Union: Luxembourg, 2017.
16. Cabero-Almenara, J.; Palacios-Rodríguez, A. Marco Europeo de Competencia Digital Docente. «DigCompEdu. Traducción y adaptación del cuestionario «DigCompEdu Check-In». *Edmetic* **2020**, *9*, 213–234. [CrossRef]
17. Ministerio de Educación y Formación Profesional. Gobierno de España. Resolución de 4 de Mayo de 2022, de la Dirección General de Evaluación y Cooperación Territorial, por la que se Publica el Acuerdo de la Conferencia Sectorial de Educación, Sobre la Actualización del Marco de Referencia de la Competencia Digital Docente. Boletín Oficial del Estado, 116, de 16 de mayo de 2022. Available online: [https://www.boe.es/eli/es/res/2022/05/04/\(5\)](https://www.boe.es/eli/es/res/2022/05/04/(5)) (accessed on 27 November 2023).
18. Choi, M.; Glassman, M.; Cristol, D. What it means to be a citizen in the internet age: Development of a reliable and valid digital citizenship scale. *Comput. Educ.* **2017**, *107*, 100–112. [CrossRef]
19. Emejulu, A.; McGregor, C. Towards a radical digital citizenship in digital education. *Crit. Stud. Educ.* **2015**, *60*, 131–147. [CrossRef]
20. Gobierno de España. Available online: <https://www.lamoncloa.gob.es/Paginas/index.aspx> (accessed on 2 October 2023).
21. European Union. European Parliament and the Council of Europe. Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning. Brussels. *Off. J. Eur. Union* **2006**, *L394/310*, 10–18.
22. Gobierno de España. Ley Orgánica 3/2020, de 29 de Diciembre, por la que se Modifica la Ley Orgánica 2/2006, de 3 de Mayo, de Educación (LOMLOE). Boletín Oficial del Estado, 340, de 30 de Diciembre de 2020. Available online: <https://www.boe.es/buscar/doc.php?id=BOE-A-2020-17264> (accessed on 14 November 2023).
23. Gobierno de España. Decreto 101/2023, de 9 de Mayo, por el que se Establece la Ordenación y el Currículo de la Etapa de Educación Primaria en la Comunidad Autónoma de Andalucía. Boletín de la Junta de Andalucía, de 90, 15 de Mayo de 2023. Available online: <https://www.juntadeandalucia.es/educacion/portals/web/aldea/normativa/-/normativas/detalle/decreto-101-2023-de-9-de-mayo-por-el-que-se-establece-la-ordenacion-y-el-curriculo-de-la-etapa-de-educacion-primaria-en> (accessed on 12 June 2023).
24. Cabero-Almenara, J.; Torres-Barzabal, L.; Hermsilla-Rodríguez, J.M. Las TIC y la creación de una ciudadanía crítica e-digital. *Educ. Knowl. Soc.* **2019**, *20*, 1–10. [CrossRef]
25. González Martín, M.R.; Igelmo Zaldívar, J.; Jover Olmeda, G. (Eds.) *Condiciones del Pensamiento Crítico en el Contexto Educativo de Inicio del Siglo XXI*; FahrenHouse: Salamanca, Spain, 2021.
26. Jones, L.M.; Mitchell, K.J. Defining and measuring youth digital citizenship. *New Media Soc.* **2015**, *18*, 2063–2079. [CrossRef]
27. Elliott, T.; Earl, J. Online protest participation and the digital divide: Modelling the effect of the digital divide an online petition-signing. *New Media Soc.* **2016**, *20*, 698–719. [CrossRef]
28. Olszewski, B.; Crompton, H. Educational technology conditions to support the development of Digital Age Skills. *Comput. Educ.* **2020**, *150*, 1–9. [CrossRef]
29. Parra, D.; Fuertes, C. *Reinterpretar la Tradición, Transformar las Prácticas. Ciencias Sociales para una Educación Crítica*; Tirant lo Blanch: Valencia, Spain, 2019.
30. Pagès, J. La formación inicial del profesorado para la enseñanza del patrimonio histórico y de la historia. *Treb. Arqueol.* **2000**, *6*, 205–217.
31. Miralles, P. Competencias de pensamiento histórico para una ciudadanía democrática y crítica. *Cuad. Pedagog.* **2022**, *537*, 6.
32. Levstik, L. What Can History and the Social Sciences Contribute to Civic Education. In *Una Mirada al Pasado y un Proyecto de Future. Investigación e Innovación en la Didáctica de las Ciencias Sociales*; Pagès, J., Santisteban, A., Eds.; Servei de Publicacions de la UAB, AUPDCS: Barcelona, Spain, 2014; pp. 43–51.
33. Miralles, P.; Rodríguez, R.A.; Gómez, C. Formación inicial del profesorado en pensamiento histórico y métodos activos. In *Las Ciencias Sociales y su Didáctica: Pensamiento Histórico y Educación Democrática: Homenaje a Joaquín Prats Cuevas*; Bellatti, E.I., Fuentes, C., Miralles, P., Sánchez, L., Eds.; Octaedro: Barcelona, Spain, 2023; pp. 225–234.
34. López Facal, R. Didáctica para el profesorado en formación: ¿Por qué hay que aprender a enseñar ciencias sociales? *Íber. Didáctica Cienc. Soc. Geogr. Hist.* **2010**, *65*, 75–82.
35. Santisteban, A. La enseñanza de las Ciencias Sociales a partir de problemas sociales o temas controvertidos: Estado de la cuestión y resultados de una investigación. *Futuro Pasado* **2019**, *10*, 57–79. [CrossRef]



36. Colomer, J.C. Ámbitos de la invisibilidad en la formación del profesorado de Ciencias Sociales en el área de Educación Infantil: Evaluación y perspectivas. In *Una Enseñanza de las Ciencias Sociales Para el Futuro Recursos para Trabajar la Invisibilidad de Personas, Lugares y Temáticas*; Hernández, A.M., García, C.R., Montaña, J.L., Eds.; University of Extremadura: Badajoz, Spain, 2015; pp. 475–481.
37. Imbernón, F. En educación, no todo vale. Evidencias científicas para mejorar la práctica docente. *Doss. Graó* **2020**, *5*, 111.
38. López-Gil, M.; Bernal, C. El perfil del profesorado en la Sociedad Red: Reflexiones sobre la competencia digital de los y las estudiantes en Educación de la Universidad de Cádiz. *Int. J. Educ. Res. Innov.* **2018**, *11*, 83–100.
39. Gabarda, V.; García, E.; Ferrando, M.L.; Chiappe, A. El profesorado de Educación Infantil y Primaria: Formación tecnológica y competencia digital. *Innoeduca. Int. J. Technol. Educ. Innov.* **2021**, *7*, 19–31. [[CrossRef](#)]
40. Ascencio, P.; Glasserman, L.G.; Quintana, J. Digital competences: Reality of students starting university life. *Digit. Educ. Rev.* **2019**, *36*, 68–84.
41. Audigier, F. *Regards sur L'histoire, la Géographie et L'éducation Civique à L'école Primaire*; INRP: Gatineau, QC, Canada, 2004.
42. Guerrero Elecalde, R.; Medina Quintana, S.; López Serrano, M.J. Percepciones del alumnado del Grado en Educación Primaria sobre estrategias utilizadas en el aula por docentes de Didáctica de las Ciencias Sociales. In *Prácticas Docentes Universitarias en Didáctica de las Ciencias Sociales: Investigaciones y Experiencias*; Chaparro Sainz, Á., García Ruiz, C.R., Eds.; Dykinson: Madrid, Spain, 2022; pp. 63–74.
43. Guerrero, R.; Chaparro, Á.; Felices, M.M. La práctica docente en Didáctica de las Ciencias Sociales a revisión: Una investigación en el Grado en Educación Primaria. In *Claves Para la Innovación Pedagógica Ante los Nuevos Retos*; López-Meneses, E., Cobos-Sanchiz, D., Molina-García, L., Jaén-Martínez, A., Martín-Padilla, A.H., Eds.; Octaedro: Barcelona, Spain, 2020; pp. 1574–1582.
44. Esteban, F. *La Universidad Light. Un Análisis de Nuestra Formación Universitaria*; PAIDÓS-Educación: Bogota, Columbia, 2019.
45. Sapsford, R.; Jupp, V. *Data Collection and Analysis*; Sage and The Open University: London, UK, 2006.
46. Blair, J.; Lacy, M.G. Statistics of ordinal variation. *Sociol. Methods Res.* **2000**, *28*, 251–280. [[CrossRef](#)]
47. Franceschini, F.; Galetto, M.; Varetto, M. Qualitative ordinal scales: The concept of ordinal range. *Qual. Eng.* **2004**, *16*, 515–524. [[CrossRef](#)]
48. Bashkansky, E.; Gadrich, T. Evaluating quality measured on a ternary ordinal scale. *Qual. Reliab. Eng. Int.* **2008**, *24*, 957–971. [[CrossRef](#)]
49. Martínez Martín, N. Medidas de Dispersión Ordinal: Aplicaciones a la Medición del Impacto de Etiquetas Lingüísticas y a Problemas de Decisión Multicriterio con Operadores OWA. Ph.D. Thesis, Universidad Complutense de Madrid, Madrid, Spain, 2020.
50. Damaskinidis, G. Qualitative Research and Subjective Impressions in Educational Contexts. *Am. J. Educ. Res.* **2017**, *5*, 1228–1233. [[CrossRef](#)]
51. Hernández, F.; Maquilón, J.J. Introducción a los diseños de investigación educativa. In *Principios, Métodos y Técnicas Esenciales Para la Investigación Educativa*; Nieto, S., Ed.; Dykinson: Madrid, Spain, 2010; pp. 109–126.
52. McMillan, J.H.; Schumacher, S. *Investigación Educativa*; Pearson Educación: London, UK, 2005.
53. Cubo, S.; Martín, B.; Ramos, J.L. *Métodos de Investigación y Análisis de Datos en Ciencias Sociales y de la Salud*; Pirámide: Madrid, Spain, 2011.
54. Coe, R.; Waring, M.; Hedges, L.V.; Arthur, J. (Eds.) *Research Methods and Methodologies in Education*, 2nd ed.; Sage: Thousand Oaks, CA, USA, 2017.
55. Martínez Arias, R. *Psychometrics: Theory for Psychological and Educational Tests*; Síntesis: Madrid, Spain, 1995.
56. Catalina-García, B.; García Jiménez, A.; Montes Vozmediano, M. Jóvenes y consumo de noticias a través de Internet y los medios sociales. *Hist. Comun. Soc.* **2015**, *20*, 603–621. [[CrossRef](#)]
57. Arab, E.; Díaz, A. Impacto de las redes sociales e internet en la adolescencia: Aspectos positivos y negativos. *Rev. Méd. Clín. Las Condes* **2015**, *26*, 7–13. [[CrossRef](#)]
58. Hasebrink, U.; Domeyer, H. Media Repertoires as Patterns of Behaviour and as Meaningful Practices. A Multimethod Approach to Media Use in Converging Media Environments. *J. Audience Recept. Stud.* **2012**, *9*, 757–779.
59. Ortiz-Colón, A.M.; Ortega-Tudela, J.M.; Román García, S. Percepciones del profesorado ante la alfabetización mediática. *Rev. Cienc. Soc.* **2019**, *XXV*, 11–20. [[CrossRef](#)]
60. Gutiérrez, J.J.; Cabero, J. Estudio de caso sobre la autopercepción de la competencia digital del estudiante universitario de las titulaciones de grado de Educación Infantil y Primaria. *Profesorado. Rev. Curríc. Form. Profr.* **2016**, *20*, 180–199. [[CrossRef](#)]
61. Torres, A.; Jiménez, D.; González, V.; Martínez, M.A.; Morales, J. La competencia digital de los futuros docentes de secundaria y su mejora a partir de la formación específica en TIC. In *La Docencia en la Enseñanza Superior. Nuevas Aportaciones Desde la Investigación e Innovación Educativas*; Roig-Vila, R., Ed.; Octaedro: Barcelona, Spain, 2020; pp. 445–453.
62. Moreno-Guerrero, A.J.; López-Belmonte, J.; Pozo, S.; López, J.A. Estado de la competencia digital docente en las distintas etapas educativas desde un alcance internacional. *Rev. Espac.* **2020**, *41*, 1–17. Available online: <http://www.revistaespacios.com/a20v41n16/a20v41n16p19.pdf> (accessed on 11 November 2023).
63. Hernández, V.M.; San Nicolás, M.B. Percepción del alumnado universitario sobre su grado de competencia digital. *Hamut'ay* **2019**, *6*, 7–18. [[CrossRef](#)]
64. Moreno, M.D.; Gabarda, V.; Rodríguez, A. Alfabetización informacional y competencia digital en estudiantes de magisterio. Profesorado. *Rev. Curríc. Form. Profr.* **2018**, *22*, 253–270. [[CrossRef](#)]

65. Pinto-Santos, A.R.; Pérez, A.; Darder, A. Autopercepción de la competencia digital docente en la formación inicial del profesorado de educación infantil. *Rev. Espac.* **2020**, *41*, 29–45. Available online: <https://www.revistaespacios.com/a20v41n18/a20v41n18p29.pdf> (accessed on 30 November 2023).
66. Marín Suelves, D.; Gabarda Méndez, V.; Ramón-Llin Mas, J. Análisis de la competencia digital en el futuro profesorado a través de un diseño mixto. *Rev. Educ. A Distancia* **2022**, *22*, 1–30. [[CrossRef](#)]
67. Sánchez-Caballé, A.; Gisbert-Cervera, M.; Esteve-Mon, F. La competencia digital de los estudiantes universitarios de primer curso de grado. *Innoeduca. Int. J. Technol. Educ. Innov.* **2019**, *5*, 104–113. [[CrossRef](#)]
68. Kahne, J.; Bowyer, B. Can media literacy education increase digital engagement in politics? *Learn. Media Technol.* **2019**, *44*, 211–224. [[CrossRef](#)]
69. European Commission. Citizenship Education at School in Europe. 2017. Available online: <https://op.europa.eu/en/publication-detail/-/publication/6b50c5b0d651-11e7-a506-01aa75ed71a1/language-es/format-PDF> (accessed on 1 October 2023).
70. Peart, M.; Gutiérrez-Esteban, P.; Cubo-Delgado, S. Empirical assessment for DIGISOC Questionnaire. *Mendeley Data* **2021**, *68*, 3327–3351. [[CrossRef](#)]

**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.