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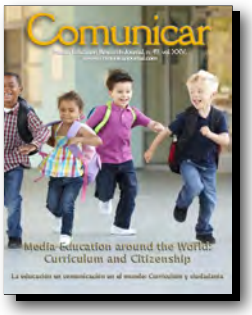

Media Education as a Strategy for Online Civic Participation in Portuguese Schools

La educación mediática como estrategia de participación cívica on-line en las escuelas portuguesas

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ABSTRACT

Whilst various studies have examined participation on the Internet as a key element of a new emergent civic engagement, informally or formally through national and local governments' online measures, less has been done to measure or suggest ways of overcoming social and technological constraints on online civic participation. Additionally, few studies have looked at the relationship between the actual implementation of such initiatives in classrooms and the messages which are conveyed indirectly as a result of teachers' own conceptions of classroom strategies, which are perhaps better described as a "hidden curriculum". This paper reports on these constructions through a set of detailed quantitative and qualitative case studies of the implementation of civic engagement through online activity in several regions of Portugal. The data, obtained through questionnaires, were used to produce novel composite scores reflecting the participatory and media literacy strategies of schools, as well as teachers and students' media literacy and online civic actions. We present empirical results from a study population consisting of 12 public secondary school principals, 131 teachers, and 1,392 students in grades 11 and 12, suggesting that students' online civic engagement and media literacy levels are affected by their teachers' classroom practices and further training and by the implementation of a project-based approach to media education.

RESUMEN

Mientras que numerosos estudios han examinado la participación en Internet como elemento clave de una nueva involucración cívica emergente, informal o formal, a través de medidas gubernamentales locales o nacionales on-line, el esfuerzo ha sido menor para medir o sugerir formas de superar las restricciones sociales y tecnológicas de la participación cívica on-line. Pocos estudios se han centrado en la relación entre la implementación de las iniciativas en las aulas y los mensajes expresados indirectamente como resultado de las concepciones personales de los docentes en las estrategias didácticas que probablemente pueden ser descritas como «currículo oculto». Nos basamos en un análisis cuantitativo y cualitativo de un conjunto de estudios de casos sobre la implementación del compromiso cívico a través de actividades en línea en varias regiones de Portugal. Los datos obtenidos a través de cuestionarios fueron usados para crear un sistema de puntuación capaz de reflejar las estrategias escolares sobre la participación y la alfabetización mediática, así como la acción cívica on-line de docentes y alumnos. Presentamos los resultados empíricos con una población que comprende 12 directores de escuelas públicas secundarias, 131 docentes y 1.392 alumnos de los cursos 11º y 12º. Los resultados sugieren que los niveles mediáticos de los estudiantes y sus niveles de compromiso cívico on-line están influenciados por las prácticas de sus profesores, su formación y por la implantación de proyectos de alfabetización mediática.

KEYWORDS | PALABRAS CLAVE

Media literacy, education, curriculum, teaching strategies, teachers' training, online civic engagement.
Alfabetización mediática, educación, currículum, estrategias de enseñanza, formación de profesorado, participación ciudadana on-line.

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1. Introduction

Civic participation and electronic government through information and communication technologies (ICT) and the Internet have become a talking-point in many education systems. Potentialities and practices have been studied worldwide (Davies & Pittard, 2009; Harasim, 1995; Korte & Hüsing, 2006; Paige, Hickok, & Patrick, 2004). In line with international guidelines (e.g., World Bank, OECD, UN) advocating for citizen participation in government services and decision-making processes through ICT, governments are taking a growing number of actions online. This, in turn, increases citizens' requirement to use the Internet to interact with government, through portals, social network websites and, in some countries, to vote electronically, creating a demand for corresponding skills. Whilst participation on the Internet has been examined as a key element of a new emergent civic engagement, less has been done to measure or suggest ways of overcoming social and technological constraints on online civic participation. Additionally, few studies have looked at the relationship between the actual implementation of such initiatives in classrooms and the messages that are conveyed indirectly as a result of teachers' own conceptions of classroom strategies, perhaps better described as a "hidden curriculum".

The number and user-friendliness of Internet-based tools is increasing, and young people are using smartphones and other mobile devices to achieve various other socially-oriented goals. At the same time, governments have always favoured mediated interactions with citizens. Decision-makers in today's digital societies take advantage of such online tools to reach a greater audience in a more effective way. However, the literature on online civic participation shows that young people's levels of interest are low (Albero, Olsson, Bastardas-Boada, & Miegel, 2009; Hasebrink, Livingstone, Haddon, & Ólafsson, 2009) despite their intensive personal Internet use and the continuing expansion of e-governance.

In Portugal, although substantial human and financial resources have been invested in ICT for schools (notably computer acquisition and teacher training in digital educational resources and media literacy), these changes have had a limited effect on young people's civic engagement and participation.

A closer look at school and classroom-level strategies in both media literacy and citizenship education may offer important insights into factors limiting young people's online participation. In particular, data on teachers' conceptions and experiences on media literacy and citizenship may offer insights into the "hidden curriculum" and its effects on students' learning and development.

1.1. The importance of young people's online civic participation

According to Dahlgren (2000: 338), "for people to see themselves as citizens, and for a civic culture to flourish, involves [...] the mutual interdependence of knowledge and competencies, loyalty to democratic values and procedures, as well as established practices and traditions". To enable young people to become civically active, they should be involved in decision-making on issues related to their interests. This serves not only to support the development of skills such as debate, negotiation, and prioritization (Lansdown, 2001; Sinclair, 2004) but, far more importantly, to establish and deepen their self-perception as citizens. Conversely, it has been argued that the civic community can benefit from young people's participation in various ways: improved service delivery, through consultation or direct participation in changing systems and services (Kirby, Lanyon, Cronin, & Sinclair, 2003; Sinclair, 2004); improved decision-making processes, insofar as participation leads to more accurate decisions (Kirby & al., 2003); and expanded democracy, as young people's participation in their community is strengthened.

Being brought up in participatory environments offers the young more opportunities to internalize concepts of democracy and citizenship, and the related learning processes and positive experiences may play an important role in shaping their understanding and perceptions of citizenship. Early experience participating in community affairs may thus increase the chances that young people will get involved in democratic institutions when they are older (Bragg, 2007; Head, 2011), thereby reducing the gap between youth and adults with respect to democracy and civic engagement. Because young people are heavy media consumers who are able to express their preferences and influence others (Sinclair, 2004), they are often consulted online on goods and services. It has even been suggested that consultation for market growth is the main driver of young people's online participation across Europe (Barber, 2009; Kirby & al., 2003) and is the main form of participation available to them (Sinclair, 2004). However, this is a reductive conception of participation.

1.2. Exploring media literacy for young people's online civic engagement

Media literacy education focusing on online citi-

zenship practices may be crucial to increasing young people's levels of online civic participation. In this context, empowering youth with skills that enable them to take an active role and deal with multimodal media texts and services is a key goal. If we decide to ignore the ongoing changes in literacy requirements, we are marginalizing young citizens in the "global village" (Castells, 2001) and failing to preparing them for new labour markets (Reynolds & Caperton, 2011).

Here, the role of schools and teachers is essential. Substantial efforts are thus needed to enable citizens to develop the skills needed to deal with online tools. The alternative is deepening digital inequality, reinforcement of social injustice, and the perpetuation of the divide between those who can and cannot participate and influence/set the political agenda.

Our use of any technology and understanding of its potential is influenced not only by our individual sense of agency, but also by our cultural and social environment. Literacy thus cannot be seen as a purely autonomous individual development, sufficient in and of itself to promote change or to inspire young people to be active in their community (Street, 2003); in fact, it is inherently ideological and contested. Instead, as Cope and Kalantzis (2000) and Buckingham (2003) have argued, a social perspective is needed, stressing the variable nature and form of literacy in differing cultural contexts.

In addition to these social considerations, media literacy requires individual skills. The National Association for Media Literacy Education (2007) defines media literacy as the ability to encode, decode, analyze, and produce mediated messages. In this context, Potter (2010) emphasizes the need to develop a broad set of skills to deal with different messages and media in order to be literate.

However, the fact that today's young people have been in contact and interaction with various media from their earliest years does not imply that schools should neglect the development of media literacy. There are strong arguments that teachers should focus on developing children's critical skills (Burn & Durran, 2007; Parry, Potter, & Bazalgette, 2011).

Moreover, teaching and learning to participate online in a civic sense implies acknowledging that technologies are shaped by the social, and, also, how in turn their affordances shape our social relations (Selwyn, 2010) and influence how we communicate (Blau, 2004). Media education should, therefore, develop not only technical knowledge, but also a critical take on technology neutrality, and awareness of security, privacy, and the digital footprint, equipping young people with skills to interact meaningfully with ICT tools, rather than acting as passive media consumers (Buckingham, 2003).

A closer look at school and classroom-level strategies in both media literacy and citizenship education may offer important insights into factors limiting young people's online participation. In particular, data on teachers' conceptions and experiences on media literacy and citizenship may offer insights into the "hidden curriculum" and its effects on students' learning and development.

Moreover, it is important to recognize that each person appropriates technological artefacts differently and that a given technology has different interpretation and usage for different social groups (Bijker & Law, 1992; Pinch & Bijker, 1984). The relevant social groups are likely not to be the initial designers and producers (Selwyn, 2012): each social group reconstructs technology according to their own goals and experiences, producing a different processes of meaning making. For this reason, it is necessary to address the relationship of Internet tools as they are actually appropriated by young people to citizenship issues. And as Bennett (2008: 12) has suggested, "young people themselves can better learn how to use information and media skills in ways that give them stronger and more effective public voices". However, Fedorov and Levitskaya (2015) showed that less than 10% of experts polled believe that media critics' texts are used quite often in media literacy education in their countries.

1.3. Citizenship and media literacy education in Portugal

Portugal introduced democratic education into its educational policies in 1986 via the basic law on the

education system, which reflects the national environment of the time, immersed in the ideals of the 1974 revolution against the dictatorship. This law established a cross-curricular approach to providing students with a civic and moral education, fostering individual contributions to society.

Since then, the Portuguese school curriculum has undergone a number of substantial changes. In 2001, civic education was integrated into the curriculum as both a cross-curricular approach and a subject in its own right (45 minutes/week) in grades 5-9 (age 10-14), and in 2010 it was introduced in grade 10 (age 15). In 2012 civic education classes were removed from the curriculum and it was returned to the status of cross-curricular approach to all school subjects.

In 2012, independently of the national curriculum, the Autonomous Region of the Azores developed a "non-disciplinary school area" called "Citizenship", which is implemented between grades 1-9 in Azorean schools. It aims to help students develop as moral individuals and citizens by cultivating cultural, scientific, and technological knowledge to foster an understanding of reality; enabling them to search for, select, and organize information in order to turn it into mobilized knowledge; and to promote the understanding of health issues (Direcção Regional da Educação e Formação, 2010).

Turning to media literacy education, the "Study on the Current Trends and Approaches to Media Literacy in Europe" (European Commission, 2007) highlighted some references to media studies in the ICT component of the Portuguese curriculum, but these were focused on developing skills for using Microsoft tools in grades 8-10 (age 13-15) .

The focus on developing skills for using Microsoft tools reflects how the education system's approach to digital education is immersed in private sector interests (Selwyn, 2010). Nevertheless, with its 2005 Technological Plan, the Portuguese government committed to making large human and financial investments in technological infrastructure for schools. The stated aim of the programme was to mobilize the "information and knowledge society" and encourage democratic participation through ICT (Ministério da Ciência Tecnologia e Ensino Superior, 2005). Under this programme, schools benefited from broadband Internet, computers and other digital equipment, and teacher training in ICT, regardless of their teaching specialization.

Moreover, in 2011 the Ministry of Education and Sciences published recommendations on education for media literacy (Recommendation of the National Education Council, n. 6/2011), recognizing that media literacy is a matter of citizenship and inclusion, which is needed to avoid or decrease the risk of exclusion from community life. However, the same government gradually withdrew ICT education from the national curriculum until, by 2012, the school curriculum did not include any mandatory ICT classes at any level. An optional ICT school subject may be offered in grades 7 and 8, at the school's discretion.

The concept of "digital natives" (Prensky, 2001), which casts all younger people as naturally experienced and knowledgeable users of digital spaces and equipment, exerted a strong influence on government's decision to withdraw ICT as a mandatory subject. Adherence to this concept has prevented some policy-makers from acknowledging that even if some young people are more familiar with technological tools, the Internet, computers, and video-games than older people, they still need support in deepening the development of critical skills in order to become producers rather than passive consumers of online media and services.

2. Material and methods

The study reported on in this paper attempted a detailed exploration of the above issues. It was conducted of a study concluded in 2015, consisting of a set of 12 case studies in Portuguese public schools (mainland and Azores) and municipalities using a mixed methods approach[1].

The use of a case-study approach initially suggested itself for two reasons: a) to develop an understanding of a sufficiently deep level to frame a meaningful interpretation of teachers' hidden and real curricula, and b) to gather a rich dataset providing sufficient detail and depth on a number of questions relating to education for media literacy and citizenship: here, on teachers' and students' online civic actions. The data were analyzed in terms of three main dimensions: a) schools' political goals with regard to media education, b) implemented media literacy and citizenship strategies (school and classroom level); c) students and teachers' online civic participation.

2.1. Establishing the sample

A cluster sampling process was used (latent class analysis, using Latent Gold 4.5 software package) on the municipalities employing a set of ICT and education indicators, as the general focus of the study was to explore the relationship between online civic participation and e-government strategies. The municipal indicators were grouped into three dimensions: a) ICT

affordances, b) services and activities delivered online, and c) education.

The education dimension included the number of grade 10-12 students, transition rate/completion of regular secondary education, and the number of computers per student in municipal schools where grades 10-12 are taught). They were chosen to reflect the level of need for services and activities aimed at young people as well as access to computers and the development of media skills in schools (Burn & Durran, 2007; Hobbs, 2011; Jenkins, 2006).

After this process, 12 schools were randomly selected in each participating municipality to be case study schools, with the exceptions of one substitution (for a school which withdrew) and one chosen for convenience as it is the school where one of the authors is a teacher.

2.2. The study population

The study population consisted of 12 directors of public secondary schools, 131 teachers, and 1,392 students in grades 11 and 12. The choice to focus on students in these grades was related to the voting age in Portugal (18 years) and the age range of the students (15-21 years).

2.3. Procedures and data analysis

The questionnaires were administered directly by the first author in each school. The questions were grouped into the following categories: school media education political goals (school principals); classroom media literacy strategies (school principals and teachers), media literacy and online civic participation (all groups), and perceived opportunities to participate (students).

2.3.1. Composite scores

The data obtained through the questionnaires were used to produce novel composite scores reflecting the schools' participatory and media literacy strategies, as well as the media literacy and online civic participation of school actors. The composite scores were produced by taking the sum of the items present in the questionnaires and they were as shown in tables 1-3:

In addition, for both the Download and Upload categories, 1 point was scored if was checkedat least one of the items in each of these as it was not expected to check all of the items.

2.3.2. Statistical analysis

The following inferential statistical analysis was conducted: A Mann-Whitney U-Test was conducted on the dataset of all students to compare pairs of independent groups: by voting age (A:<18 years; B:>18 years), school grade (A: 11th grade; B: 12th grade), gender (A: female; B: male), and municipal population class (A: medium/city; B: small/village)[3]. Mann-Whitney U-Tests were also conducted to compare the differences between the groups of teachers by gender (A: female; B: male) and age (A: [18; 43], B: [44; 69]) in scores for classroom strategies on media literacy and citizenship.

Pearson product-moment correlation coefficients (r) were computed to investigate the strength and direction of relationships between the variables (composite scores, mobile Internet access frequency, age in years, and municipality) on students and teachers'

Table 1. Teachers' composite scores, their content, and some items present in the teachers' questionnaire

Composite score name	Composite score content	Example questionnaire items	Scoring
Media literacy strategies	Teachers' media and digital literacy classroom strategies	Online videos to illustrate concepts associated with citizenship; online discussions on citizenship; active inquiry and critical thinking about the messages conveyed in the media (traditional and internet); app development skills	Never: 0 pts Rarely:1 pt Frequently:2 pts Very frequently: 4 pts Max= 60points
Training[2]	Teachers' ICT training	Digital Educational Resources; ICT and Education; Media and Multimedia; Programming languages; Civic education	Yes: 1 pt No: 0 pts Max=15 points
Students' formal online civic participation from teacher's perspective[2]	Teachers' perceptions of their students' formal online civic participation	Did students: Start a protest or campaign for a cause; Sign a petition; Participate in decision-making processes; Vote in any of the movements on the Portuguese "My Government" portal	Consulting: 1 pt Start/Participate:2 pts Voting: 2 pts Max= 7 points
Students' media literacy from the teacher's perspective[2]	Teachers' perceptions of their students online media literacy actions	Downloading video, images and texts; Uploading video, images and texts; Reading T&C of online services; Configuring privacy settings of online accounts	Download: 1 pt Upload: 2 pts T&C reading: 3 pts Privacy settings: 3 pts Critical evaluation: 3 pts Max=12 points

data. Preliminary analyses were performed to ensure that the assumptions of normality, linearity, and homoscedasticity were not violated. A significance level of α=.05 was used.

Table 2. Students' composite scores, their content and some items present in the students' questionnaire

Composite score name	Composite score content	Example questionnaire items	Scoring
Perceived opportunities to participate	Students' perceptions of what they can participate in	Students' association; National student life; Content for the school webpage; National social issues; National/European political issues	Yes, I can: 1 pt Yes, but I'm not interested: 1 pt No, I can't: 0 pts Max= 11 points

Finally, a multiple regression analysis was conducted to identify possible predictive effects of a range of factors, including: students' scores, age, school year, whether the school offered media literacy training, school media projects, regularity of mayoral contact with young people, and schools partnering with the municipality in projects. A preliminary analysis was conducted to ensure that the assumptions of normality, linearity, multicollinearity, and homoscedasticity were not violated.

3. Results

3.1. Media literacy strategies: School principals and teachers

The school data reflecting the hidden and real curricula are divided into two subsections: data from school principals, expressing the school's philosophy, political goals, and decisions in relationship to media literacy and citizenship; and teachers' data, where the focus was on teachers' training and classroom strategies.

3.1.1. School principals

None of the schools considered students' contributions to the school website as a main priority, and the majority considered both students' participation in school activities and access to information to a greater diversity of stakeholders as main priorities for the configuration of both their website (60%) and social network website profiles (80%). In terms of media literacy training, all schools offered ICT as a subject to students. As for school media literacy projects, none of the schools were involved with "Webin@rsDGE" (webinars developed by the Portuguese Ministry of Education and Sciences), "Digital Safety Seal for Schools" and "GeoRed" (Geography project using geographic information systems on the web). The projects most frequently present were "Seguranet" (Portuguese programme for Internet security learning; 45.5% of schools) and offline school newspaper (54.5%).

3.1.2. Teachers

Turning to teacher training, 80% had further training on digital resources or ICT in the classroom, 50% on media education or multimedia, 60% on using the Internet for educational purposes, and 30% had training in programming languages. Teachers scored low on classroom media literacy strategies (M=16.8, SD=9.3): only 13 teachers obtained a total score above 30 out of 60 points. The strategy most frequently implemented in schools' classrooms was promoting active questioning and critical thinking about the messages conveyed in the media, traditional and Internet (10 schools), followed by the promotion of the students' use of the school's portal or webpage (6 schools). The least implemented were online debates for students on citizenship issues (6 schools) followed by teaching skills associated with developing applications as an alternative to existing models on the Internet (5 schools).

Focusing only on media literacy for citizenship, the majority of teachers presented the use of Facebook, individual blogs, and Google search engine as their main classroom educational resources, while less than 10% presented school-related websites (e.g., astropt.org; cienciahoje.pt, stra.mit.edu/genetics) and institutional websites. The reasons presented for their choices were content diversity of the website (11.3%) and curriculum content (16.2%), while only 4.9% aimed to develop media literacy skills and 2.1% the trust and reliability of the websites.

3.1.3. Effects on media literacy and citizenship strategies

Mann-Whitney U-Tests showed no statistically significant differences between the age ([18; 43] vs. [44; 69]) or gender groups in teachers' media literacy and citizenship strategies. Classroom media literacy strategies showed a strong positive correlation with classroom citizenship strategies [r(109)=.564, p<.001], and a medium positive correlation with both teachers' media literacy scores [r(109)=.288, p=.02] and formal online civic participation [r(109)=.333, p<.001]. Another interesting result was the medium positive correlation between teachers' perception of their students' online civic participation to be [r(112)=.317, p=.001] and their own formal online civic participation.

Teachers' media literacy scores were low (M= 7.9; SD=3.5) and showed a medium positive correlation with their perceptions of students' media literacy levels [r(114)=.336, p<.001], and their own formal online civic participation [r(112)=.362, p<.001]. Teachers' ICT training showed no statistically significant correlations, apart from a weak positive correlation with teachers' media literacy scores [r(114)= .207, p=.026].

3.2. Students' media literacy and civic online participation

3.2.1. Effects on students' media literacy

Students' media literacy scores were low (M=8.5; SD=3.5). No significant effect of gender, voting age or school grade was found. Students' media literacy scores were positively correlated with their formal online civic participation [r(1134)=.178, p<.001] and with their informal online civic participation [r(1182) =.169, p<.001].

The multiple regression analysis on students' media literacy showed that their formal online civic participation (β=.139, p<.001), informal online civic participation (β=.134, p<.001), schools implementing projects such as SeguraNet (β=–.246, p< .001), Internet-based radio & TV (β=–.082, p=.012), and school newspapers (β=–.215, p<.001) predicted students' media literacy, explaining 10.4% of variance (R^2=.104, F(5)=23.69, p=<.001).

3.2.2. Effects on students' civic online participation

Students' civic online participation scores were low (M=1.5; SD=1.8) and showed statistically significant effects of school grade on students' formal online civic participation (U= 144197, Z=–3.33, p = .0 0 1 , r=–.003), with the mean rank of grades 11 and 12 being 540.2 and 601.4, respectively.

A significant difference was also found between the voting age groups (<18 years, >18 years) in formal online civic participation (U=75763, Z=-3.23, p=.025, r=–.002). The mean rank of the non-voting age and voting-age groups was 560.3 and 617.1, respectively. Moreover, students' formal online participation was positively correlated with their media literacy scores (β=.139, p<.001), their informal online civic participation [r(1135)=.343, p<.001], their perceived opportunities to participate [r(1136)=.114, p<.001], their mobile Internet access [r(912)=.073, p=.028], and their age [r(1135) =.089, p=.003].

The multiple regression analysis on students' formal online civic participation showed that it was predicted by students' media literacy (β=.123, p<.001), students' informal online civic participation (β= .320, p<.001), students' perceived opportunities to participate (β=.110, p<.001), and regular mayoral meetings with young people (β=–.070, p=.035). Together these factors explained 14.5% of the variance in this score (R^2=.145, F(4)=38.22, p<.0010).

4. Discussion and conclusion

The results on students' online civic participation data suggest that students perceive civic participation as an adult responsibility, and therefore believe that they need to be of legal voting age to do it. Allied with students' low level of perceived opportunities to participate, this suggests that students in this age range may think more in terms of becoming citizens later, rather than already being young citizens. In addition, the mean rank difference between school grades indicated that grade 12 students participate more online. However, it was not possible to fully verify this point, as the questionnaires did not directly ask whether stu-

Table 3. Composite scores common to teachers and students, their content, and some items present in all of the teachers', school principals', and students' questionnaires

Composite score name	Composite score content	Example questionnaire items	Scoring
Teachers' media literacy[2] Students' media literacy	Skills, attitudes and dispositions towards online media	Have you: Downloaded video, images and texts; Uploaded video, images and texts; Read the T&C of online services; Configured privacy settings of online accounts	Download: 1 pt Upload: 2 pts T&C reading: 3 pts Privacy settings: 3 pts Critical evaluation: 3 pts Max=12 points
Teachers' formal online civic participation[2] Students' formal online civic participation	Online civic participation using formal channels	Have you: Started a protest or campaigned for a cause; Signed a petition; Participated in decision-making processes; Voted in any of the movements on the Portuguese "My Government" portal	Consulting: 1 pt Start/Participate: 2 pts Voting: 2 pts Max= 7 points
Teachers' informal online civic participation[2] Students' informal online civic participation	Online informal civic actions in online social networks or newspapers	Have you: shared links, videos or images related to the environment; "Liked" images, videos, or comments on political, social, economic issues; Commented on pictures, videos, etc., about ethnic discrimination	Consulting: 1 pt Likes: 1 pt Sharing: 2 pts Comments: 2 pts Voting: 2 pts Max= 8 points

dents had citizenship as a school subject (some probably had). Finally, the correlation of students' mobile Internet access with their formal online civic participation confirms the arguments of authors such as Hobbs (2011) and Jenkins (2006) suggesting that wider access to Internet devices makes a significant difference to meaningful online interactions and media empowerment.

The non-correlation between media literacy data and school grade observed here reflects the failure of the formal media literacy education curriculum in Portugal, where the development of students' media literacy skills is minimized (European Commission, 2007). It is also consistent with growing emphasis among young users on their role as consumers (Barber, 2009; Kirby & al., 2003).

A number of results support our argument for further research on teachers' conceptions, and experiences related to media literacy and citizenship as a key effect on students' learning and development. These include, notably, the positive correlations between teachers' media literacy strategies and their formal online civic participation, and between their perception of their students' formal online civic participation and their own formal online civic participation. The importance of the "hidden curriculum" is also suggested by the positive correlations of teachers' media literacy scores with their perceptions of students' media literacy levels, and their own formal online civic participation. This influence is partly explained by the "Pygmalion (Rosenthal) effect" (Rosenthal & Jacobson, 1968), whereby teachers' actions in the classroom are constrained by their expectations about students' knowledge and skills.

While the results from teachers showed that a high percentage had further training in digital education resources, or media education, they also showed low scores on classroom strategies for fostering media literacy, which involves developing skills that can help students deal with any type of message, in any type of medium (Potter, 2010). Teachers also showed low scores on media literacy strategies, a measure of their use of pedagogy aiming to develop the interdisciplinary ability to synthesize, analyze, and produce mediated messages, consisting with Fedorov and Levitskaya's (2015) results on the use of media critics' texts in the classroom. No correlation was found between training in ICT, media literacy, and citizenship education, on the one hand, and teaching strategies, on the other hand, suggesting that existing teacher training models may emphasize a simple form of knowledge transmission, rather than promoting the effective development of a complete range of media and participatory skills.

Schools also had no clear plans for using available technology and its affordances to empower young people for civic engagement. None of the schools aimed at promoting student contributions to the school website; instead, they focused on using their website and online social networks to motivate students to participate in school activities and access information. However, the implementation of media literacy projects such as "SeguraNet", online radio and TV, and school newspapers, were found to predict higher student media literacy scores. These apparently represent more effective ways to develop media literacy skills, by enabling students to interact meaningfully with media objects. Moreover, the significant relationships between students' media literacy and their formal and informal online civic participation suggest that online civic involvement and media literacy are co-dependent and mutually reinforcing.

Future research in this area should also include socio-demographic variables, school subjects, training content, and service time as a teacher to better understand teachers' educational choices and decisions on media literacy and citizenship education.

Notes

[1] The study reported on in this paper is "e-Literacy, schools and municipalities towards a common goal: e-citizenship" (Dias-Fonseca, 2015).

[2] School principals were included as teachers in this analysis. They are members of the teaching staff who are chosen in triennial elections.

[3] The municipal population class categories used: Small: less than or equal to 20,000 inhabitants; Medium: between 20,001 and 100,000 inhabitants; Large: more than 100,000 inhabitants.

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