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Digital Literacies and Practices From the Perspective of Youth Agency. Challenges for Education in Chile

Alfabetizaciones y prácticas digitales desde las agencias juveniles. Desafíos para la educación en Chile

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Abstract

This article presents a discussion on digital literacy and the practices of Chilean schoolchildren and their possibilities of agency. Chile has the highest level of access to Information and Comunication Technologies (ICT) in Latin America, but also one of the most unequal educational systems. Both factors are evident in the assessments carried out in the country regarding the digital abilities of students. However, these measurements do not allow us to understand how these differences are expressed in terms of young people's digital practices. This article proposes a conceptual articulation to make sense of and guide research on digital literacy, and also presents the results of an exploratory study of mixed design, aimed at characterizing the media practices and skills of adolescents from three educational institutions in Santiago, Chile. In a first quantitative phase, a questionnaire was applied to 143 cases, and then qualitative analysis workshops were carried out with a sample of 30 students. The quantitative results confirm differences in the use of ICTs according to socioeconomic status. The qualitative findings allow us to understand these differences and create a more complex definition of digital literacy in relation to youth practices and agencies.

Keywords: agency, Chile, digital literacy, digital practices, youth.

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Resumen

Este artículo presenta una discusión acerca de la alfabetización digital y las prácticas de jóvenes escolares chilenos y sus posibilidades de agencia. Chile tiene los niveles más altos de accesibilidad a las Tecnologías de la Información y Comunicación (TIC) en Latinoamérica, pero también uno de los sistemas educacionales más desiguales. Ambos factores quedan en evidencia en las evaluaciones realizadas en el país respecto de las habilidades digitales de los estudiantes chilenos. Sin embargo, estas mediciones no permiten comprender cómo se expresan estas diferencias en términos de las prácticas digitales juveniles. El artículo propone una articulación conceptual para dar sentido y orientar la investigación en torno a la alfabetización digital, al mismo tiempo que presenta resultados de un estudio exploratorio de diseño mixto, que tuvo como objetivo caracterizar las prácticas y habilidades mediáticas de adolescentes de tres establecimientos de la Región Metropolitana, Santiago, Chile. En una primera fase cuantitativa se aplicó un cuestionario a 143 casos, y luego se realizaron talleres de análisis cualitativos con una muestra de 30 estudiantes. Los resultados cuantitativos confirman las diferencias en el uso de las TIC según el nivel socioeconómico. Los hallazgos cualitativos permiten comprender estas diferencias y complejizar la definición de alfabetización digital en relación con las prácticas y agencias juveniles.

Palabras clave: alfabetización digital, agencia, jóvenes, Chile, prácticas digitales.

Introduction

The relationship that we have with technologies and digital media, particularly those used by children and young people, is a theme that generates great concern and social debate. In the area of educational policy and research, the tendency ranges between two views: one that focuses attention on the risks and threats with a protectionist or preventionist view, and one that is more participatory or, at least, which has a vision of more active and critical subjects (Leaning, 2009). Educational policies or actions, such as the recent campaign "Hay palabras que matan" (There are words that kill) launched by the Chilean government in 2018, or the open consultation regarding the use of mobile phones in classes aimed at parents and guardians, teachers, and directors of schools throughout the country, correspond to the first approach, to which is added a general tendency towards the centrality of technologies and digital media ahead of the practices and experiences of the subjects.

Regardless of the position taken, there is a shared recognition of the cultural transformations that digital development has led to in practices such as socialization, learning, and communication, which has meant that the knowledge and skills necessary to participate in the world are now very different to those required 20 years ago. Thus, digital literacy and the development of digital skills are key for these transformations to be assumed, but, the way in which they are approached—at least in Chile—seems to be insufficient and disjointed in the life processes of the subjects.

One factor that could influence the above is the continuous transformation of digital environments, considering technological development and associated communicational and cultural practices, so any effort to define necessary skills, as well as technical, aesthetic, and social knowledge, could seem to be slower than the development of such environments.

Both the definition of digital and literacy skills and their components cannot be abstracted from the conditions and spheres of development in which they are implemented. At present, the idea that we should address the various ways in which children and young people participate in social life using digital technologies is growing (Cobo et al., 2018), that is, the practices in which they are involved and the possibilities of agency[1] that are found in daily life. This is a challenge to which educational research can and should contribute.

In this paper, we focus on the experience of Chilean schoolchildren. We propose a perspective that integrates the conceptual articulation between literacy, digital practices, and agency, contextual elements that situate the discussion, and the understanding that schoolchildren have about their relationship with the digital world.

Young Chileans and digital practices

According to indicators from the Organisation for Economic Co-operation and Development (Organisation for Economic Co-operation and Development, OECD, 2019), 87% of the Chilean population has access to internet at home and 85% of internet accesses in the country are mobile, of which 93% are via the use of smartphones (Subsecretaría de Telecomunicaciones, 2018).

Meanwhile, the latest Casen survey (Ministerio de Desarrollo Social de Chile, 2017) showed that 72% of children and young people between the ages of 5 and 17 connect to the internet mostly at home and only 5.4% report that they connect at educational establishments. This indicates that digital practices for a large proportion of Chilean young people occur in environments with continuous connection, that are equipped, and which are mostly outside schools. Despite this, internet use for school and learning purposes is generally significant in daily life. This is shown by the results of the study *Implementación de estudio de usos, oportunidades y riesgos en el uso de TIC por parte de niños, niñas y adolescentes en Chile*, better known as *Kids online Chile* (Pontificia Universidad Católica de Valparaíso, 2017), where the stated "opportunities" offered by the internet include the completion of schoolwork and assignments (93% frequency), learning something new (77% frequency), watching videos or tutorials (91% frequency), and playing (79% frequency). In addition, other activities, called "creative", are also highlighted, including the production and publication of videos and music (44% frequency). The results of *Kids online Chile*, as well as other studies, indicate that consumption of audiovisual content is one of the preferred digital practices of young people in the country (Antezana & Andrada, 2018).

In line with the above, and, as stated in the *Kids online Chile* report, the development of skills and literacies in a digital environment is dependent on the various socio-cultural contexts and the mediations carried out by families, schools, peers, and the content platforms themselves.

Literacy and digital education in Chile. How it has developed and what is known

Digital skills—and by extension, digital literacy—have been included in the official Chilean curriculum since 1998, based on the fundamental transversal objectives (Ministerio de Educación de Chile, Mineduc, 2009). These objectives establish information and communication technologies as one of the focuses of education. As stated by Cabello and Claro (2017), the initial definition was focused on the understanding of operational skills to use Information and Comunication Technologies (ICT) as resources to support learning, an orientation that, as of

1. That is, the social action of a subject in the public sphere (Van Dijck, 2009), based on the reflection on that action and the world which it inhabits (Couldry, 2014).

2012, was extended to incorporate the communicative dimensions of technology use. This same movement can be observed in the educational information technology policy spearheaded by the program Enlaces since the 1990s. In the first stage, the policy was focused on equipping and connecting schools in the country, in order to improve technological conditions for the inclusion of ICTs with a pedagogical approach. This was supported by teacher training and the development of teaching resources to aid the teaching and learning required by the curriculum. Over time, and in line with digital development and the transformations that this produced, the program attempted to meet these new challenges based on a series of initiatives that, according to the Advisory Council for the Digital Agenda in Education (Consejo Asesor para la Agenda Digital en Educación) (Mineduc, 2017) showed a certain weakness given the dispersion of strategies and policies, despite reinforcing the basis for the use of ICTs in the classroom.

On the other hand, educational research in the last decade has been aimed at measuring the skills to solve communication and information problems in digital environments (Claro et al., 2012; Jara et al., 2015), with the purpose of informing public policy and assessing its efficacy. In these studies the skills are understood as having a close relationship with literacy and are sometimes considered interchangeably, but the construct that has prevailed is that of digital skills.

One of the first studies in this area dates back to 2009 and it evaluated the digital skills of Chilean adolescents in 10th grade at secondary school (2º medio as it is known in Chile), based on three dimensions: fluidity of information, effective and ethical communication, and social impact. With this—and in line with international measurements and Chilean educational policy—the study sought to problematize the concept that existed up until that moment that there were skills related to technologies with a functional and technical perspective. The proposal advanced towards an approach that also considered mental processes in relation to creative and critical uses for productive participation in social life (Claro et al., 2012). The results show that the majority of students were able to solve problems in information use, such as searching, selection, and organization, but their skills associated with production and communicative and social use were low.

The factors that influenced these results and the differences observed were related to socioeconomic status, access, frequency of use, and the confidence shown by students.

The orientation and results of this study were continued in the national measurement implemented by Mineduc in 2011 and 2013 (Mineduc, 2013; 2014). In what later became known as ICT Simce[2], which, like the measurement system from which it took its name, defined levels of performance of digital skills in the initial, intermediate, and advanced ranges. The test also focused on 10th grade students (averaging between 14 and 15 years old), but in this case with much higher sampling (the second time it was applied it included around 12,000 students). The results for that year showed that almost half of the adolescents were able to make basic use of ICTs, while the other half were at the intermediate level, with skills to integrate information. Only 2% of the population surveyed showed more complex skills, such as assessing information, or competencies with a social impact, such as being familiar with the risks of the internet, among others. As regards the factors associated with these performances, the analysis confirmed the importance of the families' socioeconomic status and cultural capital.

The ICT Simce was only applied twice. There were various possible reasons why it was discontinued and these include the lack of political will to broaden the view about what learning is and which knowledge is relevant (Cabello & Claro, 2017), involving the complexity in this area to define what digital skills are which ones are

2. Currently called National System for the Assessment of Learning Results and previously called the System for Measuring Education Quality.

relevant, as well as the criticism—increasingly widespread—of certain international research and public opinion regarding the negative consequences of standardized and measurement approaches that underpin this educational assessment policy (Cabalin, Montero, & Cárdenas, 2019).

Another study that complemented the knowledge produced along these lines took the results of the 2011 ICT Simce and extended the analysis to understand the individual and home context factors that would explain adolescents' performance on the skills assessed (Jara et al., 2015). In order to do that, this mixed study conducted new quantitative analyses of the test data, and included the perceptions of adolescents who had been part of the measurement through group interviews. The results demonstrated the relationship existing between the performance of the students, the socioeconomic status of the families, and the linguistic capital (Language Simce), as well as a positive relationship with the use of social media, particularly to support the coordination and development of academic activities. The qualitative analyses showed differences between students according to performance levels, where the best students had a more critical approach to the assessment of information quality, using more sophisticated search strategies. On the other hand, these young people also showed activity focused on academic work.

Using a different perspective, a recent study by the National Television Council (Consejo Nacional de Televisión (CNTV, 2018) contributes knowledge about the media skills of Chilean adolescents. In this case the approach was specifically based on the communicative dimension in relation to technologies and digital media. This descriptive and quantitative study reveals a profile of media skills in the digital context, taking into account dimensions such as values and ideology, reception and audience, technology, language, aesthetics and production, and programming, as well as citizen participation in virtual spaces. The results show a high degree of knowledge about technologies and devices at the user level, but poor specialization, as well as low levels of critical literacy. Although regulation of media is a somewhat unknown issue for both sexes, the students recognize that there should be greater control over personal data, mainly in networks such as Facebook. On the other hand, there is a high proximity to the artistic and aesthetic spheres. The aspect that emerges most strongly is the difference between students studying at paid private schools and the rest, as the former have a more critical opinion of technology, media, and its link to everyday life. Some of the results discussed in this article were the result of the adaptation and pilot application of this instrument.

As we can see, what is known about the digital literacy of young people in Chile is somewhat partial in terms of its coverage, approach, and systematicity. Indeed, there has been a tendency to reduce both literacy and skills to school learning, with the limited framing that the standardized measurement policy has imposed on the educational curriculum, as well as a digital perspective that maintains centrality in technologies or the media ahead of the implied cultural practices and knowledge that underpin and support the relationship with digital technologies. It is also noteworthy that there is inconsistent treatment—sometimes indistinct, sometimes differentiated—of the constructs of skills, literacy, and competency (Valdivia-Barrios, Pinto-Torres, & Herrera-Barraza, 2018).

Practices, literacy, and agency

One way of addressing the relationship of young people with digital technologies is through their practices, that is, the routine things they do using digital technologies and media, which involve physical and mental activities (emotions and motivations, among others), objects, and their uses, as well as knowledge associated with meanings and practical knowledge (Reckwitz, 2002). In other words, practices are what we do in relation to technologies, the capabilities we have for those activities, and the meanings that are at stake.

In specific terms, the conceptualization of digital practices is a tribute to theoretical development in social research of media phenomena. The nature of digital technologies and environments is based on communication and information, so it could be suggested that practices in relation to digital technologies are media experiences situated in digital environments (Valdivia & Herrera, 2018).

Like all social activity, digital practices are characterized by regularity, providing stability and enabling the fluid participation of subjects in social spheres. In addition, the mediation of language is key in this and, in this particular case, the various semiotic resources that mobilize the meanings and knowledge created, published, and put into circulation. The regularity of the action implies a certain normativity that is shaped in the continuous updating of the practice, that is, there are certain legitimized, standardized, and permitted ways of using the technologies and digital media. In turn, Hobart (2010) argues that such practices are not linear or consistent, so any attempt to establish homogeneous and universal patterns is distanced from the possibility of accounting for them. It is only possible to assume the situated nature of these practices, acknowledging the weight of particular social scenarios and contexts from the perspective of the subjects themselves in the definitions of what their practices are.

From this viewpoint, if digital practices consider the capacities and mediation of language and other semiotic resources, literacy is key to the execution of these practices. In very broad terms, literacy has been associated with the mastery of reading-writing and with knowledge in a specific area. In the case of digital literacy—as with digital practices—its conceptual development has mainly taken place under the auspices of communication and media literacy studies. The latter has been defined as the ability to access, analyze, assess, and communicate messages in a variety of ways and across different contexts (Aufderheide, cited in Potter, 2010; Livingstone, 2004). However, this definition must be problematized as a consequence of the intensification of interactivity and the simplification of the production and circulation of digital content that currently exists (Jenkins, Ford, & Green, 2013; Livingstone, 2004).

Meanwhile, Buckingham (2015) claims that digital literacy consists of four dimensions: representation, which offers different interpretations and selections of reality, including values and ideologies; languages, addressing the various rhetorical and textual forms of construction of interactive communication; production, where young people have to recognize who communicates with whom and why, addressing aspects of value, ideology, business, and safety, among others; and, finally, audiences, recognizing their own position as a user, identifying to which groups their messages are directed and the different ways in which digital media are used. As we can see, digital literacy involves more than mere mastery of technical knowledge and skills and language: it also involves methods of use and value-based and ideological positions, situating subjects in social contexts. Indeed, Buckingham himself recently (2019) stated that this concept fundamentally refers to critical thinking about the economic, ideological, and cultural dimensions of the media.

From a broader perspective, and from a sociocultural position that considers digital literacy as social practice, a plural view of "literacies" would better capture the complex and multidimensional practices in which young people participate (Erstad, Flewitt, Kümmerling-Meibauer, & Pereira, 2019).

In this more open consideration of digital literacies in relation to the positions of young people in society, Van Dijck (2009) introduces the notion of agency, that is, the social action of a subject in the public sphere. While digital practices provide us with scenarios, activities, meanings, and motivations associated with the use of literacy, agency introduces the notion of protagonistic action of young people in public spheres beyond the individual use of technologies. With a broader vision of agency, Couldry (2004; 2014) associates this with extensive processes of action based on reflection, which make sense of both the world in which one lives and the action that takes place within it. Agency in digital spheres thus requires and encourages the development of skills in content creation, analysis, and interpretation with an explicit and, therefore, critical point of view.

Agency and digital practices allow us to transcend the view of digital literacy at the service of measurable school learning, and the techno-centric or media-centric view, whichever is the case, to get closer to the great international and national orientations that would guide educational systems: training for participation in society and facing highly changeable environments.

If the digital practices and agency involve addressing the views and actions of young people themselves, the question about their digital literacy cannot be resolved without their participation. In this paper we intend to dig deeper into the understanding of the inequalities present in the digital literacy of Chilean adolescents based on the question: what are the digital practices associated with literacy like, considering their activities and meanings, and what possibilities of agency are observed based upon them? This is what we propose below based on some of the results of a study carried out within the framework of a school ethnography that looked into the situated learning and media productions of Chilean adolescents in the Metropolitan Region of Santiago.

Method and Materials

The aim of the study was to characterize the media practices of Chilean adolescents in three school contexts in Santiago: a paid private school, a private subsidized school, and a municipal school, which serve students of diverse socioeconomic status, with the students of highest status attending the paid private establishment and the lowest attending the municipal school. We defined a mixed exploratory design for the study that combined the preparation and application of a questionnaire in the quantitative phase and subsequent analysis and discussion with a group of students in the qualitative phase. The fieldwork was carried out between 2013 and 2014.

Due to the ethnographic nature of the main study, the sampling was intentional and not probabilistic. It considered a total universe of 228 students from various high school grades who had consented to participate. The quantitative sample included 143 students in 11th grade at secondary school between 14 and 15 years old, while the qualitative phase included a sample of 30 students between 12 and 16 years old.

Instruments and procedures

In the quantitative phase a special questionnaire was designed to characterize the students' media practices and skills. Three dimensions were considered in the case of the former: access and uses, appropriation, and media production, while for the skills a selection of items from the *Competencias Mediáticas de Estudiantes Secundarios* (Secondary Students' Media Competencies) questionnaire (Ferrés et al., 2011) were included. The complete questionnaire was validated by experts in two workshops, one methodological and the other content-based. The online version was uploaded to the platform LimeSurvey. The questionnaire was applied in the three school in groups by grades in the computer rooms of each school.

For the qualitative phase we held an analysis and discussion workshop with the students. This was intended to analyze the results of the questionnaire, considering the perspective of the adolescents. The technique used followed the World Café methodology (Fouché & Light, 2011), which consists of a group discussion to generate a space for reflection and collective thinking in a lively and attractive format. Two thematic tables were organized regarding uses, media reception, social media, and content production. A dossier was prepared for each of the tables with some quantitative descriptive results. Each group chose a host from among the participants and each table had a facilitator. An audiovisual recording was made of the work done by the workshops. In addition, each facilitator prepared a summary report of the dynamics and content that emerged in the discussions.

Analysis procedure

The analyses of both phases were of a descriptive nature. We used the SPSS 20.0 program for the statistical analysis. For the qualitative information, we conducted a categorical thematic analysis of the diversity of materials produced: reports from the facilitators, audio recordings of the discussions, literal transcripts of segments of contributions by the participants, and presentation materials prepared by the students. This involved double triangulation, firstly of the materials and information, given the diversity of the records, and secondly of the analysts.

Results

According to the quantitative results, there is a high level access to ICT in this group of adolescents, with homogeneous behavior in the three schools: 97% have a computer at home, 84% have a smartphone, 95% have fixed internet at home, and 19% said they have mobile internet. In addition, 99% connect to the internet at least once a week and 98% of the young people are on social media. These results are not only similar to those found by other national investigations carried out in a similar period, but also ratify the mass access to devices and technology, as well as the intensive use of social media by young people.

Consumption and communication with digital technologies

In order to characterize the activities carried out by adolescents in relation to technologies, we considered their consumption of content on digital platforms and its uses. In the case of consumption, the participants were consulted on the frequency with which: they watched videos; read the press; listened to music; watched television programs, movies, or series; and listened to online radio programs. Table 1 displays the results of this investigation.

Table 1. Online activity at least once a week and percentage of students, according to school type

Type of online activity	School type			
	Total	Municipal	Subsidized private	Paid private
Watching videos	90.9	93.2	91.5	88.5
Listening to music	81.1	77.3	80.9	84.6
Reading the press	51.7	52.3	53.2	50
Watching movies or series	58	50	48.9	73.1
Watching television programs	23.8	20.5	19.9	30.8
Listening to radio programs	11.9	13.6	10.6	11.5

Source: Prepared by the authors.

As we can observe in Table 1, the vast majority of students use digital platforms to watch videos and listen to music. More than half of the respondents stated that they regularly watch movies and read the press online, while a quarter of the group said they watch television programs on the internet, and only one in 10 young people listens to online radio. We can say that there is relatively homogeneous behavior according to the school, except regarding consumption of films or television series, where the students at the paid private school have a consumption percentage above the average, possibly explained by their socioeconomic status, because in this case, a paid subscription is usually required in addition to internet access. The difference between schools is

statistically significant when analyzing the data with Spearman's rank correlation coefficient rho, which is used with ordinal variables. Therefore, we can state that private school students consume more online movies and series than their peers at other schools (r = 0.200; p <0.05).

In addition to consumption activities, there are also uses of ICTs associated with interpersonal communication. Table 2 shows the activities carried out at least once a week by the adolescents that were considered in the questionnaire.

Table 2. Interpersonal communication activities carried out at least once a week and percentage of students according to school type

Type of activity	School type			
	Total	Municipal	Subsidized private	Paid private
Exchanging emails	90.2	81.8	93.6	94.2
Exchanging photos and images on WhatsApp	79.7	72.7	80.9	84.6
Coordinating assignments via chat	70.6	61.4	74.5	75
Exchanging audio via WhatsApp	70.6	61.4	72.3	76.9
Exchanging video via WhatsApp	65	65.9	61.7	67.3
Sharing links on WhatsApp	44.8	36.4	46.8	50
Playing and chatting online	44.1	50	46.8	36.5

Source: Prepared by the authors.

Although students frequently carry out interpersonal communication activities, among those they carry out least often are sharing links on WhatsApp (44.8) and playing and chatting online (44.1%).

In this regard, we should note that students from municipal schools show the lowest percentages of ICT use in almost all activities for interpersonal communication. For example, the difference is significant between schools with respect to exchanging emails (r = 0.164; p <0.05). On the other hand, in items such as coordinating assignments via chat, and exchanging images, links, or audio via WhatsApp, students from subsidized private schools have above average levels of use, with figures similar to their peers at the paid private school. This suggests that the "mobile" exchange of information—which does not require paid services—was not yet widespread among the entire population at the time the data was collected.

In the qualitative workshops, this dimension was extended to the relationship that young people had with digital media. In this respect, there is consensus on the relevance that these devices have in their lives, with various positions regarding their advantages and difficulties: while for a group of students the negative aspects are related to the impact on interpersonal relationships, another group—without ignoring this—states that ICTs are essential. They highlight the potential to share information, organize, and facilitate daily activities. The students at the paid private school establishment expanded their reflections on the uses of ICTs to issues related to factors such as technological dependence, identity, and interpersonal communication, among others.

> In confirm that I rely on the internet. If not, I don't do anything, I'm useless. I'm a disgrace. (Student, 10th grade, paid private school).

> We're born with cell phones. What do we know how to do? It's bad that we depend on the internet, but it's a good tool. (Student, 10th grade, paid private school).

> The internet can conceal your image, you can be whoever you want to be. (Student, 11th grade, paid private school).

In the same vein, the students at the municipal school ratify the predominance of and dependence on technologies, but they have a more distant attitude, associating it more with their peers than themselves.

> Yes, the use of technologies here [at school] is very heavy, for some it's like a drug addiction, especially among the girls. (Student, 10th grade, municipal school).

This group explains the more active use of digital platforms for interpersonal communication because use of these technologies is becoming easier, but also because young people have more skills to take advantage of their functionalities. They recognize that communication through digital applications is somewhat superficial, and that more profound conversations, whether personal or public, are better done face to face.

Although the quantitative data indicate that the activity of playing and chatting online is the least frequent, this topic was discussed by the students. They associate it with certain groups of teenagers, mainly males. In the municipal school there is interesting additional information: the cases of videogame players at school, in general, are generally "girls with good grades".

As regards the gender difference, a group of adolescent females at the paid private school distanced themselves from the high figures of internet use, presenting a more critical judgment regarding the negative effects of the web on their peers. In particular, they highlighted the effects on the relationship with knowledge and investigation, which is shown in the following dialogue:

> Student 1: There are a lot of people who use internet to search for everything. Every question they have.
>
> Student 2: Existential questions.
>
> Student 1: When my dad has a question he grabs books or asks his grandpa. Now it's so easy to look on a phone.
>
> Student 2: When I was small and [I] didn't understand a word, my dad always said "look it up in the dictionary", and I was like what a drag! Now I'm thankful to him for that because I don't have the habit of searching for things on the internet, I look in the books at home and things like that.

Two salient themes emerge from the above: the first is the critical perspective with which these young women analyze an advantage that is position as an attribute of the internet, that is, the speed and amount of information that can be accessed. Their questioning points to the loss of more traditional cultural practices (which they value more highly) in relation to knowledge, such as dialogue with experienced adults and reading books. The second theme, on a more interpretive level, is the relationship between socioeconomic status, cultural capital, and critical perspective, since these teenagers at a paid private school come from a family environment where the relationship with knowledge is not solely mediated by the internet or the school.

Analysis of the information on digital platforms

Critical analysis of digital media and content is one of the dimensions of digital literacy. Based on the activities addressed in the questionnaire, the topic of searching for and selecting information on the internet for school assignments was chosen for the workshops. It is generally pointed out that the ability to search for and discriminate information on the internet based on certain criteria that ensure the reliability of the sources is key for the exercise of citizenship in the digital world.

In the section of the questionnaire on media skills, one of the items puts the students in a position to carry out a school assignment on Pablo Neruda. They rank their preferences for five web pages to search for relevant information: a) neruda.uchile.cl; b) cervantes.cl; c) wikipedia.org; d) taringa.com; and e) rincondelvago.com.

In order to analyze this item, the preferences were grouped into three levels: sources of reliable and known information (a and b); sources of complete information, but not always reliable due to anonymity or poor stability in the production of information (c); and unreliable sources of information (d and e).

Table 3. Preferences of information sources for school assignments and percentage of students, according to school type

Type of activity	School type			
	Total	Municipal	Subsidized private	Paid private
Sources of reliable and known information	28.7	13.6	48.9	38.5
Sources of complete information, but not always reliable	21	22.7	17	23.1
Unreliable sources of information	50.3	63.6	51.1	38.5

Source: Prepared by the authors.

As we can see in Table 3, there is a preeminence of the use of unreliable sources on the internet among the students. Half of the respondents chose websites with the lowest reliability as the first source, except for the students at the paid school, a similar proportion of whom selected reliable and unreliable sources to perform the assignment. This difference by school type is statistically significant (r = 0.232; p <0.05).

In the analysis workshops these results were heavily discussed. Indeed, students at both the paid private school and municipal school were surprised by the high percentage of students who preferred websites with lower reliability and, in both cases, this was explained because websites that could be more reliable are less well-known. They also acknowledged that the choice of sources is guided by the first item that appears in the search results.

However, there are differences in the position that both groups adopt to explain and comment on the results. The students at the paid private school state that the criteria for searching for and selecting information are applied according to the reliability of the sources, where they establish as criteria of reliability the way in which the sites are written and the way in which they present the information, adding that an important factor is the complexity of the sites in terms of presenting the information. For example, they identify Google Scholar as a serious source, but say that it is difficult to understand. They also indicate that the interests and motivations of each person to carry out the task have an influence. Finally, they mention a piece of background information regarding the school context, since their teachers pay special attention to this aspect in assessments, indicating the sites that they should not use, but without providing explicit references of sources that are reliable.

The participants in the workshops at the municipal school judged their peers who most frequently chose sites of low reliability, once again distancing themselves from these practices:

> I usually see who runs the page. If they control it like cervantes.cl, for example, it must be controlled by an institution, which makes me think that it's more reliable, that there are people who work on it, and surely studied a career to do that. (Student, 11th grade, municipal school).

Production and participation in digital platforms

This dimension has a series of associated activities that are related to content creation and publication on digital platforms. It is generally stated that active participation is associated with the appropriation of technologies and the assumption of a role as a content producer and in specific media. Table 4 shows information regarding the activities that involve students' level of production as a whole.

Table 4. Percentage of students who have carried out activities to create and publish content at least once a week, by school type

Type of activity	School type			
	Total	Municipal	Subsidized private	Paid private
Has published photos taken by themselves	78.3	72.7	74.5	86.5
Has published photomontages (memes, collages) edited by themself	16.1	18.2	14.9	15.4
Has published news or information taken from other media	14.7	6.8	19.1	17.3
Has published videos recorded by themself	2.8	2.3	0	5.8
Has published audio (podcasts) recorded by themself	2.1	0	2.1	3.8

Source: Prepared by the authors.

The level of publication that most stands out is that of images taken by the young people themselves: four of every five adolescents state that they have performed this action at some time. As in the case of communication activities through digital platforms, images—particularly photography—are one of the content types with the greatest presence in production activities. Afterwards, and far lower, are activities of publishing self-created photomontages (16.1%) and dissemination of news or information from other media (14.7%). In the case of the latter, it is interesting that there is a difference of more than 10 points between the adolescents from the municipal school and those from the paid private and subsidized private schools ($r = 0.186$; $p < 0.05$). This could indicate that participation in the digital media sphere among municipal school students may not be related to topics of public interest, at least in terms of news. It would be necessary to look more closely at the content production of the meme type in this group (18.2%), where there is a greater representation, but they did not appear to be discussed in the analysis workshops.

The low degree of creation and publication of content in the social and digital media is explained by the students as being due to the complexity of this type of activity, which requires a set of skills and knowledge that not everyone possesses.

At the paid private school, the students recognize themselves as being in the majority that state that they use social media for communication, particularly with friends. They combine the motivation of interpersonal communication with the expression of opinions. They recognize the use of content curation platforms (Tumblr), since their interfaces have various advantages (usability and ease of sharing content from other users). The most frequent type of use of this type of publication among students is reposting images from other accounts.

With respect to the autonomous creation of content, there is a problem of trust or fear of exposure. The contrast between the confidence they say they have in expressing their opinions and the distrust they show for the production of their own content is noteworthy. The results on the low publication of content appear to indicate a lack of confidence and self-esteem on the part of these students.

The students highlight the difference between social media in which contact is made with family and friends (Facebook) and those where publications are made to be seen by an impersonal audience (mainly blogs and Twitter). Here it should be remembered that the fieldwork was carried out in 2013 and 2014, when Instagram—which is currently the platform most frequently used by these groups—began to become more widespread. The use of social media generally responds to a need for entertainment, although it is also used to interact with the closest groups (classmates), often anonymously, to discuss topics that would generally not be talked about face to face.

The students at the municipal school state that the low participation in activities to publish audiovisual content is related to the complexity involved, unlike the activity of uploading images. From their perspective, young people ignore actions that involve greater "difficulty", generally carrying out simpler activities. They mention certain very specific cases of classmates who are youtubers, with one of them stating: "Only one classmate wants to be a youtuber, he's preparing to become one" (Student, 10th grade, municipal school).

For this group, the indolent attitude of the young people at the municipal school as users of digital platforms explains why they do not create content and, on the contrary, they basically use them for interpersonal communication. They also recognize that sending and publishing photographs is a form of technology use that facilitates personal expression, as with emoticons. Production and dissemination of videos—when this is done—is mainly observed at the level of interpersonal communication mediated by digital platforms and with two orientations in the content: intimate videos (not necessarily sexual) and entertaining or embarrassing videos.

Discussion and final thoughts

As the results indicate, the participants in the study show high levels of access to and uses of ICTs, in accordance with data from existing research at the national level. In addition, differences persist according to socioeconomic status, assuming that the type of school is an indicator of the structural inequality of the Chilean educational system. The results of the questionnaire show slight differences in specific aspects regarding consumption, analysis, and production of content. For example, students at the paid private school watch more series and movies online, share more information and coordinate assignments through applications, and use reliable sources to obtain information. These results are similar to those found in the study by Jara et al. (2015), which surveyed adolescents participating in the 2011 ICT Simce regarding personal and household factors associated with their performance on the test, where the paid private school students would be classified as "good students" and high performers. However, the discussions conducted in the analysis workshops displayed more complex nuances.

According to the young people participating in the study, the low results for analysis of information from the internet, even for formal educational purposes, do not necessarily imply they have a naive relationship with technologies or a or lack of perspective. They do recognize information search and selection criteria (seriousness in the presentation of the information, explicitness of the authorship, and the linking of this with serious institutions), in addition to a strategic logic according to the complexity of the task and subjective motivations, that is, they decide how much time and energy to invest in the task depending on the degree of interest it generates in them. This latter reflection only appears among the students at the paid private school. It is this perspective to look at their digital practices in a self-critical way that is not observed in the workshops with students at the municipal school, where the tendency was to see the practices of others as being simplistic or the least safe. However, this

perspective and self-criticism show nuances among the students from the paid private school: some declare total dependence, leaving interpretation open regarding its implications, while others critically judge this dependence and value a relationship with knowledge mediated by others, such as adults, media, and technologies.

The difference according to the type of school was also reflected in the results on content production. Although this, especially production of audiovisual content, is low in students of all three schools, the students in the private sector are the ones who show the greatest interest in publicizing their opinions and sharing content related to topics of public interest. It would be interesting to look at these aspects at present after the feminist demonstrations that took place in streets and educational institutions, as well as after growth of the application Instagram.

The production of own content by the students is generally low, but those at the paid private school show a comparatively higher percentage in production of content considered "complex". Although these results may have varied due to the time at which the information was collected, the structural differences that have been highlighted have already been confirmed in other quantitative studies (Claro et al., 2012; Ministerio de Educación, 2014).

In general terms, from the perspective of Van Dijck (2009), the possibility of agency in these cases seems to be scarce, given that this requires the configuration of a function and communicative purpose that exceeds the limits of interaction with acquaintances and family, as well as a critical perspective of the media and ideological dimensions of digital technologies, as stated by Buckingham (2015; 2019). However, based on the notion of agency proposed by Couldry (2014), understood as the reflective and self-critical ability to observe the world (not merely the digital world) and the action within it, students at private schools seem to have more opportunities to develop such capabilities. These are the differences in terms of which we should pay more attention to our judgment, as well as how naturalized digital technologies seem to be in the daily lives of all these young people. The biggest challenge is not the omnipresence of the internet, but its invisibility (Lovink, 2016).

These results are not intended to represent what is happening with the Chilean population, as they are aimed at beginning the characterization of schoolchildren's practices and literacy in their situated contexts and, based upon that, opening up dialogue and investigation with their school communities. However, during the process it became clear that it was not possible to accurately propose what the practices and literacy of these students were like, not least regarding their positioning as agents. The spaces for joint analysis with adolescents about which activities they carry out most frequently or how to explain the results of literacy—for example in an aspect as relevant as searching for and analyzing information, and production of content—not only contributed a situated understanding in the context of these results, but also provided evidence of how socioeconomic inequalities operate.

Finally, although the research done in recent years indicates the relevance of understanding digital literacy as a process that is mediated and which is not the sole responsibility of the school—on which we are in full agreement—the results presented herein seem to show that reversing inequality in digital practices and literacy in the areas linked to the possibility of agency can only be resolved by educational policies that focus on this perspective, but with a more complex view of the skills to be developed and the learning that should be promoted. In this regard, both the school and other educational and cultural agencies can play a strategic role.

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References

Antezana, L. & Andrada, P. (2018). *En clave adolescente. Referentes, prácticas y hábitos de consumo audiovisual*. Santiago de Chile: Instituto de la Comunicación e Imagen de la Universidad de Chile.

Buckingham, D. (2015). Defining digital literacy. What do young people need to know about digital media? *Nordic Journal of Digital Literacy*, 4, 21-34.

Buckingham, D. (2019). Teaching media in a 'post-truth' age: Fake news, media bias and the challenge for media/digital literacy education. *Cultura y Educación, 31*(2), 213-231. https://doi.org/10.1080/11356405.2019.1603814

Cabalin, C., Montero, L., & Cárdenas, C. (2019). Discursos mediáticos sobre la educación: el caso de las pruebas estandarizadas en Chile. *Cuadernos.info*, *44,* 135-154. https://doi.org/10.7764/cdi.44.1429

Cabello, P. & Claro, M. (2017). Public policies for digital inclusion among young people in Chile: Reflections on access, opportunities, outcomes and rights. *Journal of Children and Media*, 11(2), 248-251. https://doi.org/10.1080/17482798.2017.1306368

Claro, M., Preiss, D. D., San Martín, E., Jara, I., Hinostroza, J. E., Valenzuela, S., Cortés, F., & Nussbaum, M. (2012). Assessment of 21st century ICT skills in Chile: Test design and results from high school level students. *Computers & Education, 59*(3), 1042-1053. https://doi.org/10.1016/j.compedu.2012.04.004

Consejo Nacional de Televisión, CNTV (2018). *Alfabetización mediática en niños y adolescentes chilenos.* Santiago de Chile: Departamento de Estudios y Relaciones Internacionales.

Cobo, C., Cortesi, S., Brossi, L., Doccetti, S., Lombana, A., Remolina, N., Winocur, R., & Zucchetti, A. (Eds.). (2018). *Jóvenes, transformación digital y formas de inclusión en América Latina*. Montevideo: Penguin Random House.

Couldry, N. (2004). Theorising media as practice. *Social Semiotics, 14*(2), 115-132. https://doi.org/10.1080/1035033042000238295

Couldry, N. (2014). A necessary disenchantment: Myth, agency and injustice in a digital world. *The Sociological Review, 62*(4), 880-897. https://doi.org/10.1111/1467-954x.12158

Erstad, O., Flewitt, R., Kümmerling-Meibauer, B., & Pereira, Í. S. P. (Eds.). (2019). *The Routledge handbook of digital literacies in early childhood*. New York: Routledge.

Ferrés i Prats, J., García Matilla, A., Aguaded Gómez, J. I.,Fernández Cavia, J., Figueras, M., & otros. (2011). *Competencia mediática. Investigación sobre el grado de competencia de la ciudadanía en España*. Barcelona: Instituto de Tecnologías Educativas del Consell de l'Audiovisual de Catalunya y Grupo Comunicar.

Fouché, Ch. & Light, G. (2011). An invitation to dialogue: "The world café" in social work research. *Qualitative Social Work, 10*(1), 28-48. https://doi.org/10.1177/1473325010376016

Hobart, M. (2010). What do we mean by 'media practices'? In B. Bräuchler & J. Postill (Eds), *Theorising media and practice* (pp. 55-75). Oxford: Berg.

Jenkins, H., Ford, S., & Green, J. (2013). *Spreadable media: Creating value and meaning in a networked culture*. New York: New York University Press.

Jara, I., Claro, M., Hinostroza, J. E., San Martín, E., Rodríguez, P., Cabello, T., Ibieta, A., & Labbe, Ch. (2015). Understanding factors related to Chilean students' digital skills: A mixed methods analysis. *Computer and Education, 88*, 387-398. https://doi.org/10.1016/j.compedu.2015.07.016

Leaning, M. (Ed.). (2009). *Issues in information and media literacy: Criticism, history and policy.* Santa Rosa: Informing Science Press.

Livingstone, S. (2004). Media literacy and the challenge of new information and communication technologies. *The Communication Review, 7*(1), 3-14. https://doi.org/10.1080/10714420490280152

Lovink, G. (2016). *Social media abyss: Critical Internet cultures and the force of negation*. Malden: Polity Press.

Ministerio de Educación, Mineduc & Centro de Educación & Tecnología-Enlaces. (2013). *Desarrollo de habilidades digitales para el siglo XXI en Chile: ¿Qué dice el Simce TIC?* Santiago de Chile: Autor.

Ministerio de Educación & Centro de Educación & Tecnología-Enlaces. (2014). *Informe de resultados Simce TIC 2° Medio 2013.* Santiago de Chile: Autor.

Ministerio de Desarrollo Social de Chile. (2017). *Encuesta CASEN*. Retrieved from http://observatorio.ministeriodesarrollosocial.gob.cl/casen-multidimensional/casen/casen_2017.php

Ministerio de Educación de Chile, Mineduc. (2009). *Objetivos fundamentales y contenidos mínimos obligatorios de la educación básica y media. Actualización 2009*. Santiago de Chile: Autor.

Ministerio de Educación de Chile, Mineduc. (2017). *Recomendaciones para una política digital en educación escolar. Consejo Asesor para la Agenda Digital en Educación*. Santiago de Chile: Autor.

Organisation for Economic Co-operation and Development, OECD. (2019). *ICT Access and Usage by Households and Individuals*. https://doi.org/10.1787/b9823565-en

Pontificia Universidad Católica de Valparaíso, PUCV. (2017). *Implementación de estudio de usos, oportunidades y riesgos en el uso de TIC por parte de niños, niñas y adolescentes en Chile: Informe final*. Santiago de Chile: Mineduc & Unesco-OREALC.

Potter, W. J. (2010). The state of media literacy. *Journal of Broadcasting & Electronic Media, 54*(4), 675-696. https://doi.org/10.1080/08838151.2011.521462

Reckwitz, A. (2002). Toward a theory of social practices: A development in culturalist theorizing. *European Journal of Social Theory*, *5*(2), 243-263. https://doi.org/10.1177/13684310222225432

Subsecretaría de Telecomunicaciones de Chile, Subtel. (2018). *Principales resultados. Series estadísticas primer semestre 2018*. Santiago de Chile: Ministerio de Transporte y Telecomunicaciones.

Valdivia, A. & Herrera, M. (2018). Aprendizajes y prácticas mediáticas en la escuela. Desafíos de la etnografía escolar con jóvenes. In J. Assaél & A. Valdivia (Eds.), *Lo cotidiano en la escuela. 40 años de etnografía escolar en Chile* (pp. 221-254). Santiago de Chile: Editorial Universitaria.

Valdivia-Barrios, A., Pinto-Torres, D., & Herrera-Barraza, M. (2018). Alfabetización mediática y aprendizaje. Aporte conceptual en el campo de la comunicación-educación. *Revista Electrónica Educare, 22*(2), 1-16. https://doi.org/10.15359/ree.22-2.8

van Dijck, J. (2009). Users like you? Theorizing agency in user-generated content. *Media, Culture & Society, 31*(1), 41-58. https://doi.org/10.1177/0163443708098245