Special Issue

Digital Education Platforms and Schooling: New Challenges and Alternatives Toward Education Equity and Children's Rights

education policy analysis archives

A peer-reviewed, independent, open access, multilingual journal



Arizona State University

Volume 31 Number 138

December 12, 2023

ISSN 1068-2341

Normative Becoming in the Digital Sphere: WhatsApp Parent's Group in Chilean Education¹

Camila Moyano Dávila Universidad Finis Terrae

Ismael Tabilo Prieto
Universidad Alberto Hurtado/Universidad Finis Terrae

María Isabel Vera-Muñoz Universidad Alberto Hurtado



Samanta Alarcón Arcos Pontificia Universidad Católica de Chile Chile

Citation: Moyano Dávila, C., Tabilo, I., Vera-Muñoz, M. I., & Alarcón Arcos, S. (2023). Normative becoming in the digital sphere: WhatsApp parents' groups in Chilean education. *Education Policy Analysis Archives, 31*(138). https://doi.org/10.14507/epaa.31.7907 This article is part of the special issue, *Digital Education Platforms and Schooling*, edited by Pablo Rivera-Vargas, Lluís Parcerisa, and Carla Fardella Cisternas.

Journal website: http://epaa.asu.edu/ojs/

Facebook: /EPAAA Twitter: @epaa_aape Manuscript received: 28/4/2022 Revisions received: 30/8/2023 Accepted: 6/9/2023

¹ This work was supported by the National Research and Development Agency under the grants FONDECYT/INICIACIÓN/N°11200428.

Abstract: Digital communicational technologies, such as WhatsApp, have been part of schools both before and during the pandemic. This article explores the normative emergence of being a student, a parent, and a teacher in the use of parents' WhatsApp groups. In Chile, this digital application is widely used by the population, and it is particularly important for school communities. Based on interviews conducted with teachers and parents, and a theoretical approach based on science and technology studies, the results show that students are constantly labeled as "good" or "bad" without nuance, which produces stereotypes, and parents are also labeled in a binary way, with one group of alarmists and one of relaxed parents, where counter criticisms emerge, while teachers are seen as an extension of the schools and are expected to be constantly present. Digital communication technologies mediate these interactions and open up a new level of interaction, with standards and meanings enabled by the features of the application. We discuss these results, emphasizing that the normativities of these becomings are intertwined in the digital sphere, and using a mapping visualization of the analysis, we show how normativity acts ubiquitously and produces constantly changing expectations of how one should be for those in the group. The mapping exercise shows that the main relationship between the three becomings is emotion, so we conclude that, on the understanding that affect exceeds individuality and represents intensities online, normativities are also incorporated as affective responses in the parents' WhatsApp group. **Keywords**: parents' WhatsApp groups; education; normativity; affect

Devenir normativo en el ámbito digital: Grupo de padres de WhatsApp en la educación chilena

Resumen: Las tecnologías comunicacionales digitales, como WhatsApp, han formado parte de las escuelas tanto antes como durante la pandemia. Este artículo explora el surgimiento normativo de ser estudiante, padre y maestro en el uso de los grupos de WhatsApp de los padres. En Chile, esta aplicación digital es ampliamente utilizada por la población y es particularmente importante para las comunidades escolares. Utilizando entrevistas realizadas a docentes y padres de familia, y un enfoque teórico basado en estudios de Ciencias y Tecnologías, los resultados muestran que los estudiantes son constantemente etiquetados como "buenos" o "malos" sin matices, lo que produce estereotipos, y los padres también son etiquetados de forma binaria. manera, con un grupo de alarmistas y otro de padres relajados, donde surgen contracríticas, mientras que los profesores son vistos como una extensión de las escuelas y se espera que estén constantemente presentes. Las tecnologías de comunicación digital median en estas interacciones y abren un nuevo nivel de interacción, con estándares y significados habilitados por las características de la aplicación. Discutimos estos resultados, enfatizando que las normatividades de estos devenires están entrelazadas en la esfera digital, y utilizando una visualización cartográfica del análisis, mostramos cómo la normatividad actúa de manera ubicua y produce expectativas en constante cambio de cómo uno debería ser para aquellos en el grupo. El ejercicio de mapeo muestra que la principal relación entre los tres devenires es la emoción, por lo que concluimos que, entendiendo que el afecto excede la individualidad y representa intensidades en línea, las normatividades también se incorporan como respuestas afectivas en el grupo de WhatsApp de los padres.

Palabras-clave: grupo de WhatsApp de apoderados; educación; normatividad; afectos

Devir normativo na esfera digital: Grupo de pais do WhatsApp na educação chilena Resumo: As tecnologias comunicacionais digitais, como o WhatsApp, fizeram parte das escolas antes e durante a pandemia. Este artigo explora a emergência normativa de ser aluno, pai e professor no uso de grupos de pais no WhatsApp. No Chile, esta aplicação digital é amplamente utilizada pela população e é particularmente importante para as comunidades escolares.

Utilizando entrevistas realizadas com professores e pais, e uma abordagem teórica baseada em estudos de Ciências e Tecnologias, os resultados mostram que os alunos são constantemente rotulados como "bons" ou "maus" sem nuances, o que produz estereótipos, e os pais também são rotulados de forma binária. Forma, com um grupo de alarmistas e outro de pais relaxados, onde emergem contra-críticas, enquanto os professores são vistos como uma extensão das escolas e devem estar constantemente presentes. As tecnologias de comunicação digital medeiam essas interações e abrem um novo nível de interação, com padrões e significados possibilitados pelas funcionalidades do aplicativo. Discutimos esses resultados, enfatizando que as normatividades desses devires estão interligadas na esfera digital e, usando uma visualização cartográfica da análise, mostramos como a normatividade atua de forma onipresente e produz expectativas em constante mudança de como alguém deveria ser para aqueles do grupo. O exercício de mapeamento mostra que a principal relação entre os três devires é a emoção, portanto concluímos que, na compreensão de que o afeto ultrapassa a individualidade e representa intensidades online, as normatividades também são incorporadas como respostas afetivas no grupo de WhatsApp dos pais.

Palavras-chave: grupos de WhatsApp dos pais; educação; normatividade; afectos

Normative Becoming in the Digital Sphere: WhatsApp Parent's Group in Chilean Education

Before and during the COVID-19 pandemic, different digital technology platforms were hastily introduced in schools, and whether for pedagogical or communicational purposes, school communities have been adapting and reconfiguring their practices toward digitalization (Fenwick, 2010; Fenwick & Edwards, 2016; Håkansson Lindqvist & Pettersson, 2019; Haleem et al., 2022; Lindh & Nolin, 2016; Mishra et al., 2020; Pettersson, 2021; Williamson, 2017). In this regard, scholars have focused mainly on the performance, challenges, and advantages of these processes. Digital platforms represent a complex scenario in which user profiles are created, since users can be administrators, managers, teachers, students, and workers, assuming multiple roles as everyday designers (Pink et al., 2016). Digital platforms, according to Decuypere, Grimaldi, and Landri (2021), make communication between parties possible but also regulate it: which kinds of activities are allowed, what type of content can be uploaded, and what interactions can be performed in this public sphere. In the educational field, recent research has drawn attention to the influence of normative and control beliefs on the decision to communicate using digital media (Bordalba & Garreta, 2019). Communication between parents (especially mothers) and teachers has been explained as a result of a need to be present in educational settings, mainly on the part of working parents (Aviva & Simon, 2021), and partnering with parents has been targeted by Chilean schools to drive children's learning. Using the available digital platforms during the COVID-19 pandemic, when schools gave classes remotely for nearly a year, schools managed to continue being part of students' everyday lives; but since children have returned to school, the use of these platforms has remained a very important dynamic in the becoming of what counts (Allen, 2016).

One of the most important findings regarding digital communication technology (DCT) in schools is the conclusion that both teachers and parents have a perception of surveillance when using these platforms. On the one hand, teachers feel that, through online communication platforms, parents intervene and intrude in their everyday school work (Addi-Raccah & Yemini, 2018; Wasserman & Zwebner, 2017). Other researchers have focused on the consequences that these platforms have for communication, such as increasing misunderstandings, aggressions,

students' loss of autonomy, and other negative outcomes (Addi-Raccah & Yemini, 2018; Cetinkaya, 2017a, 2017b; Dwi Mayangsari & Aprianti, 2017; Martínez-Hernández et al., 2017). Meanwhile, there are studies that emphasize the positive outcomes of using DCT, such as improving students' language development and increasing parental involvement (Kurtz, 2014; Wasserman & Zwebner, 2017). While these studies have provided useful insights into the benefits and disadvantages of using DCT in education, they have failed to examine the consequences of the state of surveillance that actors perceive due to their use. Research has not yet explored which kinds of behaviors this state of surveillance fosters among teachers, parents, and students and how they are seen and might shape school life. In the case of Chile, mobile internet is highly accessible and widely used, and the country has some of the cheapest mobile internet plans in the world (Instituto Federal de Telecomunicaciones, 2020), with 90% of Chilean homes having an internet connection. In this context, and partly as a consequence of the pandemic, schools all around the country have been implementing online communication with families, assuming that this kind of communication is cheap, easy, and instantaneous. One of the most widely used applications (apps) for this purpose is WhatsApp, an instant messaging service that allows people to create chat groups with different contacts and send text, images, and voice and video messages to all the participants. In recent years, this practice has become very widespread in Chile, and school communities create different types of WhatsApp groups between teachers and students, teachers and parents (Cascales-Martínez et al., 2020), and, most popularly, between parents. This new kind of daily communication is changing relationships in school communities, especially for families, and affecting the lives of teachers and students (Sánchez-Garrote & Cortada-Pujol, 2015).

In these circumstances, Chile has outlined a school educational policy that is intended to "guide and strengthen the teaching, learning, and management processes of school coexistence for the development of the personal and social spheres, and of knowledge and culture, both of the students and of the educational community as a whole" (Ministerio de Educación, 2019, p. 8). One of the main focuses is cyberbullying and this program uses different approaches, such as the challenge that school coexistence implicate for school communities, the rights and duties of users, and prevention, among others. The program provides schools with different pedagogical tools to work on the topic, and although it involves activity on the part of the entire school community, it is very much oriented toward the harassment that students may suffer, positioning teachers and families merely as mediators in the digital sphere. In this article, we emphasize that, in the digital school scenario, parents, teachers, and students are part of digital interactions whether or not they are part of the digital platform (i.e., students in the parents' WhatsApp groups). We would like to inform public policies addressing this issue: first, so they consider all of the community as a possible target of cyberbullying; and second, so they consider all possible negative outcomes that digital platforms at school may produce beyond just cyberbullying, such as stereotyping, discrimination, and normative ways of producing and reproducing "appropriate" and highly restrictive ways of being teachers, parents, and students.

In this article, we are interested in exploring the different normative productions that emerge through parents' WhatsApp groups for students, teachers, and parents. Although regulations can be studied from a critical perspective as long as they produce power relations, our approach attempts to highlight the immanent character of regulations and how they are performed in the digital space through the possibilities provided by the platform. For that purpose, we conducted interviews with 23 parents and 23 teachers in the city of Santiago, Chile, during 2021 and 2022 and analyzed these interviews using a theoretical approach based on science and technology studies (STS). STS is a theoretical framework that focuses on the interconnection of human and non-human entities and that establishes that both entities have the capacity for agency in that relationship. Our interest is in understanding what is produced as normativity in the intertwined relationship between the digital

communication app and human use, and we present a theoretical framework for this objective regarding STS and normativity. Additionally, we explain our methodology and fieldwork process and present our research results, which are divided into two main sections. In the first section, we present a parents' WhatsApp group and parents' perceptions of it and then develop the normative emergence regarding being a teacher, a student, and a parent. In the second one, we present our discussion by showing how these three normative productions interact through qualitative visualizations using the software Atlas.ti. We conclude by presenting the implications of our results for school communities in this digital age.

How Normativity Emerges Through Digital Platforms

Over recent decades, we have started to experience new ways of socializing and living, mainly through digital technologies and new materialities. We use computers, tablets, cell phones, and smartwatches with enormous room for nuance in our daily lives. We are users of apps and social networks, read news on websites, and contact and make real-time connections with people practically anywhere in the world. Because of all this, connective platforms cannot be considered as separate from social organizations and infrastructures but more as dynamically evolving societal arrangements where different actors constantly shape and reshape shared values. Although these platforms seem to be useful, they are deployed performatively, not simply connecting actors but also steering their connections, values, and contesting ideologies (van Dijck et al., 2018).

Undoubtedly, the social use of digital materialities has created routines and value systems associated with them (Silverstone et al., 1992), incorporating a moral dimension into the use of the digital sphere (Horst & Miller, 2012). New guidelines are thus generated regarding what can, should, or should not be done in these networks: what is posted or not, and when and how something is shown or written virtually (Horst & Miller, 2012).

In Latin America, following the start of the pandemic, the use of digital technologies increased more rapidly than in recent trends (Jung & Katz, 2023). Connectivity has also grown along with the use of cell phones and computers with broadband internet access, which have become indispensable: 45% of the population reported having teleworked during the pandemic in Chile (Jung & Katz, 2023), with the education sector being the second most likely to migrate to this type of platform (Comisión Económica para América Latina y el Caribe, or CEPAL, 2020). Education through videoconferencing and other digital platforms functioned as a lifeline in the face of restrictions during the health emergency and confinement measures through a public agenda (Zancajo et al., 2022), raising more questions about the value systems associated with the use of digital platforms (Mahmoud Saleh et al., 2022).

In the Chilean context, activities and what information is displayed are regulated by each user, but this digital platform—which van Dijck and Poell (2018) call "digital architecture," or programs designed to organize interactions between users and corporate entities—tends to establish certain rules or behavioral guidelines that delimit communicative exchanges (see Decuypere et al., 2021). Digital technologies create conditions for change, although humans quickly and notably reimpose normativity (Horst & Miller, 2012).

According to Leppänen et al. (2015), there are sociocultural meanings and practices associated with the creation of these profiles and identities, as users claim or reject and are granted—or not granted—the right to use certain sociolinguistic resources. Such negotiation of social practices generates authenticity in users (Bucholtz, 2003).

Science and Technology as the Theoretical Approach

This article focuses on STS because it enables us to focus on the relation between human actors and digital technologies. The STS approach centers on the relations and actions of networks of devices, proposing that in those relations, everything/everyone has the potential to be actors (Moyano Dávila et al., 2023) and have agency to affect and be affected by others. In the educational field, current studies mainly use this approach because it allows us to overcome binary distinctions as permanent and fixed categories (i.e., natural/social, human/non-human; Decuypere, 2019; Decuypere et al., 2014; Edwards, 2015; Fenwick & Edwards, 2010, 2016; Thompson, 2012; Waltz, 2004; Williamson, 2017). The STS approach analyzes assemblages from where things are produced, which means that nothing is given because it is created through relationships, while entities come together, act, and become in relations (Latour, 2005), transforming their original design into their action trajectories.

The above is particularly interesting for our topic because we are exploring not only communications within the school community but also how this communication is produced when it takes place in a different setting, such as via digital technologies. We use this approach because it enables us to understand to what extent digital technologies are not simply tools for humans but can organize and limit their actions and, ultimately, their existence (Moyano Dávila et al., 2023). Therefore, digital technologies for communication within schools present a new form of living in the school, producing a particular educational community.

The STS approach in education has influenced various types of work, especially in digital technologies. Following the ideas of Fenwick and Edwards (2010), entities in education exist to do more than merely to respond to human expectations—they can change and shape human intentions, relationships, memories, and so on. Specifically, networks (composed of human and non-human actors) organize actors' actions and discourage others (Sisto & Zelaya, 2013). In other words, and in line with this article's stated objective, digital technologies and the human interactions within them produce stabilizations and rules regarding the school context, and we aim to demonstrate norms for being a teacher, parent, and student through digital technology such as WhatsApp groups.

Normativity and New Becomings

In virtual spaces and through DCT, normative depictions emerge and guide users' behaviors, and these configurations—always open and unfinished—are constantly becoming. Using Butler's (2017) work and extending certain elements of her performative theory of assembly, we consider virtual spaces of interaction as public spaces where different ways of being and doing appear; therefore, virtual interaction in digital spaces allows the emergence of desirable behaviors and, consequently, normative configurations involving the different actors in a school community.

Within these spaces, relations between normativity and new becomings are enacted and, far from being a supreme and invariable rule, normativity is a practice and doing (Butler, 1990, 1993). People are the norm insofar as they produce it in agreement or resistance through their everyday practices and doings, with the norm being an iteration of discourses and practices that perform the possible becomings of the subject (Butler, 1990).

In a different but complementary vein, Frega (2014) distinguishes at least three normative practices: justification, critique, and institutionalization. Social agents mobilize these practices to coordinate group life, relying on a specific form of "practical rationality" to relate to, accommodate, defend, or criticize social norms in given contexts. Frega's work allows us to understand that normativity, seen as practice, has both a transcendent and immanent character. On the one hand, the validity of the emerging normative figures can transcend social agents' position of enunciation, while on the other, every normative act is always situated and rooted in specific contexts that allow its appearance.

According to Haynes (2016), normativity within digital spaces refers to the everyday assumptions that users make and how they consider them natural: right and wrong, fair and unfair, appropriate and inappropriate. Haynes (2016) specifies that, although these guidelines change according to the times and the context, the fact that the majority follows them and does not challenge them is what makes them normative. Normativity is thus expressed through regulations, moderation, censorship, codes of conduct, "netiquettes," and sanctions (Leppänen, 2009; Leppänen et al., 2015).

In this sense, the use of digital platforms not only refers to the online work of a small community but also to the normative construction of profiles that regulate with what social codes we are allowed to be or do one thing or another. Normativity emerges ubiquitously in the "intimate zones of everyday life" as some relations and identities are promoted while others are discouraged and even neglected (Berlant, 1998).

Within the school context, normativity can emerge through interactions and uses of DCT, so different school actors stabilize how a teacher, a parent, and a student should be, and these stabilizations may exclude certain ways of being and present the difference as stigmatizations and stereotypes. From this perspective, the uses and roles played by the WhatsApp parents' groups open up a space for interaction and sociability in which emergent norms and expected ways of being are configured, acted, and transmitted.

New becomings are constantly shaped in virtual interactions whose limits and effects can transcend virtuality, while DCT opens up a space where the ways of being "normal" or "different" are at stake. So new becomings are possible in the space of potentiality, where the rigid roles of the face-to-face world can be destabilized. Analyzing the normative practices of social agents in WhatsApp groups, we may think about the emergence of identities without overrepresenting their actualized form, prioritizing difference over repetition (Krejsler, 2016).

Methodology

Based on three years of research, this project studies different digital communication platforms used between schools and families. Specifically, regarding WhatsApp groups, we conducted 23 interviews with teachers and 23 with parents during 2021 and 2022, exploring topics such as their general opinion of the app, the participants' usage, how it fosters or hinders teachers' work, parents' knowledge of daily school life, and students' educational processes. The interviews also addressed which topics generate the most conflicts in the groups, how such conflicts develop, which topics the participants find uncomfortable to discuss, and what their expectations are for using this app at school. The interviews lasted between 50 and 60 minutes each and were conducted and recorded online by the research team (four people), with the team transcribing the interviews literally.

The Chilean education system is deeply segregated (Bellei, 2013; Villalobos & Valenzuela, 2012) as a consequence of the privatization of social rights, including education, initiated in the 1980s during Augusto Pinochet's dictatorship. This period led to inequality in accessibility to education and translated into a problem of educational quality, producing a highly inequitable system (García-Huidobro & Bellei, 2003).

For this reason, our sample comprised teachers and parents from public, charter (subsidized), and private schools, thus including the full diversity of the school system and enabling us to compare the different types of schools and obtain various perspectives of the reality of using WhatsApp parents' groups at school. It is important to address the relevance of social class in the Chilean educational system, particularly in relation to the type of school. As reported by research on the topic, Chilean education is a market-driven system, which means it is regularized by market

prices that establish differences and segmentation between schools (Corvalán & García-Huidobro, 2016). In this sense, the educational market has tended towards privatization and school segregation (Elaqua, 2012; Valenzuela et al., 2013), increasing enrollment in charter schools. In this scenario, the marketized system has led to a strong correlation between the type of school and the socioeconomic level of the students, and although different types of segregation based on cultural and social categories have emerged in the educational system in the last decade, the socioeconomic level is still one of the most important factors. Since there is little literature on the topic we explore in this article, we decided to conduct our comparisons using mainly the socioeconomic variable. The final sample is shown in Table 1.

Table 1
Summary of Sample

Type of school	Parents (N)
Total Public School	8
Total Charter School	6
Total Private School	9
Total Interviews	23

After completing the transcription of the interviews, the team started the analytical process using the Grounded Theory approach (Strauss & Corbin, 2002; Walker & Myrick, 2006) with the Atlas.ti software, which allows us to identify emerging codes induced from the participants' interviews. As one of the theory's creators contends, "Those features, however, will never develop if researchers focus on the procedures presented in this text and apply them mechanically. We want readers to understand what we are saying, to understand why they are doing certain activities, and to do so in flexible and creative ways" (Strauss & Corbin, 2002, p. 16). Accordingly, we use Grounded Theory in a flexible manner, meaning that we only use open and selective coding to organize and systematize the large amount of material with which we work. However, it is not the purpose of the study to establish a general theory or causal relationships between the concepts and categories that emerged from the interviews. We believe that this use of Grounded Theory is pertinent to a performativity-oriented theoretical framework since it maintains the focus on emergent categories and their interactions rather than on their relationships of determination.

The process of preparing and organizing the data started with uploading the documents with the transcriptions of all the interviews. In order to reduce the data into themes, we selected quotations and added them to codes, which were then grouped into themes (code groups). When we first carried out the open coding, we had one theoretical framework, but we prioritized what the participants said in the interviews. We carried out our initial analysis inspired by an STS approach, meaning that our focus was not only on human perceptions regarding a digital device but on the digital technology platform as an actor that participates in a network (with humans and other devices). We understand that WhatsApp produces different emotions, desires, expectations, and normativities and is also affected and transformed by human actors when used, which allowed us to reorganize the codes into groups. At the end of this process (axial coding), we had highly emergent coding. However, since we did this very openly, we had a very large number of codes with which to work (742), so we decided to separate them into different groups, which we named according to our

interview guide and then the project's objectives. We reviewed these groups and created a new project in the software with the groups that referred to our main research question: What are the normative becomings in the parents' WhatsApp groups regarding teachers, parents, and students? We selected all groups that refer to a perception of "ought to be" and used them for the new Atlas.ti project, "Normativities"; all 35 code groups in this project were subsequently analyzed by "actor" (students, teachers, and parents). In this regard, we organized information for this article through visualizations in Atlas.ti.

Networks were constructed to represent the results, with the visualizations representing the content of the main code groups and codes. In the first stage, the interviews and focus groups of teachers, parents, and students were coded in NVivo and then grouped into code groups according to their thematic affinity. Groups related to the themes of uses, normativity, affects, and becomings were selected, and these themes were reviewed for the three actors observed, with the understanding of the intertwined construction and interdependence of the different identities and of the virtual and school reality.

Results

What Is a Parent WhatsApp Group and How Do Parents Use It?

Parents now rely on technology to be connected with their child's school community, and one popular platform for that communication is WhatsApp groups. While initially intended to facilitate sharing of school-related information, our research reveals that parents' use of these groups extends beyond its original purpose, configuring certain ways of being a student, a teacher, a parent, a classroom, and even a family.

The WhatsApp group for parents is mainly presented as a tool to support parents and help the students with their responsibilities. According to our participants, making and receiving homework reminders is common, and they are often provided by parents who are more active in terms of sending information, so the rest of the parents are constantly reminded of their children's homework and other activities. Nevertheless, as illustrated by some interviewees, spaces for emotional containment are created, particularly during the pandemic.

The conversation turned because the pandemic was clearly: "I don't understand what I have to do", "where is the material", "which unit are they on". Moms and dads were really lost, and others trying to help . . . and also a lot of containment, like: "hey, relax". (Marta, Parent, Private School)

Conversation among parents is vital in this type of space since it generates a sense of community and reduces anxiety in the face of the new challenges of homeschooling. Also, the burden of parental responsibility in the educational process—often in terms of guilt—is relieved to some extent, often through relaxation and humor.

In some cases, the groups include the presence of the principal and are usually being more restrictive with circulating information than in other, freer groups where anyone can upload information. The latter becomes a space where the surveillance of the parents by the teacher and among the parents themselves is a central issue (Moyano Dávila et al., 2023):

Once we had like a "school for parents" regarding treatment, respect, and all those things and regarding content. . . . We had to create rules for the group, so there would be problems, for example, I don't know, in the WhatsApp group you can't send memes or you can't send political topics that are going to be controversial or you can't write after 10:30 p.m. (Delia, Parent, Charter School)

The possibility of instant communication enabled by the app can change the communicative codes of face-to-face life, particularly in terms of frequency. Although WhatsApp groups are generally valued as a rapid aid to help parents follow school issues, they tend to saturate many of the participants due to the amount and diversity of information received:

The number of interactions, it's not every day and it's not all day, but there are times or days when if you don't look at them for a while, you can have 200 messages because they build up very fast. It makes it impossible to follow if you want to be attentive, and discriminating between the important and the trivial becomes very difficult. (Roberto, Parent, Public School)

In this case, it is common to hear experiences of conflicts generated digitally and even reflected in the face-to-face school experience, and some parents (and teachers) emphasize that face-to-face communication is still the preferred way to resolve them. Although many of these conflicts are dealt with through the WhatsApp groups, the final resolution is always expected to happen in face-to-face conversations between the parents involved and the principal or some school authority. In this sense, for schools, WhatsApp is recognized as an informal way to communicate, although the features of the platform allow certain changes to be made in the course of school life, and conflicts arising on the app can be transferred to daily life and must sometimes be addressed face to face.

I would say that the expectation is that it could be used to remind us of information, perhaps, like it could help us with things such as doing everyday stuff, "remember that you leave early today", like that could almost be a public utility notification for all of us who maybe weren't paying attention, or "remember that tomorrow you have to take such and such a thing" and that could help like . . . make our lives easier . . . but when some content appears, that's more of feeling in the pit of the stomach and that requires other reflections, like . . . I feel that it's not the best place there. (Sofía, Parent, Private School)

WhatsApp parents' groups are digital spaces for affective encounters, where the participants produce the group as a space of relief, emotional containment, and shared experiences. However, conflicts, stereotypes, and norms emerge in that intimate and affective space where differences are exposed.

Considering the types of schools in this analysis, where private schools are associated with the upper and upper middle class and charter and public schools with the lower and lower middle class, private schools present WhatsApp use that is more closely linked to the academic environment, children's grades, and performance, while charter and public schools tend to produce more discussion on topics that go beyond the pedagogical domain, such as the interaction between people and the school environment.

Normative Becoming

Students, the Becoming of "The Good" and "The Bad"

As we have shown, WhatsApp parents' groups are not only static tools where information about the school context is deposited, but they also produce affection, emotions, and, therefore, conflicts. It is important to note that in this section, the normative becoming of the student is related to parents' and teachers' narratives regarding their use of WhatsApp.

Parents usually talk about their children's academic results, sending photographs of their notebooks and homework. For them, the objective is to compare their children's advances with the rest of the group, which sometimes leads to the rapid production of labels for students:

They also begin to generate this anxiety of sending the photo of the work or the notebook or the homework, so the other is "well, my child's handwriting isn't like that or he didn't achieve the same thing, or he didn't know about the homework, so my child is irresponsible", which often generates more anxiety and also creates this conflict of not achieving the same thing. (Cecilia, Teacher, Private School)

Some parents' drive for their children's academic success can evolve from anxiety to conflict when children are singled out, particularly in sensitive situations. For example, the following participant mentioned a child's full name in messages to the group of parents, accompanied by a (particularly negative) qualifier, which not only created stereotypes about being a good student (e.g., not being aggressive, not having to repeat years) but also created ways of being a family by holding her caregivers accountable to the scrutiny of others:

One of the girls who had been involved in the conflict had repeated the year, so they said, "because the girl who repeated, the girl who repeated the girl who repeat

Thus, the normative configurations of being a good or bad student emerge due to the possibility of comparison within the digital group, and labels expressed in the digital space tend to produce a typical student with whom parents establish a comparison, suggesting that WhatsApp groups with their features produce these normative beings as students. The fact that the students are not in the group, and parents have some anonymity to talk "freely" about other families and students and easily exchange photos, documents, and videos almost at the very instant that events take place, is a characteristic of WhatsApp groups that involve the production of the students' normative beings. These normative beings are not static and personalized, but there is a constant flux of characteristics that produce "the good" and "the bad" students. For example, "the bad" student is stigmatized and reproached by the group for being "the one who's always poking their nose in or that child is the one who always shouts in class" (Mónica, Parent, Public School). Labels also emerge for the "good" parent—that is, the one who checks the messages and replies in the expected way—or the "good" teacher, who replies quickly.

Nevertheless, pressure and stereotypes are not only built around the behavior of students but also around the construction of masculinity and femininity. Gender stereotypes are reaffirmed in the chat and have practical consequences in the day-to-day lives of students, producing limitations regarding their preferences, aspirations, and practices.

But there are some workshops after classes that are given to the children and there was a diverse offering of workshops. Unfortunately, for pre-kindergarten there was very little, ballet was practically the only workshop there was, and it was very much aimed at girls. They told them: "the little girls, let them go, and the girls this and the girls that", and the moms complained and said: "we only have the ballet workshop and it's only for girls, and what do we do with the boys?" So, I said: "hey, but the ballet workshop doesn't have to be only for girls, boys dance ballet too, men dance

ballet too", and I enrolled my son in the ballet workshop. (Javiera, Parent, Public School).

In this way, through this type of resistance, not only are stereotypes questioned but also the autonomy of the students in terms of what they want to be through school practices. Although for some, it is a priority to be alert to their children's school responsibilities (which can be reflected to a large extent in the participation of parents in the WhatsApp chat), it is generally expected that, as long as the age of the children allows it, they can take care of their own homework and take decisions as independently as possible.

I think it depends on each family and how they handle it as a family because, of course, there are children who are very autonomous and you remind them in the classroom and then of course, you send the WhatsApp to the parent, the parent tells the child and the child says "oh no, I have it already". In those cases, yes, but there are other cases where, of course, the parent ends up finding out through the WhatsApp and in the end, they end up doing things for the child when they're not so autonomous or when they're more forgetful. (Valentina, Teacher, Private School)

As we can see in the analysis, surveillance around being a "better student" emerges in parents' WhatsApp groups and produces normative configurations, and by comparing their children's school performance and behavior, parents configure labels that are more than mere adjectives. The depictions of how to be a good student, according to the parents, are also accompanied by the families being exposed to the school's digital public sphere, where their practices are subjected to the evaluation of others, so the parents are also assessed and under normative surveillance.

With regard to the types of schools, we see that digital interactions in the private schools show greater interest in supporting and caring for the child individually and through the organization of the agenda. In the case of the charter and public schools, the focus is on coexistence, the child's public treatment, and the impact of labels in the school environment.

Parents: A Binary Becoming

The parents' WhatsApp groups are constituted by different affections that embrace all the digital experiences in this virtual space. This app not only responds to practical coordination needs but also enables the emergence of a space for the circulation of affection that, although apparently spontaneous, regulates the interactions between parents. In this sense, all the aspects we will describe here are linked with parents' emerging affections. These affections in WhatsApp groups are instant (almost impulsive) responses to the chat when parents interact, and there is general agreement that these groups constantly have abundant emotions, rapid responses that prioritize "saying" more than interacting.

So, you're worried about your daughter, right, and the concern and anger that you will have as a parent, uh, you dump that anger in the WhatsApp, you dump it and you leave it there, and you question the other or qualify the other, and there, uh, it remains there. So, no, it caused, rather, it contributed to increase the conflict. What was a circumstantial situation, for example, in the classroom, became a permanent situation in the, in the WhatsApp. (José, Teacher, Public School)

These affective responses used by parents produce the idea that they have very few skills to deal with the conflictive situations that their children could be experiencing at school. Parents and teachers have a generalized idea that WhatsApp groups are devices where parents are highly disruptive in terms of their interventions.

The parents aren't people who have the competences, or the skills, or the obligation to solve them or not and they generally end up spoiling things, especially situations of coexistence, instead of helping to solve them. (Laura, Teacher, Charter School)

Literature on the topic of school and family relations has emphasized the tense relationship between the two actors (Cárcamo Vásquez, 2015; Madrid et al., 2019). Specifically, some studies mention that schools behave as "expert" institutions (Lareau, 2000, 2003) where teachers give guidelines for parents to apply (Madrid et al., 2019) because, as mentioned by Laura, they lack sufficient skills to solve certain problems.

The depiction of parenting constructed through the WhatsApp groups is represented in a very binary manner. It is important to note that these categories are part of an "in-vivo coding" process and not an interpretation of the authors, and we use the verbatim words of the parents to create them. On the one hand, some parents are completely "relaxed," less active in the chat, and sometimes categorized as "negligent." On the other hand, we see the "anxious," "alarmist," and "irrational parent." Among our participants, critics were seen in each group.

I would say that I can classify them in two main areas. First, the alarmists, I'm going to call them, typically what happens in all grades that "no, my child has COVID, they're all infected, they're all going to die", it's like one person thinks that what happens to that person is what happens to everyone and alarms the rest of the parents and they end up, I don't know, 10 more calling the school "What's happening?" Or, I don't know, a girl fell down a staircase because she tripped, "my daughter was pushed down the stairs, there's bullying", boom, alarm and people are more sensitive too, so they get sucked in easily. I would say that's a classification. (Laura, Teacher, Charter School)

Both groups of parents are judged and criticized by parents and teachers. For example, parents who "abuse" WhatsApp groups rely on the chat to find out about their children's daily school life, homework, and so on. Reflecting this binary view, the other group of parents is almost always absent from the chat and only interacts when trying to understand something happening in "real life."

But there is, let's say . . . it's that there's a, well, in our context of 45 parents, so it's a lot of people who suddenly, there are people who abuse the utility, so to speak. Uh, I feel like . . . uh, I don't know, instead of, all of a sudden, the convenience of asking again instead of reading, sometimes I don't know, it's three posts up, but I asked again anyway. (Karina, Parent, Charter School)

Then there are those who are always present and interacting in the group, with the affect in this group very much related to the urgency of responding and being there and the fear of missing out. These are parents that, through the chat, are hypervigilant of their and others' children's daily school life. As mentioned in the previous section, the participants relate this to academic control, in that the parents take on their children's academic responsibilities to ensure their success. However, there is a general understanding that the WhatsApp group is detrimental to these parents' autonomy and sense of responsibility.

If it weren't for what's online, I wouldn't be aware of a lot of things.

But this, it's like, it seems to me a bit conducive to this, this is what's called helicopter parents in English, helicopter parents, like they're constantly flying over and watching and I think it's not good for the child. I try not to be like that, I hope, I hope it's not like that.

Interviewer: That concept is good, we're going to use it.

Interviewee: Yes, helicopter parents is a theme. (Javiera, Parent, Public School)

"Hey, I'm missing whatever page" and moms who are real pains in the neck about what the child has to do, asking for everything, children who are clearly very controlled and others who make the comment "hey, relax and let the child do it anyway", that generated a debate in the WhatsApp chat, more people got involved, etc. (Hugo, Teacher, Private School)

Because anyway, you have to go to class, like for the children and sometimes, there are children who say "no, there's no homework", so the mother is suspicious and asks "hey, is it true that there's no homework?", hey . . . well . . . the child doesn't feel like doing homework, like one that . . . the child's space is affected . . . like that . . . the child has space because if he says he has no homework, the mother says "no, yes, yes, he has homework", well, what a pain! So in first class, it's like this . . . all the time, so we had a meeting and the teacher "hey, the homework . . .", I don't know, but there are some who want the child to do it perfectly. (Sara, Parent, Private School)

These different ways to label parents (anxious, hyper-present, or negligent) should be understood within a frame of structural conditions that support these different ways of being in the WhatsApp group. For example, from our data, we could interpret that although both fathers and mothers participate in the groups, the mothers generally chat more. So, the "anxious" category is almost always directed at mothers. Meanwhile, as mentioned above, the types of schools in Chile are stratified by socioeconomic level, with each corresponding to a certain social class, so the participants' labeling practices are conducted between families of similar socioeconomic levels. However, we know from the literature on school-family relations that this relationship is very much embedded in power, which is particularly unbalanced with lower middle-class and lower-class families (Madrid et al., 2019).

As we have seen, the WhatsApp group creates certain rules and normativities that ignore differences in parenting. Literature about DCT emphasizes the blurring of boundaries between schools and families (Addi-Raccah & Yemini, 2018; Wasserman & Zwebner, 2017), and our study also highlights the blurring of boundaries between families. These blurred boundaries relate to teachers' perception that parents surveil their pedagogical work and parents' feeling that other families are judging them and surveilling their home dynamic. WhatsApp groups are a device that creates a sense of shelter for parents, so they are not concerned about the anonymity of teachers and students when talking. However, more importantly, as seen previously, the lack of anonymity in discussions of certain situations can create stigmas and stereotypes of what constitutes a "bad student."

[Name and surname] is an aggressive girl. I mean, saying that she's a girl kills her, I mean, imagine, you labeled her, you categorized her, all of that. So, I think it would be different, even in the chat, "Mom of whoever, I want to tell you", because the rest is personal and you talk about it, but if you throw it into the air, it leaves a trail of conflict. (Laura, Teacher, Charter School)

In all schools, we observe the duality of labeling and alarmist-versus-relaxed parents. However, some distinctions can be made according to the type of school. In the private schools, it is mainly the teachers who criticize the alarmist mothers; in the charter schools, the teachers talk mostly about the

parents' misuse and lack of skills to manage this tool; and finally, in public schools, teachers are more critical of emotionality, which is very similar to the criticism of private charter schools but from the point of view of emotions. As we can see throughout this section, the school has different mandates and expectations about what is good or bad use of WhatsApp according to the social class they tend to serve.

Teachers Becoming Available 24/7

We see that the teachers are asked to be constantly available and to be representatives of the school. Teachers are mandated to mediate conflicts and define rules of use, even if it is outside their duties.

Of course, because the parents still consider us an authority . . . they still consider us an authority for their sons and daughters, so there's respect that's enforced and it's enforced in the parents' meetings. Maybe, if I were part of that WhatsApp group, they would also be more measured or the conflict would be handled in a better way, but it's not my mission, let's say, and being in it isn't part of my job either. (Catalina, Teacher, Charter School)

As described by the interviewee, the presence or absence of the teacher in the WhatsApp group modifies the way in which the parents relate to each other, as their presence fulfills an expectation of formality, institutionalism, and authority. As evidenced in the previous section, the school represents expert knowledge for parents, especially for lower-middle-class families. The school's knowledge is not only focused on the pedagogical sphere but also encompasses forms of child-rearing and parenting.

The presence of a teacher in the group creates greater formality, tinging the group's digital environment with a sense of seriousness, and becomes an extension of the classroom: "The focus of the space is lost despite the fact that I, as a tutor 'this is a formal space, I'm present too' we have to respect that. It's like an annex to being in the classroom" (Juan, Teacher, Public School).

The teacher's presence as a group member, even while not participating in conversations, would thus generate more measured and nuanced interactions between parents and less conflict, or at least better-managed conflict. In this case, the teacher embodies the classroom space itself and represents the school institution in the WhatsApp group, with their role being to supervise and simultaneously take care of it.

Constant availability and rapid responses are fundamental criteria to be considered a "good" teacher in parents' eyes. However, this demand for availability does not consider the reality and diversity of a teacher's daily work.

They often get upset because no one pays attention to them on WhatsApp and it's like "hey, I'm doing classes on another course, I'm doing other things, I'm interviewing parents". My quality as a tutor isn't at stake because whether I answer the WhatsApp or not, eventually I will answer you, but you're also in classes of course. (Juan, Teacher, Public School)

This constant availability also has an affective form of presentation. As seen above, parents are often considered anxious and demanding, especially regarding information about their children, and, in this context, DCT also plays an important affective role. As stated by interviewee Cecilia: "The parents are really anxious, much more so than the children, and they transmit a lot of that anxiety, so we also try to reduce it, anticipate it" (Cecilia, Teacher, Private School).

In addition to providing official information and embodying the school in the digital space, teachers anticipate information in order to communicate calmness to parents. Hence, teachers are

expected to be moderate and restrained in their emotions, even in conflictive situations, with this calmness meaning proper functioning of the school in pedagogical terms, safety and protection of the children, and good handling of possible conflicts. Therefore, this affective function of WhatsApp is a way to prevent misinformation and misunderstandings on the part of parents, thus reducing the possibility that they may make complaints.

What I think is useful, I think the main thing today, at least in my area, is to reassure the families that things are working well at this school from the pedagogical perspective, which is still important, but also from the academic perspective, that is, it's better to know that if there's a conflict, the parents know that this conflict will be discussed and solved. It's more about making them calm. (Laura, Teacher, Charter School)

Managing the affective environment of the school through WhatsApp allows teachers to work in the realm of potential. Unlike in the face-to-face world, the affective practices of anticipation give teachers the opportunity to shape virtual interactions and reduce the probability of complaints or conflicts between parents or between parents and the school.

The affective environment is also constructed through these anticipatory practices. However, this does not imply solely delivering timely and pertinent information but also involves a way of acting upon it. In the school's virtual space, teachers must be kind and attentive with the transmission of information.

So [the teacher] sends me the photo, he sends it to the group, the group is happy "oh, how nice, how wonderful" [the parents say] because now we're much more distanced than before, but there are teachers who are very open, very open and that's like a showcase for what they're doing. (Sara, Parent, Private School)

Delivering information is also a form of care, both for the virtual image of the school and the coexistence between the different actors in the WhatsApp group. Being an "open teacher" is a way to name the different practices of affective regulation, with the adjective "open" specifically marking the boundary between duty and what is demanded beyond duty, where teachers can show what the school is doing and create a calm environment for parents.

As we can see from the review of these excerpts, teachers' practices fulfill several functions. These functions operate simultaneously on an affective level, limiting and controlling the environment of the WhatsApp group, and on a pragmatic level, orienting the possible interactions considered right and wrong. In the case of teachers, normative becomings are intertwined with the requirement of availability and the affects related to the correct and expected ways of being present.

Regarding the different types of schools, we see that in private schools, teachers tend to interact based on anticipation, being concerned mainly with providing good school service and showing that things at the school are "handled properly." In the case of charter and public schools, anticipation is also observed in the form of availability, but it is based on the expectation of being an authority, having expert knowledge in the treatment of children, and managing coexistence in the digital space.

Discussion

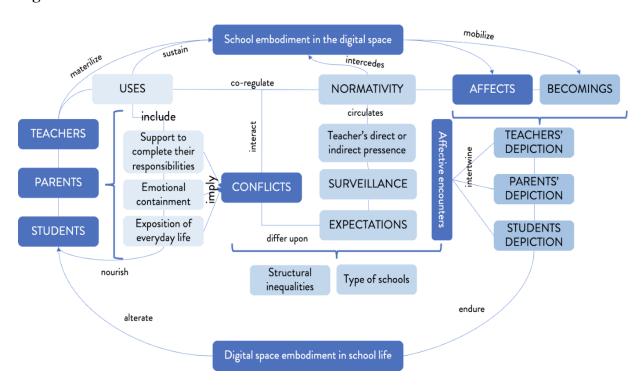
How the Three Becomings Interact through Mapping Visualizations

The digital platforms created by educational communities show the continuum of becoming rather than being (Henwood & Marent, 2019). In this sense, materiality is not separate from human

agency but is intertwined (Cecez-Kecmanovic et al., 2014; Hultin, 2019; Hultin & Introna, 2019. The WhatsApp group platform turns into a changing space where adults interact around the children's world, become, and constantly transform. For example, rules emerge upon need but also revolve around expectations of what is good and what is wrong. Parents are expected to act as if they have no feelings (although affection is constantly present) and be aware of rules that are not stated but should be known.

On the other hand, our results show that roles are constantly changing in the digital arena but are diffracted in the non-digital world. A continuum is established between what happens in school settings and on digital communication platforms. Conflicts arise and are sometimes resolved on the platform, but they can sometimes emerge on the digital platform and become an issue in the physical educational setting. In that sense, parents who are not part of this digital realm are left behind. To analyze such complex scenarios, we used a computer-assisted method, supporting the traditional use of Grounded Theory methodology (Diehl et al., 2022; Welhausen, 2018). Atlas.ti has been designated as suitable to support an interpretive approach like Grounded Theory, remaining true to its core principles but extending new options for analysis due to technical advances (Friese, 2019). Figure 1 shows a mapping visualization that revolves around the three becomings and their interactions. Students, teachers, and parents revolve around divergent becomings marked partly by the rhythm imposed by WhatsApp groups. School life and often private home life become available, revealing everyone's intimacies, but mostly those of the students, as parents are the ones who decide what is shared and what is not.

Figure 1



Amidst the different uses identified in this research, many pertain to distinct forms of emotional support and solace that are aligned with the hectic pace of daily tasks. Surveillance operates constantly over these becomings, and in this space, the expectations of parents, students,

and teachers are at stake as they are always visible. Conflicts that arise in the WhatsApp group spill over into real life and vice versa. Furthermore, not all parents and teachers want or are able to be present at all times in these groups, which also presents challenges and difficulties for the ways of belonging. The entirety of school life is affected by what happens in WhatsApp groups, and affect permeates all relationships. The use of WhatsApp groups in everyday school life has become the norm, and these online spaces have evolved into a central part of what occurs at school, continuously generating new becomings and realities. Normativity exerts its influence ubiquitously, presenting the challenge of keeping up with school life as well as setting expected ways of acting for the entire school community, whether they are members of the groups or not. These affective encounters shape the perceptions of students, parents, and teachers, regularly introducing new information to the school environment.

Conclusion: Circulation of Affect that Shapes the Normative Becomings in the WhatsApp Parents' Group

In accordance with the aforementioned ideas, we can observe that the new becomings are intertwined with affects. As in the face-to-face world, the virtual world creates a space with an affective climate that shapes interactions. In addition to data and information, DCT enables the circulation of desires, interests, joys, and anger, both individual and collective (Paasonen et al., 2015). Consequently, the virtual environment of the school is directly related to the affects that circulate in this space. Participation in virtual spaces also implies being exposed to being affected and affecting others. In this sense, any action and interaction involve an affective investment: "Sensory impulses and forms of intensity that generate and circulate within networks comprising both human and nonhuman actors" (Paasonen et al., 2015, p. 1). Affects exceed individuality and human actors, and they represent intensities and shape both virtual and face-to-face environments.

In the case of parents, for example, affect triggers assessments of children's academic performance and comparisons with their own children. Thus, the collective and virtual construction of what they consider to be a good or bad student is supported by affects that drive these comparisons (e.g., anxiety or a competitive attitude). The evaluated characteristics are not fixed; they are discussed and redefined in WhatsApp conversations according to the situations that arise, each of which always carries an affective component. In this respect, users affect the normative depictions and, in turn, are also affected by them.

From this perspective, we consider affects as force relations. They emerge and act in the space of potential and circulate in the intermediate space between "the capacities to act and be acted upon" (Seigworth & Gregg, 2010, p. 1). Teachers' anticipatory work clearly illustrates the role that affect plays in managing the school's virtual environment, and we argue that the normative depictions of teachers are strongly intertwined with kindness, attentiveness, availability, and care, which opens up an important space for exploring the productive relations between normativity and affect.

Digital practices in schools are adjusted to the implicit norms of the digital world, and, in turn, these same practices create and transform the expected ways of being in WhatsApp groups. Normative becomings circulate through the digital space, producing affective atmospheres where norms are acted on and produced. According to Brown et al. (2019), an affective atmosphere is the sense of collective feeling that impinges upon a space of encounters and links the bodies together. Despite their immanence, atmospheres are not neutral: "They attract and repel, amuse and horrify, enchant and become unbearable. These feelings are not so much responses to an atmosphere, but behavioral possibilities disclosed within the atmosphere itself" (Brown et al., 2019, p. 13).

In this affective atmosphere, each virtual community defines a form of emotional governance (Koschut, 2019) that sets the rules regarding affective responses. In this research, we observe that digital rules of interactions are feelings that people incorporate as appropriate affective responses in WhatsApp. Hence, we see that, as posited by Frega (2014), normativity, when understood as a practice, embodies an immanent level, circulation, and emergence of affects, alongside a transcendent dimension representing a "correct" or "institutional" framework for digital interaction in school. Circulation of affect establishes an expected environment regarding how to behave in the digital space according to the position held in the school community.

Human life and, consequently, social dynamics within the school are understood as "plural and messy" (Ingulfsvann et al., 2020, p. 3). In this research, this perspective has proven to have great value for exploring the ways in which different school actors affect each other and shape their virtual environment. Apps, technological devices, students, parents, and teachers form a web of encounters (Latour, 2005) whose interactions vary in intensity and force and whose forms are always changing and mobile.

Finally, this article presents how WhatsApp parents' groups become a virtual space of normativity. The results could have practical implications for school communities regarding diversity and inclusion, and we argue that it is important to pay attention to and care about what is produced in digital communication spaces between schools and families due to its direct impact on daily family and school life. The connection between the virtual space and real life at school also extends to the existence of students and families in the school context. The exclusion of non-normative ways of being for teachers, students, and parents means eliminating differences in educational spaces. Embracing normativity silences different voices—for example, those of parents who do not participate in WhatsApp groups or those students who are rapidly labeled with stereotypes. As mentioned in another study, one possible way of achieving this could be to accept and embrace these differences, allowing conflict to emerge, remain, and be resolved (Moyano Dávila et al., 2023).

By allowing conflicts to persist, we foster the acceptance of differences, creating the opportunity for diversity to take positions that reveal their essence and the factors affecting them. On the contrary, when differences are stereotyped, named, and labeled, the school community maintains a status quo that reproduces disadvantages and exclusions. Through this perspective, we aim to contribute to the literature on school-family relations, and we are specifically interested in how new approaches to this topic require schools to adapt creatively to the diversity of families, integrating them innovatively (Madrid et al., 2019). This perspective is particularly important considering evidence that teachers often perceive relations with families as individual interactions, thereby rendering institutional actions invisible in their approach to family involvement (Garreta, 2008). Our study contributes to this body of evidence, shedding light on this phenomenon in a distinct school setting—the digital realm. The conclusions drawn from our research also underscore the importance of having institutional and macro-level guidelines for action regarding the relations that emerge in the digital space of education. In addition to this evidence in the results, our data also reveals the tense relationship between parents and schools as well as parents' and teachers' normative expectations regarding the appropriate way to be and participate in the digital sphere.

The normative dynamics of virtual spaces within the school context can help in discerning the advantages and risks inherent to these platforms, both for school coexistence and for the reproduction or transmission of inequalities in the physical world, such as stereotypes or cyberbullying. As evidenced in our research, regulations and affections become intertwined in the virtual space, and the sources of violence or discrimination can adopt a highly impersonal nature. This insight could guide educational policy to develop programs that holistically mediate these spaces, acknowledging that both human and non-human actors wield influence and responsibility for the impacts that virtual interactions can have on students' school experience.

References

- Addi-Raccah, A., & Yemini, M. (2018). What is up? Parental Whatsapp discussion groups in diverse educational settings in Israel. *Multicultural Education Review*, 10(4), 310–326. https://doi.org/10.1080/2005615X.2018.1532224
- Allen, L. (2016). Photos of (no)thing: The becoming of data about sexuality at school. Reconceptualizing Educational Research Methodology, 7(1). https://doi.org/10.7577/rerm.1822
- Aviva, D., & Simon, E. (2021). WhatsApp: Communication between parents and kindergarten teachers in the digital era. *European Scientific Journal*, 17(12). https://doi.org/10.19044/esj.2021.v17n12p1
- Bellei, C. (2013). El estudio de la segregación socioeconómica y académica de la educación Chilena [Study of socioeconomic and academic segregation in Chilean education]. *Estudios Pedagógicos*, 39(1), 325–345. https://doi.org/10.4067/S0718-07052013000100019
- Berlant, L. (1998). Intimacy: A special issue. *Critical Inquiry*, 24(2), 281–288. https://doi.org/ 10.1086/448875
- Bordalba, M. M., & Bochaca, J. G. I. (2019). Digital media for family-school communication? Parents' and teachers' beliefs. *Computers & Education*, 132, 44–62. https://doi.org/10.1016/j.compedu.2019.01.006
- Brown, S. S., Kanyeredzi, A., McGrath, L., Reavey, P., & Tucker, I. G. (2019). Affect theory and the concept of atmosphere. *Distinktion: Journal of Social Theory*, 20(1), 5–24. https://doi.org/10.1080/1600910X.2019.1586740
- Bucholtz, M. (2003). Sociolinguistic nostalgia and the authentication of identity. *Journal of Sociolinguistics*, 7(3), 398–416. https://doi.org/10.1111/1467-9481.00232
- Butler, J. (1990). Performative acts and gender constitution: An essay in phenomenology and feminist theory. In S.-E. Case (Ed.), *Performing feminisms: Feminist critical theory and theatre* (pp. 270–282). Johns Hopkins University Press.
- Butler, J. (1993). Bodies that matter: On the discursive limits of sex. Routledge.
- Butler, J. (2017). Cuerpos aliados y lucha política. Hacia una teoría performativa de la asamblea. Paidós.
- Cárcamo Vásquez, H. (2015). La familia como enemigo: imágenes que los futuros titulados en maestro de primaria deuna universidad pública de Madrid poseen sobre la relación familia-escuela en uncontexto multicultural [The family as an enemy: Images that students of elementary school teacher training of a public university from Madrid have about the family-school relationship in a multicultural context]. Si Somos Americanos. Revista de Estudios Transfronterizos, 15(2), 41–65. https://doi.org/10.4067/S0719-09482015000200003
- Cascales-Martínez, A., Gomariz Vicente, M. N., & Paco Simón, A. (2020). WhatsApp como herramienta educativa en Educación Primaria: Alumnado, docentes y familias [WhatsApp as an educational tool in primary education: Students, teachers and families]. *Pixel-Bit. Revista de Medios y Educación* (58), 71–89. https://doi.org/10.12795/pixelbit.74213
- Cecez-Kecmanovic, D., Galliers, R. D., Henfridsson, O., Newell, S., & Vidgen, R. (2014). The sociomateriality of information systems: Current status, future directions. *MIS Quarterly*, 38(3), 809–830. https://doi.org/10.25300/MISQ/2014/38:3.3
- Cetinkaya, L. (2017a). An educational technology tool that developed in the natural flow of life among students: WhatsApp. *International Journal of Progressive Education*, 13(2), 29–47. ERIC. https://eric.ed.gov/?id=EJ1145590
- Cetinkaya, L. (2017b). The impact of Whatsapp use on success in education process. *The International Review of Research in Open and Distributed Learning*, 18(7), 59–74. https://doi.org/10.19173/irrodl.v18i7.3279

- Comisión Económica para América Latina y el Caribe. (2020). Universalizar el acceso a las tecnologías digitales para enfrentar los efectos del COVID-19 [Universalizing access to digital technologies to address the consequences of COVID-19] (Special Report COVID-19 No. 7). https://repositorio.cepal.org/bitstreams/b03540f1-8133-434d-8b62-2f0738515533/download
- Corvalán, J., & García-Huidobro, J. E. (2016). Educación y mercado. El caso chileno [Education and market. The Chilean case]. In J. Corvalán, A. Carrasco, & J. E. García-Huidobro (Eds.), *Mercado escolar y oportunidad educacional. Libertad, diversidad e igualdad* (pp. 17–56). Ediciones Universidad Católica de Chile.
- Decuypere, M. (2019). STS in/as education: Where do we stand and what is there (still) to gain? Some outlines for a future research agenda. *Discourse: Studies in the Cultural Politics of Education*, 40(1), 136–145. https://doi.org/10.1080/01596306.2018.1549709
- Decuypere, M., Ceulemans, C., & Simons, M. (2014). Schools in the making: Mapping digital spaces of evidence. *Journal of Education Policy*, (29)5, 617–639. https://doi.org/10.1080/02680939.2013.865081
- Decuypere, M., Grimaldi, E., & Landri, P. (2021). Introduction: Critical studies of digital education platforms. *Critical Studies in Education*, 62(1), 1–16. https://doi.org/10.1080/17508487.2020.1866050
- Diehl, A., Abdul-Rahman, A., Bach, B., El-Assady, M., Kraus, M., Laramee, R., Keim, D., & Chen, M. (2022). *Characterizing grounded theory approaches in visualization*. arXiv. https://doi.org/10.48550/arXiv.2203.01777
- Dwi Mayangsari, I., & Aprianti, A. (2017). Understanding communication among parents and teachers in WhatsApp. Case study in Bandung, Indonesia. *Malaysian Journal of Social Sciences and Humanities*, 2(2), 19–24.
- Edwards, R. (2015). Knowledge infrastructures and the inscrutability of openness in education. Learning, Media and Technology, 40(3), 251–264. https://doi.org/10.1080/17439884.2015.1006131
- Elaqua, G. (2012). The impact of school choice and public policy on segregation: Evidence from Chile. *International Journal of Educational Development*, 32(3), 444–453. https://doi.org/10.1016/j.ijedudev.2011.08.003
- Fenwick, T., & Edwards, R. (2010). *Actor-network in education*. Routledge. https://doi.org/10.4324/9780203849088
- Fenwick, T., & Edwards, R. (2016). Exploring the impact of digital technologies on professional responsibilities and education. *European Educational Research Journal*, 15(1), 117–131. https://doi.org/10.1177/1474904115608387
- Frega, R. (2014). Les sources sociales de la normativité [The social sources of normativity]. Vrin.
- Friese, S. (2019). Grounded theory analysis and CAQDAS: A happy pairing or remodeling GT to QDA? In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of current developments in grounded theory* (pp. 282–311). SAGE Publications. https://doi.org/10.4135/9781526485656.n16
- García-Huidobro, J. E., & Bellei, C. (2003). Desigualdad educativa en Chile [Educational inequality in Chile]. In R. Hevia (Ed.), *La educación en Chile, hoy* (pp. 87–114). Universidad Diego Portales.
- Garreta, J. (2008). La participación de las familias en la escuela pública: Las asociaciones de madres y padres del alumnado [Family participation in public schools: Associations of mothers and fathers of students]. CIDE & CEAPA.

- Håkansson Lindqvist, M., & Pettersson, F. (2019). Digitalization and school leadership: On the complexity of leading for digitalization in school. *International Journal of Information and Learning Technology*, 36(3), 218–230. https://doi.org/10.1108/IJILT-11-2018-0126
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, *3*, 275–285. https://doi.org/10.1016/j.susoc.2022.05.004
- Haynes, N. (2016). Social media in Northern Chile: Posting the Extraordinarily Ordinary. UCL Press. https://doi.org/10.2307/j.ctt1g69xv2
- Henwood, F., & Marent, B. (2019). Understanding digital health: Productive tensions at the intersection of sociology of health and science and technology studies. *Sociology of Health & Illness*, 41(S1), 1–15. https://doi.org/10.1111/1467-9566.12898
- Horst, H. A., & Miller, D. (2012). Normativity and materiality: A view from digital anthropology. *Media International Australia*, 145(1), 103–111. https://doi.org/10.1177/1329878x1214500112
- Hultin, L. (2019). On becoming a sociomaterial researcher: Exploring epistemological practices grounded in a relational, performative ontology. *Information and Organization*, 29(2), 91–104. https://doi.org/10.1016/j.infoandorg.2019.04.004
- Hultin, L., & Introna, L. D. (2019). On receiving asylum seekers: Identity working as a process of material-discursive interpellation. *Organization Studies*, 40(9), 1361–1386. https://doi.org/10.1177/0170840618782280
- Ingulfsvann, L. E. S., Moe, V. F., & Engelsrud, G. (2020). The messiness of children's voices: An affect theory perspective. *International Journal of Qualitative Methods*, 19. https://doi.org/10.1177/1609406920958601
- Instituto Federal de Telecomunicaciones. (2020). *Análisis sobre el mercado de Operadores Móviles Virtuales* (OMVs) 2020. https://www.ift.org.mx/sites/default/files/contenidogeneral/estadisticas/omvs2020.pdf
- Jung, J., & Katz, R. (2023). Impacto del COVID-19 en la digitalización de América Latina [Impact of COVID-19 on the digitalization of Latin America] (Project Document LC/TS.2022/177/Rev.1). Comisión Económica para América Latina y el Caribe. https://repositorio.cepal.org/bitstream/handle/11362/48486/4/S2300183_es.pdf
- Koschut, S. (2019). Can the bereaved speak? Emotional governance and the contested meanings of grief after the Berlin terror attack. *Journal of International Political Theory*, 15(2), 148–166. https://doi.org/10.1177/1755088218824349
- Krejsler, J. (2016). Seize the opportunity to think differently! A Deleuzian approach to unleashing becomings in education. *Educational Philosophy and Theory*, 48(14), 1475–1485. https://doi.org/10.1080/00131857.2016.1163247
- Kurtz, G. (2014). Integrating a Facebook group and a course website: The effect on participation and perceptions on learning. *American Journal of Distance Education*, 28(4), 253–263. https://doi.org/10.1080/08923647.2014.957952
- Lareau, A. (2000). Home advantage: Social class and parental intervention in elementary education (2nd ed.). Rowman & Littlefield.
- Lareau, A. (2003). Unequal childhoods: Class, race, and family life (1st ed.). University of California Press.
- Latour, B. (2005). Reassembling the social: An introduction to actor-network-theory (1st ed.). Oxford University Press.
- Leppänen, S. (2009). Playing with and policing language use and textuality in fan fiction. In I. Hotz-Davies, A. Kirchhofer, & S. Leppänen (Eds.), *Internet fictions* (pp. 62–83). Cambridge Scholars Publishing.
- Leppänen, S., Spindler, J., Rørbeck, T., Stæhr, A., & Kytölä, S. (2015). Authenticity, normativity and social media. *Discourse, Context & Media*, 8, 1–5. https://doi.org/10.1016/j.dcm.2015.05.008

- Lindh, M., & Nolin, J. (2016). Information we collect: Surveillance and privacy in the implementation of Google apps for education. *European Educational Research Journal*, 15(6), 644–663. https://doi.org/10.1177/1474904116654917
- Madrid, R., Saracostti, M., Reininger, T., & Hernández, M. T. (2019). Responsabilización, obediencia y resistencia: Perspectivas de docentes y padres sobre la colaboración familia-escuela [Accountability, obedience, and resistance: Teachers and families' perspectives on schoolfamily collaboration]. Revista Electrónica Interuniversitaria de Formación del Profesorado, 22(3), 1–13. https://doi.org/10.6018/reifop.389801
- Mahmoud Saleh, M., Abdelkader, M., & Sadek Hosny, S. (2022). Architectural education challenges and opportunities in a post-pandemic digital age. *Ain Shams Engineering Journal*, 14(8), Article 102027. https://doi.org/10.1016/j.asej.2022.102027
- Martínez-Hernández, I., Cascales-Martínez, A., & Gomariz-Vicente, M. A. (2017). Grupos de Whatsapp en familias de educación infantil y primaria [WhatApps family groups of preschool and primary education]. Revista Latinoamericana De Tecnología Educativa, 16(2), 239–255.
- Ministerio de Desarrollo Social. (2017). Encuesta CASEN 2017 [Survey CASEN 2017]. Observatorio Social.
- Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*, 1, Article 100012. https://doi.org/10.1016/j.ijedro.2020.100012
- Moyano Dávila, C., Rojas-Navarro, S., & Domenech, R. (2023). Silenced conflict: Surveillance and normalization using WhatsApp groups at school. *Family Relations*, 72(2), 547–564. https://doi.org/10.1111/fare.12816
- Paasonen, S., Hillis, K., & Petit, M. (2015). Introduction. Networks of transmission: Intensity, sensation, values. In K. Hillis, S. Paasonen, & M. Petit (Eds.), *Networked affect* (pp. 1–24). MIT Press. https://doi.org/10.7551/mitpress/9715.001.0001
- Pettersson, F. (2021). Understanding digitalization and educational change in school by means of activity theory and the levels of learning concept. *Education and Information Technologies*, 26(1), 187–204. https://doi.org/10.1007/s10639-020-10239-8
- Pink, S., Ardèvol, E., & Lazeni, D. (Eds.). (2016). *Digital materialities: Design and anthropology*. Routledge.
- Sánchez-Garrote, I., & Cortada-Pujol, M. (2015). Recursos digitales en la relación familia y escuela en la etapa 0–3 [Digital resources in the family-school relationship during the 0–3 stage]. *Culture and Education*, 27(1), 221–233. https://doi.org/10.1080/11356405.2015.1006851
- Seigworth, G., & Gregg, M. (2010). An inventory of shimmers. In M. Gregg & G. Seigworth (Eds.), The affect theory reader (pp. 1–26). Duke University Press. https://doi.org/10.1215/9780822393047
- Silverstone, R., Hirsch, E., & Morley, D. (1992). Information and communication technologies and the moral economy of the household. In R. Silverstone & E. Hirsch (Eds.), *Consuming technologies* (pp. 15–31). Routledge. https://doi.org/10.4324/9780203401491_chapter_1
- Sisto, V., & Zelaya, V. M. (2013). La etnografía de dispositivos como herramienta de análisis y el estudio del managerialismo como práctica local. *Universitas Psychologica*, 12(4). https://doi.org/10.11144/javeriana.upsy12-4.edha
- Strauss, A., & Corbin, J. M. (2002). Bases de la investigación cualitativa. Técnicas y procedimientos para desarrollar la teoría fundamentada [Basics of qualitative research. Techniques and procedures for developing groundedtheory] (E. Zimmerman, Trans.; 1st ed.). Editorial Universidad de Antioquia. (Original work published in 1998)

- Thompson, C. (2012). Theorizing education and educational research. *Studies in Philosophy and Education*, 31, 239–250. https://doi.org/10.1007/s11217-012-9290-y
- Valenzuela, J. P., Bellei, C., & de los Ríos, D. (2014). Socioeconomic school segregation in a market-oriented educational system. The case of Chile. *Journal of Education Policy*, 29(2), 217–241. https://doi.org/10.1080/02680939.2013.806995
- van Dijck, J., & Poell, T. (2018). Social media platforms and education. In J. Burgess, A. Marwick, & T. Poell (Eds.), *The SAGE handbook of social media* (pp. 579–591). SAGE. https://doi.org/10.4135/9781473984066.n33
- van Dijck, J., Poell, T., & de Waal, M. (2018). *The platform society: Public values in a connected world.*Oxford University Press. https://doi.org/10.1093/oso/9780190889760.001.0001
- Villalobos, C., & Valenzuela, J. P. (2012). Polarización y cohesión social del sistema escolar chileno [Polarization and social cohesion in the Chilean school system]. Revista de Análisis Económico, 27(2), 145–172. https://doi.org/10.4067/S0718-88702012000200005
- Walker, D., & Myrick, F. (2006). Grounded theory: An exploration of process and procedure. *Qualitative Health Research*, 16(4), 547–559. https://doi.org/10.1177/1049732305285972
- Waltz, S. B. (2004). Giving artifacts a voice? Bringing into account technology in educational analysis. *Educational Theory*, *54*(2), 156–172. https://doi.org/10.1111/j.1741-5446.2004.00012.x
- Wasserman, E., & Zwebner, Y. (2017). Communication between teachers and parents using the WhatsApp application. *International Journal of Learning, Teaching and Educational Research*, 16(12), 1–12. https://doi.org/10.26803/ijlter.16.12.1
- Welhausen, C. (2018). Visualizing science: Using grounded theory to critically evaluate data visualizations. In H. Yu & K. Northcut (Eds.), *Scientific communication: Practices, theories and pedagogies* (pp. 82–106). Routledge Studies in Technical Communication, Rhetoric and Culture. https://doi.org/10.4324/9781315160191-5
- Williamson, B. (2017). Learning in the 'platform society': Disassembling an educational data assemblage. Research in Education, 98(1), 59–82. https://doi.org/10.1177/0034523717723389
- Zancajo, A., Verger, A., & Bolea, P. (2022). Digitalization and beyond: The effects of Covid-19 on post-pandemic educational policy and delivery in Europe. *Policy and Society, 41*(1), 111–128. https://doi.org/10.1093/polsoc/puab016

About the Authors

Camila Moyano Dávila

Universidad Finis Terrae cmoyano@uft.cl

https://orcid.org/0000-0002-6357-3469

Camila Moyano Dávila holds a PhD from the Université de Lausanne, Switzerland. She was a postdoctoral researcher in the Center of Advances Studies in Educational Justice at the Pontificia Universidad Católica de Chile. She is an associate professor at the Family Science School at the Universidad Finis Terrae. Moyano Dávila's research agenda delves into the longitudinal and digital qualitative methodologies, intersectionality in education, and the sociomaterial productions of the communicational digital platform in the educational context. She has published in several indexed journals.

Ismael Tabilo Prieto

Universidad Alberto Hurtado/Universidad Finis Terrae

itabilo@uahurtado.cl

https://orcid.org/0000-0002-7501-5085

Ismael Tabilo Prieto is a sociologist from the Universidad Alberto Hurtado and holds a master's in social sciences from l'École des Hautes Études en Sciences Sociales de Paris (EHESS). He is an academic at the Family Science School, Faculty of Education, Psychology and Family at the Universidad Finis Terrae. He is also a PhD student in sociology at the Faculty of Social Sciences, Universidad Alberto Hurtado. His research topics include biographical approach and life course studies, sociology of education and work, education to work transition, social research methodologies.

María Isabel Vera-Muñoz

Universidad Alberto Hurtado mariaisabel.veram@gmail.com

https://orcid.org/0000-0003-3934-9405

María Isabel obtained her bachelor's degree in sociology from the Universidad Alberto Hurtado in Santiago de Chile. She is currently pursuing her master's degree at the same university. Her research explores education with a focus on the pedagogy of memory and its implications in constructing a democratic society in Chile.

Samanta Alarcón Arcos

Pontificia Universidad Católica de Chile salarcon2@uc.cl

https://orcid.org/0000-0002-2597-1378

Samanta Alarcón Arcos is a sociologist and holds an MA in public policy from the School of Government at Pontificia Universidad Católica de Chile. Her work focuses on childhoods, care, and public policy. She currently works at the Center of Advances Studies in Educational Justice and the Childhood Observatory at Colunga Foundation, a project co-financed by the European Union.

About the Editors

Pablo Rivera-Vargas

University of Barcelona (UB), Spain; Andrés Bello University, Chile pablorivera@ub.edu

https://orcid.org/0000-0002-9564-2596

Associate Professor at the Department of Teaching and Educational Organisation of the University of Barcelona (Spain). PhD in Education and Society (University of Barcelona) and PhD in Sociology (University of Zaragoza). Visiting Doctoral Professor at the Faculty of Education and Social Sciences of the Andrés Bello University (Chile). He is a member of the research group ESBRINA - Subjectivities, visualities and contemporary educational environments (2017 SGR 1248) and of the Institute for Research in Education at the University of Barcelona. His research activity has been related to public policies of digital inclusion in formal and non-formal learning contexts; and to the analysis of the use of platforms.

Lluís Parcerisa

University of Barcelona (UB), Spain lluisparcerisa@ub.edu

https://orcid.org/0000-0002-6755-1988

Assistant Professor in the Department of Teaching and Learning and Educational Organization at the University of Barcelona (Spain). PhD in Sociology from the Autonomous University of Barcelona (UAB). Member of the Institute of Education Research (IRE-UB) and the research groups ESBRINA - Subjectivities, visualities and contemporary educational environments (2017 SGR 1248) and GEPS (Globalisation, Education and Social Policies). His research analyses the role of international organizations in the global governance of education, the political economy of educational reform, the datafication and platformization of education, teacher professionalism and the enactment and effects of school autonomy with accountability reforms in the education sector.

Carla Fardella Cisternas

Andrés Bello University, Chile

carla.fardella@unab.cl

http://orcid.org/0000-0001-8936-2435

Associate Professor at the Faculty of Education and Social Sciences at the Andrés Bello University and Associate Researcher at the Millennium Nucleus Centre on Authority and Asymmetries of Power. Master and PhD in Social Psychology from the Autonomous University of Barcelona. Researcher specialising in the study of the transformation of the state and the implementation of public policies in labour, education and science.

Special Issue

Digital Education Platforms and Schooling: New Challenges and Alternatives Toward Education Equity and Children's Rights

education policy analysis archives

Volume 31 Number 138

December 12, 2023

ISSN 1068-2341



Readers are free to copy, display, distribute, and adapt this article, as long as the work is attributed to the author(s) and **Education Policy Analysis Archives**, the changes are identified, and the same license applies to the

derivative work. More details of this Creative Commons license are available at https://creativecommons.org/licenses/by-sa/4.0/. **EPAA** is published by the Mary Lou Fulton Teachers College at Arizona State University. Articles are indexed in CIRC (Clasificación Integrada de Revistas Científicas, Spain), DIALNET (Spain), Directory of Open Access Journals, EBSCO Education Research Complete, ERIC, Education Full Text (H.W. Wilson), QUALIS A1 (Brazil), SCImago Journal Rank, SCOPUS, SOCOLAR (China).

About the Editorial Team: https://epaa.asu.edu/ojs/index.php/epaa/about/editorialTeam
Please send errata notes to Jeanne M. Powers at jeanne.powers@asu.edu

Join EPAA's Facebook community at https://www.facebook.com/EPAAAAPE and Twitter feed @epaa_aape.