

CYBERBULLYING, CYBER AGGRESSION AND ONLINE RISKS: HOW CAN THE SCHOOL ACT IN THE PROBLEMS OF (CYBER)COEXISTENCE?

CYBERBULLYING, CYBER AGRESSÃO E RISCOS ON-LINE: COMO A ESCOLA PODE ATUAR DIANTE DOS PROBLEMAS DA (CYBER)CONVIVÊNCIA?

CYBERBULLYING, CIBERAGRESIÓN Y RIESGOS ONLINE: ¿CÓMO PUEDE ACTUAR LA ESCUELA ANTE LOS PROBLEMAS DE LA (CIBER)CONVIVENCIA?



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ABSTRACT: The problems of (cyber)coexistence are increasingly present in the lives of our children and adolescents, so that using this technology ethically, consciously and positively has become a demand of education. Many schools face situations related to the improper and disrespectful use of cell phones and social networks, mainly involving students, but also educators and family members. Faced with this challenge, we propose the educational program "A Convivência Ética On-line", to be developed with students, which can inspire and guide educational and preventive actions by schools wishing to work with this issue. In this article we present the problems of coexistence that affect our students, such as cyberbullying, cyber-aggression, virtual risks; and the main characteristics of the program for educators seeking to study and develop actions in search of ethical (cyber)coexistence.

KEYWORDS: Coexistence. Cyberbullying. Cyber aggression. Program. Education.

RESUMO: Os problemas de convivência no meio on-line estão cada vez mais presentes na vida das nossas crianças e adolescentes, de modo que usar essa tecnologia de forma ética, consciente e positiva passou a ser uma demanda da área da educação. Muitas escolas enfrentam situações relacionadas ao uso indevido e desrespeitoso de celulares e redes sociais, envolvendo principalmente alunos, mas também educadores e familiares. Diante desse desafio, propomos o programa educativo "A Convivência Ética On-line", para ser desenvolvido com estudantes, que pode inspirar e nortear ações educativas e preventivas das escolas que desejam trabalhar com essa temática. Neste artigo, apresentamos os problemas de convivência que atingem nossos estudantes, tais como cyberbullying, cyber agressão, riscos virtuais; e as principais características do programa para educadores que buscam estudar e desenvolver ações em busca da (ciber)convivência ética.

PALAVRAS-CHAVE: Convivência. Cyberbullying. Cyber Agressão. Programa. Educação.

RESUMEN: Los problemas de ciberconvivencia están cada vez más presentes en la vida de nuestros niños y adolescentes, por lo que utilizar esta tecnología de forma ética, consciente y positiva se ha convertido en una exigencia en el ámbito educativo. Muchos centros educativos se enfrentan a situaciones relacionadas con el uso inadecuado e irrespetuoso de los teléfonos móviles y las redes sociales, en las que se ven implicados principalmente alumnos, pero también educadores y familiares. Ante este reto, proponemos el programa educativo "Convivencia Ética On-line", a desarrollar con los alumnos, que puede inspirar y orientar las acciones educativas y preventivas de los centros que deseen trabajar con esta problemática. En este artículo presentamos los problemas de convivencia que afectan a nuestros alumnos, como el cyberbullying, las cyberagresiones, los riesgos virtuales; y las principales características del programa para educadores que quieran estudiar y desarrollar acciones en busca de la ciberconvivencia ética.

PALABRAS CLAVE: Convivencia. Cyberbullying. Cyberagresión. Programa. Educación.

Introduction

In 2020, due to the health crisis caused by the COVID-19 pandemic, there was an increase in the proportion of Internet users compared to 2019 in Brazil. The adoption of remote learning activities by many schools, imposed by social distancing measures, has intensified the use of online environments, especially among children and adolescents, who were already frequent users of these spaces.

Although there is a profound inequality in access to the Internet, given that there is a prevalence of users from higher socioeconomic classes, Brazil has reached the milestone of 152 million Internet users, which corresponds to 81% of the country's population aged 10 years or more (CETIC, 2020). For the first time, the survey identified a higher proportion of households with Internet access (83%) than individual users (81%). The study also showed that there was an increase in the presence of a computer (desktop, laptop or tablet) in households (from 39% in 2019 to 45% in 2020), reversing a downward trend that had been taking shape in recent years. The use of the network by children and adolescents between 10 and 17 years of age to carry out school activities has also increased. The number of students who carried out school activities or research on the Internet increased from 72% in 2019 to 89% in 2020, and those who studied online on their own from 50% in 2019 to 69% in 2020.

In addition, there was a significant increase in access to social networks by children and adolescents. According to the TIC Domicílios report (CETIC, 2020), access to the Instagram platform showed the highest growth compared to other social networks. Among the population aged 9 to 17 years, the number of subjects who had an Instagram account increased from 36% in 2016 to 45% in 2018, and in 2020 this number reached 64%. Another social network that also stood out was the TikTok platform: 46% of the population in this age group has a profile on the network. The proportion was significantly higher for those with profiles on Snapchat (18%) and Twitter (14%). Both Instagram and TikTok are platforms whose core functionalities are sharing and accessing videos, indicating great interest in the consumption of this type of content by children and adolescents.

Considering this intensification of the participation of children and adolescents in online environments, especially in social networks, we emphasize some points that deserve attention from educators. There are countless problems and challenges arising from virtual relationships and the possibilities that this medium offers, such as: cyberbullying and other forms of online violence, access to age-inappropriate content, contact with harmful behavior, risks and vulnerability that this space provides; as well as the influence of digital media in the constitution

of the identity of children and young people. Even though anyone is exposed to these problems, this article aims to focus on the impacts of the use of the Internet and social networks on the lives of children and adolescents and the role of the school in this scenario, since this population is undergoing both cognitive and affective development and moral and, therefore, needs limits, monitoring and training to understand and face the various problems and challenges online, as well as to base their actions on the internet on ethical values.

Next, we will discuss the characteristics of the virtual space and the main risks and challenges currently faced by children and adolescents.

Characteristics of cyberspace and online coexistence

The way online platforms are organized and the very functioning of the internet allows access to unlimited content, connection with anonymous people, accelerated interactions, large-scale propagation of content, indicating a dual function of this tool: potency for positive and negative actions, depending on how we use it. Therefore, it is important to know the characteristics of the online environment that impact the way we live in this environment, which can aggravate situations of violence and increase some risks.

The first feature is that there is the possibility of anonymity in online spaces, that is, those who commit crimes or acts of violence on the internet may not show themselves, which makes it difficult to identify the perpetrator and, consequently, their accountability. Another important aspect is that online content remains, that is, information tends to be recorded for posterity, making reversibility of some situations difficult. Furthermore, we do not know who may have access to the content and information we share in this medium: these are the so-called “invisible audiences” (BOYD, 2010), those users who observe, collect, share or store other people's personal data.

In this sense, even if we use private digital means to share information, secrets, passwords, confidential reports or any other content, from the moment they enter the online space, they are no longer under the control of the user, as there are no guarantees that no one else will have access. This means that we are facing an environment in which, despite having tools that ensure data and information privacy, the internet is, above all, a public space, where content can be quickly exposed to a very large number of users.

It is essentially these characteristics that potentiate what we call online coexistence problems, such as violence and virtual risks. Let's move on to these reflections.

Cyber attacks

The term cyber aggression is generally used to designate aggression in a broad way, when there is the intention to cause harm to a person, using cell phones, the internet and social networks. There are, however, aspects of this form of violence. We highlight those that most affect children and adolescents, such as: cyberbullying, sexting, shaming and virtual lynching.

Cyberbullying is marked by a characteristic that differentiates it from other types of online violence, since it corresponds to violent and intentional actions between peers, in the virtual environment (DEMPSEY *et al.*, 2011), that is, between high school students, for example. We have frequently observed some harmful behavior involving students on the networks, such as humiliation; disclosing secrets, pictures or private messages from colleagues; create fake profiles to share materials and information that harm students; offend a colleague on the internet or intentionally exclude them from an online group or create a group to defame a colleague, among others. These are all actions marked by disrespect, which directly impact the relationships established by students in the school environment and can accentuate the suffering of those who are targeted, since the author of the aggression, although anonymous, is a known person, a student at same class or the same school.

Online peer violence situations can encompass other subtypes of cyber aggression. One of them is shaming (massive public shame, in free translation), that is, when social networks are used as a means to shame, embarrass, ridicule or publicly expose individuals (VRIES, 2015). An example that often involves students is the creation of memes or WhatsApp stickers, with the aim of humiliating or ridiculing a colleague. That is, there is the manipulation of a person's image (which may or may not be accompanied by text), which spreads quickly among users on networks, reaching high popularity.

There are also specific cases in which a subject exposes himself or is exposed on the internet and ends up being judged by a multitude of social network users. We have seen a movement of mass behavior in this environment, in which people gather to give their opinion and even condemn an alleged transgressor until they obtain their “virtual and social murder”. This movement is called virtual lynching, a phenomenon historically known to humanity, but which is enhanced by the diffusion power of the internet. Exposure cases that result in lynchings affect adolescents throughout Brazil. In 2020, a movement on the social network Twitter called *Exposed* began, in which Internet users began to expose reports involving public figures or ordinary people, denouncing alleged crimes and other types of transgressions. Several schools faced situations in which their students were exposed on the network, accused of committing

sexual harassment; some cases had such a serious impact on those involved that they began to suffer threats both online and offline.

One of the main problems facing social media right now is hate speech. We understand the phenomenon as “an externalized discriminatory manifestation, which encompasses acts of discriminating and instigating discrimination against a certain group of people who have a common characteristic” (SILVA *et al.*, 2011, p. 450). Examples are: manifestations of homophobia, racial, social, religious and gender discrimination, which manifest themselves in social networks in an explicit or veiled way, often disguised as humor in memes, stickers, jokes, etc.

Another type of cyber aggression that has been gaining prominence worldwide due to its increasing incidence, especially among young people, is sexting, situations in which sexual material is exchanged through technological devices (VAN *et al.*, 2015). The mass sharing of this intimate content (popularly known in Brazil by the expression “leaking of nudes”) results in a high level of suffering for those who are exposed.

Sexting was already a problem before the pandemic: data released by UNICEF (2019) pointed to the presence of the phenomenon in the lives of adolescents. Among the 14,000 Brazilian women aged 13 to 18 who participated in this study, 35% have already sent someone intimate photos or videos; more than 70% have received intimate images from someone without asking; 80% have already received requests from someone to send nude images; less than 20% said they had ever asked someone for a nude picture. About 55% indicated the WhatsApp application as the main online environment used to share images; a private messaging platform, but which, due to the possibility of sharing the internet, allows these images to be quickly exposed publicly. Among the girls interviewed, 10% have already shared intimate images and report feelings of guilt, loneliness, sadness; in addition to not finding support either in the family or in the school to face the situation. Most girls are also unaware of any protection network for victims of leaking intimate images without consent: only 6% were aware of help channels. When questioned about the school's performance, 70% of the girls said that the subject had never been discussed in the classroom, indicating that there is no space for this topic in the educational routine.

Sharing intimate images involving minors can lead to another problem. We know that the internet is now another space used by cyber criminals who groom minors, that is, subjects who intentionally take advantage of the vulnerability and easy access to children and adolescents in the online environment. According to Cappellari (2005, p. 68), before the

Internet this problem already existed, but it had a limited scope. Currently, due to digital tools and characteristics of the online medium, criminals are able to produce and share pornographic material quickly and widely; as well as approach minors in a much more veiled way, pretending to be a child or teenager. In this way, they manage to get closer and gain confidence until they seduce the victim to get what they want.

Both the sexual act itself and the production and dissemination of child pornography material are crimes provided for by Brazilian law in article 217-A of the Penal Code (BRASIL, 2009), and in articles 240 and 241 of the Statute of the Child and Adolescent (BRASIL, 1990). In addition to the legal issue, there is the ethical dimension involved in situations of dissemination of intimate content, since the privacy of a minor is exposed on the internet, a genuinely public and powerful space for large-scale content sharing and irreversibility of actions.

Virtual Risks

This ease of reposting an image or other content on the networks also exposes our young people to risks. We are talking about “Fake News” or “online rumors”, which are contents intentionally created to promote disinformation. According to Valente (2019), false content finds fertile ground on social networks, because there are homogeneous groups that confirm Internet users’ worldviews, forming true “bubbles”. There is also the emotional factor related to the sharing of misinformation, because it is about content that provokes intense feelings in those who receive it. This is the great strategy behind the spread of rumors or misleading content: influencing our emotions.

When we seek to verify the ability of children and adolescents to critically analyze the contents that are exposed on the networks, we identify studies that point to a certain difficulty. According to a study released by Stanford University (WINEBURG *et al.*, 2016) with 7,804 high school and higher education students, about 82% of high school students could not distinguish between an ad labeled “sponsored content” and real news on a website. Many students judged the credibility of news stories based on how much information they contained or whether a photo was attached to the news story rather than the source.

Another study carried out by Plan International (2021) identified that almost nine out of ten girls were negatively affected by Fake News about the COVID-19 pandemic. 26,000 girls aged 15 to 24 from 26 countries participated in this study. Of the 1,000 people interviewed in Brazil, four out of ten are not sure how to identify fake news on social media; of these, 6% do

not know how to differentiate fake news from real news, indicating a gap in the education of these adolescents. Furthermore, 35% reported that false information is affecting their mental health, leaving them stressed, worried and anxious – in Brazil, this number reached 46%.

Mental health: this is the theme that has been gaining prominence when we reflect on the use of the internet by children and adolescents. Surveys that assess everything from dependence, compulsion, phobias to influence on building self-image and personality formation, have alerted family members and educators regarding the time spent using cell phones and social networks and the types of content that their sons and daughters, male and female students have access.

According to Wen (2018), the biggest problem related to the use of smartphones is the loss of the notion of limits, that is, there is a marked difficulty in disconnecting from the “virtual world” and focusing on the “real world”. Due to the mobility of cell phones, the device is present in the most diverse situations of our daily lives, allowing access to social networks, games and other applications at any time and in any place. Selman and Weinstein (2015) indicate that this constant presence of the cell phone can cause experiences of emotional stress, called digital suffocation, due to the large amount of messages and notifications that we receive uninterruptedly on virtual platforms. In addition to suffocation, there is the development of excessive fears, such as, for example, nomophobia, which is the fear of being without a cell phone or without an internet connection. The symptoms of nomophobia can vary: they range from obsessively checking messages on the cell phone to the inability to turn it off, constantly charging the cell phone battery, showing irritation when being in places without connection and being unable to go to the bathroom without taking the phone with you.

A survey carried out by YouGov points out that 79% of young people between 18 and 24 years old say that they rarely or never leave home without their cell phone; and at home, when changing rooms, 49% take their phone with them. Young people claim that they feel nervous and “lost” when they are disconnected from their online identities (WALDERSE, 2019). But at the same time, they believe that they would be better able to concentrate more without the cell phone, which indicates that it is too distracting. The average number of daily hours that Brazilians spend on the internet is the highest in the world, 4 hours and 48 minutes, confirming the clear dependence or difficulty of limiting the time we remain connected.

And if the time we spend online is a warning sign, what we do on the internet in that time is too. According to the Digital In (2021) report, 98.8% of internet users aged between 16 and 64 consume video content on the internet. Still according to the data released, the YouTube

video platform is the most accessed digital media compared to other media. The appropriation of YouTube as a space for the production and sharing of content gave rise to a specific category used to name these producers: they are called youtubers. According to Andrade e Castro (2021), youtuber is “the Internet user who creates and publishes his video on the network using the YouTube website as support. When the youtuber is a child, it is called a young *youtuber* (p. 3, our translation); In 2016, this category grew by 564% compared to the previous year.

The videos produced by youtubers are the main content accessed by children and adolescents. And with that, they end up becoming reference figures for children and youth. Recent research (MIRANDA, 2019; MONTEIRO, 2018) conclude that they have a strong power of persuasion in children, indicating that they are seen by them as admirable subjects, thus playing an important role in building self-image and personality formation of this audience.

In addition, children who are still in formation tend to reproduce some actions of their youtubers. In 2018, we carried out an investigation with 175 elementary school students, aged between 9 and 11 years old, from a private school in the city of São Paulo, with the objective of verifying the origin of some of the children's behaviors, such as picking up food from the floor and eat or jump from a high place; our hypothesis was that many of these “challenges” would have been launched by youtubers. In our results, we found that, on average, 40% of students had already imitated challenges proposed by youtubers. At the time, we analyzed some videos produced by them and found risky or disrespectful challenges, ranging from slapping people that leave marks on someone's body, to keeping their heads underwater while holding their breath. We concluded, from this investigation, that children have difficulty measuring the risks they are subject to in the face of this type of behavior, since they are actions performed by adults who are references for them.

Many not only imitate, but also identify with physical or emotional aspects, as well as with values that are important to these subjects. This is one of the great challenges present in the online universe in relation to the formation of identity and self-image of children and young people: the emotional and behavioral impact that are influenced by identification models. It is no coincidence that these figures are considered digital influencers, since they exercise persuasive power, guide trends, behaviors and opinions. And they can even monetize their pages or online channels, using their social networks as showcases to display advertising campaigns, in which social standards of beauty are reproduced, which can directly impact the construction of identity and body perception of their users (BERENGUER; FERNÁNDEZ, 2019).

It is common to observe in the virtual profile of digital influencers exposure of photos edited by filters offered by the platforms, exalting the body, face, hair. Young people follow this pattern of behavior, manipulating their photos online, due to an excessive concern with their appearance. Rajanala, Maymone and Vashi (2018) reveal worrying data: people have been looking for plastic surgeons to help them look more like their own versions under the effects of filters. This is a problem called “body dysmorphia”, in which people lose touch with reality, creating the expectation that they must look perfect all the time.

This idealization of the perfect image drives the excess of posts and, consequently, the search for popularity on the networks. The popular is the one that has a high number of “followers” who accompany and interact with the profile, attributing “likes” to its photos, sharing its contents or viewing its videos. The tools available on the main social networks and the operation of algorithms in this space enhance the reach of this digital content, often reaching a wide audience. And it is in this context of exposing life in a public space, in which appearance is fundamental, that many children and adolescents live together.

There are implications that need to be considered when we reflect on the use of social networks in this context of overexposure. One of them is the evident difficulty of many users in establishing boundaries between what is public and what is private on the internet. We can often observe published content in which there is routine exposure, personal objects, intimacies (such as secrets, personal experiences, nude images), personal data, among other situations with these same characteristics. The risks of personal exposure on social media are high. Often, users disclose private information on the internet without scaling the impact that this can cause. Security is often not used as a criterion when posting or accessing online content and, consequently, the image or personal data can be used for different purposes.

Moreover, from the perspective of the development of children and adolescents, La Taille (1998) elucidates that this constant violation of privacy can impact on the construction of the “frontier of intimacy”; that is, this excessive exposure of private content on the internet can promote an imbalance in the construction of this limit, implying a greater difficulty in keeping to oneself feelings, or events, that the subject does not want to share or that the other does not have the right to know. He explains that children and adolescents need a safe shelter to grow up undisturbed, however, it seems that the right to be alone is constantly disrespected in the age of the internet and social networks. Currently, there is almost no possibility for a teenager to be alone. Not physically, as he may be alone in his room, but virtually he is interacting non-stop with peers or even unknown identities. This is another topic that we need

to reflect on with young people, communication with unknown people, who come together in forums with common interests, often allowing easy access to extremist groups or communities on social networks such as WhatsApp, Discord, Instagram, TikTok, Telegram etc.

Given this scenario, it is clear that we need to incorporate these themes into school education. Online coexistence directly impacts face-to-face coexistence and vice versa, since they are not distinct spaces. If our students are experiencing or even practicing some of the situations described above, it is up to the educational institution to reflect on this context and train their students to learn to use digital tools. This knowledge does not only refer to the technical use, but mainly to the ethical, safe and healthy use of social media.

The educational program "On-line Ethical Coexistence"

We start from the premise that it is necessary to institutionalize the issues that involve the virtual universe in the school environment. It is fundamental to start by investing in the continuing education of education professionals, with a view to improving the quality of relationships and studying and reflecting on themes that involve (cyber) coexistence. In addition, a curriculum change is needed. Such themes need to be incorporated into the disciplines taught to students and/or into a systematized space in which socio-emotional skills and moral values, fundamental for improving relationships on the internet and beyond, are objects of knowledge and reflection.

It is in this sense that we defend the importance of the school preparing for this current demand and planning educational and preventive actions, in order to train students for the ethical use of the virtual space. Promoting ethical coexistence online implies facing the violence, prejudice, intimidation, disrespect, manipulation, abuse and lies that are propagated (VINHA *et al.*, 2017). Intentionality is needed in this work, aiming at the implementation of procedures that have as their objective the formation of more humane, fair, generous people; improving the quality of online relationships, building rules for the good use of technology; reflection and awareness about the complexity of coexistence problems manifested in the network and their consequences.

For this reason, we present the assumptions of the educational program "On-line Ethical Coexistence", which was implemented and evaluated (BOZZA, 2021) to be developed with elementary and high school students (adapting the themes to each age group), which values the good coexistence in virtual spaces, but not restricted to it, involving a process in which relationships, behaviors, customs are reflected and criticized by students and, thus, new ways

of living in these environments are thought and discussed. By “educational program” we understand a series of planned and articulated actions to be developed with students, educators and family members, aiming at prevention, intervention to online coexistence problems and the promotion of essential ethical values for (cyber) coexistence. However, in this article we focus on working with students only.

The theoretical perspective for the development of this program is Piaget's constructivist, since there are principles that guide this work: the moral formation of students (PIAGET, 1932, 1994); the promotion of a cooperative sociomoral environment in the classroom (DEVRIES; ZAN, 1998); relational pedagogy as a pedagogical practice (BECKER, 1993, 2002); the use of active methods in classes (PIAGET *et al.*, 1977); and work with moral practices (PUIG, 2004).

In addition, the program integrates BNCC curricular components, mainly covering general skills 4 and 5, which are directly related to the use of technology, seeking to develop skills and abilities related to the critical and responsible use of digital media. According to the guidelines, it is the role of the school to train students to develop skills and “criteria for curation and ethical and aesthetic appreciation, considering the profusion of fake news, post-truths, cyberbullying and hate speech in most varied instances of the internet and other media” (BRASIL, 2018, p. 488, our translation).

There are socio-emotional skills and socio-moral values that we consider fundamental for the development of a program in this area. Train subjects who are capable of: facing difficult situations assertively (assertiveness), reflecting on themselves and obtaining information about themselves (self-observation); knowing and valuing oneself positively (self-knowledge); conduct one's own actions and make choices based on ethical values (self-regulation); valuing oneself positively in articulation with ethical values (self-respect); acquire information and compare different points of view on reality, with the aim of understanding it and committing to improve (critical understanding); exchange opinions and points of view of other interlocutors, with the intention of reaching an understanding (dialogic skill); think about moral problems, in a fair and solidary way (moral judgment); being moved by someone else's state of suffering, in virtual spaces, where there is physical and emotional distancing between subjects (cyber empathy); anticipate and analyze the consequences of a given action through moral criteria (consequential thinking); perceive and respond to risks, considering the dimensions full of values (perception of risks); respect all people, considering the uniqueness of each one (respect).

Based on the conclusions resulting from our literature review (BOZZA, 2021), we observed that several themes and training aspects need to be considered in educational programs in this area, which go beyond cyberbullying and other cyber aggressions. Dimensions that involve the scope of the virtual image, online relationships, harmful behavior on the network, as well as the risks we are subject to in the online space, in addition to work aimed at positive use, are fundamental in the structure of a curricular plan that contemplates living together online. In addition, we defend that any program in this area must be flexible, since changes in the virtual space are fast, the problems are diverse and the virtual relationships multiple, that is, to work on (cyber)coexistence at school it is necessary to take into account the complexity of the online universe.

Curriculum for the promotion of ethical coexistence online and prevention of virtual violence

Next, we organize a curricular matrix based on studies presented in previous works (BOZZA, 2016; 2021), in which we aim to briefly describe each of the curricular components in the educational program “On-line Ethical Coexistence”, as well as its objectives, the possible work themes that integrate each one and the values and competences worked on. The curricular matrix is represented below (Table 1, Table 2, Table 3, Table 4, Table 5).

Table 1 – Curriculum component: virtual image

Description	It is the image that the subject builds and/or displays of himself in the virtual environment through his actions and the contents he exposes on the network, as well as possible consequences of these actions and exposed contents.
Goals	Reflect on the image itself that is exposed in the virtual environment - the “showcase”, or the image that is transmitted to others on social networks - from the contents that are published, shared or “liked”, as well as possible consequences of these exposures. Analyze and reflect on the characteristics of public profiles that students follow (digital influencers) or the online groups they are part of, as well as becoming aware of their influence on their own behavior and actions.
Themes and contents	Privacy: boundary between public and private space, exposure of intimacy. Self-image and revealed image: narcissism present in selfies, popularity on the internet, need and pressure to have likes on posts, photo editing to modify what they consider “physical defects”, virtual image x real image, showcase, revealing images of oneself (what is value for the subject). Admiration: Digital influencers or “famous” profiles that interfere in the construction of their followers' self-image, behaviors and consumption; pressure to join online groups.

Socio-emotional skills and socio-moral values	Self-observation Self-knowledge Self-regulation Consequential Thinking Risk perception Respect Self-respect
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Source: Elaboration of the author

Table 2 – Curriculum component: online relationships

Description	It deals with the relationship modalities present in the online universe and the influence of online actions on interpersonal relationships established face-to-face.
Goals	Reflect on the forms of relationships present in the online universe, as well as the influence of online actions on face-to-face interpersonal relationships.
Themes and contents	Relationships of affection: online friendship and love relationships, manifestations of jealousy and control of the partner or friends using virtual tools, use and functioning of relationship applications. Trust: sharing passwords, online betrayal, keeping “ contacts ”, sending and receiving <i>nudes</i> . Communication: indirect manifested in social networks, distortion or difficulty in interpreting the intention in an online message, leaving it in a vacuum.
Socio-emotional skills and socio-moral values	Assertiveness Self-regulation Virtual Empathy Dialogic skills Consequential Thinking Respect for the other

Source: Elaboration of the author

Table 3 – Curriculum component: online behaviors

Description	It deals specifically with user conduct on the Internet, including harmful conduct, as well as the implications arising from certain types of online behavior.
Goals	Know and reflect on harmful or disrespectful conduct by users on the internet, as well as the ethical and legal implications arising from certain types of online behavior.
Themes and contents	Online aggression: cyberbullying, exposure of vexatious or vulnerable content on the network, virtual lynchings, <i>sexting</i> and revenge pornography, online sexual harassment, <i>haters</i> and <i>trolls</i> , hate speech, sexual harassment. Prejudice: racism, homophobia, xenophobia, sexism, fatphobia, difference between humor and prejudice. Judgments: freedom of expression, denunciation (using the networks to report alleged crimes or transgressions), false accusation, destruction of someone's image through exposure on the internet.

	Responsibility for online actions: authorization to post photo/video of others, content authorship, copyright, legislation related to the online universe, anonymity or false identity.
Socio-emotional skills and socio-moral values	Assertiveness self-observation Self-regulation Self-respect Critical understanding Virtual empathy Dialogic skills Moral judgment Consequential thinking Risk perception Respect for the other

Source: Elaboration of the author

Table 4 – Curriculum component: virtual risks

Description	It deals with the dangers that subjects are exposed to on the network, as well as the safety strategies that can be used to prevent them.
Goals	Knowing and reflecting on the risks and dangers that subjects are exposed to on the network, as well as the safety strategies that can be used to identify, prevent or face them.
Themes and contents	Scams: <i>Phishing</i> and <i>catfishing</i> (scams in virtual affective relationships), fake profiles, conversation with unknown people, online chains, data theft. Crimes: racism, hate speech, pedophilia, pornography, illegal practices, Deep web, Dark web, extremist groups (Red Pill, <i>incel</i> , Sigma Man) Manipulation of data and information: disinformation, online rumors, Deep fake, algorithms, manipulation of data and content during elections (Brazil and USA), espionage. Physical and mental health: excessive use of cell phones, online addictions, damage to the quality of face-to-face relationships, cell phones as a distracting element (in class, in traffic, etc.), challenge games Digital security: password protection, private profile, block users, report offensive pages or profiles, identify and report suspected pedophiles and other crimes.
Socio-emotional skills and socio-moral values	Self-observation Self-regulation Critical understanding Moral judgment Consequential thinking Risk perception

Source: Elaboration of the author

Table 5 – Curriculum component: positive use

Description	It is about the recognition of technology as a powerful tool for positive actions.
Goals	Learn about collective movements and online activism in favor of social and environmental improvements or in defense of human rights. Recognize the positive use of technology to help. Act on the internet in a conscious and respectful manner. Learn assertive communication techniques and empathetic listening. Use technology tools positively.
Themes and contents	Help: online support networks Activism and Social Movements: Human Rights Defense and Social Improvements. Hack activism Positive tool: use of photography as a teaching resource to promote positive coexistence Good interactions: conscious and respectful use of the internet and social networks
Socio-emotional skills and socio-moral values	Self-observation Self-respect Virtual empathy Dialogic skills Moral judgment Respect for the other

Source: Elaboration of the author

We consider all these themes presented in the curriculum matrix above to be important for work in this area, but we emphasize that this matrix should not be static. It needs to keep up with the transformations that occur in the online space, integrating new themes and removing those that do not make sense for the context in which it operates. That said, let's move on to the presentation of the work methodology of the contents that integrate the dimensions.

Class methodology

We indicate the procedure called Cycles of Collective Construction of Knowledge (NUNES, 2017). The cycles contemplate a set of work stages that allow the advance in the knowledge of a certain theme, through reflections and coordination of perspectives, with the purpose of establishing collective positions that represent a commitment of the group of students. In this sense, the procedure meets the theoretical assumptions presented, since it encompasses active methodologies and integrates moral practices, as well as favoring cooperation.

The cycles follow five steps. The first stage corresponds to raising initial ideas about a topic: you can narrate what you know, ask questions to satisfy your curiosity, present opinions

or ideas for solving a problem. The objective of this step is to engage the participant. Different pedagogical resources can be used for this purpose: case analysis, hypothetical conflicts, dilemmas, surveys, reports, images, videos, among others.

The next step consists of getting to know different perspectives, comparing the ideas that the subject initially presented with those of other participants, through reading records or collective discussions. The third stage aims to know the ideas of specialists on the subject in question. This may involve surveys, interviews, dialogue classes, etc. Then, the participant returns to his own ideas, based on what he learned from the specialized knowledge and from the exchange of perspectives with colleagues. The final step consists of coordinating perspectives, combining ideas or arriving at collective positions that represent the vision of the group or class. It may involve collective agreements or the production of materials prepared by students (campaigns, posts on the school's social networks, etc.).

The duration of each cycle depends on the number of proposed activities and on the engagement and participation of students. Cycles can also encompass content from different components, since they are interrelated; and they must be flexible, as they may involve actions that were not planned, depending on real situations that occur and are related to certain work contents.

Considerations about the program

We defend the social function of the school as one of the institutions responsible for the formation of more ethical, respectful, fair human beings, thus justifying the relevance and the need for the school to include the theme of ethical coexistence, on the internet and outside it, as something central to their teaching plans. In addition, we consider it fundamental for educational institutions to prepare and educate this generation of children and adolescents for digital citizenship, since, today, social relations are also established in the virtual space. In this sense, we infer that schools should develop a program in this area to work on the theme of ethical coexistence through curricular and systemic work, necessary for the formation of respectful, fair, tolerant, generous subjects, who base their actions on these and on other moral values, both in virtual and physical environments.

We know that the structure of the program, in the way it was presented, may at first seem unfeasible for many schools, due to the number of themes that integrate the curricular matrix and the way in which they are worked. Therefore, what we suggest is that educational institutions design their own program, taking into account their own reality, but necessarily

opening an institutional and curricular space for such themes to be objects of knowledge. Furthermore, we reiterate the importance that work in this area needs to be carried out in a reflective, continuous and systematized way.

Therefore, the present program can inspire other educational programs and this work can be developed in different ways, with different arrangements. For example, the themes presented in this study can be broken down and integrated into the curriculum from the 6th year of Elementary School II to the 3rd year of High School. Or even, in institutions that already have in their curriculum a space for the rational appropriation of moral values, these themes can be interspersed with other moral practices that are already part of the curriculum. The important thing is to develop a consistent and continuous work in this area.

With regard to age, the topics that make up the curriculum are aimed at teenagers, but we know that even younger students already interact in virtual environments and that many of the online problems and challenges we address here also affect children. For this reason, we strongly recommend starting a preventive work in the early years of Elementary School, adapting the themes to the age group and organizing a flexible curriculum to address the contents. Yes, because the structure of the curriculum should not be rigid: any program in this area must address issues related to the moment in which we live.

Regarding the way we develop activities, it is important to emphasize that we defend the use of active methodologies, which is why we use cycles of collective construction of knowledge. Proposals should encourage dialogue, debate, exchange of perspectives among students; the leading educator should not give ready-made answers, but present research data so that the discussion is not only based on common sense, promoting cognitive imbalances in students. In this sense, it is not enough to “apply activities”, it is necessary to allow and encourage students to express themselves, questioning and helping them to reflect and seek answers and, in this way, advance in knowledge.

Another important aspect that we consider in our program is the intentionality of a work with sociomoral and emotional values. Our proposal was developed based on the assumptions of moral psychology, within a research group that studies the subject, which is GEPPEM (Group of Studies and Research in Moral Education - Unesp/Unicamp), and therefore sociomoral development appears as something intentional, which differentiates our program from others (BOZZA, 2016). In this sense, we defend the planning and execution of activities aimed at the moral formation of students and we consider it essential to act to improve the quality of relationships on the internet and beyond.

The educator who develops the work in this theoretical perspective also needs to guarantee a cooperative sociomoral environment in the classroom (DEVRIES; ZAN, 1998), in which relationships of mutual respect are predominant and in a way that sociomoral values, such as justice, generosity, respect, and socio-emotional skills, such as empathy and assertiveness, are experienced. Otherwise, we run the risk, for example, of working on important topics such as respect and (cyber)empathy with students and these values not being experienced in practice.

Conclusion

The studies presented in this article prove how urgent it is for schools to prepare themselves to work on the highlighted themes: it is evident that coexistence in online environments is increasingly present in the lives of our students, and that it impacts on relationships within the school and beyond, in society as a whole. We have already found in our previous research (BOZZA, 2016) that systematic and continuous work with virtual coexistence is a gap in Brazilian schools. Therefore, we reiterate the need for public policies in this area, which offer support to educational institutions and invest in the training of teachers to train themselves and feel able and confident to work on these themes.

Finally, we reiterate the fundamental role of education in transforming our society into a more democratic, fair, respectful, critical and, above all, human society, remembering the words of Freire (1987, p.87): “education does not transform the world, education change people, people change the world”.

REFERENCES

ANDRADE, M.; CASTRO, G. A criança conectada: os youtubers mirins e a promoção de modos de ser criança nas lógicas do consumo. *Intexto*, Porto Alegre, n. 52. 2021.

BECKER, F. *Epistemologia do professor: o cotidiano da escola*. Petrópolis, RJ: Vozes, 1993-2002.

BERENGUER, M. S.; FERNÁNDEZ, M. L. *Internet girls: autorrepresentación femenina y redes sociales*. Máster em Producció Artística, Universitat Politècnica de València, Facultat de Belles Arts, 2019.

BRASIL. **Base Nacional Comum Curricular (BNCC)**. Educação é a Base. Brasília, DF MEC/CONSED/UNDIME, 2018.

BRASIL. **Lei n 12.015, de 7 de agosto de 2009**. Altera o título VI da parte especial do Decreto-Lei n 2.848, de 7 de dezembro de 1940 - Código penal, e o art. 1º da lei n 8.072, de 25 de julho de 1990, que dispõe sobre os crimes hediondos, nos termos do inciso XLIII do art. 5º da constituição federal e revoga a lei n 2.252, de 1º de julho de 1954, que trata de corrupção de menores. Brasília, DF: MJ, AGU, 2009. Available at: [https://www.planalto.gov.br/ccivil_03/_ato2007-2010/2009/lei/112015.htm#:~:text=Estupro%20de%20vulner%C3%A1vel-,Art.,a%2015%20\(quinze\)%20anos](https://www.planalto.gov.br/ccivil_03/_ato2007-2010/2009/lei/112015.htm#:~:text=Estupro%20de%20vulner%C3%A1vel-,Art.,a%2015%20(quinze)%20anos.). Access: 15 Dec. 2019.

BRASIL. **Lei n 8.069, de 13 de julho de 1990**. Brasília, DF: Estatuto da Criança e Adolescente (ECA), 1990. Available at: <https://www.gov.br/mdh/pt-br/navegue-por-temas/crianca-e-adolescente/publicacoes/o-estatuto-da-crianca-e-do-adolescente>. Access: 10 Dec. 2019.

BOYD, D. M. Social Network Sites as Networked Publics: Affordances, Dynamics, and Implications. *In: Networked Self: Identity, Community, and Culture on Social Network Sites*, 2010, p. 39-58.

BOZZA, T. C. L. **O uso da tecnologia nos tempos atuais**: análise de programas de intervenção escolar na prevenção e redução da agressão virtual. Orientador: Telma Pileggi Vinha. 2016. Dissertação (Mestrado em Educação) – Universidade Estadual de Campinas, Campinas, São Paulo, 2016.

BOZZA, T. C. L. **Adolescentes e interações on-line**: uma proposta de intervenção educativa visando à convivência ética virtual. Orientador: Telma Pileggi Vinha. 2021. Tese (Doutorado em Educação) – Universidade Estadual de Campinas, Campinas, SP, 2021. Available at: https://bdtd.ibict.br/vufind/Record/UNICAMP-30_7f19fbfd9c23a10e644d1d71b6926b64. Access: 10 Jan. 2023.

CAPPELLARI, M. S. V. A pedofilia na pós-modernidade: um problema que ultrapassa a cibercultura. **Em Questão**, v. 11, n. 1, p. 67-82, 2005.

CENTRO REGIONAL DE ESTUDOS PARA O DESENVOLVIMENTO DA SOCIEDADE DA INFORMAÇÃO (CETIC). **TIC Domicílios 2020**. Edição COVID-19. Metodologia Adaptada. 2021.

DEMPSEY, A. G. *et al.* Has cyber technology produced a new group of peer aggressors? **Cyberpsychology, behavior, and social networking**, v. 14, n. 5, 2011.

DEVRIES, R.; ZAN, B. **A ética na educação infantil**. Porto Alegre: Artes Médicas, 1998.

DIGITAL IN (Brasil). **State of digital**. 2021. Available at: <https://datareportal.com/reports/digital-2021-brazil>. Access: 10 Oct. 2021.

FREIRE, P. **Pedagogia do Oprimido**. Rio de Janeiro: Paz e Terra, 1987.

FUNDO DAS NAÇÕES UNIDAS PARA A INFÂNCIA (UNICEF). **Adolescentes e o risco de vazamento de imagens íntimas na internet**. Projeto Caretas. 2019. Available at:

https://www.unicef.org/brazil/sites/unicef.org.brazil/files/2019-02/br_caretas_pesquisa.pdf.
Access: 10 Dec. 2019.

LA TAILLE, Y. **Limites**: três dimensões educacionais. São Paulo: Ática, 1998.

MIRANDA, A. B. **A influência exercida por youtubers no comportamento de consumo infantil**. 2019. Trabalho de Conclusão do Curso (Bacharelado em Administração) – Universidade Federal do Rio Grande do Sul, 2019.

MONTEIRO, M. C. S. Entretenimento e incentivo ao consumismo no canal do YouTuber Luccas Neto. *In*: CONGRESSO BRASILEIRO DE CIÊNCIAS DA COMUNICAÇÃO, 41., 2018, Joinville, SC. **Anais** [...]. Joinville, SC: Sociedade Brasileira de Estudos Interdisciplinares da Comunicação, 2018. Access: 17 Nov. 2018.

NUNES, C. A. A. **Ciclos de avanço no conhecimento** - guia prático. Grupo de Estudos e Pesquisas em Educação Moral (GEPEM). Faculdade de Educação da Unicamp, 2017.

PIAGET, J. **O juízo moral na criança**. São Paulo: Summus, 1932/1994.

PIAGET, J. *et al.* **A tomada de consciência**. São Paulo: Melhoramentos, 1977.

PLAN. **Por ser menina**. Relatório Final. São Paulo, 2021.

PUIG, J. M. **Práticas morais**. São Paulo: Moderna, 2004.

RAJANALA, S.; MAYMONE, M. B. C.; VASHI, N. A. Selfies – living in the era of filtered photographs. **JAMA Facial Plastic Surgery**, v. 20, n. 6, 2018. Available at: <https://www.liebertpub.com/abs/doi/10.1001/jamafacial.2018.0486>. Access: 12 Jan. 2020.

SELMAN, R., L.; WEINSTEIN, E., C. Is cyberbullying all that goes ‘over the line’ when kids are online? **The Conversation**, 2015.

SILVA, R. L. *et al.* Discursos de ódio em redes sociais: jurisprudência brasileira. Direito e Desigualdades no século XXI, **Rev. direito GV**, v. 7 n. 2, 2011.
<https://doi.org/10.1590/S1808-24322011000200004>

VALENTE, J. C. L. Regulando desinformação e fake news: um panorama internacional das respostas ao problema. **Comunicação Pública**, v. 14, n. 27, 2019.

VAN, J. *et al.* The association between adolescent sexting, psychosocial difficulties, and risk behavior. **J. Sch. Nurs.**, v. 31, p. 54-69, 2015.

VINHA, T. P. *et al.* **Da escola para a vida em sociedade**: o valor da convivência democrática. Americana, SP: Adonis, 2017.

VRIES, A. D. The use of social media for shaming strangers: young people’s views. *In*: HAWAII INTERNATIONAL CONFERENCE ON SYSTEM SCIENCES, 48., 2015, Kauai, HI. **Proceedings** [...] Kauai, HI, 2015. Available at: <https://ieeexplore.ieee.org/document/7070057/authors#authors>. Access: 15 Jan. 2020.

WINEBURG, S. *et al.* Evaluating Information: The Cornerstone of Civic Online Reasoning. **Stanford Digital Repository**, 2011. Available at: <http://purl.stanford.edu/fv751yt5934>. Access: 15 Jan. 2020.

WEN, C. L. Educação para saúde mental no cotidiano do mundo digital. **Revista Construção Psicopedagógica**, v. 27, n. 28, p. 5-18, 2018.

WALDERSEE, V. Could you live without your smartphone? **YouGov**, 8 mar. 2019. Available at: <https://yougov.co.uk/topics/technology/articles-reports/2019/03/08/could-you-live-without-your-smartphone>. Access: 20 Aug. 2019.

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