The Challenges and Risks of Internet Use by Children: How to Empower Minors

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Abstract
The aim of this paper is to reflect critically, using the latest data taken from reports, research, publications and other sources, on how to empower children in their daily Internet browsing given current online risks. These risks faced by children are a real concern for teachers, families and researchers and this article will focus on analyzing those online risks which produce the most emotional distress for children, namely grooming and cyberbullying. The use of the Internet, and the ease with which information or situations can be seen on it, has broken the social taboos associated with the risks that children are exposed to. Data such as 44% of children in Spain having felt sexually harassed on the Internet at any time in 2002, or 20% of U.S. children suffering cyberbullying according to a survey of 4,400 students in 2010, indicates the severity of the problem. Therefore, as stated in UNESCO’s MIL Curriculum for Teachers (Media and Information Literacy), it is necessary to work on the responsible use of the Internet by children and to empower them to reduce the possibility of them becoming future victims or bullies. At the end of the article we will develop a list of recommendations to be considered in the design of educational activities focused on the critical training of the minor’s use of the Internet.

Keywords/Palabras clave
Children, Internet, cyberbullying, grooming, critical thinking, media literacy, information literacy, empowerment.

Retos y riesgos del uso de Internet por parte de los menores. ¿Cómo empoderarlos?

Resumen
El objetivo de este artículo es reflexionar críticamente, a partir de una selección de últimos informes, investigaciones, publicaciones y otras fuentes, sobre las orientaciones de cómo «empoderar» a los y las menores frente a los riesgos on-line actuales. Entre los diferentes riesgos quisiéramos destacar los que más violencia emocional producen; las situaciones de «grooming» o ciberacoso, cada vez más visibles y urgentes de prevenir conjuntamente. El uso de Internet y la facilidad de visibilizar cualquier información o situación ha permitido romper el tabú social respecto a estos riesgos. Datos como el que el 44% de menores en España se había sentido acosado sexualmente en Internet en alguna ocasión en el 2002, o el que el 20% de niños en Estados Unidos sufría ciberacoso, según una encuesta realizada a 4.400 estudiantes en el 2010, nos indican la gravedad del problema. Por ello, tal y como se recoge en el Currículum MIL de la UNESCO para profesores (Media and Information Literacy), es necesario trabajar el uso responsable de Internet por parte de los y las menores, para empoderarlos evitando que puedan convertirse en futuras víctimas o acosadores. A partir de los riesgos reales que pueden padecer, así como las respuestas científicas y sociales que se han dado al respecto, elaboraremos una serie de recomendaciones a tener en cuenta en el diseño de actividades educativas enfocadas a la capacitación crítica de los y las menores en cuanto su uso de Internet.

Keywords/Palabras clave
Menores, Internet, ciberacoso, grooming, alfabetización informacional, pensamiento crítico, alfabetización mediática, empoderamiento.
1. Introduction

UNESCO’s MIL Curriculum for Teachers gives special importance to reflecting on the opportunities, risks and challenges the Internet presents, and currently offers, with respect to minors. With this in mind, the document places particular emphasis on the importance, both for children themselves and for teachers, of understanding and reflecting on the concepts and characteristics that define the Internet and especially Web 2.0 applications and everything associated with it. Similarly, the curriculum emphasizes the importance of educational processes as key elements in the apprehension and assimilation by minors of the risks and opportunities offered by cyberspace; hence, special emphasis on the need (perhaps, urgency) for teachers to gain as much knowledge as possible on the wide and varied terminology and trends of minors, as well as their user habits, while on the Internet. Teachers also need education in the area of legislation and rights. They need to find out about the main agreements, declarations, white papers and other documents of national and international importance on the subject. According to Wilson, Grizzle, Tuazon, Akyempong and Cheung (2011: 128), ‘Children and young people are often well acquainted with its applications and can benefit from its use tremendously, but they are also vulnerable. Risks and threats accompany this positive development, often in parallel to those that already exist in the offline world. [...] The best way to help them stay out of harm’s way is to empower and educate them on how to avoid or manage risks related to Internet use’.

These objectives are set out in detail in two work units (Unit 1: Young people in the virtual world, Unit 2: Challenges and Risks in the virtual world) which propose an exhaustive work of conceptual reflection on Web 2.0, the main usage habits of minors on the Internet, children’s rights and other international documents related to issues involving cyberspace, among other topics. The learning objectives, according to the curriculum developed by UNESCO, focus on guaranteeing that the teacher is able to understand general patterns of behavior as well as the interests of children when they browse online. Furthermore, it attaches particular importance to the teacher’s ability to develop independently educational methods and tools to generate basic resources for children encouraging the responsible use of the Internet as well as raise awareness of the opportunities, challenges and risks posed by the on-line scenario.

With respect to the objectives of these two units of the curriculum, and to the proposals set out in this research paper, we must emphasize that the data portrays a scenario replete with interrogatives. At the same time, it demands the design, systemization and creation of mechanisms (methods, materials, discussion areas) that contribute to improving the use that minors make of the Internet as well as raise awareness of the opportunities offered by cyberspace.

In the Spanish context, according to figures from the National Institute of Statistics (Spain), 70% of minors between the ages of 0 and 14 use a computer and have access to the Internet at home, 52% of which invest a minimum of five hours a week surfing the Internet¹. More recent studies by Bringué, Sábada and Tolsa (2011) establish that 97% of the homes where children between the ages of 10-18 own a computer, 82% are connected to the Internet. To that information must be added that prior to turning ten, 71% of children claim to have had «experiences» in cyberspace. The same report establishes that most minors spend more than an hour a day on the Internet while 38% claim that during the weekend the time they spend on the Internet exceeds two hours a day.

The place where minors spend time on the Internet is equally important insofar as the «where» and «with whom» is established as these factors condition the on-line content consulted. In this respect, the same study indicates that 89% of Spanish adolescents surf the web at home. And of these, one in every three teenagers has the computer in their bedroom, which is a crucially important factor as it limits the supervision that adults (parents, tutors and guardians) may exercise over their children. 21% have the computer in the living room. According to the data in the report, only 15% of homes with children aged between 10 and 18 have a laptop. The report adds that 29.4% consult the Internet at a friend’s house; 28.5% at school; 24.4% at a family member’s house and 10.2% at a cybercafé. Finally, it is interesting to note that 86.5% of Spanish adoles-

© COMUNICAR 1134-3478; e-ISSN: 1988-3293; Preprint Version DOI: 10.3916/C39-2012-02-06
cents that use the Internet are alone in front of the computer. Shared use of a computer with friends is 42.9%; with siblings 26.2%; with mothers 17.7% and with fathers 15.8%. The results of the report establish that close to 45% of minors recognize that their parents ask them about their activity while on the Internet. For their part, more than half of students between the ages of 10 and 18 use a computer and the Internet as a support for their schoolwork. The presence in social networks is especially interesting due to their reach and rapid growth. In the Spanish context, according to the findings of Bringué, Sábada and Tolsa (2011), 70% of users between the ages of 10 and 18 are present in a social network, being Tuenti (three out of five consider it their favorite) and Facebook (one in every five has an account) the more popular choices. The study also introduces relative data with respect to the sensitivity of minors in terms of the risks associated with the Internet. It seems relevant that one in every five users between the ages of 10 and 18 believes that they can upload any video image on the Internet. To this information can be added equally disturbing data that shows that 10% of minors surveyed have admitted to using the Internet to do harm to a peer.

According to the study carried out by Bringué and Sábada (2008) during which 25,000 children between the ages of 6 and 18 were surveyed from Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela, 46% of the children affirmed that their parents only asked them what they did while surfing the Internet. On the other hand, 36% indicated that their parents «do nothing» while 27% replied that their parents make it a point to «take a look» at them while they surf the Web on a regular basis. The study establishes that only 9% of those children surveyed replied that their parents «do something together» with them while 5% said that their parents look at their emails or check the sites the children have visited. Furthermore, within the Latin-American context, the study reveals that 45% of minors interviewed between the ages of 6 and 9 prefer the Internet over television and that, among the most valued activities, are sending emails, virtual «meetings» and conversations in real time. The possibility of «having fun alone or with others» at a distance is also highly valued by the children surveyed. In the North American context, a study on the use of the Internet by adolescents establishes that leisure (movies, TV series, music etc.), the search of information and receiving instant messages constitute the most popular activities on the Web. The following table, taken from the «Pew Questionnaire on the Internet and American life for parents and teens, 2006»², allows us to verify this type of activity in cyberspace.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visiting websites for downloading movies, TV series and music</td>
<td>81%</td>
</tr>
<tr>
<td>Obtaining information on news and current affairs</td>
<td>77%</td>
</tr>
<tr>
<td>Sending or receiving instant messages</td>
<td>68%</td>
</tr>
<tr>
<td>Watching open video platforms like Youtube</td>
<td>57%</td>
</tr>
<tr>
<td>Using social network sites like Myspace or Facebook</td>
<td>55%</td>
</tr>
<tr>
<td>Accessing information on universities or subjects of interest</td>
<td>55%</td>
</tr>
<tr>
<td>On-line games</td>
<td>49%</td>
</tr>
<tr>
<td>On-line shopping (clothing, music, books)</td>
<td>38%</td>
</tr>
<tr>
<td>Accessing information on issues related to health, diet, physical fitness</td>
<td>28%</td>
</tr>
<tr>
<td>Downloading podcasts</td>
<td>19%</td>
</tr>
<tr>
<td>Visiting chat rooms</td>
<td>18%</td>
</tr>
</tbody>
</table>

Table 1: Adolescent activities on the Internet (2006).

The above table shows the growing tendency of minors to dedicate their leisure time to surfing the Internet. It thus establishes an increase in the time dedicated to cyberspace in detriment to other leisure activities which previously had been analogue in nature. Therefore, by virtue of the percentages indicated in the table above, it is possible to identify different work areas within the context of the use of the Internet by younger audiences.

In all cases, the figure and role of the teacher is crucial in order for minors to attain a critical, analytical and qualitative use of the Internet. This set of goals interconnects with the main objectives established in the curriculum of UNESCO with respect to minors and the use of the Internet. Finally, taking into consideration these aims or trains of thought, we can list the following points to consider:

- Conceptual reflection. There is a need to identify and establish the scope of the main concepts introduced by the Internet, as well as their implications, connections and defining characteristics.
This is ultimately a necessary challenge in order to have teachers capable of dealing with the Web 2.0 scenario, and the Internet in general, in a solvent and autonomous way. Similarly, teachers must know the content of the main agreements, treaties, declarations and other documents, international or national, and have contributed to the legislation and / or regulation of questions concerning the presence of children in cyberspace and the potential uses they make of it. Teachers must be able to grasp the possibilities of the Internet in their daily work, applying it in the early stages of investigation, preparation of teaching materials, creation of e-activities etc.

- Establishing mechanisms of mediation in the consulting process. The characteristics of the Internet, tied to the uses that children make of it, call for the creation and application of mechanisms that guarantee, through mediation, the use that children make of the Internet. This raises the need to reflect on the most appropriate ways in order to achieve complete digital media literacy among these users.

- Track design for autonomous learning. The changing nature of the Internet calls for the design of strategies and spaces (especially virtual) that reinforces the autonomous training of teachers in the aspects associated with the Internet and childhood.

- Application of transversal and ongoing issues. The conceiving and design of the curriculum should include a transversal focus that strengthens the presence of elements directed at all times at stimulating critical reflection on the relation between the Internet and children. This continuity will mean that the treatment of internet content with respect to children will not be relegated to a meaningless section of this study.

2. Method and Materials

Keeping in mind everything said thus far, this paper strives to carry out a systematic study and analysis of the most relevant documentation on children and the Internet. We proceed to compile and offer a selection of approaches and proposals that researchers, experts and theorists, especially in the Spanish and international contexts, have presented on this topic, to contrast their views with the focus and proposals included in the curriculum of UNESCO.

The results presented below are the fruits of a literature analysis undertaken on international scientific publications of impact, as well as reports on research related to the topic and on expert social organizations. The choice of material is based mainly on contributions related to the risks of ‘grooming’ and ‘cyberbullying’ and on recommendations on how to empower children and lower the risks they face on the Internet. These results are contrasted with the orientation provided in the MIL Curriculum in order to draw pertinent conclusions and prepare future lines of work in this field.

3. Results

Among the eight risks identified in the MIL Curriculum of UNESCO, two that we consider to be of the greatest social concern present today have been selected, namely grooming and cyberbullying. Both risks, indeed threats, generate a negative impact on the emotional development of children.

Two of the three major themes to work on in the Unit of «Challenges and Risks in the virtual world» are 1) the work of understanding the challenges and risks of Internet use by children and 2) their empowerment through the responsible use of the Internet. It is therefore necessary to train teachers in how to empower children to face these challenges and risks.

The aim of the literature analysis is to offer appropriate recommendations to teachers to facilitate their educational tasks in this subject. The following results are reported: the definition of cyberbullying and ‘grooming’, data on its prevalence in Spain, Europe and the United States and, finally, a selection of scientific and social recommendations are made with respect to the empowerment of children due to the challenges and risks that daily on-line contact brings.

3.1. Understanding current risks and challenges: Prevalence of grooming and cyberbullying

Bullying is defined by harassment between peers. When it is measured by on-line interaction it is known as cyberbullying. According to one of the latest publications (Law, Shapka, Hymel, Olson & Waterhouse, 2012), both offline and on-line harassment are similar, although differences do exist between the process and the consequences. The authors state that in offline harassment situations the roles are more marked: one party perpetrates the aggression while the other suffers its consequences. Some go to the defense of the victim while others support the one who harasses.

On the other hand, as Law’s research (2012) indicates, these roles are not as defined in on-line interactions. The possibility of reacting to harassing messages received via Facebook, or other social websites, by posting similar negative comments on the profile of the harasser, allows cyberbullying to become interpersonal violence turning it into reciprocal cyber-aggression.
In recent research from the US, from a sample consisting of 4,400 students aged between 11 and 18, 20% acknowledged having been the victim of cyberbullying while 10% admitted to having been both bully and bullied (Hinduja & Patchin, 2010).

In Spain, according to selected data (Garmendia, Garitaonandia, Martinez & Casado, 2011), 16% of minors between the ages of 9 and 16, claimed to have suffered from bullying both offline and on-line. One of the disturbing facts is the ignorance of parents; 67% of guardians of children who had received nasty or hurtful messages claimed that their children had not received such messages, thereby ignoring the reality experienced by their sons and daughters. In Europe, 19% of children aged between 9 and 16 said they had received such comments in the previous 12 months (Lobe, Livingstone, Ólafsson, & Vodeb, 2011).

This risk, harassment between peers in the way of on-line interactions, can have a very negative impact on the emotional development of children; depression, low self-esteem, and in extreme cases suicide, as evidenced by the Jokin case in 2003 or, more recently, the case of Phoebe Prince in 2010.

Most worrying in recent years is detecting, in accordance with the chosen data, the increase in the number of cases of cyberbullying. This in turn leads us to consider the urgent need to train teachers and educators on this subject. Thomas Ryan (2011) claims that teachers who are participating in his research calling for the inclusion of cyberbullying as a subject in higher education. It also appears that the majority of participating teachers identifies these situations and tries to find solutions in some cases, but recognize that they do not know how to manage it properly.

The second group of risks chosen is grooming. This concept refers to the interactions carried out prior to sexual abuse on the part of the predator to gain the trust of the minor and obtain a date for a sexual encounter which generally ends in abuse (Kierkegaard, 2008; McAlinden, 2006). The grooming is prevalent both off and on-line. One of the myths to overcome is that on-line grooming is only perpetrated by strangers while, in fact, in most cases, it is perpetrated by people known to the victims, as in the case of sexual abuse (Bolen, 2003).

In recent years, the increase in these interactions in cyberspace has led the European Parliament to debate the importance of including on-line grooming as a crime against children. Thus, in the recent European Directive (2011), on-line grooming was added as a criminal offense, among other punitive measures, to protect minors from sexual abuse, while promoting increased investment in prevention programs as well.

In the United States, according to data published in 2006, the percentage of soliciting sex on-line (including grooming) dropped from 19% in the year 2000 to 13% in 2005. However, aggressively soliciting sex on-line from minors rose from 4% in 2000 to 7% in 2005 (Finkelhor, Wolak & Mitchell, 2006). In Europe 15% of children between the ages of 11 and 16 say they have seen or received sexual messages online in the last 12 months (Livingstone, Haddon, Görzig & Ólafsson, 2011).

In Spain there are two reports that show a substantial difference in the percentage of children who have felt sexually harassed on the Web. On the one hand, according to one report, 9% of Spanish children between 11 and 16 said they had received sexual messages (Garmendia & al., 2011). On the other hand, in the other report, it noted that 44% of Spanish children had felt sexually harassed on the Internet at any given time, within which 11% admitted to having been victim on several occasions (ACPI / PROTEGELES, 2002). This disparity of percentages indicates the need to design specific research on this type of risk to better the understanding of its prevalence in Spain.

The publication of data on cyberbullying and online grooming clearly demonstrates how both risks are present in the lives of children. What unites all researchers is the need to understand this reality on a deeper level and the best way to address it. According to the authors, we must avoid alarmist speeches and promote positive Internet use among minors. The authors coincide in valuing the use of the media for the benefits it brings to children in terms of their learning and development. But they point out the importance of promoting discerning attitudes and prevention when dealing with the media, not only limited to children but also among the community as a whole, with particular reference to educators and families (Anastasiades & Vitalaki, 2011; Livingstone & Helsper, 2010; Oliver, Soler & Flecha, 2009; Pérez Tornero & Varis, 2010; UNICEF Innovation Research Centre, 2011; Wolak, Finkelhor, Mitchell, & Ybarra, 2008).

3.2. Recommendations for empowering children in their responsible use of the Internet

Empowering children against the risks associated with the Internet should be included as one of the basic features of any educational curriculum. This inclusion can be treated as specific content, as is the case in the MIL Curriculum, but also as (an educational overlap) (interdisciplinary), ever-present on a day to day basis in any school and in all subjects taught. Due to the increased
use of ICTs by children, the educational community cannot only limit itself to defining the empowerment of children to a few scheduled sessions. On the contrary, global educational strategies must be devised to strengthen competencies related to media and information literacy (Pérez Tornero & Varis, 2010).

Educators, on the other hand, as previously shown, demand orientation in order to address this problem. For this very reason the following recommendations are defined as basic by both authors and social organizations:

- Focusing prevention content on interaction and not just on the publication of data, messages or images. Often, content designed to prevent violent situations such as cyberbullying or grooming concentrates on alerting of the danger which, it is assumed, is conveyed exclusively by data or images on the Internet without exploring the ‘why’ of such information. Researchers warn that using language of prohibition and more so with minors and adolescents, is counterproductive. Therefore, the most important factor is to focus on content of prevention within on-line interactions that minors may be exposed to (Valls, Puigvert & Duque, 2008; Wolak & al., 2008).

- Designing community-based prevention models that include the entire community, especially family members. As previously shown, both teachers and families need training in these risks, but also to participate together in the designing of the community models in the prevention of violence (Oliver & al., 2009). Only by jointly coordinating efforts will goals be achieved more effectively. Minors also express their voice with respect to on-line risks at conferences such as the one organized by the CEOP, IYAC (International Youth Advisory Congress), held on July 17, 2008 in London. At the conference critical training in ML within the entire education community was called for; teachers and family, the media as a whole and business in general were requested to get involved in promoting a cyberspace free of violence. When adults acquire more crucial training in dealing with on-line interactions that generate violence, the more children will be inclined to be included and thus empowered in the face of these risks. As a consequence, there will be a more positive impact in the children’s own empowerment.

- Promoting the protagonism of children in the application of prevention programs that address the risks of online interactions. Most documents analyzed indicate how prevention should also focus on the peer group. By empowering children as agents of creative use of the Internet and overcoming on-line risks, training other children or even their own community, one attains more effective programs (UNICEF Innocenti Research Centre, 2011; Wolak & al., 2008).

Some examples of international scope that already include direct participation are: the program ThinkUKNow³ from the UK and the international organization I-Safe⁴. Both are examples that may be useful for teachers. One can browse content designed for families, teachers and children of different ages and establish them as models.

- Designing strategies that include educational and informational media literacy from a humanistic and critical perspective. Media literacy has no meaning unless it is linked to a greater purpose which is the creation of a society based on a culture of peace and ultimately, as stated by Pérez Tornero (2010: 122), contributes to building a world that is a good place to live, «to create a peaceful and interdependent world that constitutes a good place to live».

It is also necessary that children empower themselves in order to be active players in this change, from the building of a society based on a culture of peace, and in the promotion of their creativity to achieve this goal. Therefore, educational strategies must also include this perspective to advance a more humane and less destructive society. Children should be autonomously critical with their use of the media and self-critical with the impact of their use.

Once the main priorities on how to promote the empowerment of children are discussed, the next question is: What steps should a school undertake to achieve this empowerment?

First and foremost, teachers must be trained to confront this critical situation. Their training must be based on the most significant international recommendations with the greatest repercussions within the scientific community, as well as on the social impact it obtains.

For instance, having round table discussions (Aubert & al., 2008) on leading articles or books on the subject. Teachers must have access to cutting edge scientific literature in order to exercise their position as critical, intellectual educators (Giroux, 1989). Some topics in their training would be: how to work on media literacy by reflecting on how children themselves use the media; what the real risks are and what they are not; which messages are key to prevention and which are a waste of time. At the same time, teachers need to be encouraged to share their training with families. It is essential to create spaces for debate and interaction between teachers and families so that both groups are better prepared than they are today.

Secondly, design specific and transversal strategies implementing media literacy learning, especially with the idea of further developing critical thinking. To do this it would be necessary to in-
volve the students themselves in the design of educational activities to promote a critical understanding of abusive and violent interactions (either cyberbullying or grooming). Also necessary is the promoting of joint projects based on their creativity and collective intelligence (Levy, 1997) to help overcome such interactions. Teachers have the responsibility to ensure that the design and implementation of the activity are both carried out successfully. Continuous assessment of the activities and initiatives is essential to evaluate their results and impact. Therefore, it is necessary to establish mechanisms for this ongoing evaluation.

Thirdly, the risks discussed are those that affect the emotional development of children, therefore the emotional dimension must not be ignored. Ultimately, both grooming and cyberbullying are interactions that directly affect the self-esteem of victims and their deepest feelings. They also foment a sense of violence within those who carry out and support these acts. Therefore, when we talk about empowering children we also must take into account the interactions between them. Are they repeating social patterns without being aware of it? As teachers, have we given them enough media literacy to recreate their identities regardless of social influences? Finally, up to what point have we offered children the opportunities to learn how to counter on-line violence? A key challenge for media literacy is precisely to include the link between its acquisition as the basis for recreation of the self and values of active citizenship, namely nonviolence and solidarity.

4. Conclusions
The implementation of the MIL Curriculum in schools favours the empowerment of children in their use of the media. The acquisition of skills related to media literacy and informational training is essential for their education in a constantly changing world. The inclusion of a specific unit of content related to on-line risks in the MIL Curriculum is considered positive since it is one of the demands of teacher training.

In the unit analyzed the most common risks are identified. In this article we have extended the description of two of them, cyberbullying and grooming. The prevalence of both risks in Europe, Spain and the United States is similar. The data clearly demonstrates the need to work on preventing these risks, including it in the daily education strategy as well as dealing with it in specific sessions.

It is essential that the application of the MIL Curriculum accompany the recommendations defined; the critical reflection of on-line interactions, the inclusion of the whole community, the leadership of children in educational activities and, finally, the aim of constructing a society based on a culture of peace with the children being the builders of a better and more just world to live in.

Footnotes
1 Questionnaire on information technologies in the home. First semester of 2006 (National Institute of Statistics).
3 www.thinkuknow.co.uk (12-1-2012).
4 www.isafe.org/Channels/?Ch=ai (12-1-2012).

References


