Children and adolescents in a digital world

The digital divide exacerbates inequalities in access to information and knowledge, making it more difficult to socialize with peers and limiting awareness of and the ability to use basic tools for life in society. Reducing this gap sets in motion virtuous synergies of social and cultural inclusion for children and adolescents, facilitating skills development and generating lifelong opportunities. Although the younger generations are connected digital natives, inequalities persist among socioeconomic groups, though these have been tempered by connectivity programmes in public schools in the region.

The main article of this edition of Challenges uses current information to examine the progress made and the gaps that remain in this area. Providing children and adolescents with access is merely a first step. They then need to be protected from the risks associated with information and communications technologies (ICTs), which must be harnessed for purposes of meaningful learning, promoting uses that are more in line with the educational curriculum. Lastly, the article posits that connectivity policies must be linked to the fulfilment of children’s rights in the framework of the Convention on the Rights of the Child.

As is customary, this issue also contains information on meetings and conferences held in the region during the year and recent publications in this field. Mention is also made of good practices from Peru in reducing gender gaps and a joint initiative between mobile operators and the United Nations Children’s Fund (UNICEF) to protect children in the digital age. Viewpoints includes expert opinion on the potential of ICTs as tools that can facilitate the exercise of the rights of children and adolescents, but also lead to violations of these rights.
The semester in the region

>> First International Workshop on Early Childhood and Social Protection
In collaboration with UNICEF, ECLAC and the Central American Social Integration Secretariat (SISCA), a workshop was organized in San Salvador in March 2014 to stress the importance of comprehensive early childhood care policies in the development strategies of the region’s countries.

>> Sixth World Congress on the Rights of Children and Adolescents
The Congress, to be held in Puebla, Mexico, from 12 to 14 November 2014, will debate the right to a life free of violence, access to the Internet and social networks, child migration and the right to a family life.
http://vicongresomundialdeinfancia.org/

>> First Latin American Biennial on Childhood and Youth
An opportunity for exchange and reflection for researchers, policymakers and representatives of social organizations, to be held in Manizales, Colombia, from 17 to 21 November 2014. Children and young people are invited to participate in the discussions.
http://bienal-clacso-redinju-umz.cinde.org.co/

Key documents

>> ECLAC and the European Commission, 2014
Sunkel, Guillermo, Daniela Trucco and Andrés Espejo (2014), La integración de las tecnologías digitales en las escuelas de América Latina y el Caribe: una mirada multidimensional, Libros de la CEPAL series, No. 124 (LC/G.2607-P), Santiago.
http://cepal/publicaciones/xml/3/52953/LaIntegraciondelas Tecnologiasdigitales.pdf

>> COL, 2011

>> UNICEF Innocenti Research Centre, 2012
Child Safety Online: Global challenges and strategies, Florence, March.

>> ECLAC and UNICEF, 2014
Rico, María Nieves and Daniela Trucco (2014), Adolescentes: derecho a la educación y al bienestar futuro, Políticas sociales series, No. 190 (LC/L.3791), Santiago, March.

What do adolescents think of social networks?

"Facebook is a place where I can keep in touch with friends and post my photos or theirs. It’s my virtual profile."
Rocío, age 14

"If Facebook disappeared it wouldn’t be the end of the world; surely another similar social network would come along."
Paz, age 17

"If Facebook didn’t exist it would mean the end of cyberbullying, harassment and all that."
Santiago, age 13

"The good thing is that I can communicate with people; but the bad thing is that it can lead to misunderstandings because in a written message you can’t tell how the other person is saying things."
Salvador, age 14

"The bad part is that some people add you without knowing you, just to bully or harass you."
Rocío, age 12

"Facebook is part of my life; logging on is part of my everyday routine."
Victoria, age 15

"I use it to share photos with my friends, but the bad part is that everything I post can be seen by strangers."
Facundo, age 17

"I think that Facebook brings us together and helps us communicate, but trying to hide certain information is difficult."
Simón, age 16

Source: Facebook and Twitter: young people give their opinion on social networks [online], http://www.quehacemosma.com/2014/03/facebook-y-twitter-chicos-y-chicas-opinan-sobre-las-redes-sociales/
1. Information and communications technologies (ICTs): a new context

When the Internet was launched in the 1990s nobody could imagine the impact it would have on people’s everyday lives or the extent to which it would become embedded into such disparate areas as information, education, communication, health, service provision, production systems and eGovernment. It is expected that by the end of 2014 there will be 3 billion users, with one in three people in developing countries online, and that 2.3 billion users worldwide will have mobile Internet data plans (ITU, 2014a). In Latin America there has been a sustained increase in the number of users in the last 10 years (see figure 1). In some countries more people have access to the Internet than do not, such as Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia and Uruguay. This is also the case in the English-speaking Caribbean countries (see figure 2).

Children are part of this phenomenon. The younger generations —exposed to ICTs since childhood— are used to living in a media-saturated environment and therefore have a more advanced and dynamic grasp of technology than their parents. These so-called “digital natives” are children who share
a common global culture that makes them more intuitive ICT users (Berkman Center for Internet and Society, n/d). Although the structural inequality of Latin America and the Caribbean means that not all children and adolescents are digital natives, ICTs are certainly present in their everyday lives, as shown by the level of access to computers, the Internet and mobile telephones in their homes (see table 1). This has been complemented by the sterling efforts of the public schools system to promote access to technology in education, where an average of more than 90% of students now have access to a computer at school (Sunkel, Trucco and Espejo, 2014).

2. Diversification of platforms for Internet access and use

Children access the Internet in different places depending on the context and policies in each country. In Colombia, for example, school is the main point of access, while in Costa Rica (56%), Ecuador (64%) El Salvador (81%), Mexico (60%) and Peru (67%) it is the home (see table 2). A study by García de Diego (2012) —which included 1,956 adolescents, teachers and representatives of Internet cafes in various countries— found that Internet cafes are an important access point in Brazil (35%),
Chile (29%), Guatemala (47%), Mexico (62%), Peru (68%) and Uruguay (23%). But while cybercafes offer children a way of connecting, they are not risk-free. For example, in Peru 50% of the adolescents surveyed were potentially at risk: more than 30% had seen a user viewing pornography and 10% had been contacted by an unknown adult. There is also evidence of an incipient culture of self-care: in Guatemala 17% of the adolescents said that they did not visit Internet cafes because they did not have their parents’ permission to do so and, on average, 10% in Chile, Guatemala, Mexico and Uruguay stated the perceived risks as their reason for not going.

The ability to access the Internet from telephones, tablets and other devices has given rise to a generation for whom being connected is part of daily life. For example, in Chile 80% of adolescents between the ages of 13 and 18 have mobile phones, as do one in three children aged 6 to 12 years in El Salvador (see table 2). Guatemala is the only Latin American country where mobile telephones are the most common means accessing the Internet, as explained by the low cost of data plans (García de Diego, 2012). This diversity of technological platforms creates a highly technology- and media-saturated environment, where gaps in access and use are being closed and children are important actors. Being online, whatever the device used, opens the door to a vast array of activities, from searching for educational content to pursuing personal interests by sharing photographs, contacting and communicating with peers, downloading music or movies or playing video games online. These activities entail different levels of interactivity, from passive reception to highly active participation, either alone or in groups.

### Table 1

<table>
<thead>
<tr>
<th>Country and year</th>
<th>Age group</th>
<th>Access to a mobile telephone</th>
<th>Access to a computer</th>
<th>Internet access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia (Plurinational State of), 2011</td>
<td>6-12 years</td>
<td>82</td>
<td>18</td>
<td>5</td>
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<tr>
<td></td>
<td>13-18 years</td>
<td>87</td>
<td>24</td>
<td>7</td>
</tr>
<tr>
<td>Brazil, 2012</td>
<td>6-12 years</td>
<td>91</td>
<td>47</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>13-18 years</td>
<td>92</td>
<td>51</td>
<td>44</td>
</tr>
<tr>
<td>Chile, 2011</td>
<td>6-12 years</td>
<td>98</td>
<td>61</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>13-18 years</td>
<td>99</td>
<td>66</td>
<td>51</td>
</tr>
<tr>
<td>Colombia, 2012</td>
<td>6-12 years</td>
<td>93</td>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>13-18 years</td>
<td>94</td>
<td>35</td>
<td>28</td>
</tr>
<tr>
<td>Costa Rica, 2012</td>
<td>6-12 years</td>
<td>97</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>13-18 years</td>
<td>97</td>
<td>55</td>
<td>54</td>
</tr>
<tr>
<td>Ecuador, 2012</td>
<td>6-12 years</td>
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<td>31</td>
<td>19</td>
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<td></td>
<td>13-18 years</td>
<td>90</td>
<td>36</td>
<td>25</td>
</tr>
<tr>
<td>El Salvador, 2012</td>
<td>6-12 years</td>
<td>94</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>13-18 years</td>
<td>95</td>
<td>22</td>
<td>12</td>
</tr>
<tr>
<td>Nicaragua, 2009</td>
<td>6-12 years</td>
<td>56</td>
<td>4</td>
<td>1</td>
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<tr>
<td></td>
<td>13-18 years</td>
<td>62</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Paraguay, 2011</td>
<td>6-12 years</td>
<td>93</td>
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<td></td>
<td>13-18 years</td>
<td>94</td>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td>Peru, 2012</td>
<td>6-12 years</td>
<td>82</td>
<td>26</td>
<td>17</td>
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<tr>
<td></td>
<td>13-18 years</td>
<td>85</td>
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<td>21</td>
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<tr>
<td>Uruguay, 2012</td>
<td>6-12 years</td>
<td>98</td>
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<tr>
<td></td>
<td>13-18 years</td>
<td>98</td>
<td>91</td>
<td>56</td>
</tr>
<tr>
<td>Venezuela (Bolivarian Republic of), 2012</td>
<td>6-12 years</td>
<td>43</td>
<td>41</td>
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</tr>
<tr>
<td></td>
<td>13-18 years</td>
<td>44</td>
<td>42</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from household surveys.

A 10-point proposal of children’s e-rights has been published
In this context, the question of which skills young people develop from Internet use should be asked, since while educational applications play a key role, the spread of ICTs has focused above all on entertainment and socialization (Sunkel, Trucco and Espejo, 2014), particularly chatting and the use of social networks.  

In Brazil, for example, the figures show that more children aged 9 to 16 years use social networks than in Europe.

### 3. Opportunities and risks from a rights-based perspective

According to UNICEF (2012; 2011a), the Internet has positive effects on different spheres of children’s lives, helping them to develop their digital capacities and creating opportunities for their adult lives. The gamut of possibilities offered by ICTs entails both advantages and risks. The challenge lies in building digital capacities and strategies for online security and self-care. The Convention on the Rights of the Child should serve as a guide for safeguarding children’s rights online. ICTs, when placed at the service of the fundamental rights of children, facilitate the exercise of their right to express an opinion, promote citizen participation and provide a conduit for their freedoms of expression and information. With the technological advances of Web 2.0, users cease to be passive receivers and are able to create and disseminate their own content. Children and adolescents can access messages from the mass media and from individuals, sharing opinions and information and promoting dialogue. They cultivate their interpersonal relations in a great variety of formats, including text, photographs, audio and video. The cross-cutting nature of these practices democratizes the production and exchange of opinions, ideas and content, and increases participation and diversity on the web (OECD, 2007). This also helps develop children’s social and communication skills and encourages creativity and interactivity (Pavez, 2014).

At the same time, the risks associated with the Internet, such as the prevalence of content not suitable for children—including websites dedicated to pornography, sexual grooming of children by adults or gambling— are hard to ignore. The most common risk is cyberbullying, which constitutes an attack on a child’s honour and reputation, as protected under articles 13 and 16 of the Convention on the Rights of the Child. Cyberbullying...
Analysis and research

Box 1
UNICEF 10-point proposal on the e-rights of children

To mark International Safer Internet Day on 6 February 2004, the UNICEF country office in Spain presented a set of 10 rights and duties relating to information and communications technologies (ICTs), which stressed the importance of encouraging a responsible approach to access to and use of ICTs for informative and recreational purposes.

1. The right to access to information without discrimination on the basis of sex, age, economic resources, nationality, ethnicity or place of residence. This right shall apply especially to children with disabilities.

2. The right to freedom of expression and association; the right to seek, receive and disseminate information and ideas of all sorts on the web. The exercise of these rights may be restricted only to ensure the protection of children against information that is prejudicial to their well-being, development and integrity and to guarantee compliance with the law and to safeguard the security, rights and reputation of other persons.

3. The right to be consulted and express their opinion in the application of Internet-related laws or regulations pertaining to them.

4. The right to protection against exploitation, trafficking, abuse and violence of all kinds.

5. The right to personal development and education, and to use all the opportunities provided by new technologies for educational purposes.

6. The right to privacy in electronic communications. The right to withhold personal data on the Internet and to preserve their identity and their image from possible unlawful use.

7. The right to recreation, leisure activities, entertainment and play using the Internet and other technologies. The right to have games and leisure activities free of gratuitous violence and racist, sexist or denigrating messages and that are respectful of the rights and image of children and other persons.

8. Parents shall have the right and the responsibility to provide their children with guidance and to agree arrangements with them for responsible Internet use.

9. The governments of developed countries shall undertake to cooperate with other countries to facilitate the access of their citizens, especially children, to the Internet and other technologies for promoting their development, thus avoiding the creation of a new barrier between rich and poor countries.

10. The right to enjoy and use new technologies to move towards a healthier, more peaceful, more united, fairer world that is more respectful of its environment and in which the rights of all children are respected.


In 2013 more people had access to the Internet than did not

involves persistent harassment, persecution, denigration, privacy violations, exclusion or impersonations via the Internet or other electronic media perpetrated by an individual or a group against a person who is unable to defend himself or herself (Smith and others, 2008). While abuse and violence are nothing new in schools, the advent of the Internet means that they have taken on a new form. The features that set cyberbullying apart, such as the speed at which messages can be circulated to a large audience, make it part of an unprecedented, expanded form of harassment, turning online platforms into potent instruments for emotional destruction and presenting a grave challenge to education systems (UNICEF, 2011b).

In a study of cyberbullying carried out in Brazil 33% of the 5,827 students surveyed stated that a friend of theirs had suffered cyberbullying, and in 30% of those cases that friend had been a victim of abuse on the Internet (tactics include defamation, the publishing of embarrassing photographs and the stealing
of passwords to social network accounts) (UNICEF, 2011b). A joint study by Microsoft and the National Institute against Discrimination, Xenophobia and Racism (INADI) of Argentina, found that 16% of the students surveyed had been intimidated or threatened and 15% had suffered some form of discrimination on a social network (UNICEF, 2011b). Cyberbullying has been recorded in other countries with high rates of Internet use, such as Chile and Uruguay, but various other countries in the region have also reported some degree of online harassment (García de Diego, 2012).

4. Pending challenges and the role of education

ICTs facilitate the acquisition of cognitive skills in the social, political and economic spheres. Technological devices are part of children's everyday life and have driven peer relations beyond the realm of the classroom, whether to the benefit or the detriment of the members of the school community. Further reflection is required on the role of schools in providing guidelines and protocols on how to use the Internet safely in order to take advantage of the benefits and minimize the risks. Despite a lack of information on parents’ attitudes to Internet use in the home, children are, in many cases, more knowledgeable about the media and technology than their parents, who are therefore ill-equipped to provide them with guidance. Schools must step in to provide tools to move forward in this area. Policies on ICT in schools have helped to narrow the digital divide, facilitating access for students from the least privileged strata of society. Now, an important goal is to make teachers digitally literate so they can use this technology in their teaching. The growing exposure of the new generations to technology poses great challenges for the education system. Pupils need to be taught risk-free ways to browse the Internet, taking advantage of the benefits of technology to develop and exercise their rights. These skills go beyond digital literacy: they are cognitive and ethical capacities that will permit the younger generations to construct and play a full and active role in society.

BIBLIOGRAPHY

Berkman Center for Internet and Society (n/d) [online] https://cyber.law.harvard.edu/research/youthandmedia/digitalnatives.
ECLAC (Economic Commission for Latin America and the Caribbean) (2013), The Digital Economy for Structural Change and Equality (LC/L.3602), Santiago, Chile.
García de Diego, S. (2012), Understanding the Use of ICTs by Children and Young People, Bangkok, ECPAT International.
Sunkel, G., D. Trucco and A. Espejo (2014), La integración de las tecnologías digitales en las escuelas de América Latina y el Caribe. Una mirada multidimensional, Libros de la CEPAL, No. 124 (LC/2607-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).
ICTs as a tool for the exercise of children's rights

ICTs are an important aspect of children’s lives, so it is essential to consider the opportunities and risks that they entail. The Convention on the Rights of the Child outlines the rights of children in respect of the media. Specifically, articles 13 and 17 establish children’s right to access information from different sources, including the Internet. Article 12 enshrines their right to form their own opinions and guarantees their right to freedom of expression.

The open nature of the Internet makes it a space for socialization, participation and expression. Indeed, children and adolescents can become authors and publish material on blogs, video sites and other platforms. In other words, they are not passive receivers of online information, but protagonists shaping the Internet. Governments and society must therefore ensure that they have the resources that they need in order to access information and learn to use it.

A major challenge is how to strike the right balance between online protection and empowerment in relationships between adults and their children. Life online brings with it potential risks, such as cyberbullying and exposure to inappropriate content. A key aspect is the trust that children place in the mediation of their parents, caregivers and teachers.

The rapid spread of mobile devices and increased access to the Internet in private spaces means that efforts must go beyond restrictive approaches (the use of software, content filters and other prohibitive measures) because the best way to protect children and adolescents is to use strategies based on an active mediation of their Internet use.

ICTs do not in themselves guarantee rights or inspire citizen communication or participation; indeed, they may even lead to breaches of the rights of children and adolescents by exposing them to harassment, privacy violations or sexist, racist or homophobic content.

The techno-cultural environment—which has naturally become an integral part of the lives of children and young people—offers rapid access to multiple outlets for information, expression, recreation and interaction, and can produce a sense of omnipotence or affinity, despite the sometimes limited and fleeting nature of online relationships.

While much remains unknown about the way in which children and adolescents use technology, it is evident that they do not generally see the digital world as a place for the exercise of rights and fulfilment of duties, and rather act more as avid consumers of novelties than digital citizens. In the best of cases, they construct their own spaces and create content and applications.

Schools do not show pupils how to use ICTs responsibly, and instead expect parents to monitor or control their children, which reinforces the image of ICTs as objects of desire, contention or negotiation in their relations with adults.

Some notable initiatives on ICT include EU Kids Online, a thematic network that identifies studies of children and Internet use in Europe, and the Spanish-language portals www.chicos.net.ar and PantallasAmigas (“Friendly Screens”).

Gloria Bonder
Coordinator of the UNESCO Regional Chair Women, Science and Technology in Latin America

Alexandre Barbosa
Manager, Regional Centre on Studies for the Development of the Information Society
Girls in ICT Day

Girls in ICT Day is an initiative launched by the member States of the International Telecommunication Union (ITU) in 2010 to raise awareness and interest among girls and young women concerning future careers in the ICT sector. It is celebrated every year on the fourth Thursday of April and involves visits to ICT institutions, meetings with women role models and practical experiences.

For example, in Pasco, Peru, in April 2014, the National Institute of Research and Training in Telecommunications of the National University of Engineering (INICTEL-UNI) held a one-day event on women and technology (“Nosotras y la Tecnología”) with 100 girls from the district of Yanahuana to inspire them to pursue a career in science and technology. The aim was to promote girls’ and young women’s interest in careers linked to ICTs and, by mainstreaming a gender equality perspective, to encourage women to become telecommunications leaders. For the first time, a group of 14- and 15-year-old girls took part in a workshop where they learned the basic elements of programming a video game. They also had the opportunity to talk —via Skype— with two young Peruvian women who are successful telecommunications engineers.

Mobile telephone operators commit to children’s rights

Since August 2014, the GSM Association of mobile operators has been cooperating with UNICEF to promote online child protection in Latin America and the Caribbean. The association’s goal is to encourage other organizations to adopt the new online child protection guidelines that it developed in conjunction with UNICEF and ITU. These guidelines lay down basic principles for the safer use of Internet-based services by children in Latin America in the following areas:

• Integrating children’s rights into all corporate policies and relevant management processes and ensuring that they are taken into account.

• Developing standard operating procedures for handling material on child sexual abuse.

• Creating a safer online environment that is appropriate to the child’s age.

• Educating children, parents and educators on child safety online.

• Promoting digital technology as a way of increasing civic participation.

The work to be done includes promoting the use of these guidelines by running a series of online workshops and seminars to provide practical support for their implementation in each country in the region.

Did you know…?

...that in Latin America and the OECD countries, at the age of 15, more boys than girls aspire to careers in science and technology?

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Programme for International Student Assessment (PISA), 2006.

...that in Panama, Trinidad and Tobago and Uruguay, more girls than boys use ICTs for schoolwork, chatting and e-mail?

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from the Programme for International Student Assessment (PISA), ICT questionnaire, 2009.

...that young men in Peru aged 12 to 18 years in the first and fifth socioeconomic quintiles generally have more hours of free time per week than their female peers?

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of the National Time Use Survey (ENUT), Peru, 2010.

...that 99% of public schools in Jamaica make use of computer-assisted learning?


...that 100% of teachers in Aruba, Montserrat and Cuba teach courses using ICT resources?