

The Internet Literacy Handbook :

A Council of Europe
project to empower and
engage communities.

Dr. Elizabeth Milovidov, J.D.



Council of Europe - CAHENF-IT



New Recommendation adopted on children's rights in the digital environment

STRASBOURG | 4 JULY 2018



Recommendation CM/Rec(2018)7 of the Committee of Ministers to member States on Guidelines to respect, protect and fulfil the rights of the child in the digital environment

*(Adopted by the Committee of Ministers on 4 July 2018
at the 1321st meeting of the Ministers' Deputies)*

Preamble

The Committee of Ministers, under the terms of Article 15.b of the Statute of the Council of Europe,

Considering that the aim of the Council of Europe is to achieve a greater unity between its members for the purpose of safeguarding and promoting the ideals and principles which are their common heritage, *inter alia* by promoting common policies and standards;

Reaffirming the commitment of member States to ensure that every child enjoys the full range of human rights enshrined in the United Nations Convention on the Rights of the Child (UNCRC), in the Convention for the Protection of Human Rights and Fundamental Freedoms (ETS No. 5), and their protocols, and that these rights should be fully respected, protected and fulfilled, as technology continues to develop;

Having regard to the obligations and commitments as undertaken within other relevant international and European conventions, such as the revised European Social Charter (ETS No. 163), the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108), the Convention on Cybercrime (ETS No. 185) and its Additional Protocol concerning the criminalisation of acts of a racist and xenophobic nature committed through computer systems (ETS No. 189), the Council of Europe Convention on Action against Trafficking in Human Beings (CETS No. 197), the Council of Europe Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse (CETS No. 201), the Convention on Preventing and Combating Violence against Women and Domestic Violence (CETS No. 210) and taking into account the recommendations, resolutions and declarations of the Committee of Ministers and of the Parliamentary Assembly of the Council of Europe in this field;

Recognising that the digital environment is complex and subject to rapid evolution, and is reshaping children's lives in many ways, resulting in opportunities for and risks to their well-being and enjoyment of human rights;

Conscious that information and communication technologies (ICTs) are an important tool in children's lives for education, socialisation, expression and inclusion, while at the same time their use can generate risks, including violence, exploitation and abuse;

Bearing in mind the Council of Europe Strategy for the Rights of the Child (2016-2021), which identified the rights of the child in the digital environment as one of its priority areas, and the Council of Europe Internet Governance Strategy (2016-2019), according to which the internet should be a safe, secure, open and enabling environment for everyone,

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INTERNET LITERACY HANDBOOK



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What's inside?

Who is it for?

- Families
- Educators
- Policy Makers
- Young people
- You



Above all, the *Internet Literacy Handbook* sets out to **provide information** and **promote reflection** on some of the more complex **ethical, sociological and cultural issues** that are intrinsically linked to **digital- and media-related activities** which have taken on such a large role in the lives of a majority of people in many parts of the world.

6. Internet – Looking forward

” “Free expression is the base of human rights, the root of human nature and the mother of truth. To kill free speech is to insult human rights, to stifle human nature and to suppress truth”

Liu Xiaobo, Nobel Peace Prize laureate of 2010 and human rights activist

CHECKLIST FACT SHEET 23 – INTERNET OF THINGS

In the same manner that you already protect your computer and other devices from security intrusions, be sure to apply those measures to your “Internet of things” devices.

Be aware that it is difficult to protect every individual device, but that you can protect your network and reduce your areas of vulnerability.

Carefully consider any “Internet of toys” items that you plan on introducing into your home and to your child. Check the security and privacy parameters of the toy and ask yourself: “How necessary is this toy?”

Internet of things



How do you use it?

The technological advances evidenced by the recent development of Internet and wireless connectivity to data-enabled devices are causing excitement in many areas. This budding field of development known as the "Internet of things" (IoT) where web-connected devices enhance company efficiency and lifestyle convenience may also cause huge concern to parents and individuals alike.

■ Concerns about security, privacy and data collection are just a few issues that experts and policy

before cutting the engine on a vehicle. The actions of the two hackers have sparked debate on digital security for cars and trucks.

■ Another area of debate is the idea that the IoT is the next industrial revolution. Today there are an estimated 10 billion connected devices, but estimated growth of this new trend in the market is expected to hit between 26 billion and 30 billion devices by 2020, with an estimated market worth of between US\$6 trillion and US\$9 trillion².

■ This will lead to an explosion in connected devices and a corresponding explosion in data. The General Data Protection Regulation will face new challenges in protecting privacy, when data is ubiquitous.



INTERNET OF THINGS

- The term “Internet of things” first emerged in 1999, but it was not until several years later that we saw the real existence of Internet-connected objects.
- The IoT³ is the network of physical objects or things embedded with electronics, software, sensors and connectivity to enable them to collect and exchange data.
- The IoT is used to describe everything from intelligent thermostats that turn up the heating before you get home to refrigerators that order orange juice when you have run out. People are wearing health and fitness trackers and animals are being fitted with health and location trackers⁴.
- The IoT simply means Internet connectivity where devices can talk to each other, making it easier to control and automate tasks – and collect data.
- The Pew Research Center believes that the IoT and “wearables” will have widespread and beneficial effects⁵ by 2025.



WEARABLE TECHNOLOGY

- “Wearable technology” or “wearables” are clothing and accessories incorporating computer and advanced electronic technologies.
- Wearables are also called fashionable technology, wearable devices, tech togs or fashion electronics⁶.
- Wearables provide instant data to the user and the user is able to instantly monitor the technology, download it for later use or send a printout.



INTERNET OF TOYS

- The IoT can also be applied to toys for children. Wireless connectivity will allow a toy to interact with other data-enabled devices or other toys.
- The Internet of toys is presenting new ways to introduce young people to technology and often encourages them to interact with the toy.
- Hello Barbie, a Mattel Internet of toys venture created in 2015 where Barbie can listen to children, caused concern for parents and privacy experts, as well as leading psychologists, who wonder if these types of toys would cause developmental issues for children, affecting their ability to create, imagine and learn autonomously. ToyTalk, a 2011 company, offers a different opinion and argues that talking toys and Wi-Fi enabled toys can offer learning opportunities to children⁷.

How do
you
use it?

- Despite the convenience offered by the Internet of things and wearables, and despite the diversion and fun offered by the Internet of toys, users may not be sufficiently aware that IoT and toy devices, just like smartphones and computers, may pose security and privacy risks. In the case of toys, there may perhaps even be child-development risks.



IMPORTANCE OF UNDERSTANDING THE ISSUES

- The IoT includes wearable devices that many users may not consider as a “computing device”; as such they risk ignoring privacy issues.
- The techno-futurist visions of the IoT and wearables are attractive to many. However, the entry-level positioning of the IoT means that more research needs to be done. As cybersecurity firms have learned in the past, people with criminal intent are working harder and faster to create new ways to achieve their end goal.
- The advance of toy companies into the domain of the IoT means fantastic new toys for young people, but parents need to understand the risks of having open microphone devices in the hands of young people and open data links in their own homes.



ETHICAL CONSIDERATIONS AND RISKS

- The ultimate goal of the IoT is to increase efficiency, but the interconnectivity that accompanies this increased efficiency may pose considerable risks.
 - The idea that people can remotely access your devices and your data is a frightening prospect.
 - The majority of devices and wearables are not designed with optimal security or privacy in mind.
 - Recent intrusions showed hackers viewing people in their homes via baby monitors and webcams⁸.
 - Consumers may be as “at-risk” of cyber-intrusion as they used to be of physical intrusion in their homes.
 - Consumers will need to be aware that the General Data Protection Regulation gives them control over their data and they should inform themselves about how this will work in practice.



HOW TO

- IoT devices vary in design and function. The most important instruction in the proper usage of the device is to read the instructions and to understand the functionalities of the device.
- It is necessary to go through the settings functions in order to disable or enable proper settings that afford privacy where you want it.
- Consider doing research on the device before purchase as some wearables have been recalled or do not function as marketed.
- Remember that this is a developing field and, if you wait a few weeks or months, there is always something newer, better and often less expensive on the market.



IDEAS FOR CLASSROOM WORK

- Have students create a list of all the possible devices that could be connected in a home. Then ask them to list potential security or privacy risks. What can the user do to reduce the risks? What can the device provider do? What can the Internet service provider do?

How do you use it?

- After a discussion on the IoT, ask the students to draft potential instructions to consumers to help consumers understand security issues.
- Read a summary of the General Data Protection Regulation and ask the students to list all the clauses pertinent to the IoT⁹.
- Download the video clip on the consumer rights awareness campaign¹⁰ and engage the students in a discussion about consumer rights and the IoT.
- Ask young people to “develop” new toys for the Internet of toys. What are the benefits of the toy? What are the risks? How can they protect young users? How can they reassure parents that the toy is safe?



GOOD PRACTICE

It is important to be open to embracing this new technology, but you should be sure to take appropriate security measures to protect your data and your privacy.

- Restrict personal information on data-enabled devices.
- Reinforce your security on your home wireless network.
- Select strong passwords.
- Where possible, keep certain devices separate from each other.
- Limit Internet of toy interactions with your other devices, and be sure to monitor their capabilities.

Consumers must be attentive to several issues when selecting an IoT device:

- **Compatibility and interoperability:** is the device compatible with devices from other manufacturers or do you need to stay in the same “ecosystem” to be able to use the device? This is extremely important, as otherwise you will be “locked in” with that manufacturer with no way to switch or integrate other devices from other manufacturers.
- **Connectivity:** does the IoT device rely only on Internet connectivity to function properly? Ideally, you should be able to access the device without having to connect to the Internet. This is especially important as, if your device manufacturer closes down the online platform for accessing your device, it will effectively become useless.



FURTHER INFORMATION

- More information on EU “Consumer rights and law” can be found at: http://ec.europa.eu/consumers/consumer_rights/index_en.htm.
- The Guardian has reported on the Internet of things: <http://www.theguardian.com/technology/internet-of-things>.
- More information on the Internet of things can be found on Intel’s infographic: <http://www.intel.com/content/www/us/en/internet-of-things/infographics/guide-to-iot.html>.
- Disney has carried out research on the Internet of toys: <http://www.disneyresearch.com/project/calipso-internet-of-things/>.
- An Internet of toys guide can be found at: <http://www.mutualmobile.com/posts/iot-internet-toys>.
- There is also detailed information from the Children’s Digital Media Center: <http://cdmc.georgetown.edu/publications-and-papers/textbooks/>.
- Relevant Council of Europe documents: “Human rights for Internet users – Children and young people” <http://www.coe.int/en/web/internet-users-rights/children-and-young-people>.

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- Disney has carried out research on the Internet of toys: <http://www.disneyresearch.com/project/calipso-internet-of-things/>.
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How do you use it?



Want to
contribute?

Send any **ideas,**
resources and
good practice
examples to the
Children's Division
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Europe.

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Elizabeth Milovidov, PhD, J.D.



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elizabeth@digitalparentingcoach.com



+33 (0)6 65 62 25 71

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