

# AUTISM & NEW TECHNOLOGIES



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## TIPS

from parents, professionals, and  
children with ASD, for problems  
arising from the use of digital tools

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école d'études sociales et pédagogiques · Lausanne  
haute école de travail social et de la santé · Vaud

## A PROGRAMME SUPPORTED BY:



The UEFA Foundation for Children ([www.uefafoundation.org](http://www.uefafoundation.org)) was established on the initiative of the UEFA's desire to play a more active role in society. The Foundation, which is a public body governed by Swiss law, was formally established and began operating the 24th of April 2015. For years, the governing body of European football has been supporting initiatives and programmes that help children in difficult circumstances, working with numerous different partners to develop projects across Europe and beyond. The foundation aims to help children and safeguard their rights. Sport, and football in particular, can provide support in the areas of health and children's education, as well as promoting access to sporting activity, facilitating children's personal development and fostering the integration of minorities.

## AND COORDINATED BY:



The mission of the FIRAH (Foundation of Applied Research on Disability) follows two main directions, which are complementary and merge:

- 1 - The call for projects: selection and funding of applied disability research projects.
- 2 - The coordination of the Resource Center. Internationally concerned, the Resource Center Applied Research and Disability aims at creating connections and bonds between researchers and field stakeholders<sup>1</sup>. It develops and disseminates research in order to promote an inclusive social transformation and to facilitate the full involvement of persons with disabilities.



**CENTRE RESSOURCES**  
Recherche Appliquée et Handicap

[www.firah.org/centre-ressources/](http://www.firah.org/centre-ressources/)

**1 - Field stakeholders :** Persons with disabilities, their families, and their representative organisations. Any Human Rights organisation working with persons with disabilities. Service providers and other organisations working with Persons with disabilities. Service providers and other organisations working in mainstream that are required to meet the needs of persons with disabilities such as architects, teachers, companies, industries etc. Researchers and research institutes. Local, national and international decision makers.

## IN PARTNERSHIP WITH:



Autisme-Europe aisbl ([www.autismeurope.org](http://www.autismeurope.org)) is an international association whose main objective is to advance the rights of people with autism and their families and to help them improve their quality of life. It ensures effective liaison among almost 90 member autism organisations in from 38 European countries, including 27 Member States of the European Union, governments and European and international institutions. Autism-Europe plays a key role in raising public awareness, and in influencing the European decision-makers on all issues relating to the rights of people with autism. Self-advocates and parents play a central role in our organisation to ensure that the views and interests of persons with autism are adequately reflected in our work. We are also regularly consulted by the World Health Organisation (WHO) and cooperate with the United Nations (UN).

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## **AUTISM AND NEW TECHNOLOGIES**



An action-research project has been launched by FIRAH, and is being conducted by INSHEA, the universities of Mons and Paris Sud-Créteil, the National Autistic Society, the Haute école de travail social et de la santé (EESP | HES-SO), and the Fondation Autisme Luxembourg.

This three-year collaborative programme is an opportunity to share knowledge and practices concerning the use of new technologies for children with Autism Spectrum Disorder (ASD), aged from 2 to 18 years.

### **The project has three major themes:**

- Improve access to educational material and equipment developed with new technologies and adapted to specific needs for children with ASD and their families, such as robots or tablets.
- Increase awareness and train families and professionals in the best support for children with ASD in their use of new technologies. Guidebooks are available to families and professionals.
- Design and carry out applied research projects on the needs and expectations of children with ASD and their families, and provide concrete answers for their daily needs. This means evaluating the impact of the use of new technologies on children with ASD, to improve available material and applications. The approach is participatory, involving the children, parents and professionals working alongside the researchers.

Online questionnaires were given to children and adolescents with ASD, to their parents, and to professionals working with these children on the use of new technologies. The aim was to gather feedback on the use of new technologies. The questionnaires included questions on the digital tools and method of use, the different areas (educational, communication, logic...) in which they were used, appropriation, and specific questions on verbal communication and social interactions. The questionnaires were filled in by 111 professionals, 137 parents, and 90 children or adolescents with ASD, from Belgium, France, Luxembourg, United Kingdom and Switzerland.

These questionnaires led to a report for each country, and an inter-country summary for the six countries involved. These reports constitute an overview of the feedback received from the questionnaires. Two concrete pragmatic teaching aids complete the reports. These documents are aimed at a general public, in particular children, adolescents, professionals (educators, schoolteachers, professors, speech therapists, psychologists, doctors...), but also researchers and other groups interested in the theme of new technologies and autism.

These tips are presented in the following manner: actual problems encountered by parents and professionals are mentioned, followed by tips from parents and professionals to deal with the problems.

The child is addicted to digital tools and has behavioural issues if I remove them. What should I do?	p. 6	_____
The child will only play his own apps on the tablet, and refuses the ones I've put on for him. What should I do?	p. 6	_____
The child stays too long on certain apps, and not enough on others.	p. 6	_____
The child has difficulties using a computer, especially the mouse. What should I do?	p. 7	_____
The exercises on certain apps are not adapted to my child. What should I do?	p. 7	_____
The child has discovered inappropriate sites or YouTube videos. How can I prevent this?	p. 7	_____
The child is unable to work autonomously on an app?	p. 7	_____
I don't know what work the child has done on his digital tool. How do I find out?	p. 7	_____
The digital tablet is broken or about to break. How do I prevent this?	p. 9	_____
The app has a virus, what do I do?	p. 9	_____
As a parent, or professional, I struggle when I want to use certain apps with my child/children with ASD. What do I do?	p. 9	_____



## **The child is addicted to digital tools and has behavioural issues if I remove them. What should I do?**

**Tip 1:** Offer 30-minute screen-time vouchers, given at the start of each week, to control the digital obsession. Encourage your child manage these her/himself over the course of the week.

**Tip 2:** Use a timer so the child knows when to turn the screen off.

## **The child will only play his own apps on the tablet, and will not engage with the ones I've put on for him. What should I do?**

**Tip 1:** Use Guided Access<sup>2</sup> to prevent the child exiting the app chosen by a parent or professional.

**Tip 2:** In certain applications, you can apply a code which restricts the child from exiting the app.

**Tip 3:** If the child refuses to use the apps he is asked to use, you can block his wifi access.

**Tip 4:** Have 2 tablets, personalised for easy identification (with colour codes for example) :

- One for leisure use, the child can choose his own apps.
- One for work, the parent or professional chooses the app.

## **The child spends too much time on certain apps, and not enough on others.**

**Tip 1:** Draw up a contract regulating the time allowed for each app.

**Tip 2:** Use a timer to control the time allowed for each app.

**Tip 3:** Make a programme with pictogrammes representing each app, and put the child's favourite app last.

**Tip 4:** Indicate from the start the time allowed for each app.

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<sup>2</sup> - See [apple.com support](https://apple.com/support) section.

## **The child has difficulties using a computer, especially the mouse. What should I do?**

**Tip:** Use a digital tablet, or buy a touch screen for your computer.

## **The exercises on certain apps are not adapted to my child. What should I do?**

**Tip 1:** Some apps allow you to choose your options. Find apps that can be customized, and select only those options adapted for your child.

**Tip 2:** Some apps allow you to enter your own content (words, images). You can thus personalise the exercises for your child's needs.

## **The child has discovered inappropriate sites or YouTube videos. How can I prevent this?**

**Tip 1:** Select YouTube kids, with secure access so that the child cannot access inappropriate videos.

**Tip 2:** Block certain sites and subjects.

## **The child is unable to work autonomously on an app?**

**Tip 1:** Create a model/guide with the child can use to work with the app.

**Tip 2:** Supervise what the child is doing, intervene only when necessary, so that she/he can become as independent as possible.

## **I don't know what work the child has done on his digital tool. How do I find out?**

**Tip:** Film the child while she/he is working on the tablet.





## **The digital tablet is broken or about to break. How do I prevent this?**

**Tip 1:** Create a model/guide the child can use to work with the app.

**Tip 2:** Add a neck strap to the tablet, to avoid dropping it.

## **The app has a virus, what do I do?**

**Tip:** Uninstall, then reinstall the app.

## **As a parent, or professional, I struggle when I want to use certain apps with my child/children with ASD. What do I do ?**

**Tip 1:** Before using an app with a child, practice in advance, and learn the different functions of whatever app you will be using.

**Tip 2:** Always ask a colleague or resource person for help.

**Tip 3:** Look for tutorials on YouTube or other websites.



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**THE FOLLOWING TIPS COME FROM  
THE RESPONSES GIVEN TO A QUESTIONNAIRE  
BY PARENTS OF CHILDREN WITH ASD,  
AND PROFESSIONALS WHO WORK WITH  
THESE CHILDREN. THEY CONCERN PROBLEMS  
ENCOUNTERED AND OVERCOME BY THESE PARENTS  
OR PROFESSIONALS.**

**AUTISM SPECTRUM DISORDERS COVER  
A WIDE RANGE, SO TIPS THAT WORK  
WITH SOME CHILDREN MAY NOT WORK  
WITH OTHERS. THESE TIPS ARE SIMPLY  
POINTERS TO BE ADAPTED ACCORDING  
TO THE CHILD AND THE SITUATION.**

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