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**HELPING CHILDREN TO LEAD HEALTHY LIVES IN A  
DIGITAL WORLD: DO WE REGULATE THE SCREEN USE IN  
SCHOOLS?**

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**Abstract**

Digital devices have changed our daily lives. The last two decades have seen an explosion in the use of digital technology. This use has been extended in the school context. Considering this new paradigm, the impact of screen time has been explored in the last years and paediatrics guidelines have worked on promoting a healthy use of screens. Are educators aware of the need to regulate a healthy use of screens in classrooms as well? Which actions do they take? In this study, we collected the perspectives of 11 teachers concerning the regulation of screen use in schools and their impact on students as learners. Qualitative data was collected through an online focus group. Our analysis shows that there is a lack of debate at schools about promoting a healthy use of screens. The discussion focuses on the creation of schools ready to teach and learn in the digital era and how to help children lead healthy screen use in the educational sector.

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**1. Theoretical Framework**

Having a look at the literature review, screen time has been associated with academic performance, food intake (junk food), physical activity, sleep, obesity and sedentarism, among other factors. Several pediatric guidelines have been elaborated to promote healthy screen use (e.g. National guidelines for screen time, Australia; American Academy of Child & Adolescent Psychiatry). This concern has become a reality for educational institutions as well. Indeed, some voices as UNESCO (2023) highlight that excessive screen use in school can contribute to children's overall risk.

After New Zealand students were declared to have amongst the highest rates of screen use in the world, both at home and in the classroom (Cullen et al., 2024; OECD, 2021), The Paediatric Society of New Zealand (2024) elaborated the new guidance for safer screen use in education settings. The recommendations of this guidance focus on evidence-based advice to support pupils in developing safer screen behaviours in education settings, across different ages and stages of development (0-6; 6-13, and 13-18 years old).

This guidance includes interventions to reduce risks like eye breaks, blinking exercises, advice on safer use of headphones and earbuds, ergonomics, limits on screen time or a balance of screen-based learning with screen breaks and non-digital activities, and many others. This material provides practical and comprehensive recommendations to maximise the educational benefits of digital technologies while minimising potential health risks.

The document is the result of extensive research and consultation with experts in education, health, and digital safety. It outlines actionable strategies for balancing screen time and promoting the best outcomes for all children, including those with special learning needs. For every stage of development some restrictions, some limitations and some encouragements are added (see Table 1 for this information in the stage 6-12).

**Table 1.** Guidance for safer screen use in education settings (6 to 12 years)

Restrict
<ul style="list-style-type: none"><li>• No smartphone/smartwatch access during class unless exempt</li><li>• No screen use in class without approval from the teacher</li></ul>
Limit
<ul style="list-style-type: none"><li>• Up to a third of the school day learning on screens (limited use for younger students with gradual increase reflecting age/development), unless required for students with special learning needs</li><li>• Session length 20 minutes</li><li>• Limit headphone/earbud use</li></ul>
Encourage
<ul style="list-style-type: none"><li>• Purposeful and intentional use of devices in schools only</li><li>• Outdoor exercise/activities</li><li>• Protect play in break periods (screen-free, outdoors if possible)</li><li>• Reward prosocial and positive learning behaviour with social interactions or physical activities, rather than screen-based activities</li><li>• Adjustable seating and chairs</li><li>• Correct ergonomics and lighting</li><li>• Paper homework option preferred</li><li>• Education on healthy screen behaviours</li><li>• Continue to educate students about digital citizenship and cyber security</li></ul>

## 2. Method

An online focus group was conducted with 11 teachers from public and private schools in Barcelona, teaching from 4th to 6th grade in Primary Education (10-12 years). Data was collected in November 2024. Only participant 7 belonged to a school that had adapted their teaching-learning process with screens in the last stage of Primary Education. The rest of the teachers belonged to more traditional schools.

Educators were required to participate after showing interest in receiving some training in the use of IT at schools when visiting them since they were tutoring teacher students doing their internship in their schools and these students belonged to the university of one of the authors of the study.

Our interest was getting information on how teachers regulate screen use in schools and if they think this has an impact on students as learners. With this purpose in mind, we designed a list of questions to debate inspired by the new guidance for safer screen use in education:

- i. Do your students use the following tools and how long along a session/ school day/ week?  
(tablets computers, smartphones, smartwatches, headphones, earbuds)
- ii. Has the use of these devices a purpose/ intention?
- iii. Do your students combine academic activities with outdoor exercise/activities?
- iv. Are there some screen-free spaces/ moments established at the institution?
- v. How is usually the prosocial and positive learning behaviour rewarded? (With social interactions and physical activities? Or screen-based activities?)
- vi. Does the school take care of adjustable seating and chairs/ correct ergonomics and lighting?
- vii. How is homework required usually? Paper or screen?
- viii. Do your students receive some tips on healthy screen behaviours and cyber security?

A content analysis was conducted after the focus group was recorded to analyse how far/close teachers' statements from the new guidance for safer screen use in education settings.

## 3. Results

Some preliminary results are shown (see Table 2):

**Table 2.** Findings from the online focus group

Content/ Participants	1	2	3	4	5	6	7	8	9	10	11
Tablets				x				x			
Computers		x		x		x		x		x	
Smartphone Smartwatch				x				x			
Headphones/ earbuds											
Computers								x			
Use of tools over a week	D <sup>1</sup>	2h	D	5h	D	1h	D	15h	D	2h	D
Use of devices with purpose/ intention	x	x	x	x	x	x	x	x	x	x	x
Homework required	P <sup>2</sup>	D	P	D	P	P	P	S <sup>3</sup>	P	P	P
Care about correct ergonomics & lighting		somehow		somehow				x		somehow	
Tips on healthy screen behaviours and security				occasionally				sometimes			

<sup>1</sup>D= Depends <sup>2</sup>P= Paper <sup>3</sup>S= Screen

Educators were in some aspects close to the guidance; for example, there was a large agreement on the use of devices with a purpose and intention, at least from their declarative knowledge, and also consensus on the homework option preferred (paper). However, there was a big diversity among teachers when going in detail, since for this last aspect, for example, teachers answering “it depends” was kind of ambiguous and not very clear/meditated the reasons behind.

For some other aspects, educators did not express having taken determinant decisions about the use of screens; for example, in relation to how many hours per day their students spent in front of a screen in class, a majority declared that it depends, and only one followed the recommendation of up to a third of the school day (Catalan students remain 5h per day at school).

Concerning the care about correct ergonomics and lighting, there was no consistent reflection behind either (only one teacher had thought on this aspect). In relation to tips on healthy screen behaviours and cyber security, one teacher expressed to have focused on that sometimes and the other very occasionally.

To finish, regarding the tools used at school for the development of learning activities, the most frequent was the computer and only one teacher used headphones. Tablets and smartphones were equally used, and none of the teachers’ used smartwatches.

#### **4. Discussion**

Educators did not plan the screen use at school as a project, but instead as something less planned and more spontaneous, except at a basic level in which they had clear ideas on their decisions (i.e., use or not use of smartphones in the classroom).

Action plans at educational institutions should be elaborated to foster healthy use of screens and meditated decisions in relation to their digital use. Our study makes evident the need to create schools ready to teach and learn in the digital era; that is, schools that help children to lead a healthy screen use in the educational sector and beyond, with the support of parents as well.

With this purpose in mind, some schools have indeed adapted their teaching-learning process with screens “almost” full time, like Participant 7, but not in the line that the New guidance and other voices suggest, which supports the statement that we need to create schools ready to teach and learn in the digital era, but finding a balance with screen-free spaces/moments, since teaching children and young people how to balance the digital with the non-digital is *essential* for their wellbeing (Ventouris et al., 2021).

#### **Data Availability Statement**

Data is available upon request.

#### **Declaration of Conflicts Interests**

The authors would like to declare that they have no conflict of interest to disclose.

#### **Ethical Statement**

Our institution does not require ethics approval for reporting individual cases or case series.

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