

# Conference Summary

## Back to the Future – Locked Screens in the Classroom

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The increasing presence of smartphones in the classroom has sparked global debate on their impact on students' concentration, social interactions, and mental well-being. The Back to the Future – Locked Screens in the Classroom conference, held by the Youth Research Institute on December 10, 2024 in Budapest, Hungary, convened educators, policymakers, and mental health professionals from across Europe to examine the implications of a smartphone-free learning environment. Through keynote speeches, panel discussions, and interactive roundtables, participants explored the effects of constant digital connectivity on cognitive development and emotional resilience. The event provided a platform to share research-based insights and practical strategies aimed at fostering focused, engaging, and balanced educational spaces.

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### The Keynote Presentations

#### The Neurological and Psychological Impact of Smartphone Use

Ákos Pörtl, a family safety expert at the Youth Research Institute, emphasised that childhoods dominated by smartphone use can lead to significant and potentially long-term negative consequences. He highlighted the role of major technology manufacturers in linking smartphone use to dopamine production. Dopamine, a neurotransmitter that activates the brain's reward centres, reinforces behaviours that generate pleasure. When smartphone interactions become dopamine-driven, children may develop compulsive habits that hinder cognitive development, academic performance, and mental health. Given these risks, international collaboration is essential for developing regulatory frameworks that govern smartphone use in educational settings, including possible school-wide bans.

#### Community-Based Interventions: The "It Takes a Village" Initiative

Rachel Harper, principal of St. Patrick's National School in Greystones, Ireland, introduced the "It Takes a Village" initiative, a community-based program designed to improve the well-being

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of primary school children. This initiative arose in response to increasing anxiety levels among students and focuses on enhancing digital awareness and emotional intelligence among children, parents, and teachers. The program fosters collaboration among eight local schools, shifting the emphasis from individual responsibility to collective action. It incorporates workshops, a voluntary smartphone-free code of conduct, and the use of play therapy in an effort to strengthen students' mental resilience. Notably, the initiative has led to a complete absence of smartphones among students at Harper's school and has attracted global interest.

## Section 1: Regulatory Perspectives: Policies from the UK, Ireland, Hungary, and Slovakia

The panel discussion titled *The Changing Educational Environment: Regulations, Perspectives, and Experiences from the United Kingdom, Ireland, Hungary, and Slovakia* examined how various countries approach smartphone regulations in schools. The session, moderated by Dorina Marton of Mathias Corvinus Collegium (MCC), featured the following speakers:

Rachel Harper, Principal of St. Patrick's National School Greystones, spokesperson for the "It Takes a Village" initiative (Ireland), Robin Millar, former Member of Parliament for North Wales (United Kingdom), and Michal Bozik, researcher at the Institute for Child Psychology and Pathopsychology and representative of the Slovak Ministry of Education (Slovakia).

Bozik detailed Slovakia's recently implemented smartphone restrictions, which followed extensive consultations with school administrators and parents. The primary motivation for the regulation was the increasing prevalence of cyberbullying and social exclusion among children. The policy aims to reduce incidents of online harassment while encouraging more face-to-face interaction and stronger peer relationships. The restrictions for younger students are particularly stringent, banning smartphones from all school premises, not just classrooms.

Millar provided insights into the UK's legislative approach, emphasising that while the country has an overarching online safety law, additional measures specifically targeting school smartphone use are under consideration. He noted that policymaking in this area requires persistence, stating, "This process is a marathon, not a sprint."

### Parental Engagement and Voluntary Restrictions

Harper stressed the importance of community-driven education and voluntary compliance with smartphone restrictions. She argued that parental support is crucial for the long-term success of such initiatives. Encouraging parents to establish and uphold smartphone-free norms within their communities creates a self-reinforcing cycle of support for these measures.

### Social Media and Gaming: Differentiating Risks

The discussion also touched on the growing awareness of social media's negative impact, a concern even acknowledged by figures like Facebook founder Mark Zuckerberg. Millar pointed out that the most severe cases of social media-related harm have pushed the issue into the public consciousness. However, panellists distinguished between the effects of smartphones and video games. While video games can have certain cognitive and social benefits, smartphones

employ unpredictable reinforcement mechanisms that drive compulsive use, increasing the risk of addiction.

## **Section 2: The Impact of Smartphones on Student Well-being, Mental Health, and Learning Abilities**

The second panel discussion of the conference focused on the effects of smartphone use on students' psychological and cognitive development. Experts from various fields shared insights into how excessive screen time influences children's ability to focus, interact socially, and engage in learning.

Marie-Estelle Dupont, a clinical psychologist and author from France, emphasised that children using smart devices predominantly experience emotions such as fear and excitement rather than curiosity and joy in learning. Andrej Omulec, a professor at the Faculty of Applied Social Studies in Nova Gorica, Slovenia, highlighted the importance of parental responsibility in regulating smartphone usage. Jozica Pongrac, a family and couples' therapist as well as a lawyer from Slovenia, discussed the social pressure of online visibility. Ryan Blank, an educator, historian, and Head of Political Studies at Harrow School in the United Kingdom, provided practical teaching strategies for managing declining attention spans in students.

The discussion, moderated by Enikő Szakos, a researcher at the Mathias Corvinus Collegium Learning Institute and Head of Department at István Nemeskürty Faculty of Teacher Training, Ludovika University of Public Service, underscored the urgent need for parental guidance, educational policies, and community-driven approaches to mitigate the adverse effects of smartphone use. Experts emphasised that fostering meaningful human connections and critical thinking skills is essential in an increasingly digital world.

Marie-Estelle Dupont noted that her generation was among the last to learn reading and writing without constant screen notifications. One of her key recommendations was that parents should only introduce smartphones to children once they have mastered the use of handwriting tools, as excessive screen time hinders the development of fine motor skills and sensory-motor abilities.

Andrej Omulec addressed the issue of parental responsibility, pointing out that many parents attempt to gain their children's affection by purchasing smart devices while failing to establish boundaries for their use. He provided a simple example: instead of allowing children to use their phones as alarm clocks, parents could buy a basic alarm clock. He argued that parents must make responsible decisions about delaying technology exposure and strictly regulating screen time.

Jozica Pongrac discussed the social pressure of online visibility, explaining that people today feel compelled to share every aspect of their lives on social media to affirm their existence. She linked this phenomenon to a fundamental need for connection. Drawing on scientific research, Pongrac stressed the necessity of delaying smartphone usage, highlighting that the human brain only fully develops around the age of 25. Early exposure to digital stimuli, therefore, can have long-term negative effects on mental health and cognitive functions.

Ryan Blank provided practical teaching insights, explaining how he adapted his lessons to

accommodate students' declining attention spans. He structures his classes into 10–15-minute segments to maintain engagement and emphasised that teachers should avoid assigning screen-based homework, as this contributes to excessive daily screen exposure.

Marie-Estelle Dupont warned that young people are particularly susceptible to manipulation due to their underdeveloped critical thinking skills. She argued that the classical dialectic of thesis-antithesis-synthesis is too challenging for many students today, leading to frustration.

Andrej Omulec reiterated that parents must set clear boundaries on technology use, as children's brains are not yet mature enough to make independent choices about screen time. He noted that in Slovenia, many children, when asked what they want, respond with "nothing," a reflection of their cognitive immaturity exacerbated by excessive smartphone use.

Jozica Pongrac concluded by stressing that providing material goods is not the key to good parenting. Instead, fostering emotional connections and strong familial bonds is essential for children's well-being and development.

### **Section 3: Regulation in Education – Balancing Technology, Rights, and Safety in Schools**

This panel examined the role of technology in education, exploring the legal, social, and psychological implications of digital devices in schools. Experts discussed smart device regulations, digital safety risks, and the importance of institutional collaboration in promoting healthy digital habits.

Szabolcs Frigy, director of Katona József High School, addressed the social effects of smartphone use in schools. Balázs Puskás, legal expert, analysed the legal aspects of smartphone regulations and international practices. Anna Takács, police captain, highlighted digital safety risks and preventive measures for young people. The discussion was moderated by Luca Bártol, a student of MCC.

#### **Technology and the Right to Education**

Szabolcs Frigy said that smartphones have become a status symbol in schools, leading to exclusion and bullying among students who do not own the latest devices. However, experts agreed that digital tools do not fundamentally impact the right to education. Balázs Puskás explained that the primary concern is the negative effect of excessive screen time on social interactions and mental health. Hungary's recent legislation, which restricts smartphone usage in schools from 1 September 2024, has already shown promising results, increasing social interactions and reducing bullying.

#### **Digital Risks and Educational Authority**

Anna Takács highlighted that many young people face digital threats such as cyberbullying, phishing, and child exploitation, often without sufficient protection. Police reports show that victimisation can begin as early as 10-11 years old, with young offenders frequently unaware of the consequences of their actions. This highlights the urgent need for awareness campaigns.

Szabolcs Frigy pointed out that social media influencers have increasingly replaced teachers as primary sources of information, undermining educators' authority. Restoring the credibility of teachers is essential for combating misinformation and guiding students towards reliable knowledge.

### **Institutional Collaboration and Further Regulations**

Institutions are launching joint initiatives to reduce digital dependence. The Diocese of Vác in Hungary introduced a "digital detox" campaign in Catholic schools, measuring students' screen time and raising awareness about device usage.

Experts agreed that digital regulations improve students' physical and social development. Approximately eight screen-free hours daily promote physical activity, social connections, and better peer relationships. The police offer preventive education programmes, and panellists supported stricter regulations, especially regarding social media. Balázs Puskás referenced Australia's recent ban on social media for those under 16, suggesting that a similar approach could be applied in Hungary. Experts emphasised the need for clear, proactive policies to protect children's well-being and establish firm digital boundaries.

## **Section 4: Mental Health, Cognitive Development, and Emotional Intelligence in Youth**

The panel discussion, moderated by Ákos Pörtl, family safety expert at the Youth Research Institute, examined the effects of digital device use and excessive screen time on students' mental health, cognitive ability, and emotional intelligence.

Dr. Rita Pécsi Uzsalyiné is an educator and researcher in pedagogy, focusing on emotional intelligence and its role in effective learning and personal development. Dr. Melinda Hal is a clinical psychologist specialising in the impact of digital device usage on mental health, well-being, and behavioural development. Szilárd Horváth is the founder of Búzaszem School and a media professional at MTVA, advocating for education models that emphasise movement, arts, and human connection over digital dependency. Berci Trauttwein is the developer of the OUT application, a digital tool designed to encourage reduced screen time and promote real-life experiences among young people.

### **Mental Health and Emotional Intelligence**

Melinda Hal stated that psychological well-being is intrinsically linked to physical health, academic performance, and overall life quality. Digital overuse negatively affects expected lifespan, learning efficiency, and even demographic trends.

Rita Uzsalyiné Pécsi highlighted that emotional intelligence is crucial for applying knowledge effectively. Intelligence alone does not guarantee success; social skills and collaboration play an equally vital role. However, the current education system predominantly focuses on IQ-related competencies, often neglecting emotional development, which can lead to burnout even among university students.

## **The Búzaszem School Model**

Szilárd Horváth emphasised that optimal brain function requires movement and artistic engagement. Thus, Búzaszem School integrates physical activities, arts, and genuine human connections into its curriculum. In 2011, the institution eliminated smartphones from classrooms. By 2018, collaboration with parents led to a near-complete reduction in screen time at home. The school's self-regulatory model resulted in increased happiness among students, teachers, and parents, as well as improved neurological maturity in students. He noted that parental screen habits strongly influence children's behaviours, reinforcing the need for digital restrictions both in schools and at home.

## **Cognitive Development and Parental Influence**

The panellists have also discussed that children whose parents read to them at home show cognitive advantages of up to 1.5 years compared to peers exposed primarily to digital content. The impact extends to vocabulary, comprehension, speech development, and fundamental cognitive abilities.

## **Digital Addiction and "Digital Autism"**

Excessive screen time can lead to addiction comparable to substance abuse. Current Hungarian regulations contain loopholes, and experts advocate for stricter policies, including zero-tolerance approaches for young children. Unlike alcohol and tobacco, which feature warning labels, smartphones lack explicit cautionary statements despite their potential for neural damage, stressed Melinda Hal. Approximately 25 percent of individuals under the age of 18 suffer from mental disorders, with "digital autism" being one of the emerging concerns. This condition, linked to excessive screen exposure, impairs cognitive development, increases anxiety and depression, and alters personality traits. Experts recommend delaying smartphone introduction and enforcing mindful usage to mitigate long-term consequences.

## **Conclusion**

All panels emphasised the urgent need for regulatory action, institutional collaboration, and proactive digital education. From legislative measures to school-based initiatives, a comprehensive strategy is essential to fostering a balanced digital environment that safeguards students' mental health, cognitive growth, and emotional intelligence. The Back to the Future – Locked Screens in the Classroom conference brought together experts from diverse fields to examine the profound impact of smartphone use on students' cognitive development, mental health, and social dynamics. Across the four panel discussions, participants explored how excessive screen time affects learning, emotional intelligence, and well-being, emphasising the need for parental responsibility. Practical solutions — such as phone-free policies, digital detox initiatives, and alternative teaching methods — were highlighted as essential for fostering focused, resilient learners. Ultimately, the conference underscored the urgency of reclaiming the classroom as a space for deep engagement, critical thinking, and meaningful human connection, advocating for a balanced approach to technology use.