

Mr. Roberto J. Alonso, Board Member

SUBJECT: SCREEN TIME EFFECTS

COMMITTEE: ACADEMICS, INNOVATION, EVALUATION & TECHNOLOGY

LINK TO STRATEGIC PLAN: RELEVANT, RIGOROUS & INNOVATIVE ACADEMICS

The frequency of screens in our modern lives, amplified by the COVID-19 pandemic, has led to an unprecedented increase in screen time for both students and teachers. While technology offers immense educational potential, the escalating rates of screens raises significant concerns regarding the physical and mental health of students and employees.

Research has linked excessive screen time to various physical health problems, particularly in children and adolescents. It has been determined that increased screen time, especially at close proximity, can strain eyes and contribute to the development of myopia (nearsightedness). Likewise, the blue light emitted by screens has been found to suppress melatonin production, a hormone crucial for regulating sleep-wake cycles. This can lead to sleep deprivation and related health issues. Excessive screen time frequently causes a displacement of physical activity, leading to a sedentary lifestyle and increased risk of obesity and associated metabolic disorders. Excessive screen time has also been associated with a range of behavioral health problems which include attention deficit and focus issues.

Studies suggest a correlation between high screen time and difficulties with attention, focus, and hyperactivity, potentially impacting learning and academic performance while also leading to increased rates of anxiety, depression, and loneliness, particularly among adolescents. Compounding the issue, the stimulating nature of screen-based activities have also been found to lead to dopamine dysregulation, contributing to addictive behaviors and difficulty regulating emotions.

The pervasive use of screens, therefore, has implications for the educational well-being of students. Studies have found a negative correlation between excessive screen time and academic performance. Students who spend more time on screens often have less time for studying and may have trouble concentrating in class. Students who are fatigued or overstimulated due to excessive screen use may struggle to engage in classroom activities while teachers themselves may experience increased stress and a sense of futility due to balancing the demands of technology integration and the need to manage student screen time in the classroom.

Passive consumption of screen media, such as watching videos or scrolling through social media, can limit opportunities for active learning and critical thinking. This may lead to difficulties in analyzing information, evaluating evidence, and formulating independent conclusions. Excessive screen time can disrupt the consolidation of information into long-term memory, hindering learning and retention. The constant distractions and multitasking associated with screen use can overload the brain's working memory, making it harder to process and store new information effectively.

It is also important to note that excessive reliance on pre-structured digital content can stifle creativity and imagination. Students may become less inclined to engage in open-ended activities that require original thinking and problem-solving. Excessive screen time can also displace social interactions and real-world experiences that are crucial for social and emotional development. This may lead to difficulties in forming relationships, understanding social cues, and regulating emotions.

While the effects of increased screen time may be harmful at all ages, there are different impacts that must be considered for different age groups. Young children are particularly vulnerable to the negative effects of screen time on language development, cognitive skills, and social-emotional learning. Excessive screen exposure during early childhood can hinder the development of critical skills and have long-term consequences while older students may be more adept at managing their screen time. Students are still susceptible to the negative impacts on attention, sleep, mental health, and academic performance. The addictive nature of some screen-based activities can be particularly problematic for adolescents.

It's important to note that not all screen time is equal. Educational and interactive screen activities, used in moderation, can have positive effects on learning. However, it's crucial to strike a balance and limit passive and non-educational screen time to mitigate the potential negative impacts on schooling.

This agenda item seeks to direct the Superintendent to develop clear guidelines and procedures for screen time usage by students and teachers during school hours and for school-related activities outside of school hours. These guidelines and procedures should be evidence-based, age-appropriate, and regularly reviewed to adapt to evolving research and technology trends.

This item has been reviewed and approved by the Office of General Counsel as to form and legal sufficiency.

ACTION PROPOSED BY

Mr. Roberto J. Alonso:

That The School Board of Miami-Dade County, Florida, direct the Superintendent to:

1. In coordination with the Parent Academy to develop a plan to create programs that encourage parental involvement in managing and monitoring their children's screen time, organize workshops and seminars led by health professionals, psychologists, and educators to discuss the impact of screen time on physical and mental health.
2. Develop and create appropriate web resources and informational pamphlets outlining the risks of excessive screen time and tips for healthier digital habits.
3. Explore the feasibility of promoting and integrating lessons on digital literacy and screen time management into the school curriculum, teaching students about the importance of balancing screen time with other activities.
4. Develop a plan for implementation and enforcement of School Board policies that promote healthy screen use, such as guidelines for screen time during school hours and recommendations for at-home use.
5. Provide a report regarding the proposed actions for this item at the Academics, Innovation, Evaluation, and Technology Committee meeting of August 7, 2024.