

# Safe Schools Policy – Best Practice Standards for Screens and Radiation

By Cris Rowan, Dr. Lennart Hardell, Tarmo Koppel, Sveinn Kjartansson & Stella Sæmundsdóttir

The past decade was marked by rising use of mobile technology by children in homes and schools, with studies showing concurrent decline in [child physical](#)<sup>1,2</sup> and [mental health](#)<sup>3</sup>. One in three children enter school [developmentally vulnerable](#)<sup>4</sup>, one in four are [obese or overweight](#)<sup>5,6</sup>, one in seven have a [diagnosed mental illness](#)<sup>7</sup>, and one in ten are [addicted to technology](#)<sup>8</sup>. As problematic behaviors escalate and classroom management becomes increasingly difficult, schools continue to increase unmanaged student technology use. Safety standards for children in schools regarding screen time and wireless radiation either do not exist, or do not concur with [current scientific evidence](#)<sup>9</sup>. There are no studies which demonstrate wireless radiation endemic in mobile technology is *safe* for humans, with mounting research [now indicating harm](#)<sup>10</sup>. Cancer incidence in teens has risen [25% over the past 38 years](#)<sup>11</sup>. The rapidity of child development poses increased risks for children, indicating immediate measures be taken in school environments to protect children. This *Safe Schools Policy* will serve as an education industry benchmark standard in ensuring productive and sustainable futures for all children.

## Safe Technology Policy for Schools

1. *Prohibit all cell phones from school environments.*
2. *Replace wireless with wired technology; relocate cell phone towers.*
3. *Ensure literacy achieved grades K-3; prohibit all educational technology until grade 4.*
4. *Limit education technology duration to less than 1 hour/day; education technology content should pass 'high quality research' criteria.*
5. *Requirements for outdoor physical activity should increase relative to education technology use.*

## Safe Technology Procedures for Schools

### ACTION 1 – BAN CELL PHONES

*Prohibit all cell phones from school environments.*

#### Rationale

Use of cell phones in schools has risen steadily since their inception in 2010, and management of this technology by teachers is becoming increasingly problematic. Students are accessing inappropriate content on their cell phones including video games, pornography, Facebook, texting, sexting, and cyberbullying. Studies show multitasking (using multiple devices at one time) [reduces student productivity](#)<sup>12</sup> and is harmful to [physical and mental health](#)<sup>13</sup>. Having a cell phone on the desk during class even though not in use, has been shown to [reduce grades](#)<sup>14</sup>, and 92% of students report that when studying, they prefer [books to screens](#)<sup>15</sup>. Cell phones emit what is now determined to be [harmful radiation](#)<sup>16</sup> which is linked to cancer as well as [problematic behaviours](#)<sup>3</sup> in children, with observed growing trend to [diagnose and medicate](#)<sup>17</sup> these behaviors. Current research indicates that this ongoing and relentless screen and radiation experimentation on students in schools, needs to stop now.

## ACTION 2 – GO WIRED

*Replace all wireless devices including tablets, routers, cell towers, and blue tooth, with wired technology. Relocate cell phone towers away from school to a safe distance as defined by government occupational health and safety guidelines.*

### Rationale

In 2011 the International Agency for Research on Cancer at [WHO categorized wireless radiation<sup>18</sup>](#) emitted from cell phones, tablets, routers, cell towers etc. as a Group 2B (possible) carcinogen. The U.S. Federal Drug Administration's *National Toxicology Program* preliminary findings released in May 2016 showed [increased incidence of cancer<sup>10</sup>](#) in male mice and rats following 10 hour/day wireless exposure. Recent [systematic study of cancer epidemiology<sup>19</sup>](#) research demonstrated *1.33 times greater brain cancer risk* with cell phone use greater than 10-year duration when low quality or biased studies are eliminated. Until proven safe, the Environmental Health Trust's [Precautionary Principle<sup>20</sup>](#) calling for removal of wireless radiation from schools must be applied.

## ACTION 3 – ENSURE LITERACY

*Ensure literacy achieved grades K-3; prohibit all educational technology until grade 4.*

### Rationale

Foundations for child development and learning include movement, touch, human connection, and nature. Technology use prohibits child engagement in these 4 factors, and consequently has proven to be [detrimental to development and learning<sup>21</sup>](#). Education technology (edtech) is [inadequate in achieving foundations<sup>22</sup>](#) for printing, reading, or math literacy which require sensory, motor and spatial activation. Should children achieve developmental foundations for literacy, self-regulation, social skills, and attention ability by the end of grade 3, approved and safe use of edtech is appropriate by grade 4.

## ACTION 4 – EDTECH EVIDENCE

*Edtech duration should not exceed 1 hour/day; content should pass 'high quality research' criteria.*

### Rationale

Countries with the highest PISA scores use no more than 1 hour of edtech per day (China, South Korea), and those with the [lowest PISA scores use the most edtech<sup>23</sup>](#). Canada dropped out of the top ten PISA rankings in 2012, with no improvement in 2015 status. Edtech is not evidence based, and [lacks proven outcomes<sup>24</sup>](#). Industry driven edtech studies which report positive outcomes, are rife with conflict of interest and bias resulting in misinterpretation and misrepresentation of data. Edtech requires reliable and reproducible government or university conducted studies which meet government determined 'high quality research criteria', and prove not only short term benefits but also long term efficacy to qualify for use in schools.

## ACTION 5 – MOVE OUTSIDE

*Requirements for outdoor physical activity should increase relative to education technology use.*

### Rationale

Edtech is sedentary, overstimulating and isolates students from their teachers and peers resulting in [impaired development, sleep deprivation, mental illness, attention deficit, lack of self-regulation, and few social skills](#)<sup>17</sup>. Counterbalance initiatives to use of edtech should include engagement in movement and nature activities. Research shows movement not only improves cardiovascular fitness, but also builds strong core needed for motor coordination, which in turn [improves printing and reading literacy](#)<sup>25,26</sup>. 45 minutes of exercise using equipment such as treadmill, bike, elliptical, and rowing machines prior to doing school work, have proven to [improve grades, mood, attention, and ease of learning](#)<sup>27</sup>. Access to as little as [20 minutes per day of “green space”](#)<sup>28,29</sup> found in nature, has proven to significantly reduce adhd and improve attention. Standing instead of sitting, outdoor class, gym station obstacle courses, and challenging [teen playgrounds](#)<sup>30</sup> would effectively counterbalance edtech, and enhance development, behavior and learning.

## Safe Schools Policy – Summary Statement

The ways in which we are raising and educating children with technology are not sustainable<sup>31</sup>. Children are using 7.5 hours/day and teens 9 hours per day of entertainment media,<sup>32, 33</sup> which is 4-5 times the amount recommended by the American Academy of Pediatrics<sup>34</sup>. Experts continue to raise the alarm regarding children’s significant vulnerability to wireless radiation,<sup>35</sup> yet schools continue to escalate use of unsafe and unmanaged education technology.<sup>36</sup> At what point do schools, school boards, and education government become complicit in knowingly causing harm to children, and when does society stop using children as guinea pigs? Enact *Safe Schools Policy – Best Practice Standards for Screens and Radiation* now. It’s already too late.

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## Authors and Contact Info

**Cris Rowan** BScOT, BScBI, SIPT. Pediatric Occupational Therapist and biologist. Presented at DDA conference. Clinical Instructor at Pacific University Portland Oregon for OT doctoral course on impact of technology on children. Institute for Digital Media and Child Development - Parental Education, Clinical Research CAOT Sensory Processing Disorder - BC Rep. Performed over 300 workshops for health and education professionals and parents. Publish numerous articles in international journals and presented at international conferences. Cris can be reached at [crowan@zonein.ca](mailto:crowan@zonein.ca).

**Prof. Lennart Hardell** is a professor in Oncology and cancer epidemiology at the University Hospital in Orebro, Sweden. Has his research contributed to the cancer classification of different agents such as TCDD, PCB, the herbicide Glyphosate, and radio frequency fields. Vice President of European Society of Environmental Health. Deputy of Ethical Committee at Uppsala. European Journal of Cancer Prevention Research Prize. Swedish Medical Research Council in molecular genetic epidemiology. 2011 IARC expert in classification of cell phone radiation

carcinogenicity. Dr. Hardell can be reached at [Lennart.hardell@orebroll.se](mailto:Lennart.hardell@orebroll.se).

**Tarmo Koppel**, Tallin University of Technology. Materials Science, Electromagnetism, Health Economics. BSc, MA, PhD-candidate. Tarmo Koppel is an environmental health scientist. For the past three years Tarmo has been involved in European Union's and Estonian electromagnetic fields legislation analysis and formulation as a national expert. His recent years in research have focussed on mobile communications (mobile networking) risk management issues. Tarmo can be reached at [tarmo.koppel@ttu.ee](mailto:tarmo.koppel@ttu.ee).

**Sveinn S. Kjartansson** and **Stella Sæmundsdóttir** coordinated the international conference *Children Screen Time and Wireless Radiation* held on Feb. 24, 2017 in Reykjavik Iceland, serve on the board for the *Association of Parents of Pre-School Children*, and co-own *Iceland Luxury Tours*. Sveinn has a BSc in computer science, is an entrepreneur in wireless technology and IT, and is an observer for the *Reykjavik Education and Youth Committee*. Stella's academic background is in psychology, is an avid wireless research collator, and previous owned and managed a book store. Sveinn and Stella can be reached at [sveinnk@gmail.com](mailto:sveinnk@gmail.com).