

July 16, 2019, Massachusetts Joint Committee of Education Hearing

***Testimony in support of state legislation to regulate school technology,
specifically for the intent of:***

S. 294, An Act Limiting School Screen Time

S. 295, An Act Accounting for Technological Privacy and Safety in Schools
with Local and State Committees

H. 588, An Act Requiring Privacy Protections and Supporting Safer
Technology in Schools

H. 587, An Act reducing public school nonionizing radiation and wireless
exposures

Submitted By:

Kirstin Beatty, Last Tree Laws co-chair and Holyoke resident

Attached:

Co-signers of Testimony – Except Bolding, Added After Signatures Collected

STATE STANDARDS EXCESSIVELY PROMOTE SCREEN TIME & TECHNOLOGY, DETRACTING FROM STUDENT HEALTH AND EDUCATION

A screen time bill (S. 294) was put forward by [Kirstin Beatty of] Last Tree Laws to remove the technology mandate, to encourage schools to limit screen time and return technology choices to local communities and teachers.

Digital addiction, “electronic cocaine,” and “digital heroin” are entering our lexicon based on observations of parents, scientists, and psychologists.^{i ii} A Stanford study reports 1 in 8 adults report difficulty remaining offline, showing compulsive attachment to cyberspace such as with chat rooms, blog entries, emails, etc.ⁱⁱⁱ If adults have trouble, why are we habituating preschoolers?

Massachusetts has a Pre-K educational writing standard *requiring pre-kindergarteners* use digital tools to *convey messages*. Why demand technology use in Pre-K when students can barely spell?

Doctors even report early technology use is interfering with motor skills and the ability to hold a pencil.^{iv v vi}

However, integration of technology by teachers, administrators, and superintendents is enforced by state performance rubrics [and promoted by the resources or grants available through the state Massachusetts Personalized Learning Edtech Consortium (MAPLE) and the New England Secondary Schools Consortium (NESSC)].^{vii}

Through grade 12, our state standards require public school students utilize technology in nearly every course *in addition* to media and computer science digital requirements.

Tech requirements in non-tech courses mean that *subject matter becomes secondary*. Use of a draw and paint program is suggested to meet foreign

language standards. Requirements for software like draw and paint requires purchase, instruction, and navigation of the software, which can leech time and attention from foreign language learning and be a logistical burden to teachers, schools, and students.

In foreign language and any other non-tech subject, our mandate ought to be the subject, not technology.

The Organisation for Co-Operation and Development, funded by 34 countries, in 2015 released a study finding math and reading skills were much worse where students had more technology access. Just viewing emails beyond once or twice a week negatively impacted reading skills.

Yet, with budget shortfalls, many school committees are advocating online courses and cutting existing teachers.^{1 viii}

The Center for Education Policy Analysis in 2015 reported students in online college courses “perform substantially worse than students in traditional in-person courses.” Reviews by both the Stanford University Center for Research on Education Outcomes in 2015 review and the National Education and Policy Center in 2016 found, in contrast to brick and mortar, poor academic outcomes in online schools.^{ix x} Despite marketing and convenience, EdTech is academically questionable.^{xi}

The value of educational freedom or of individual specialization and divergence, of democracy and socialization, mean that we should minimize the automation, centralization, marketing, and top-down control made possible by technology.^{xii xiii} Curriculum content should be decided by local communities and teachers personally engaged with students, not distant, financially-interested parties. EdTech providers should not use platforms to brand students or insure market monopoly.

1 The *Hampshire Gazette* reports the South Hadley, MA, school district is cutting music, physical education, art, summer school, social studies, and a few elementary teachers due to budget shortfalls. Not reported in the article is that the high school French teacher is also being replaced by an online course (Voghel, J. 2019 June 4).

Any data that is collected digitally most likely can never be fully protected from malicious users. Even when data is anonymized, de-identified, or hidden, data may be stolen and reconstructed. Or data can be lost. In 2018, the Leominster school district paid \$10,000 in ransomware: across the nation, ransomware is increasingly a problem.^{xiv xv xvi}

Even if impossible to absolutely secure, at minimum contractors and schools should be legally obligated to protect student, staff, and their families from profiling and surveillance. The ACLU has reported that in Massachusetts school-issued digital devices arrive loaded with spyware such as keylogging and webcams, and that schools often fail to establish protective contracts and policies.^{xvii} The Network for Public Education and Parent Coalition for Student Privacy award our state privacy laws an F.^{xviii}

H. 588, put forward by Last Tree Laws, differs from the privacy bill put forward by Representative Roy. Privacy rights include all students and staff, including home-schoolers and extending from Pre-K, and responsibility resides not just with online vendors, but upon all persons. School districts and the state department are to provide staff privacy trainings. Following the recommendation of the Electronic Frontier Foundation, this bill allows students to opt out of technology use.

We have another recommendation. To prevent convenience from becoming a monopoly, we recommend that a different password and logon be required for educational versus entertainment services, and that vendors be prohibited from providing any for-profit promotions or branding to students and staff. If the same log-on is used for education and entertainment purposes, students and staff should be clearly informed when privacy protections no longer apply.

Representative Roy's legislation H. 564 focuses on preventing K-12 vendors for school districts from using or selling data collected for targeted advertising. We agree with this goal, but recommend a few changes to include Pre-K, homeschoolers, and to destroy, not delete, data. H. 564 also sets a maximum penalty, unless malicious intent can be

proven. Since lawsuits are difficult & malicious intent nearly impossible to prove, we recommend making \$1000 a minimum penalty and allowing further punitive damages for negligence.

Last Tree Laws also put forward S. 295, which requires school districts to set ongoing privacy and safety technology benchmarks, forcing school districts to recognize the task. S. 295 also requires school districts and the state department to facilitate education on technology health, safety, and risks such as digital addiction, automation, and propaganda. To prevent industry influence, measures are taken to prevent conflicts of interests.

The trillion-dollar technology industry, billions in EdTech, has managed to promote technology in schools and legislation: there needs to be a full accounting of all sides of technology, not marketing by industry & financially-interested parties. ^{xix xx xxi xxii xxiii}

The American Academy of Pediatrics recommends two hours or less of sedentary screen time daily, referencing risks of privacy, obesity, sleep disruption, sense of self, cyberbullying, sexting, exploitation, and digital addiction.^{xxiv} Many studies indicate that increasing frequency of online communication increases cyberbullying.^{xxv} Other studies link screen time to depression and social-emotional disturbance. ^{xxvi xxvii xxviii}

Responsibility dictates that we should also take seriously research indicating health risks from electromagnetic exposures like wireless or, in close contact, electricity. Wireless concerns have been raised by the American Academy of Pediatrics, the Institute for Occupational Safety and Health, the International Agency for Research on Cancer, and studies by the Ramazzini Institute, the National Toxicology Program, and others.^{xxix xxx xxxi xxxii xxxiii} More specifically, electromagnetic risks suggested by existing research include detrimental behavioral changes, cancer, and brain, immune, and reproductive damage.^{xxxiv}
^{xxxv} Whether we sponsor further research or not into mitigating or ascertaining effects, we have a responsibility to avoid inflicting these risks.

Contact Person: Beatty, Kirstin (Holyoke, MA)

Schools lack funds to hard-wire technology or to control other emanations from technology like high magnetic and electric fields or blue light. Since schools cannot address these risks in addition to other issues, a mandate to use technology is especially concerning. Further, the mandate ignores that digital devices for every student exact a toll on our environment and resources.^{xxxvi xxxvii}

Following Cyprus, France, and other countries, Last Tree Laws put forward a bill (H. 564) to encourage schools reduce wireless and other electromagnetic exposures based on current research indicating health risks. The bill revises the purpose of the Title XII to include insuring the environmental health and safety of public school classrooms.

When technology is used, we have a responsibility first to insure safety and educational freedom. Our state mandate should be a healthy and safe learning environment that provides local communities with educational flexibility.

Please support our testimony and the intent of these bills as stated.

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