Dear members of the Education and Culture committee.

I am Magili Chapman Quinn, DO. I live in Scarborough. I am an Osteopathic Family Physician and mother of two daughters, 15 and 12 years old. I grew up in Oxford, ME and went to Oxford Hills Comprehensive High School, graduating in 1989. After attending Stanford University for my undergraduate education in Communication, I attended Osteopathic medical school in Kansas City MO, where my mentor, Dr. Judy Shedd DO of Bridgton ME, had attended. I speak of this to establish my ties to Maine and the quality of education, mentorship, and people I credit my success to.

I graduated from medical school having just obtained a flip phone, in 2003. In just over 20 years our culture has changed so profoundly as a result of cellular technology and smartphone use that, if I were growing up today, I'm not sure I would enjoy the same level of success. By design, my attention to the opportunities in front of me and the people in my local spheres would have been co-opted toward millions of info bytes from far away and unknown content makers without the knowledge of, or ability of, my parents or other trusted adults to have any idea where I was placing my attention. In fact no trusted source would be able to track this. The sources tracking are those deliberately designed to monetize attention. We are selling our attention and that of our children for the profit of companies that have no other incentive than to make a lot of money.

I practice Osteopathic Manipulative Medicine, a hands-on form of treatment that addresses physical pain and nervous system balance. I am acutely aware of the impact of cellular technology and social media in my teenage patients. Most of the patients I see in their teens and early twenties experience anxiety and musculoskeletal pain related to hypervigilance. This vigilance is driven by the "fight or flight" part of our autonomic nervous system, the system that regulates the overall balance of hormones, neurotransmitters and nerve impulses that allow us to process experiences and remain in balance and ready to respond to our environment. We naturally cycle on a continuum between highly activated, more "fight or flight" to very relaxed, or "rest and digest". Ideally we remain somewhere in the middle, with some periods on either end at the extremes, but are flexible and resilient, and able to regain a middle ground as a baseline.

Teens are in a particularly vulnerable place in their development of this nervous system baseline or set point. When they are constantly inundated by their access to cellular technology and social media, with its dopamine hits and disruptions to attention, their natural balance shifts toward being more highly activated - "fight or flight". These hormones promote hypervigilance, feelings of being unsafe, increased agitation, and inability to settle - none of which allow for easy intake of information and learning. These lead to anxiety, depression, muscular tension and pain, and digestive difficulties (ie lack of ability to access "rest and digest").

Schools are meant to be a place where we create an environment for optimal ease of learning. This starts with the qualities of the space and the expectations of the community. Children have

ample time outside of the school day to learn responsible use of personal smart devices. Parents will benefit from having the social norm shift toward no use during school as they will have that example to refer to when they try to implement limits to use and the reasons this is beneficial. After the initial adjustment, which will be painful, and an actual physiologic detox from an addiction, and establishing new cultural norms, which is always challenging, the benefit to well-being, nervous system regulation and ability to learn will increase substantially.

The smart technology will no longer be a barrier to relationships with the teachers and community members physically present during the school day. The beneficial aspects to in person, face to face relationships for growing healthy social beings will again be the focus in the setting, without constant distraction or need to police smart technology.

I have struggled personally with this in my own family. My daughter obtained a smartphone at 12 yo, too early in my opinion in hindsight. Within the first month, she was given the contact of a boy from NJ who was her age and sent her drawings of content indicating he was suicidal. As I was monitoring her texts I saw this activity. It required me to become an investigator trying to track down how to help this boy, while also supporting my 12 year old daughter as to why communicating with a person from a place you don't know, without adult involvement, was risky and potentially dangerous. My daughter has also had incidents of receiving inappropriate sexual content, and being solicited for the same. She had an incident in school of being accused of showing inappropriate pictures to a friend on her phone, which resulted in weeks of difficult investigation, mental health visits and a lost friend.

Teens will have their learning curves universally, smart phones or not, but the level and scope of these incidents is so much greater in severity due to the involvement of the technology.

I appreciate your consideration of my testimony. We have worked hard at the local level here in Scarborough with some success but feel the top down legislation will provide the structure the administration needs to fall back on with any parent push back. We parents also need to examine our smartphone use and likely dependence as well, and until we start to make it a cultural norm to limit use and really consider what constitutes healthy use, that push back will happen.

I urge you to implement this legislation and create smart tech free schools in Maine.

Thank you, Magili Chapman Quinn, DO