Keynote Address: The Movement to Protect Kids from Addictive Technologies

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ABSTRACT

In this keynote address, I describe my personal journey starting with a school outreach program I created in 2017 to address technology overuse among kids. While I initially advocated for self-help methods, I grew to recognize that the tech industry bore responsibility. This realization led me to write "Unwired: Gaining Control over Addictive Technologies," which focused on collective action to pressure the tech industry to redesign its addictive products.

I then describe the movement to control addictive technologies and protect kids, which has gained momentum since the end of the pandemic. This movement combines grassroots parent activism with legal-political action. It includes action to restrict phones in schools; impose warning labels on social media; class action suits against social media and games by parents of victims; school districts and attorneys general; as well as hundreds of bills and laws enacted to protect kids from excessive screen time and other online harms.

I conclude by calling for lawyers and parents to join this movement now – to take advantage of this window of opportunity – to save a generation of kids facing a public health crisis.

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I want to take you back for a moment to 2009. This was the year when things started changing. This was the year that smartphones got popular and so did social media.¹ Suddenly we could be online everywhere we went. We started communicating differently with each other -- increasingly virtually and less often in person.

At that time, I was the mom of three very small kids, and an early career law professor. I commuted from my home in Manhattan to my my law school in New Jersey. Maybe unsurprisingly, I became an early adopter. I vividly remember my first smartphone. It was a red Blackberry. I quickly realized it was much more efficient to text my kids' caregivers than to call; or to clear my inbox by answering emails on the way to work. Very soon I was sitting on that train noticing nobody. A colleague or a student could be right next to me in the same car, and I would never see them. I was immersed in my screen.

It took me a few years, but by around 2015, I really started noticing life changing around me and especially around my kids. I went to kids' birthday parties and realized that the kids were no longer playing with each other but instead they were sitting in a row staring at their phones.

In my role as the Director of the Institute for Privacy Protection in my law school. I decided to do so something about it. I created a school outreach program for students at the age in which they got their first cell phone and for their parents. The program introduced a new topic - technology overuse. My law students instructed the students, and I gave lectures to the parents.²

¹ Joshua Boyd, *The History of Facebook: From BASIC to Global Giant*, BRANDWATCH (Jan. 25, 2019), https://www.brandwatch.com/blog/history-offacebook/; Susannah Fox & Lee Rainie, *The Web at 25 in the U.S.*, PEW RSCH CTR., (Feb. 27, 2014), https://www.pewresearch.org/internet/2014/02/27/theweb-at-25-in-the-u-s/; Chris Quick, *With Smartphone Adoption on the Rise*, *Opportunity for Marketers Is Calling*, NIELSEN (Sept. 15, 2009), https://www.nielsen.com/us/en/insights/article/2009/with-smartphone-adoptionon-the-rise-opportunity-for-marketers-is-calling/.

² Drew Harwell, *The New Lesson Plan for Elementary School: Surviving the Internet*, WASH. POST. (Apr. 6, 2018), https://www.washingtonpost.com/business/economy/the-new-lesson-plan-for-

The program launched in 2017. Many people were not yet aware of how much time we spend on screens. I believed that once I talk to parents and help them realize there is a problem, things will change. I spoke about how we and especially our kids use our screens too much. I offered self-help measures, like parental controls to limit time or no phones at dinner. I also planned to write a book titled: Technology Addiction and the Power of Awareness.

Then the picture became clearer. Whistleblower after whistleblower emerged from Silicon Valley and explained that tech companies are designing their products to make sure users stay online for as long as possible to increase their revenues.³ This information finally revealed a complete picture of the business model that governed the Internet nearly since its inception.

This was a business model we liked because we were getting things for free. We got Gmail for free; we got Facebook for free. But the whistleblowers' revelations made it clear that they were not actually free. We paid for them with our time and with our data. Tech companies made money by targeting ads at us. To do that they needed to collect our data; and to collect data they needed to keep us online for as long as possible. They also needed to keep extending

elementary-school-surviving-the-internet/2018/04/06/8b4a8202-0417-494b-a72b-792221e08e3b story.html.

³ See Gaia Bernstein, A Window of Opportunity to Regulate Addictive Technologies, 2022 WIS. L. REV. FORWARD 64, 68-69 (2022); Dara Kerr, Meta Failed to Address Harm to Teens, Whistleblower Testifies as Senators Vow Action, NPR ORG. (Nov. 7, 2023), https://www.npr.org/2023/11/07/1211339737/metafailed-to-address-harm-to-teens-whistleblower-testifies-as-senators-vow-act; Bianca Bosker, The Binge Breaker, THE ATLANTIC (Nov. 2016), https://www.theatlantic.com/magazine/archive/2016/11/the-binge-

breaker/501122/; THE SOCIAL DILEMMA (Netflix 2020); Victor Ordonez, Key Takeaways from Facebook Whistleblower Frances Haugen's Senate Testimony, ABC NEWS (Oct. 5, 2021), https://abcnews.go.com/Politics/key-takeaways-facebook-whistleblower-frances-haugens-senate-testimony/story?id=80419357; Former Meta Executive Testifies on Social Media and Youth Mental Health, C-SPAN (Nov. 7, 2023), https://www.c-span.org/video/?531650-1/meta-executive-testifies-social-media-youth-mental-health#; Justin Hendrix, Transcript: Senate Hearing on Social Media and Teen Mental Health with Former Facebook Engineer Arturo Bejar, TECH POLICY PRESS (Nov. 8, 2023), https://www.techpolicy.press/transcript-senate-hearing-on-social-media-and-

teen-mental-health-with-former-facebook-engineer-arturo-bejar/.

our time online so we will see the targeted ads.⁴ Basically, it became clear that our data and time are the resources;⁵ and so, it was no accident our screen time kept trickling up. It was not really our choice. We were manipulated.

How do tech companies manipulate us to keep us online? They use designs that target our deepest human vulnerabilities.⁶ For example, they use a design called the infinite scroll. On Facebook or Instagram there is never an end to a page, we just keep scrolling. They took away our stopping cues. A similar design is the autoplay, on YouTube or TikTok one video automatically follows another.⁷

Tech companies also use algorithmic feeds designed to show us content that will keep us online for longer. They discovered that people linger on when they are angry. The algorithm then promoted posts that received angry responses. They discovered that taking kids to black holes keeps them on for longer.⁸ The algorithms then directed teen girls to videos that promoted anorexia.⁹ It also led kids to the infamous TikTok choking challenge, which resulted in the death of some of the experimenters.¹⁰

⁴See GAIA BERNSTEIN, UNWIRED: GAINING CONTROL OVER ADDICTIVE TECHNOLOGIES 80-81 (2023); Gaia Bernstein, Gatekeeping Screen Time: Configuring the Regulation of Addictive Technologies and Kids; Privacy Rights, forthcoming VILL. L. Rev. 30-34 (2025),https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5026758; Elettra Bietti, The Data-Attention Imperative, POL. ECON. DATA 1, 6, 21, 27 (2024). For a discussion of the business model involving data, time and ads, see Neil Richards & Woodrow Hartzog, Against Engagement, 104 B.U. L. REV. 1151, 1157-1161 (2024). See also JULIE E. COHEN, BETWEEN TRUTH AND POWER: THE LEGAL CONSTRUCTIONS OF INFORMATIONAL CAPITALISM 83-89 (describing manipulative societal power of engagement-optimized platforms); Tim Wu, Blind Spot: The Attention Economy and the Law, 82 ANTITRUST L. J. 77, 772, 778 (2019).

⁵ SHOSHANA ZUBOFF, THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER 8 (2018) (it "uses human experience as raw material.").

⁶ Daniel Susser et al., *Technology, Autonomy, and Manipulation*, 8 INTERNET POL'Y REV. (June 2019), at 1.

⁷See BERNSTEIN, *supra* note 4, at 38 & 116 (2023).

⁸ See BERNSTEIN, supra note 4, at 36-38, 130-133 (2023).

⁹ Karen Hao, *The Facebook Whistleblower Says its Algorithms are Dangerous. Here's Why.*, MIT TECHNOLOGY REVIEW (Oct. 5, 2021), https://www.technologyreview.com/2021/10/05/1036519/facebookwhistleblower-frances-haugen-algorithms/.

¹⁰ Michael Levenson & April Rubin, *Parents Sue TikTok, Saying Children Died After Viewing 'Blackout Challenge'*, N.Y. TIMES (July 6, 2022), https://www.nytimes.com/2022/07/06/technology/tiktok-blackout-challenge-deaths.html.

Realizing what was happening, I ended up writing a different book – Unwired: Gaining Control over Addictive Technologies.¹¹ I understood that awareness alone will not solve the problem. I saw that collective legal action is needed to exert pressure on tech companies to change their addictive designs. As well as collective pressure to change how we use devices in physical spaces, especially schools.

I looked back into the past to see what we can learn about containing technology addiction. I closely examined the battles against tobacco; junk food and the fight to protect privacy. There was a lot to be learnt, and you can read more about it in the book. I will focus now on one of the important lessons I learnt. It is that there is no magic solution. No one winning route. No one Supreme Court case that can solve the problem.

If you look, for example, at the historic fight against cigarette companies. This battle was successful. Far fewer people smoke today (at least regular cigarettes). But although tobacco has no redeeming traits, it took decades and many different legal actions to get there. It was 1964, after over a decade of scientific debate, that the US Surgeon General announced that smoking is a serious health risk.¹²

Still litigation went on for decades. Until the 1990s, smokers kept losing cases because the tobacco industry successfully argued that it was their choice to smoke, and they are responsible for the outcomes.¹³ Progress relied on laws that prohibited advertising cigarettes and required warning labels about the harms of smoking.¹⁴ It relied on lawsuits brought by state attorneys generals for the costs

¹¹ See BERNSTEIN, supra note 4 (2023).

¹² Allan M. Brandt, The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product That Defined America 210-39 (reprint ed., Basic Books 2009).

¹³ See BERNSTEIN, *supra* note 4, at 53-56 (2023).

¹⁴ See Federal Cigarette Labeling and Advertising Act 79 Stat. 282 Pub. L. No. 89-92 1 (1965); see BRANDT, supra note 12, at 254–58.

of healthcare for the harms of smoking.¹⁵ And it relied on local and national laws prohibiting smoking in restaurants, bars and planes.¹⁶

A similar process is happening right now. A movement to protect kids from addictive technologies emerged as the pandemic ended. By then, many medical and psychological studies piled up pointing to a public health crisis for kids. Researchers found significant impact on kids' mental health; cognitive development (evidenced also through brain images); attention; lack of sleep; and social isolation.¹⁷ I want to highlight just some examples from the mental health data. From 2010 to today depression rates of kids more than doubled.¹⁸ Suicide rates for girls ten to fourteen quadrupled. ¹⁹ Many studies pointed to the link between excessive screen time, especially on social media, and these mental health harms.²⁰ And importantly the US attorney General issued an Advisory about the harms of social media;²¹ just like his counterpart in 1964 reacted to the harms of smoking.

This movement grew very fast. It is both a grassroot movement of parents and a legal-political movement. Around the world in many countries, including the United States, smartphone free childhood

¹⁵ DONALD G. GIFFORD, SUING THE TOBACCO AND LEAD PIGMENT INDUSTRIES: GOVERNMENT LITIGATION AS PUBLIC HEALTH PRESCRIPTION 121–32 (Univ. of Mich. Press 2010).

¹⁶ See BERNSTEIN, supra note 4, at 58 (2023); see BRANDT, supra note 12, at 289–90; see GIFFORD, supra note 15, at 106–07; James A. Henderson & Aaron D. Twerski, *Reaching Equilibrium in Tobacco Litigation*, 62 S.C. L. REV. 67, 75 (2010).

¹⁷ See BERNSTEIN, supra note 4, 6-32 (2023); see BERNSTEIN, supra note 3 (2022). ¹⁸ JONATHAN HAIDT, THE ANXIOUS GENERATION, 23-25 (2024).

¹⁹ JEANE M. TWENGE, GENERATIONS: THE REAL DIFFERENCES BETWEEN GEN Z, MILLENNIALS, GEN X, BOOMERS, AND SILENTS—AND WHAT THEY MEAN FOR AMERICA'S FUTURE 399-400 (2023).

²⁰ See for example., a longitudinal cohort study of U.S. adolescents aged 12–15 (n=6,595) that adjusted for baseline mental health status found that adolescents who spent more than 3 hours per day on social media faced double the risk of experiencing poor mental health outcomes including symptoms of depression and anxiety. Kira E. Riehm & Kenneth A. Feder, *Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth*, JAMA PSYCHIATRY 1266-1273 (Sept. 11, 2019), https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2749480.

²¹U.S. DEP'T OF HEALTH AND HUMAN SERVICES, THE U.S. SURGEON GENERAL'S ADVISORY: SOCIAL MEDIA AND YOUTH MENTAL HEALTH (2023), https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf.

groups lead by parents are growing.²² In the United Kingdom, this year, two moms posted an Instagram post about parents collectively uniting to delay giving kids' smartphones by joining a WhatsApp group. The post went viral. They were shocked when the group immediately reached capacity. They encouraged others to starts groups and within hours over 60 smartphone free childhood WhatsApp groups emerged around the UK.²³

We are seeing action in schools, which is a result of grassroots action by parents,²⁴ individual schools,²⁵ and more and more broad bans on phones. Schools in France and the United Kingdom have implemented phone bans in schools.²⁶ In the United States this trend has significantly intensified in 2024 when states like Virginia²⁷, Florida²⁸ and Ohio²⁹ and large cities like Los Angeles³⁰ banned or

²² For example, in the United States a leading group is MAMA (Mothers Against Social Media Addiction). MOTHERS AGAINST MEDIA ADDICTION, INC., https://www.joinmama.org/ (last visited Jan. 6, 2025). *See also* Jonathan Haidt's movement FREE THE ANXIOUS GENERATION https://www.anxiousgeneration.com/ (last visited Jan. 6, 2025).

²³ The UK group is called Smartphone Free Childhood. SMARTPHONE FREE CHILDHOOD LIMITED, https://smartphonefreechildhood.co.uk/about (last visited Jan. 6, 2025). *See also*, Mabel Banfield-Nwachi, '*It went nuts': Thousands Join UK Parents Calling for Smartphone-free Childhood*, THE GUARDIAN (Feb. 17, 2024), https://www.theguardian.com/technology/2024/feb/17/thousands-join-uk-parents-calling-for-smartphone-free-childhood.

²⁴ A leading group is Fairplay Screens in School Group. SCREENTIME NETWORK https://screentimenetwork.org/work-groups (last visited Jan. 6, 2025).

²⁵See Ty Roush, Cellphone Bans in Schools Grow: Gavin Newsom Requests Restrictions in California, FORBES

⁽Aug. 13, 2024), https://www.forbes.com/sites/tylerroush/2024/08/13/cellphone-bans-in-schools-grow-gavin-newsom-requests-restrictions-in-california/.

²⁶ Alissa J. Rubin & Elian Peltier, *France Bans Smartphones in Schools through* 9th

Grade. Will It Help Students?, N.Y. TIMES (Sept. 20, 2018), https://www.nytimes.com/2018/09/20/world/europe/france-smartphones-

schools.html; Department of Education Press Release: *Government Launches Crackdown on Mobile Phones in Schools, <u>Feb. 19, 2024</u> <u>https://www.gov.uk/government/news/government-launches-crackdown-on-</u> mobile-phones-in-schools.*

²⁷ VIRGINIA DEP'T OF EDUCATION, GUIDANCE FOR CELL PHONE-FREE EDUCATION PURSUANT TO EXECUTIVE ORDER 33 (2024), https://www.doe.virginia.gov/home/showpublisheddocument/57403/638621683 945370000.

²⁸ H.R. 379, 2023 Leg., Reg. Sess. (Fla. 2023).

²⁹ Am. Sub. H.R. 250, 135th Gen. Assemb. (Ohio 2025).

³⁰ Jaweed Kaleem, '*Turned off and stored*.' *LAUSD Reveals Details on School Cellphone Ban to Begin Feb. 18*, LOS ANGELES TIMES (Nov. 13, 2024), https://www.latimes.com/california/story/2024-11-13/lausd-strict-school-cellphone-ban-to-begin.

significantly restricted phones in schools. The movement made people aware that phones are not only distracting students during classes, but also inhibiting their ability to develop inter-personal skills. Kids spend recess staring at their phones instead of talking to each other.

We are seeing the Surgeon General and the forty-two state Attorneys General calling for a social media warning label.³¹ A health warning just like we have on cigarette packs.

Waves of litigation are expanding not just against social media and game makers of addictive games like Fortnite. But even against dating sites that use these addictive features.³² There are three dominant strands litigation. First, class actions by parents whose kids were harmed by social media or games. For example, parents whose kids died when they attempted the Tik Tok choking challenge; and parents whose kids who got so addicted to games that they disengaged from family, friends and schoolwork.³³

Second, many school districts across the country, and the first one was here in Seattle, are suing social media companies for the costs of mental health treatment for kids suffering from the impact of addictive social media features.³⁴

³¹ Vivek H. Murthy, *Surgeon General: Why I'm Calling for a Warning Label on Social Media Platforms*, N.Y. TIMES (June 17, 2024), https://www.nytimes.com/2024/06/17/opinion/social-media-health-

warning.html; Cristiano Lima-Strong, *42 State AG's Endorse Federal Plan to Add Warning Labels on Social Media*, THE WASHINGTON POST (Sept. 10, 2024), https://www.washingtonpost.com/technology/2024/09/10/state-attorneys-endorse-social-media-warning-labels/.

³² For lawsuits against dating websites, *see* Complaint & Demand for Jury Trial, Oksayan, Kessler, George, & Schlosser v. MatchGroup, Inc., No. 3:24-cv-00888 Cal. Feb. (N.D. 14, 2024), https://www.documentcloud.org/documents/24427323-match-group-complaint/; Bobby Allyn, Maker of Tinder, Hinge Sued Over 'Addictive' Dating Apps that Put Profits Over Love, NATIONAL PUBLIC RADIO (Feb. 14, 2024), https://www.npr.org/2024/02/14/1231513991/tinder-hinge-match-grouplawsuit#:~:text=While%20Hinge's%20advertising%20slogan%20boasts,publicl y%20traded%20company's%20revenue%20flowing.

³³ See SOCIAL MEDIA VICTIMS LAW CENTER, https://socialmediavictims.org/tiktok-lawsuit/ (last visited Jan. 6, 2025); Fortnite Addiction Lawsuit Overview, TORHOERMAN LAW, LLC (Dec. 10, 2024), https://www.torhoermanlaw.com/video-game-addiction-lawsuit/fortniteaddiction-lawsuit-epic-games-lawsuit/.

³⁴See Amended Complaint & Demand for Jury Trial, California v. Meta Platforms, Inc. (In re Soc. Media Adolescent Addiction/Personal Inj. Prods. Liab... Litig.), No. 4:22-md-30407 (N.D. Cal. Mar. 27, 2024); Social Media Complaint

Third, forty-one state Attorneys General are suing Meta, for addicting kids on Facebook and Instagram despite knowing from internal research the harms to kids' mental health.³⁵ This is very reminiscent of the lawsuit that attorneys general brought decades ago against the tobacco companies. The lawsuit, which played an important role in changing tobacco litigation outcomes and the eventual comprehensive settlement with the tobacco industry.

We are also seeing hundreds of bills in states and Congress to protect kids from excessive screen time and related online harms. Many of these laws impose responsibility on tech companies to make sure their products do not contain addictive designs that harm kids. Some impose a duty of care; some prohibit certain addictive designs; others prohibit access of certain minors to social media. There are many variations.³⁶

Still one thing we are seeing across the board, which also repeats the trajectory of the fights against tobacco and especially junk food is the tech industry's resort to the First Amendment. The tech industry is invoking the First Amendment to try to repeal law after law and to block the class actions.³⁷

Why are we seeing this? These laws and litigation are a huge threat to the tech industry's business model. As I explained before, tech companies rely on having users online so they can collect their data and target ads at them. Their revenues depend on this. Kids are a particularly important source of revenues. A recent study found that

Filed by Seattle Public Schools, SEATTLE PUBLIC SCHOOLS (Jan. 10, 2023), https://www.seattleschools.org/news/social-media-

case/#:~:text=Seattle%20Public%20Schools%20(SPS)%20took,Facebook%2C %20SnapChat%2C%20and%20YouTube; Arianna Prothero, *School District Lawsuits Against Social Media Companies are Piling Up*, EDUCATIONWEEK (Jan. 31, 2024), https://www.edweek.org/policy-politics/school-district-lawsuits-against-social-media-companies-are-piling-up/2024/01.

³⁵ Cristiano Lima-Strong & Naomi Nix, *41 States Sue Meta, Claiming Instagram, Facebook are Addictive, Harm Kids,* THE WASHINGTON POST (Oct. 24, 2023), https://www.washingtonpost.com/technology/2023/10/24/meta-lawsuit-facebook-instagram-children-mental-health/.

³⁶ See Bernstein, supra note 4, 13-17 (2025); Tim Bernard, *144 State Bills Aim to Secure Child Online Safety As Congress Flounders*, TECH POLICY PRESS (May 22, 2023), https://www.techpolicy.press/144-state-bills-aim-to-secure-child-online-safety-as-congress-flounders/ (summarizing state laws and bills in mid-2023).

³⁷ See e.g., NetChoice, LLC v. Rob Bonta, 113 F.4th 1101 (9th Cir. 2024); In re: Social Media Adolescent Addiction/Personal Injury Products Liability Litigation, 702 F. Supp. 3d 809 (N.D. Cal. 2023).

social media companies alone make eleven billion dollars a year from ads targeted at kids.³⁸

Tech companies are now arguing that their addictive designs, like the infinite scroll; the autoplay; and content manipulating algorithms, are speech that should be protected under the First Amendment and trump laws designed to protect kids.³⁹ We have many laws to protect kids offline. Kids must travel in car seats; they can't gamble; they can't buy cigarettes or alcohol.⁴⁰ But we are seeing an attempt to argue that the First Amendment trumps safe designs for kids online.

I would like to end by underscoring that we have come a long way from where I was in 2017 -- trying to convince parents that there is a problem. We know there is a problem, we know the costs and we know who is responsible. But we also have a generation of kids who grew up in front of screens. I will never forget the college student who raised her hand after one of my talks and said, "But professor, our generation just prefers not to talk to people."

I believe we have a duty as parents, as lawyers, to help this generation of kids by joining this movement. We who remember that it is possible to live differently, connected to each other, to have different childhoods. If we don't and we for wait longer to see if perhaps now the tech industry will regulate itself, we may lose this newly opened window of opportunity. The longer we wait; the harder it will be. Screens and artificial intelligence will integrate even further into our lives. And fewer of us will remember what it is we are trying to recapture.

³⁸Amanda Raffoul, Zachary J. Ward, & Monique, Social Media Platforms Generate Billions of Dollars in Revenue from U.S. Youth: Findings from a Simulated Revenue Model, PLOS ONE (Dec. 27, 2023), https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0295337.

³⁹ See e.g., NetChoice, LLC v. Rob Bonta, No. 5:22-cv-08861 (N.D. Cal. Nov. 1, 2024).

⁴⁰ See e.g., Cal. Veh. Code § 27360(a) (Deering) (requiring children under eight to be secured in a car seat); OHIO REV. CODE. ANN. § 3775.99(A) (prohibiting people under 21 from sports betting); 720 ILL. COMP. STAT. 675/1 (2019) (prohibiting people under 21 from purchasing tobacco); 3 R.I. GEN. LAWS § 3-8-11.1(b) (prohibiting people under 21 from purchasing alcohol).

I truly believe that this is an opportune moment to make a change, before it is too late.