

The Effects of Phone-Free Schools: A Collaborative Review

An ongoing open-source literature review posted and curated by [Jonathan Haidt](#) (NYU-Stern) and [Zach Rausch](#) (NYU-Stern), with research assistance from Jakey Lebwahl.

The documents collect and organize the published studies and essays addressing the following questions: (1) What do we know about phone-free schools' social, educational, and mental health impacts? And (2) how can elementary and middle schools best manage smartphone use during the school day?

If you have relevant experience (especially as a researcher, or as a teacher or administrator at a school that has changed its phone policy) then please click on the "request editing access" button in the upper right, and we'll set your permissions so that you can add to this document.

Notes:

- See also our other major reviews: [Social Media and Mental Health](#), which examines the evidence that social media use is a substantial contributor to these recent [increases in mental illness among adolescents since 2010](#).
- See our other collaborative reviews [here](#).
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INTRODUCTION

Since the early 2010s, we have witnessed a [global decline in academic performance](#) among young people and a [rise in school loneliness](#). Although the pandemic exacerbated these negative trends, they began long before it. The worsening scores are occurring among both boys and girls, low-income and high-income youth, and white and Black students, with the academic declines often [more severe](#) for teens from historically marginalized groups. Parents, teachers, and schools are desperate to understand what is happening and what to do about it.

In [The Anxious Generation](#), we argue that the best plausible explanation for why this decline occurred simultaneously in many countries is that the ancient “play-based childhood” was replaced by the “phone-based childhood” in the early 2010s. Specifically, children and adolescents began to spend [much more time](#) on smartphones, social media, video games, and pornography, and much [less time](#) engaging in healthy activities such as face-to-face interactions with friends and family, sleep, exercise, and reading books. Students are bringing their phone-based behavior patterns into the classroom, resulting in classroom conflicts, teacher burnout, endless drama, cyberbullying, and massive distraction.

We believe that the most important step schools can take to reverse these negative trends is to go phone-free from bell to bell. All K-12 schools should require that phones (and any device that can receive texts or access social media) be placed in phone

lockers or [Yondr pouches](#) out of reach all day, giving students seven hours a day to focus on their teachers and peers.

But does the evidence support our claims? Does having access to smartphones and social media throughout the school day *cause* worse academic performance? Do phone bans actually work? What do those who disagree with us say? How do we respond to their arguments?

This document includes everything we know about phone-free schools: the specific policy options available, research and journalism on the effects of phones in schools, the outcomes of schools that have gone phone-free, and the people working to promote phone-free schools. To learn more about phone-free policies in states across the country, visit our phone-free legislation [map](#).

This document gathers articles and essays both for and against phone-free schools and tracks the movement's progression. We hope you find it helpful.

Key readings and resources:

- [Haidt \(2024\)](#). The case for phone-free schools. *After Babel*.
- [Bryk \(2024\)](#). How schools can help end the phone-based childhood. *After Babel*.
- [Skenazy \(2024\)](#). How phones are making parents the Anxious Generation. *After Babel*
- [Repasky \(2024\)](#). Transform Your School: The Complete Guide to Going Phone-Free. *After Babel*.
- [Phone-free schools administrator toolkit](#). A collaboration between the Phone Free Schools Movement and Fairplay.
- [EdTech Triangle](#) from everyschool.org.

SECTION 1: STORIES ABOUT SCHOOLS THAT HAVE GONE PHONE-FREE

1.1 [Oppenheimer \(2023\)](#). The Schools That Ban Smartphones. *The Atlantic*.

EXCERPT: So how was it possible that phones were invisible at St. Andrew's? By design, McGrath said. The school had not banned smartphones, she said, but it had put them in their place. At St. Andrew's, where all students board, they may have phones, but only in their rooms. Since mobile phones came into widespread use 20 years ago, the school has never allowed them in public. "The only exception is working out in the gym," McGrath said. At night, students store their phones in over-the-door shoe organizers in the dorm common areas. "A funny side effect" of this policy, she said, "is when we write to families about moving into the school, we emphasize in all caps 'YOU HAVE TO BUY AN ALARM CLOCK.' Because they can't have their phones in their rooms overnight."

...This year, the Buxton School, in Williamstown, Massachusetts, banned smartphones, but they still allow the lower-tech Light Phones, which don't support apps; according to an administrator quoted in [The Wall Street Journal](#), "The idea wasn't to cut off students entirely from the outside world, but to make it harder to have online drama accessible at all times from their pockets." [The Midland School](#), in Los Olivos, California, **does not allow students to bring phones of any kind to campus.** [Deerfield Academy](#), in Deerfield, Massachusetts, **adopted a new policy** this year: **No phones may be taken out during the school day, before 3 p.m.**

1.2 [Schulten \(2016\)](#). Would You Want to Go to a School Like This One? *The New York Times*. [More on [Midland](#)]

EXCERPT: How much internet? Not much or just enough, depending on whether you're a teacher or a student. The school confiscates phones, but service signals are nearly nonexistent anyway and the school's Wi-Fi network steers clear of the cabins. Still, the outside world intervenes via Amazon.

1.3 [Jargon \(2022\)](#). This School Took Away Smartphones. The Kids Don't Mind. *Wall Street Journal*.

EXCERPT: A boarding school is conducting a social experiment: a smartphone ban for all students and faculty... **This fall, students weren't permitted to have smartphones on campus, and teachers agreed not to use them. Instead, they would all receive minimalist Light Phones for essential communication.** The announcement resulted in chaos, Mr. Kalapos says. **"Everyone was crying. Kids were yelling at us," he recalls. "Parent feedback was really mixed."**

Now, nearly two months in, students are getting used to life without social media and the drama of group texts—even if not all of them love it. Although it's a measure that other school administrators couldn't even dream of adopting, the lessons could be useful.

1.4 [Taylor \(2022\)](#). Banning phones in school has dramatic results. *The Sydney Morning Herald*.

EXCERPT: "Davidson High School principal David Rule said there had been significant changes since students in years 7 to 10 were banned from using mobile phones at school.... "Classrooms have effectively become phone-free and this has allowed staff to focus on educating students," he said in a school newsletter. "Finally, in eight weeks of the policy, there has been a 90 per cent reduction in behavioural issues related to phones in the school." The high school in Frenchs Forest requires students to put phones in a pouch that, once closed, cannot be reopened without breaking a lock."

1.5 [Costello \(2018\)](#). Classroom ban on smartphones reduced cyberbullying, principal says. *ABC News*.

EXCERPT: **Some Tasmanian high schools have banned mobile phones from classrooms, and there is support for the move to be considered more broadly in the wake of a landmark decision in France...As [debate swirls about the benefits and pitfalls of having mobile phones in classrooms](#), several Tasmanian schools have taken the step of instituting a classroom ban — among them, New Town High in Hobart.**

..."The phones were actually distracting learning and making it difficult for kids to achieve the outcomes of the Australian curriculum," he said.

Rather than using their phones for education, students were monitoring social media, taking photos, even sending texts to complain about teachers to parents. Even through the phone fog, students could see teachers were struggling.

"They'd get up, they'd start giving you a lecture or putting on a video or getting you to open a text book and they'd turn around and see that 70 per cent of kids are on their phones," Year 8 student Charlie Pilkington said.

...As well as banning phones in classrooms, New Town High has blocked social media from the school's Wi-Fi, meaning students have to use their own data if they want to access certain apps and websites.

Mr Kilpatrick credits this with a decrease in cyber bullying...

"The remarkable thing for me is many of the students, in about week two or week three [of the new policy], came up to me and said 'Thank you for doing this Mr Kilpatrick'."

1.6 [Cell Phone Ban At San Mateo High School Receiving Positive Feedback \(2019\).](#)
CBS Bay Area. [\[Another article on this school\]](#)

EXCERPT: The assistant principal of San Mateo High School said Monday that students are still getting used to the no cell phone policy implemented in the beginning of the school year, but they've received positive feedback from teachers so far.

"For the most part, teachers are loving it, they feel like they got their classrooms back from all these distractions," Adam Gelb said.

Students must put their cell phones in a sealed pouch at the beginning of the school day, which is then unsealed by the same device during the last bell.

1.7 [Banning Smartphones in School: Its Possible. 'Students talk to each other at recess again.'](#) (2023). NRC.

EXCERPT: [To come. Don't have access]

1.8 [Castillas \(2022\).](#) Heads Up: Deerfield Rolls Out New Cell Phone Policy. *The Deerfield Scroll*.

EXCERPT: Shared experiences. Face-to-face interactions. Citizenship. In conjunction with Deerfield's core values as well as increasing research regarding mental health

benefits of lessened phone use, the Student Life Office decided to implement a new cell phone policy. **The new rule requires students to leave their phones in their dorms between 8 A.M. and 3 P.M. on Mondays, Tuesdays, Thursdays, and Fridays, and from 8 A.M. to 12:30 P.M. on Wednesdays. Additionally, there is an overall expectation of students to keep their “Heads Up” from phones while walking around campus and interacting with the community.**

1.9 [Morris \(2017\)](#). School clamps down on phones and Fitbits to ease body image worries. *The Guardian*.

EXCERPT: A girls’ school is banning wearable activity trackers and smartwatches because of concerns that pupils are skipping lunch if they fail to meet their calorie and exercise targets.

Teachers at Stroud high school in Gloucestershire fear the gadgets are exacerbating some girls’ worries about their body image.

She said: “We are banning Fitbits and smartwatches. These monitor the number of calories burned and we found that some girls would monitor the number of steps they had taken and the number of calories they had used. If they didn’t feel they had taken enough steps in the morning, they wouldn’t eat lunch.

1.10 [Woolcock \(2023\)](#). Mobile phones banned to curb sexual bullying at school.

EXCERPT: Lunnon, of Alleyn’s School in south London, described as “chastening and salutary” the discovery that it was named on Everyone’s Invited, where pupils from hundreds of schools posted experiences of sexual harassment. She said that it led to immediate action.

Her co-educational school has organised workshops for parents at which barristers warned of the consequences for boys for behaviour such as not deleting graphic pictures they were sent.

“They can get caught up by poor decisions they make when they themselves are children,” Lunnon said.

1.11 [Jenkin \(2015\)](#). Tablets out, imagination in: The schools that shun technology. *The Guardian*.

EXCERPT: In the heart of Silicon Valley is a nine-classroom school where [employees of tech giants Google, Apple and Yahoo](#) send their children. But despite its location in America's digital centre, there is not an iPad, smartphone or screen in sight.

Instead teachers at the [Waldorf School of the Peninsula](#) prefer a more hands-on, experiential approach to learning that contrasts sharply with the rush to fill classrooms with the latest electronic devices. The pedagogy emphasises the role of imagination in learning and takes a holistic approach that integrates [the intellectual, practical and creative development of pupils](#).

But the fact that parents working for pioneering technology companies are questioning the value of computers in education begs the question – is the futuristic dream of high-tech classrooms really in the best interests of the next generation?

...Sometimes groups of 25 boys would sit together, ignoring each other, staring into their phones, Hall said.

"And then the reality was in one of the sections on relationships [in the survey] 16 percent of our boys admitted they saw their friends less in person and talk to them more online. And those things were quite telling, alongside obviously other issues related to bullying, cyberbullying, and those sorts of things which every school has."

1.12 [Otago Boys' High goes phone-free during school hours \(2022\)](#). *RNZ*.

EXCERPT: A survey showed students were on devices for about five to five and a half hours outside of school hours, and they use them for about four hours while at school, so a total of about nine hours a day.

"And then the second thing was just walking around the playground at interval and lunchtime and just seeing groups of boys sitting down staring at a phone and not talking to each other, quite frankly."

1.13 [Coyne \(2022\)](#). Culver exploring if smartphone limits can help students. *Culver*.

EXCERPT: Culver Academies will be examining this school year whether limiting smartphone use can improve campus culture by cutting down on distractions and increasing social interaction while also improving the mental health of students.

...Culver now has students turn in phones by 11 p.m. and retrieve them in the morning as a way of helping to ensure students get a good night's sleep, which studies show is essential to good health. But even that isn't 100 percent effective because some students sneak in "burner" phones. Some students also spend more time on their smartphones when they're supposed to be doing homework because they know they are going to lose access soon.

The goal of this yearlong examination is to create a campus conversation that helps students understand that overuse of smartphones can be unhealthy. After all, one of the four Cardinal Virtues at Culver is moderation.

...Among the changes students will be asked to try is to disable notifications to avoid unnecessary interruptions; disabling face ID or thumbprint ID to make it more inconvenient to use the phone; to move "problem apps" to a distant screen in a folder; and to switch the color display off, because a black-and-white screen makes phones less interesting.

They also will be asked to use app limits in settings; to track screen time and to set a specific goal, such as to cut down on screen time by 10 percent. Students also will be asked to delete an app for a day or a week; to leave their phone behind for a day; to "fast" from their phones for a certain time period; or to ask their parents to set up parent controls.

1.14 [Thomas \(2022\)](#). No cellphones for Penn Hills School District students next year. *TribLIVE.Com*.

EXCERPT: Starting in the 2022-23 school year, Penn Hills School District students will have their cellphone and any other communication devices stored away during the school day.

Penn Hills High School Principal Eric Kostic made the announcement [in a Facebook](#) post on May 5.

On April 26, the school board approved the purchase of [Yondr](#) pouches to store and lock phones.

Superintendent Nancy Hines said the administration has been researching the pouch for four years. She said the product has been used at larger social events such as concerts to prevent images or videos from leaking to people who are not attending the event.

"I would much prefer to teach our students how to handle various freedoms versus restrict them. However, it seems clear that both students and teachers need more support," Hines said.

1.15 [Riley \(2022\)](#). Missouri high school bans student cell phones, smartwatches starting April 4. *Springfield News-Leader*.

EXCERPT: Starting Monday, students at a high school in central Missouri will be required to leave cell phones at home or check them into the office until dismissal. Steelville High School Principal Steven Vetter notified parents Thursday of the change, which he described as permanent.

"Students will be asked to either not bring their phones to school or to check them into the office until the day is over," he wrote [in the letter posted on Facebook](#). "This would include smartwatches that connect to their phones or any other electronic device they bring that connects to the internet."

Vetter told the News-Leader that the devices have become too much of a distraction at the 300-student high school near Rolla.

1.16 [Aiken \(2022\)](#). Cellphones in schools: Some districts take steps to eliminate devices from class while others balance benefits. *TribLIVE.Com*.

EXCERPT: Students at Penn Hills High School, Pittsburgh Milliones, Provident Charter School, Obama Academy, City Charter High School and Washington High School and

Junior High School will be required to store their smart devices in Yondr pouches — small bags with magnetic locks that work similarly to clothing security tags.

...Compared to the 2019-20 school year, Linton saw a 74% decline in fights, 89% decline in bus referrals and 57% decline in bus suspensions, Penn Hills Superintendent Nancy Hines said. Additionally, there were 13 police citations issued in 2019-20 and zero issued in 2021-22.

Kostic said the district considers the removal of cellphones from the classroom as a “contributing factor” in the change.

1.17 [Ayo & Wolf \(2022\)](#). VB school board votes to ban cell phone usage inside classrooms. *WAVY.Com*.

EXCERPT: The Virginia Beach school board has banned cell phone usage inside classrooms ahead of the upcoming school year

The new policy will require students to put their cell phones, earbuds, and wireless headphones in their backpack, purse or locker and keep them off or on silent.

Phones will not be allowed in pockets or on top of desks. Students can use their phones in the hallway or at lunch.

1.18 [Light \(2022\)](#). Buxton School Goes Light. *Medium*.

EXCERPT: In the spring of 2022, Peter Beck reached out to Light asking if we had any interest in collaborating with them as they transitioned to a school-wide smartphone ban for students & faculty. We have always wondered what it might look like for a whole school or community to go light collectively, and were quite excited by the idea.

Coming into the new school year, we shared around 80 phones with everyone learning and working at Buxton. Students set up their Light Phones at orientation and were asked to fill out a short survey about their previous smartphone usage.

1.19 [Paulsen \(2019\)](#). German schools are smartphone-free zones. *Bitkom eV*.

EXCERPT: Smartphones are on the index in most German schools. More than half of the schools (54 percent) ban mobile phones in the classroom. This is the result of a representative survey of around 500 secondary school teachers commissioned by the Bitkom digital association. According to this, every sixth school (16 percent) even has a general ban on mobile phones - including during breaks. In many cases, cell phone use is regulated differently depending on the teacher and subject. Cell phones are banned for certain teachers in 45 percent of schools and in certain subjects in 43 percent. Only 4 percent of the schools have no ban on mobile phones at all. "For the vast majority of people, smartphones are indispensable companions in all situations – including children and young people. Two thirds of ten to eleven-year-olds have their own. Bans ignore reality and often have the opposite effect," says Bitkom President Achim Berg. "Instead of locking smartphones away, we should teach our children as early as possible to use them responsibly and to move safely, confidently and confidently in the digital world."

1.20 [Walker \(2023\)](#). Cellphone Bans in School Are Back. How Far Will They Go? *NEA*.

EXCERPT: **According to the National Center for Education Statistics, in 2020, cellphone bans were in place in 76% of U.S. schools.** Some districts and schools have much broader restrictions on cellphones than others. However, struggles with student behavior and mental health have prompted many schools to restrict access to the devices. Research shows that cellphones are a major distraction in classrooms. But some experts, concerned about the impact on school culture, urge leaders not to implement overly restrictive policies.

...In 2015, 67 percent of U.S. schools had similar bans on the books, a major decline from 90% in 2009. Some experts anticipated this relaxation would continue. Many schools became resigned to the prevalence of the devices in students' lives and many were concerned that banning the devices could adversely impact low-income students [who relied on mobile-only access to the Internet](#). By 2020, however, the percentage of schools with cellphone bans had jumped to 77 percent, according to recently-released data from the [National Center for Education Statistics](#).

1.21 [Cook \(2018\)](#). Noise levels dialled up as school's total phone ban gets kids talking. *The Age*.

EXCERPT: "I hadn't anticipated the level of noise," principal Pitsa Binnion said. "There was laughter, people were actually interacting and socialising."

While many schools have banned mobile phones during class time, the high-performing state school in Melbourne's south-east decided to go one step further... From the start of term 1, McKinnon students have had to store phones in their lockers and are not allowed to touch them until they leave school, even during breaks.

"It had really impacted on the learning opportunities for children," Ms Binnion said. "I don't think they were making use of every lesson as effectively because they were constantly distracted."

...McKinnon Secondary College's push to ban phones came from an unlikely source – students... In forums held in August, children from the most tech-savvy generation raised concerns about the devices distracting them in class.

Ms Binnion got a taste of these distractions when she began confiscating phones from students who had flouted the new rules. "I couldn't believe how many notifications are coming through, constantly, and messages from mum and dad," she said.

On a few occasions, Year 11 student Xavier Verdnik felt himself reaching for an imaginary phone in his pocket. But he said he quickly adjusted to the changes.

"Not having the distraction there at all, rather than having to try to avoid it, makes it a lot easier," he said.

In education circles, Balwyn High School is known for its longstanding ban on phones. Following Mr Birmingham's comments, principal Deborah Harman said she was contacted by other schools who wanted tips on how to introduce a similar ban.

"When students are not in classes we want them to be interacting with students on a personal level and not distracted from those relationships," she said.

Banning phones has also encouraged students to take part in lunchtime activities such as sport, music and chess.

1.22 [Pitts \(2022\)](#). More Massachusetts schools banning cell phones in classrooms this year. *CBS Boston*.

EXCERPT: Marlboro High School Spanish teacher Gerry Padilla has implemented a so-called hotel in his classroom for the past few years. At the beginning of class, each student has a specifically numbered slot to put their phone in and they can retrieve it after the bell rings.

Padilla has found great success with the hotel.

"It just helps them stay more focused," Padilla told WBZ. "Before it was more social media or this one was texting. Or meet me in the bathroom or something's going on in the hallway. So, that has definitely helped students stay more focused."

Padilla also says he tries to make a game out of it to keep it fun for the students. He said he's willing to work with each student if they need to answer a call or text that could be from their families or work related.

1.23 [Wray \(2022\)](#). I've had enough of teaching. *Medium*.

EXCERPT: Students don't hear project instructions because their earbuds are in. You ask them to take them out but they don't. You look around and see the bunches of other students with earbuds in. You do one of those sit-on-the-desk kind of come-to-Jesus things where you ask everyone to unplug because it's important to be present and conscious and to understand the instructions for the project in order to get a good grade. About half the kids unplug, you get your instructions across, take questions, tell them to get started and tell them to ask for help if they get stuck. They get to work. You walk the room and help people. After helping the first few whose hands went up, you start noticing those students who didn't take out their earbuds. Those kids are still on tiktok, watching netflix, playing a first person shooter game, texting or facetimeing with friends in other classes. You go around asking them to put their phones away then return later to see the phones back out again. You ask again, the cycle repeats ad nauseam. This, of course, is all accompanied by re-explaining the project to the students who did not unplug to listen in the first place and showing them where the written online instructions are at. Trying to help the more diligent students with their very real problems navigating complex content becomes a secondary goal. And what's worse is that it is contagious! The students who were originally with you start to slowly slide away into the ranks of earbuded, story-watchers.

And they are doing it through the school's wifi! That's right, the powers-that-be at my school district consider this to be such a minor issue that it hasn't been dealt with. Students are accessing almost whatever they want through the school's wifi, very few things are blocked on their phones. Based on the amount of video streaming I see, I would guess that it accounts for the majority of the school district's total data transfer. If you email the IT people about it, they'll say "no, the students are using their phone's data plan." But then if you walk the room, asking students whether they are connected to the school's wifi, they say yes and show you the wifi connection. So then you create a log of several student's wifi enabled distractions and send it to the IT folks and after they ignore it for a few weeks they email your principal asking for the school issued laptops of those students to be wiped and reset. Ummm. This was happening on student phones, not school supplied laptops. If you'd give up and bang your head against a brick wall you might get better results.

...It all has sucked a lot of joy out of teaching, because it's no longer teaching. It's phone addiction management. And that's not my cup of tea. I'm leaving teaching for a software development job. I'm lucky to have those skills. Other teachers are looking for their way out too.

1.24 [Cook \(2018\)](#). Noise levels dialled up as school's total phone ban gets kids talking. *The Age*.

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...McKinnon Secondary College's push to ban phones came from an unlikely source – students.... In forums held in August, children from the most tech-savvy generation raised concerns about the devices distracting them in class.

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Banning phones has also encouraged students to take part in lunchtime activities such as sport, music and chess.

1.25 [Renstrom \(2017\)](#). What happened when I made my students turn off their phones. *Aeon Ideas*.

EXCERPT: Initially, 37 per cent of my 30 students – undergraduates at Boston University – were angry or annoyed about this experiment. While my previous policy leveraged public humiliation, it didn't dictate what they did with their phones in class. For some, putting their phones into cases seemed akin to caging a pet, a clear denial of freedom. Yet by the end of the semester, only 14 per cent felt negatively about the pouches; 11 per cent were 'pleasantly surprised'; 7 per cent were 'relieved'; and 21 per cent felt 'fine' about them.

Workarounds emerged immediately. Students slid their phones into the pouches without locking them, but because they still couldn't use their phones in class, this became a quiet act of rebellion, rather than a demonstration of defiance. Some of them used their computers, on which we often search databases and complete in-class exercises, to text or access social media. I'm not comfortable policing students' computer screens – if they really want to use class time to access what YONDR denies them, that's their choice. The pouches did stop students from going to the bathroom to use their phones.

In previous semesters, some students would leave the room for 10 to 15 minutes and take their phones with them. With phones pouched, there were very few bathroom trips. A quarter (26 per cent) of my students predicted that YONDR would make the classroom 'more distraction-free'. At the end of the semester, twice as many (51.85 per cent) said it actually had. I can't tell if this is a grudging admission, as though conceding that broccoli isn't so bad after all, or an earnest one. Once, after class, I noticed a pouch left under a desk. A few minutes later a student raced in. 'I totally forgot about my phone after I put it in the pouch,' she said. 'I guess that means they're working.' Perhaps she daydreamed about something else or produced a magnificent doodle, but chances are she was actually engaged in the class.

When I asked whether society would benefit from decreased phone use, only 15 per cent said no. Two-thirds (65 per cent) said yes, and 19 per cent said: 'I think so.' Half (50 per cent) of students mentioned better communication and more face-to-face interactions as benefits of using phones less. 'I started to notice how my cellphone was taking over my life,' one student wrote. '[B]eing in the shower is a time I really appreciate because it forces me to spend some time away from my phone, just thinking rather than mindlessly scrolling.'

1.26 [Life & Heijster \(2022\)](#). *Mobile phones have not disappeared from French school despite ban. Cne.News*. [Mixed review]

EXCERPT: In theory, France's complete ban on mobile phones in schools is a fine regulation. After all, everyone knows where they stand and what to do. Mobile phones are not only banned in lessons but are also not allowed out of bags during breaks. Several considerations prompted the French rule: The use of mobile phones is said to have an effect on pupils' concentration and is also the cause of "a significant proportion" of school disturbances. Moreover, it is not good for social interaction in schools, which is essential for pupils' development.

However, a strict law will not solve the problem. In practice, the legislation proves difficult. According to Ken Corten, an English teacher at an agricultural school in western France, pupils increasingly defy the ban. "I now force them to leave the mobile phone in a basket by the door at the start of class. However, many language teachers let students use their phones as dictionaries. So if I don't do that, that doesn't make things clearer for the students. Therefore, I just lug dictionaries around the school again."

However, it is not all doom and gloom with enforcement. By Manon Muller, an English teacher at a secondary school in a village near Nancy, students know not to try to keep their mobile phones with them. To make it a little easier, she, too, has placed a basket by the classroom door.

Manon: "Students can't hold back; that's a reality. I will no longer worry if two in my class are peeping on their mobile phones. What matters is that if you take action and ask them to hand in their mobile to you, then you have the law behind you."

1.27 [Cassidy \(2023\)](#). Parents show support for mobile phone ban in NSW schools but experts not sold on benefits. *The Guardian*.

EXCERPT: Mobile phones are banned in NSW primary schools, while Victoria, Western Australia, South Australia and the Northern Territory have enforced similar bans for high school students.

Dany Elachi, a Sydney parent who founded the Heads Up Alliance during the pandemic to call for children's exposure to smartphones and social media to be reduced, said parents are navigating "uncharted waters" in the digital age.

"There's a whole raft of concerns parents are dealing with for the first time in history," he said. "The idea kids might have a break from all this for six measly hours in a 24-hour day so they can learn with less distraction and build face-to-face relationships is such a no-brainer."

...Condell Park high school imposed a ban 16 years ago, requiring students to leave their phones on trolleys for the school day. The school's principal, Susie Mobayed, said it drastically reduced class interruptions. "[There is] no room for cyberbullying, social media or taking photos and videos during the school day," she said.

1.28 [Chrisafis \(2018\)](#). 'We don't really need phones': The French school that banned mobiles. *The Guardian*.

EXCERPT :La Gautrais's 290 pupils between the ages of 12 and 16 come from surrounding villages in this farming area. Since the ban, staff have noticed more social interaction between children, more empathy and a readiness to learn at the start of

lessons. There is less “switching-off anger” at having to move from breaktime gaming on smartphones to focusing in class.

“No phone use at school gives pupils a moment’s peace from social networks and some children tell us they appreciate that,” said the headteacher, Yves Koziel. “On social networks there’s an acceleration and extreme simplification of group relationships which can create conflict, even bullying. We’re freeing them from that – at least during the day. We’re cutting the umbilical cord and offering some respite from it.”

Koziel said he was pleased to see children returning to “ordinary things”, such as chatting, games and breaktime clubs and activities including dance and knitting. “I think children are more available for social interaction when they’re obliged to really speak to each other,” he said.

Policing the ban has not been difficult. Pupils switch off phones and leave them in schoolbags and there are fewer than 10 confiscations a year.

“At my previous schools, sometimes phones were in pencil cases and pupils were checking them or writing messages on phones on their laps,” Laura Floch, an English teacher, said. “Here, phones aren’t an issue.”

1.29 [George \(2023\)](#). Students can’t get off their phones. Schools have had enough. *Washington Post*.

EXCERPT: So this year, schools in Ohio, Colorado, Maryland, Connecticut, Pennsylvania, Virginia, California and others banned the devices in class to curb student obsession, learning disruption, disciplinary incidents and mental health worries.

“We basically said: ‘This has got to stop,’” said Dayton Public Schools Superintendent Elizabeth Lolli. “We’ve got academic issues that are not going to be fixed ... if our students continue to sit on their phones.”

Most school systems already had cellphone bans in 2020, according to [federal data](#), but the pandemic brought more urgency to places with lenient rules or lax enforcement. Some invested in ways to lock up phones away during school hours. Others forced students to keep them hidden away — with strict penalties for violations.

In Danbury, Conn., [Kristy Zaleta](#), principal of Rogers Park Middle School, switched to a new approach this year, too: Phones are off limits except during the school's three-minute transition periods and its 30-minute lunch. "Any other time, they're taken away," she said.

The result: "There's a calmer sense," she said. "It definitely feels like the air has changed." The previous year, she said, "almost broke us."

1.30 [What do students think of the ban on cellphone use in class?](#) Ottawa Citizen.
[YouTube Video]

QUOTE:

- Perspective on the phone ban in class: "I get a bit like anxious because you know there's so much happening on your phone like social media and things like that so I got a bit anxious and I'm not even able to focus sometimes because I'm like thinking what's happening with who's texting me stuff like that."

1.31 [Carroll \(2023\)](#). 'Much easier to say no': Irish town unites in smartphone ban for young children. *The Guardian*.

EXCERPT: On the principle of strength in numbers, parents in the Irish town of Greystones have banded together to collectively tell their children they cannot have a smartphone until secondary school. Parents' associations across the district's eight primary schools have adopted a no-smartphone code to present a united front against children's lobbying.

...Nikkie Barrie, who has an 11-year-old in primary school, said the impact was immediate. "This code makes such a difference to my life. If I know 90% of the class are in agreement, it makes my job easier in saying no."

Barrie wishes the pact could be extended to the early years of secondary school given a smartphone's effect on her 13-year-old. "It's been the bane of my life, I've lost my daughter. When technology is involved they sit there like robots engulfed in this world of TikTok or whatever."

- 1.32 [Brundin \(2019\)](#). *This Colorado Middle School Banned Phones 7 Years Ago. They Say Students Are Happier, Less Stressed And More Focused*. Colorado Public Radio.

EXCERPT: Teachers at Mountain Middle School in Durango knew they had to do something. La Plata County had one of the highest [teen suicide rates](#) in Colorado and the school wanted to be a truly safe space.

One of the first things that came to mind — a cell phone ban. So, seven years ago, that's what they did.

Shane Voss, who was the new head of school at the public charter school back then, cites 24-hour cyberbullying, loss of sleep, round-the-clock social pressure to respond to Snapchats, Instagram posts and texts, and constant comparing oneself to other students. Voss and other school staff say cell phones play an underestimated role in the current teen mental health crisis.

Voss credits the cell phone-free environment as a significant factor in the school's upward trajectory. In the school's first two years, it struggled academically. But for the past several years it has attained Colorado's highest performance rating.

- 1.33 [Newsman \(2023, November\)](#). Minnesota middle school bans student cell phones — and 'kids are happy'. *American Classroom*.

EXCERPT: A Minnesota middle school banned student cellphones a year ago, and the difference it made was “night and day,” according to school officials. “I believe (the ban) is game-changing and will have lasting impacts on our students for years to come,” Maple Grove Middle School Principal Patrick Smith told [WCCO](#).

“There was no cross-the-table conversations, there was no interaction in the hallways,” he said. “And let's be real, with these devices, our students — especially our teenagers — there's a lot of drama that comes from social media, and a lot of conflict that comes from it.”

Last year, school officials banned student cell phone use for the entire school day, from 8:10 a.m. to 2:40 p.m., following a variety of issues at the school tied to the devices.

1.34 [Randazzo and Barnum \(2024\)](#). Schools Lock Up Cellphones to Keep Students Focused. *Wall Street Journal*.

EXCERPT: Clark County School District in Las Vegas, where she works, prohibits phone use during class, but she said students know enforcement beyond a call home is rare. So all day she catches students scrolling social media, texting each other and watching YouTube videos when they should be completing assignments in their U.S. and world history classes, which are required for graduation.

Lewis's school will soon participate in a pilot program requiring that cellphones be stowed during class in nonlocking pouches that block cell signals. Clark County, the country's fifth-largest district, will require all students in sixth through 12th grades to keep phones in the pouches starting next fall. "We have to do something," Lewis said. "There's no learning going on because of the phones."

High-school junior Kylie McClusky said that since her district, Florida's Orange County Public Schools, banned phone use during the entire school day, she has felt a newfound sense of camaraderie and social interaction on the 2,500-student campus and more focus in classes. "Before, if I was having a bad day and didn't feel like talking to anyone, I would go on my phone and zone out," she said.

1.35 [Walker \(2024\)](#). There are lessons to be learned from Finland, but giving smartphones to young children isn't one of them. *The Hechinger Report*.

EXCERPT: I work in a hybrid role with Copper Island Academy, a Michigan charter school that uses tried-and-true practices from Finnish education, including regular brain breaks, teacher collaboration and hands-on learning.

Our K-8 school scored in the top 10 percent of the state's public schools on a comprehensive evaluation that considers proficiency, growth and other key indicators.

Copper Island is careful about what it borrows from Finnish education, however. We embrace evidence-based practices like brain breaks but have refrained, for example, from adopting Finland's recent emphasis on digital learning.

We subscribe to the country's former approach of minimizing screen time during the school day. Japan, another high-achieving nation, has also done this.

[What are we missing?]

SECTION 2: WHAT ARE THE SPECIFIC POLICY OPTIONS FOR SCHOOLS?

The policies listed here go from the most limited restrictions (just telling students that they should not take out their phones during class) to those that are fully phone-free.

2.1 LIMITED ACCESS

2.1.1 Teacher-Controlled Phone Access

WHAT IT IS: Teachers decide when and how smartphones can be used for educational purposes in their classrooms.

2.1.2 Phone-free in the classroom

WHAT IT IS: keep devices in backpack, purse, or own locker during class

2.1.3 Classroom phone caddies

WHAT IT IS: Teachers can place a phone caddy at the front of the classroom, where students deposit their phones at the beginning of the class and retrieve them at the end.



Image. Phone Caddy Example

2.1.4 Designated Technology Zones

WHAT IT IS: Schools can establish designated areas where students can use their smartphones during breaks or lunchtime.

2.1.5 Block social media on school wifi

- [Easily get around this](#) (2)

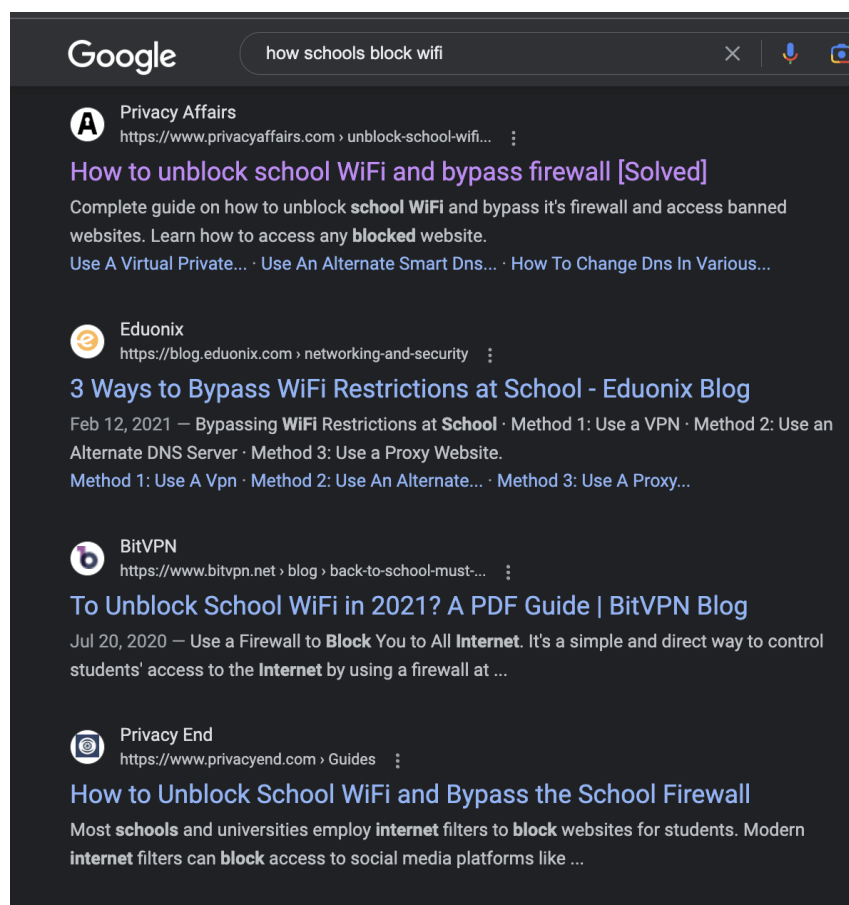


Image: Zach's quick google search.

2.1.6 [Yondr pouches](#)

WHAT IT IS: Lockable pouches that hold phones, rendering them inaccessible and unusable until the pouch is unlocked with a specific device.



Image. Yondr pouch.

[What are we missing?]

2.2 PHONE-FREE

2.2.1 Phone-Free Days

WHAT IT IS: Phone-free days are **designated days** when students are not allowed to bring their phones to school or use them during school hours

2.2.2 Phone lockers or drop off in the front office.

WHAT IT IS: Phone lockers are simple storage units where students can securely store their phones during class hours. Or students are required to deposit their phones at the school's front office before entering the classrooms. The phones are collected and stored securely, and students can retrieve them at the end of the school day or when needed for an emergency.



Image. Phone locker example

Phone locker options:

- <https://www.lockers.com/salsbury-locker-blog/the-best-cell-phone-lockers-for-your-classroom/>
- <https://www.lockers.com/cell-phone-lockers/>

2.2.3 No phones on school grounds.

WHAT IT IS: Students are not allowed to bring their phones to school or use them during school hours

[What are we missing?]

2.3 BOARDING SCHOOL POLICIES

2.3.1 LIMITED ACCESS

Examples:

- Phones are allowed only in student rooms, not in public areas. No phones overnight in rooms.
- Smartphones banned for students, Light Phones without apps allowed.
 - Smartphone ban for all students and faculty, replaced with minimalist Light Phones.
- No phones allowed during the school day before 3 p.m.
- Have all students disable notifications, make phones less convenient to use, and set app limits. Have them track screen time.

[What are we missing?]

2.3.2 PHONE-FREE

Examples:

- No phones of any kind allowed on campus.

[What are we missing?]

2.4 OTHER POLICIES

2.4.1 EDUCATIONAL PROGRAMS

Examples:

- Smartphone Education Programs: Schools can implement programs to teach students about responsible smartphone usage, digital etiquette, and online safety.
- Mindfulness and Digital Detox Programs: Schools can incorporate mindfulness and digital detox programs into their curriculum.

2.4.2 SCREEN FREE

Examples:

- Banned wearable activity trackers and smartwatches due to body image concerns.
- No iPads or any type of screen in school.

[What are we missing?]

SECTION 3: HOW DO SMARTPHONES IMPACT COGNITIVE PERFORMANCE AND DEVELOPMENT?

Below are a few important studies from both sides. For more studies on the effects of digital media on academic and cognitive outcomes see **section 5** of our larger collaborative review doc [Digital Media Effects on Adolescents: A Review](#).

3.1 STUDIES SHOWING NEGATIVE EFFECTS

3.1.1 [Glass, & Kang \(2019\)](#). Dividing attention in the classroom reduces exam performance. *Educational Psychology*.

ABSTRACT: The intrusion of internet-enabled electronic devices (laptop, tablet, and cell phone) has transformed the modern college lecture into a divided attention task. This study measured the effect of using an electronic device for a non-academic purpose during class on subsequent exam performance. In a two-section college course, electronic devices were permitted in half the lectures, so the effect of the devices was assessed in a within-student, within-item counterbalanced experimental design.

Dividing attention between an electronic device and the classroom lecture did not reduce comprehension of the lecture, as measured by within-class quiz questions. Instead, divided attention reduced long-term retention of the classroom lecture, which impaired subsequent unit exam and final exam performance. Students self-reported whether they had used an electronic device in each class. Exam performance was significantly worse than the no-device control condition both for students who did and did not use electronic devices during that class.

3.1.2 [Kuznekoff & Titsworth \(2013\)](#). The Impact of Mobile Phone Usage on Student Learning. *Communication Education*.

ABSTRACT: In this study, we examined the impact of mobile phone usage, during class lecture, on student learning. Participants in three different study groups (control, low-distraction, and high-distraction) watched a video lecture, took notes on that lecture, and took two learning assessments after watching the lecture. **Students who were not using their mobile phones wrote down 62% more information in their notes, took more detailed notes, were able to recall more detailed information from the lecture, and scored a full letter grade and a half higher on a multiple choice test than those students who were actively using their mobile phones. Theoretical and pedagogical implications are discussed.**

3.1.3 [Baert, Vujić, Amez, Claeskens, Daman, Maeckelberghe, Omeij, & De Marez \(2020\)](#). Smartphone Use and Academic Performance: Correlation or Causal Relationship? *Kyklos*.

ABSTRACT: After a decade of correlational research, this study attempts to measure the causal impact of (general) smartphone use on educational performance. To this end, we merge survey data on general smartphone use, exogenous predictors of this use, and other drivers of academic success with the exam scores of first-year students at two Belgian universities. The resulting data are analysed with instrumental variable estimation techniques. **A one-standard-deviation increase in daily smartphone use yields a decrease in average exam scores of about one point (out of 20). When relying on ordinary least squares estimations, the magnitude of this effect is substantially underestimated. The negative association between smartphone use and exam results is more outspoken for students (i) with highly educated fathers, (ii) with divorced parents and (iii) who are in good health.** Policy-makers should at least invest in information and awareness campaigns of teachers and parents to highlight this trade-off between smartphone use and academic performance.

3.1.4 [Ward, Duke, Gneezy, & Bos \(2017\)](#). Brain Drain: The Mere Presence of One's Own Smartphone Reduces Available Cognitive Capacity. *Journal of the Association for Consumer Research*.

ABSTRACT: Our smartphones enable—and encourage—constant connection to information, entertainment, and each other. They put the world at our fingertips, and rarely leave our sides. Although these devices have immense potential to improve welfare, their persistent presence may come at a cognitive cost. In this research, we test the “brain drain” hypothesis that the mere presence of one's own smartphone may

occupy limited-capacity cognitive resources, thereby leaving fewer resources available for other tasks and undercutting cognitive performance. **Results from two experiments indicate that even when people are successful at maintaining sustained attention—as when avoiding the temptation to check their phones—the mere presence of these devices reduces available cognitive capacity. Moreover, these cognitive costs are highest for those highest in smartphone dependence. We conclude by discussing the practical implications of this smartphone-induced brain drain for consumer decision-making and consumer welfare.**

3.1.5 [Clayson, & Haley \(2013\)](#). An Introduction to Multitasking and Texting: Prevalence and Impact on Grades and GPA in Marketing Classes. *Journal of Marketing Education*.

ABSTRACT: This exploratory study looks at the phenomena of texting in a marketing education context. It outlines the difficulties of multitasking within two metacognitive models of learning and sets the stage for further research on the effects of texting within class. Students in marketing classes in two different universities were surveyed. They received an average of 37 texts per day and initiated about 16. **More than 90% of the respondents reported receiving texts while in class and 86% reported texting someone from class. Even though students believed they could follow a lecture and text at the same time, respondents who did text within marketing classes received lower grades.** Contrary to other research, texting frequency was generally unrelated to GPA. Implications for both pedagogical issues and research in marketing education are discussed.

3.1.6 [Aru, & Rozgonjuk \(2022\)](#). The effect of smartphone use on mental effort, learning, and creativity. *Trends in Cognitive Sciences*.

ABSTRACT: We argue that scientific studies have not directly assessed the key cognitive processes affected by smartphone use. We propose that smartphone use can be disruptively habitual, with the main detrimental consequence being an inability to exert prolonged mental effort. This inability might negatively affect real-life creativity and domain-specific knowledge acquisition.

EXCERPT: We further hypothesize that the main detrimental effect of disruptive habitual smartphone use is on the ability to exert prolonged cognitive effort in tasks that do not

involve smartphones. This ability is required for acquiring domain-specific knowledge and for real-life creativity. These activities call for a continuous investment of mental effort over weeks, months, and years. Any such detrimental effect would not be revealed in studies that measure attention or working memory, as the person can focus over a short term if they know that their abilities are being tested. There are reasons why certain smartphone-related activities might have a more favorable cost–benefit ratio than other tasks. For instance, one benefit of digital technologies is that obtaining novelty is a reward in itself: each novel video or image, text, post, or comment might work as a reward. Social media apps further combine this novelty reward with social rewards, where feedback in the form of likes, shares, and view counts are obtained.

3.1.7 [Baumgartner, van der Schuur, Lemmens, & te Poel \(2018\)](#). The Relationship Between Media Multitasking and Attention Problems in Adolescents: Results of Two Longitudinal Studies. *Human Communication Research*.

ABSTRACT: The increased prevalence of media multitasking among adolescents has raised concerns that media multitasking may cause attention problems. Despite cross-sectional evidence of the relationship between media multitasking and attention problems, no study has yet investigated this relationship longitudinally. It is therefore unclear how these two variables are related. Two 3-wave longitudinal studies with 3- and 6-month time lags were conducted. In total, 2,390 adolescents aged 11–16 provided data on media multitasking and attention problems. Findings from random intercept autoregressive cross-lagged models suggest that **media multitasking and attention problems were strongly related between individuals. Empirical evidence for a potential detrimental long-term effect of media multitasking on attention problems was only found among early adolescents but not among middle adolescents.**

3.1.8 [Kim, Kim, Kim, Kim, Han, Lee, Mark, & Lee \(2019\)](#). Understanding smartphone usage in college classrooms: A long-term measurement study. *Computers & Education*.

ABSTRACT: Smartphone usage is widespread in college classrooms, but there is a lack of measurement studies. We conducted a 14-week measurement study in the wild with 84 first-year college students in Korea. We developed a data collection and processing tool for usage logging, mobility tracking, class evaluation, and class attendance detection. Using this dataset, we quantify students' smartphone usage patterns in the

classrooms, ranging from simple use duration and frequency to temporal rhythms and interaction patterns. Furthermore, we identify the key predictors of students' in-class smartphone use and their semester grades. **Our results reveal that students use their phones for more than 25% of effective class duration, and phone distractions occur every 3–4 min for over a minute in duration.** The key predictors of in-class smartphone use are daily usage habits and class characteristics, and in-class phone usage is negatively correlated with student grades.

3.1.9 [Gerosa & Gui \(2023\)](#). Earlier smartphone acquisition negatively impacts language proficiency, but only for heavy media users. Results from a longitudinal quasi-experimental study. *Social Science Research*.

ABSTRACT: There is a growing debate about the proper age at which teens should be given permission to own a personal smartphone. While experts in different disciplines provide parents and educators with conflicting guidelines, the age of first smartphone acquisition is constantly decreasing and there is still limited evidence on the impact of anticipating the age of access on learning outcomes. Drawing on two-wave longitudinal data collected on a sample of 1672 students in 2013 (at grade 5) and 2016 (at grade 8), this study evaluates whether obtaining the first personal smartphone at 10 or 11 years old, during the transition to lower secondary school (early owning), affected their language proficiency trends compared to receiving it from the age of 12 onwards (late owning). Results indicate an overall null effect of smartphone early owning on adolescents' language proficiency trajectories, while a negative effect is found on those who were already heavy screen media users before receiving the device.

3.1.10 [Glass, & Kang \(2019\)](#). Dividing attention in the classroom reduces exam performance. *Educational Psychology*.

ABSTRACT: The intrusion of internet-enabled electronic devices (laptop, tablet, and cell phone) has transformed the modern college lecture into a divided attention task. This study measured the effect of using an electronic device for a non-academic purpose during class on subsequent exam performance. In a two-section college course, electronic devices were permitted in half the lectures, so the effect of the devices was assessed in a within-student, within-item counterbalanced experimental design.

Dividing attention between an electronic device and the classroom lecture did not

reduce comprehension of the lecture, as measured by within-class quiz questions. Instead, divided attention reduced long-term retention of the classroom lecture, which impaired subsequent unit exam and final exam performance. Students self-reported whether they had used an electronic device in each class. Exam performance was significantly worse than the no-device control condition both for students who did and did not use electronic devices during that class.

3.1.11 [Lepp, Barkley, & Karpinski \(2015\)](#). The Relationship Between Cell Phone Use and Academic Performance in a Sample of U.S. College Students. *SAGE Open*.

ABSTRACT: The cell phone is ever-present on college campuses and is frequently used in settings where learning occurs. This study assessed the relationship between cell phone use and actual college grade point average (GPA) after controlling for known predictors. As such, 536 undergraduate students from 82 self-reported majors at a large, public university were sampled. **A hierarchical regression ($R^2 = .449$) demonstrated that cell phone use was significantly ($p < .001$) and negatively ($\beta = -.164$) related to actual college GPA after controlling for demographic variables, self-efficacy for self-regulated learning, self-efficacy for academic achievement, and actual high school GPA, which were all significant predictors ($p < .05$).** Thus, after controlling for other established predictors, increased cell phone use was associated with decreased academic performance. Although more research is needed to identify the underlying mechanisms, findings suggest a need to sensitize students and educators about the potential academic risks associated with high-frequency cell phone use.

3.1.12 [Lawson & Henderson \(2015\)](#). The Costs of Texting in the Classroom. *College Teaching*.

ABSTRACT: Many college students seem to find it impossible to resist the temptation to text on electronic devices during class lectures and discussions. One common response of college professors is to yield to the inevitable and try to ignore student texting. However, research indicates that because of limited cognitive capacities, even simple texting can reduce comprehension of class material at a rate of 10–20%. We review that research and present our study of the effects of texting on comprehension. Proposed alternatives to ignoring texting or outright bans include using smartphones for classroom exercises, educating students about the dangers of multitasking, and the use of “technology breaks.”

- 3.1.13** [Lee, Kim, McDonough, Mendoza, & Kim \(2017\)](#). The Effects of Cell Phone Use and Emotion-regulation Style on College Students' Learning. *Applied Cognitive Psychology*.

ABSTRACT: Cell phones are becoming an inevitable part of the classroom, but extant research suggests that using cell phones in the classroom impairs academic performance. The present study examined the impact of different cell phone policies on learning and emotion-regulation style. Participants were randomly assigned to one of four experimental conditions: cell phone usage allowed, cell phone possession allowed but without usage, cell phones removed, and a no-instruction control group. All participants watched a 20-minute lecture and were sent text messages to mimic classroom distractions. Afterward, participants took a multiple-choice test and filled out questionnaires assessing their level of obsessiveness, nomophobia, and mindfulness. **Participants who had their cell phone taken away performed best on the test with no other differences.** None of the emotional-regulation measures moderated the results. These findings provide important insight as to how cell phone policies can optimize learning in the classroom.

- 3.1.14** [Ravizza, Hambrick, & Fenn \(2014\)](#). Non-academic internet use in the classroom is negatively related to classroom learning regardless of intellectual ability. *Computers & Education*.

ABSTRACT: The use of laptops and cell phones in the classroom is increasing but there is little research assessing whether these devices create distraction that diminishes learning. Moreover, the contribution of intellectual ability to the relationship between learning and portable device use has not been thoroughly investigated. To bridge this gap, students in an introductory psychology class were surveyed about the frequency and duration of their use of various portable devices in the classroom. **Internet use negatively predicted exam scores and added to the prediction of classroom learning, above a measure of intellectual ability. Furthermore, students discounted the effect of using portable devices on learning over time.** Concomitantly, those with higher intellectual ability reported using the internet more in class over time. Thus, higher rates of internet use were associated with lower test grades and students' beliefs about this relationship did not reflect their ability to multi-task effectively.

3.1.15 [Larry, Alex., Mark, & Nancy \(2011\)](#). An Empirical Examination of the Educational Impact of Text Message-Induced Task Switching in the Classroom: Educational Implications and Strategies to Enhance Learning. *Revista de Psicología Educativa*.

ABSTRACT: Today's Net Generation university students multitask more than any prior generation, primarily using electronic communication tools (Carrier et al., 2009). In addition, studies report that many students text during class (Tindell & Bohlander, 2011). This research examines the impact of receiving and sending text messages during a classroom lecture. Recent laboratory research (Ophir, et al., 2009) reported that multitasking impaired performance, particularly among heavy multitaskers. Further, experimental research has shown that "technologically induced" interruptions can be disruptive, causing increased errors and decreased performance (Monk, et al., 2008). This study is the first to experimentally examine the direct impact of text message interruptions on memory recall in a classroom environment. Participants viewed a 30-minute videotaped lecture during which they were interrupted by receiving text messages requiring responses. Participants in four classrooms were randomly assigned to three groups receiving no text messages, four text messages or eight text messages. Based on the actual number of texts received and sent—including those not sent by the experimenter—three comparison groups were defined: No/Low Texting Interruption (zero to 7 text messages sent and received), Moderate Texting Interruption (eight to 15 texts), and High Texting Interruption (16 or more texts). Following the videotaped lecture, a recall test assessed the impact of text message interruptions on memory. In addition, participants were asked about their typical monthly texting and their attitudes toward classroom texting behaviors. **Results indicated that the High Texting group scored significantly worse (10.6% lower) than the No/Low Texting Interruption group although there was no significant difference between No/Low Texting Interruption and Moderate Texting Interruption group nor was there a significant difference between the Moderate Texting Interruption group and the High Texting Interruption group.** In addition, **while nearly three fourths of the participants felt that receiving and sending text messages during class was disruptive to learning, 40% felt it was acceptable to text in class.** Results also indicated that those participants who received and sent more words in their texts performed worse on the test although this was moderated by the elapsed time between receiving (or sending) a text with longer delays resulting in better performance. The results of these studies are discussed in terms of Salvucci et al.'s (2009) Unified Theory of the

3.1.16 [Dietz & Henrich \(2014\)](#). Texting as a distraction to learning in college students. *Computers in Human Behavior*.

ABSTRACT: Texting has been shown to be cognitively distracting for students in lecture settings, but few have done empirical work, or looked at moderating effects between texting and academic outcomes. This experimental study compared the proportion of correct answers on a lecture quiz between students who were randomly assigned to text message during a pre-recorded lecture and those who were not, while investigating possible moderators. **The participants who text messaged throughout the lecture scored significantly lower in percent of correct responses ($t(95) = -4.6$, $p < .001$, $d = .93$).** No moderating effects were found, including: perceived distraction, perceived texting ability, number of text messages sent and received during the lecture, age, and gender.

3.1.17 [Thornton, Faires, Robbins, & Rollins \(2014\)](#). The mere presence of a cell phone may be distracting: Implications for attention and task performance. *Social Psychology*.

ABSTRACT: Research consistently demonstrates the active use of cell phones, whether talking or texting, to be distracting and contributes to diminished performance when multitasking (e.g., distracted driving or walking). Recent research also has indicated that simply the presence of a cell phone and what it might represent (i.e., social connections, broader social network, etc.) can be similarly distracting and have negative consequences in a social interaction. Results of two studies reported here provide further evidence that **the “mere presence” of a cell phone may be sufficiently distracting to produce diminished attention and deficits in task-performance, especially for tasks with greater attentional and cognitive demands.** The implications for such an unintended negative consequence may be quite wide-ranging (e.g., productivity in school and the work place).

3.1.18 [Stothart, Mitchum, & Yehnert \(2015\)](#). The attentional cost of receiving a cell phone notification. *Journal of Experimental Psychology. Human Perception and Performance*.

ABSTRACT: It is well documented that interacting with a mobile phone is associated with poorer performance on concurrently performed tasks because limited attentional

resources must be shared between tasks. However, mobile phones generate auditory or tactile notifications to alert users of incoming calls and messages. Although these notifications are generally short in duration, they can prompt task-irrelevant thoughts, or mind wandering, which has been shown to damage task performance. **We found that cellular phone notifications alone significantly disrupted performance on an attention-demanding task, even when participants did not directly interact with a mobile device during the task. The magnitude of observed distraction effects was comparable in magnitude to those seen when users actively used a mobile phone, either for voice calls or text messaging.**

3.1.19 [Brown, Kaur, Kingdon, & Schofield \(2022\)](#). *Cognitive Endurance as Human Capital* (Working Paper No. 30133). National Bureau of Economic Research.

ABSTRACT: Schooling may build human capital not only by teaching academic skills, but by expanding the capacity for cognition itself. We focus specifically on cognitive endurance: the ability to sustain effortful mental activity over a continuous stretch of time. As motivation, we document that globally and in the US, the poor exhibit cognitive fatigue more quickly than the rich across field settings; they also attend schools that offer fewer opportunities to practice thinking for continuous stretches. Using a field experiment with 1,600 Indian primary school students, **we randomly increase the amount of time students spend in sustained cognitive activity during the school day—using either math problems (mimicking good schooling) or non-academic games (providing a pure test of our mechanism).** Each approach markedly improves cognitive endurance: students show 22% less decline in performance over time when engaged in intellectual activities—listening comprehension, academic problems, or IQ tests. They also exhibit increased attentiveness in the classroom and score higher on psychological measures of sustained attention. Moreover, each treatment improves students' school performance by 0.09 standard deviations. This indicates that the experience of effortful thinking itself—even when devoid of any subject content—increases the ability to accumulate traditional human capital. Finally, we complement these results with quasi-experimental variation indicating that an additional year of schooling improves cognitive endurance, but only in higher-quality schools. Our findings suggest that schooling disparities may further disadvantage poor children by hampering the development of a core mental capacity.

NOTE: This paper does not address the effect of smartphones directly, but discusses the vitality of developing cognitive endurance, which smartphones in classrooms would disrupt.

3.1.20 [Skowronek, Seifert, & Lindberg \(2023\)](#). The mere presence of a smartphone reduces basal attentional performance. *Scientific Reports*.

ABSTRAT: The smartphone has become an indispensable part of everyday life. It enables endless possibilities and offers persistent access to a multiplicity of entertainment, information, and social contacts. The development towards a greater use and a persistent presence of the smartphone does not only lead to advantages, but also raises potential for negative consequences and a negative influence on attention. In this research, the hypothesis of the mere smartphone presence leading to cognitive costs and a lower attention is being tested. The smartphone may use limited cognitive resources and consequently lead to a lower cognitive performance. To investigate this hypothesis, participants aged 20-34 perform a concentration and attention test in the presence and absence of a smartphone. **The results of the conducted experiment imply that the mere presence of a smartphone results in lower cognitive performance, which supports the hypothesis of the smartphone presence using limited cognitive resources. The study as well as the subsequent results and the resulting practical implications are presented and discussed in this paper.**

3.1.21 [Tanil, & Yong \(2020\)](#). Mobile phones: The effect of its presence on learning and memory. *PloS One*.

ABSTRACT: Our aim was to examine the effect of a smartphone's presence on learning and memory among undergraduates. A total of 119 undergraduates completed a memory task and the Smartphone Addiction Scale (SAS). As predicted, those without smartphones had higher recall accuracy compared to those with smartphones. Results showed a significant negative relationship between phone conscious thought, "how often did you think about your phone", and memory recall but not for SAS and memory recall. **Phone conscious thought significantly predicted memory accuracy. We found that the presence of a smartphone and high phone conscious thought affects one's memory learning and recall, indicating the negative effect of a smartphone proximity to our learning and memory.**

3.1.22 [Canale... & Billieux \(2019\)](#). Emotion-related impulsivity moderates the cognitive interference effect of smartphone availability on working memory. *Scientific Reports*.

ABSTRACT: Although recent studies suggest that the mere presence of a smartphone might negatively impact on working memory capacity, fluid intelligence, and attentional processes, less is known about the individual differences that are liable to moderate this cognitive interference effect. This study tested whether individual differences in emotion-related impulsivity traits (positive urgency and negative urgency) moderate the effect of smartphone availability on cognitive performance. We designed an experiment in which 132 college students (age 18-25 years) completed a laboratory task that assessed visual working memory capacity in three different conditions: two conditions differing in terms of smartphone availability (smartphone turned off and visible, smartphone in silent mode and visible) and a condition in which the smartphone was not available and was replaced by a calculator (control condition). Participants also completed self-reports that assessed their thoughts after the task performance, positive/negative urgency, and problematic smartphone use. **The results showed that participants with higher positive urgency presented increased cognitive interference (reflected by poorer task performance) in the "silent-mode smartphone" condition compared with participants in the "turned-off smartphone" condition. The present study provides new insights into the psychological factors that explain how smartphone availability is liable to interfere with high-level cognitive processes.**

[What are we missing?]

3.2 STUDIES SHOWING POSITIVE EFFECTS

3.2.1 [Ekanayake, & Wishart \(2014\)](#). Mobile phone images and video in science teaching and learning. *Learning, Media and Technology*.

ABSTRACT: This article reports a study into how mobile phones could be used to enhance teaching and learning in secondary school science. It describes four lessons devised by groups of Sri Lankan teachers all of which centred on the use of the mobile phone cameras rather than their communication functions. A qualitative methodological

approach was used to analyse data collected from the teachers' planning, observations of the lessons and subsequent interviews with selected pupils. The results show that **using images and video captured on mobile phones supported the teachers not only in bringing the outside world into the classroom but also in delivering instructions, in assessing students' learning and in correcting students' misconceptions**. In these instances, the way the images from the mobile phone cameras supported students' learning is explained using a variety of approaches to understand how images support learning.

3.2.2 [Bjerre-Nielsen, Minor and Lassen](#), The Negative Effect of Smartphone Use on Academic Performance May Be Overestimated: Evidence From a 2-Year Panel Study. *Psychological Science*.

In this study, we monitored 470 university students' smartphone usage continuously over 2 years to assess the relationship between in-class smartphone use and academic performance. We used a novel data set in which smartphone use and grades were recorded across multiple courses, allowing us to examine this relationship at the student level and the student-in-course level. In accordance with the existing literature, **our results showed that students' in-class smartphone use was negatively associated with their grades**, even when we controlled for a broad range of observed student characteristics. **However, the magnitude of the association decreased substantially in a fixed-effects model, which leveraged the panel structure of the data to control for all stable student and course characteristics**, including those not observed by researchers. This suggests that **the size of the effect of smartphone usage on academic performance has been overestimated in studies that controlled for only observed student characteristics**.

3.2.3 [Rung, Warnke, & Mattheos \(2014\)](#). Investigating the Use of Smartphones for Learning Purposes by Australian Dental Students. *JMIR MHealth and UHealth*.

ABSTRACT: BACKGROUND: Mobile Internet devices and smartphones have at present a significant potential as learning tools and the development of educational interventions based on smartphones have attracted increasing attention.

OBJECTIVE: The objective of this study was to obtain a deeper insight in the nature of students' use of smartphones, as well as their attitudes towards educational use of mobile devices in order to design successful teaching interventions.

METHOD: A questionnaire was designed, aiming to investigate the actual daily habitual use, as well as the attitudes of dental students towards smartphones for their university education purposes. The survey was used to collect data from 232 dental students.

Results:

Of the 232 respondents, 204 (87.9%) owned a smartphone, and 191 (82.3%) had access to third generation (3G) mobile carriers. The most popular devices were the iPhone and Android. Most of the respondents had intermediate smartphone skills and used smartphones for a number of learning activities. **Only 75/232 (32.3%) had specific educational applications installed, while 148/232 (63.7%) used smartphones to access to social media and found it valuable for their education ($P<.05$).** Students accessing social media with their smartphones also showed significantly more advanced skills with smartphones than those who did not ($P<.05$). There was no significant association between age group, gender, origin, and smartphone skills. **There was positive correlation between smartphone skills and students' attitudes toward improving access to learning material ($r=.43$, $P<.05$), helping to learn more independently ($r=.44$, $P<.05$), and use of smartphones by teaching staff ($r=.45$, $P<.05$).**

CONCLUSION: The results in this study suggest that students use smartphones and social media for their education even though this technology has not been formally included in the curriculum. This might present an opportunity for educators to design educational methods, activities, and material that are suitable for smartphones and allow students to use this technology, thereby accommodating students' current diverse learning approaches.

3.2.4 [Ye, Toshimori, & Horita \(2018\)](#). Causal Relationships between Media/Social Media Use and Internet Literacy among College Students: Addressing the Effects of Social Skills and Gender Differences. *Educational Technology Research*.

ABSTRACT: This study investigates the causal relationships between the electronic media/social media use of college students and their Internet literacy, addressing the effects of social skills and gender differences. We conducted a panel survey targeting Japanese college students and analyzed 107 responses. The following results were produced: (a) The college students in the study reported that they were able to make new friends using Twitter and Facebook and could communicate with strangers in this way; (b) for male students, improving their Internet literacy in relation to Facebook use helped them increase the frequency of their Facebook posts and improved their social skills; and (c) for female students, increasing the frequency of their Facebook posts helped to improve their Internet literacy.

[What are we missing?]

3.3 STUDIES SHOWING LITTLE OR NO EFFECTS

3.3.1 [Cecutti, Chemero, & Lee \(2021\)](#). Technology may change cognition without necessarily harming it. *Nature Human Behaviour*.

ABSTRACT: What is the long-term impact of technological advances on cognitive abilities? We critically examine relevant findings and argue that there is no clear evidence for detrimental lasting effects of digital technology on cognitive abilities. But we also suggest how digital technology may be changing predominant ways of cognition.

3.3.2 [Gupta, & Irwin \(2016\)](#). In-class distractions: The role of Facebook and the primary learning task. *Computers in Human Behavior*.

ABSTRACT: While laptops and other Internet accessible technologies facilitate student learning in the classroom, they also increase opportunities for interruptions from off-task [social networking sites](#) such as Facebook (FB). A small number of correlational studies have suggested that FB has a detrimental effect on learning performance, however; these studies had neglected to investigate student-engagement in the primary learning task and how this affects task-switching to goal-irrelevant FB intrusions (distractions); and how purposeful deployment of attention to FB (goal-relevant interruptions) affect lecture comprehension on such tasks. This experiment fills a gap in the literature by manipulating lecture interest-value and controls for duration of FB exposure, time of interruption, FB material and the order of FB posts. One hundred and fifty participants were randomly allocated to one of six conditions: (A) no FB intrusions, high-interest (HI) lecture; (B) no FB intrusions, low-interest (LI) lecture (C) goal-relevant FB intrusions, HI lecture (D) goal-relevant FB intrusions, LI lecture (E) goal-irrelevant FB intrusions, HI lecture (F) goal-irrelevant FB intrusions, LI lecture. **As predicted, participants were more susceptible to FB distractions when the primary learning task was of low-interest. The study also found that goal-relevant FB intrusions significantly reduced HI lecture comprehension compared to the control condition (A).** The

results highlight the need for recourses that will help educators increase student engagement with their learning task. Implications for future research are discussed.

NOTE: This article is included here because it discusses an important additional variable: engagement and interest. If tasks are low-interest, FB intrusions increase.

3.3.3 [Olin-Scheller, & Tanner \(2015\)](#). "Street smart" in the classroom? - upper secondary students' use of smartphones in the breaks between lessons. *Kapet*.

ABSTRACT: Recently, many schools and municipalities have invested heavily in digital tools. In order to keep pace with the spread of media technology tools, students in junior high and high school have been provided with their own tablets or laptops - often with the expectation that this will have a positive effect on teaching and learning. At the same time as these investments, the classroom - via the students' own smartphones - has become connected from the inside. This article highlights the role of the smartphone in the classroom and we discuss partly when and how smartphones appear, and partly what social and didactic implications the phones can have in student interaction. The study's material consists of observations and video recordings of the teaching in a classroom in grade 9. The class consisted of 20 students, and the school is located in a small central Swedish town. The video material consists of 12 hours of recorded data. Overall, our study shows that **mobile phones rarely appear as an order problem in the classroom. As used in the example studied, they usually do not compete with the teacher's agenda in teaching, but are used as a way to pass the time while waiting for new instruction in the teaching "in-between"**. The extent of use varies between different students, but usually has little or no connection to the teaching content. **Conversation analyzes further show how mobile use is coordinated with other aspects of classroom interaction such as task completion, students' social interaction and the teacher's teaching. The use of mobile phones also seems to be able to function both unifying and exclusionary in the social interaction between the students.**

3.3.4 [Hartmann, Martarelli, Reber, & Rothen \(2020\)](#). Does a smartphone on the desk drain our brain? No evidence of cognitive costs due to smartphone presence in a short-term and prospective memory task. *Consciousness and Cognition*.

ABSTRACT: It has recently been shown that the mere presence of one's own smartphone on the desk impairs working memory performance. The aim of this study

was to follow up on this important finding by assessing the effect of smartphone presence (present on the desk vs. absent from the desk) on different memory functions (short-term memory and prospective memory), and by further examining the moderating role of individual differences in smartphone dependency and impulsiveness. We found no overall effect of smartphone presence on short-term and prospective memory performance. **There was a moderating effect for prospective memory: Performance was better when the smartphone was absent versus present for participants with low smartphone dependency. In light of the absence of an overall effect of smartphone presence on memory functions, our results show that previous findings of impairments in working memory due to smartphone presence do not generalize to other domains of memory capacity.**

[What have we missed?]

3.4 MAJOR REVIEWS AND META-ANALYSES

3.4.1 [Hartanto... & Majeed \(2024\)](#). The Effect of Mere Presence of Smartphone on Cognitive Functions: A Four-Level Meta-Analysis. *Technology, Mind, and Behavior*.

ABSTRACT: As smartphones have become portable and immersive devices that afford social, informational, and recreational conveniences unbounded by physical restrictions, most daily activities have become closely intertwined with the presence of smartphones. This constant presence of smartphones in daily activities, however, may be concerning as some studies have suggested that smartphones—even their mere presence—can be distracting and can impair cognitive outcomes. However, such findings have not been consistently observed. To reconcile mixed findings, the current meta-analysis synthesized 166 effect sizes drawn from 53 samples and 33 studies including 4,368 participants on the effect of mere presence of smartphone on cognitive functions. **It was found that the mere presence of smartphone had no significant effect on cognitive outcomes ($d = -0.02$, $SE = 0.02$, 95% CI $[-0.06, 0.01]$, $p = .246$).** Further, the effect of mere presence of smartphone was not moderated by demographics, trait smartphone dependency, or various methods for manipulating smartphone presence and assessing cognitive outcomes. These findings indicate that there is **little reason at present to think that complete isolation from smartphones in a work environment would improve productivity and performance.**

3.4.2 [Santos, Mendes, Marques Miranda, & Romano-Silva \(2022\)](#). The Association between **Screen Time and Attention in Children: A Systematic Review**. *Developmental Neuropsychology*.

ABSTRACT: Electronic media pervade modern life. Childhood is a crucial period for attentional development and the screen exposure time is increasing. This review aimed to understand the association between screen time and attention of children with typical development. A systematic review was conducted in compliance with Preferred Reporting Items for Systematic Reviews and Meta-Analyses PRISMA being registered at Prospero under number CRD42021228721. A search was performed in January 2021 with the following keywords: “screen time,” “children,” and “attention,” combined with the operator AND, on databases PubMed, and PsycINFO. Four hundred and ninety-eight articles were identified, and 41 papers were fully read, of which 11 were included in this review. Most studies found associations between screen time and attention in children. **Only one study reported that children with more screen time performed better in an attention task. The findings suggest that exposure to excessive screen time in children can be associated with attention problems.** Parents and teachers may be involved in controlling screen exposure, especially after the extensive exposition to online classes, due to the pandemic. Further studies are needed to assess the influence of this overexposure on care over time.

3.4.3 [Chen & Yan \(2016\)](#). Does multitasking with mobile phones affect learning? A review. *Computers in Human Behavior*.

ABSTRACT: Mobile phone multitasking is widely considered to be a major source of distraction in academic performance. This paper attempts to review the emerging literature by focusing on three questions concerning the influence of mobile phone multitasking on academic performance: (a) How does mobile phone multitasking impair learning? (b) Why does mobile phone use impair learning? (c) How to prevent from mobile phone distraction? We use multiple strategies to locate the existing research literature and identified 132 studies published during 1999–2014. The mobile phone multitasking and distractibility are reviewed in three major aspects: distraction sources (ring of mobile phone, texting, and social application), distraction targets (reading and attending), and distraction subjects (personality, gender, and culture). We also compare the results of these studies with the findings on mobile phone multitasking and driving, the earliest area of mobile phone multitasking research. Both limitations of existing research and future research directions are discussed.

....Firstly, we found mobile phone multitasking is prevalent among learners, for both genders and in different cultures, nowadays through ringing of mobile phone, texting, and social networking while they are reading and attending to lectures, especially for those who are impulsive, high sensation seeking, poor executive control as well as those who values information seeking and exchanging. Secondly, the present review indicates that this question deserves a sophisticated rather than straightforward answer.

As indicated by our review, multitasking with mobile phones **do distract learning** via different ways and different mechanisms and the distraction can be prevented and intervened with different strategies. On the other hand, however, one will arrive at different assessments when taking into account characteristics of various mobile phone use, characteristics of various learning tasks, and characteristics of various learners. For instance, Facebook use is negatively predictive of students' overall semester GPAs (Judd, 2014; Junco, 2012), whereas mobile phone multitasking with email, with phone talking, or with online searching were not (Junco, 2012; Junco & Cotten, 2012).

Thirdly, the study of mobile phone multitasking in learning generally is still in the early stage. Self-reported data and correlational design are a norm rather than an exception, which make it difficult to determine directions and mechanisms of the causal relations between mobile phone multitasking and academic performance. Further systematic research programs are needed to fully understand the mobile phone multitasking phenomenon and help learners to avoid potential multitasking distractions and develop effective multitasking skills in the modern society.

3.4.4 [Sung, Chang, & Liu \(2016\)](#). The effects of integrating mobile devices with teaching and learning on students' learning performance: A meta-analysis and research synthesis. *Computers & Education*.

ABSTRACT: Mobile devices such as laptops, personal digital assistants, and mobile phones have become a learning tool with great potential in both classrooms and outdoor learning. Although there have been qualitative analyses of the use of mobile devices in education, systematic quantitative analyses of the effects of mobile-integrated education are lacking. This study performed a meta-analysis and research synthesis of the effects of integrated mobile devices in teaching and learning, in which 110 experimental and quasi-experimental journal articles published during the period **1993–2013** were coded and analyzed. **Overall, there was a moderate mean**

effect size of 0.523 for the application of mobile devices to education. The effect sizes of moderator variables were analyzed and the advantages and disadvantages of mobile learning in different levels of moderator variables were synthesized based on content analyses of individual studies. The results of this study and their implications for both research and practice are discussed.

ADDITIONAL EXCERPT: Analysis of the empirical research on the use of mobile devices as tools in educational interventions that were published in peer-reviewed journals has revealed that the overall **effect of using mobile devices in education is better** than when using desktop computers or not using mobile devices as an intervention, with a moderate effect size of 0.523.

3.4.5 [Kates, Wu, & Coryn \(2018\)](#). The effects of mobile phone use on academic performance: A meta-analysis. *Computers and Education*.

ABSTRACT: PURPOSE: Although the mobile phone has been conspicuously proliferated in the past decades, little is known about its influence; especially its effect on student learning and academic performance. Although there is a growing interest in mobile devices and their correlates and consequences for children, effects vary across related studies and the magnitude of the overall effect remains unclear. The purpose of this study is to further examine any relationships that may exist between mobile phone use and educational achievement.

RESEARCH DESIGN: A meta-analysis of research conducted on the relationship between mobile phone use and student educational outcomes over a 10-year period (2008–2017) was conducted. The operational definition of cell phone use to guide the implementation of this study is: any measure of mobile phone use, whether considered normative or problematic, that quantifies the extent to which a person uses a phone, feels an emotional or other dependence on a phone, or categorizes the types of uses and situations in which use occurs. Studies examining use for the express purpose of educational improvement are not included, as the aim of this study is to ascertain the effects of normal smartphone use. The operational definition of academic achievement to guide the implementation of this study is: any measure that quantifies the extent to which a student or group of students is performing or feels he or she is performing to a satisfactory level, including but not limited to letter grades and test scores, knowledge and skill acquisition, and self-reported measures of academic ability or difficulty.

FINDINGS: The overall meta-analysis indicated that the **average effect of mobile phone usage on student outcomes was $r = -0.162$ with a 95% confident interval of -0.196 to -0.128** . The effect sizes of moderator variables (education level, region, study type, and whether the effect size was derived from a Beta coefficient, and mobile

phone use construct) were analyzed. The results of this study and their implications for both research and practice are discussed.

[Note: The Independent Variables in this study were always measures of quantity of phone use. The meta-analysis therefore can show only the contribution of sheer hours of use to academic outcomes. Phones cause problems for students in many ways, beyond just the number of hours of use.]

[What are we missing?]

SECTION 4: HOW DO SMARTPHONES IMPACT SOCIAL INTERACTION?

Below are a few important studies on both sides. For more studies on the effects of digital media on social outcomes see **section 4** of our corresponding google doc, [Digital Media Effects on Adolescents: A Review](#).

4.1 STUDIES SHOWING NEGATIVE EFFECTS

4.1.1 [Chotpitayasunondh, & Douglas \(2018\)](#). The effects of “phubbing” on social interaction. *Journal of Applied Social Psychology*.

ABSTRACT: This research experimentally investigated the social consequences of “phubbing” – the act of snubbing someone in a social setting by concentrating on one's mobile phone. Participants viewed a three-minute animation in which they imagined themselves as part of a dyadic conversation. Their communication partner either phubbed them extensively, partially, or not at all. **Results revealed that increased**

phubbing significantly and negatively affected perceived communication quality and relationship satisfaction. These effects were mediated by reduced feelings of belongingness and both positive and negative affect. This research underlines the importance of phubbing as a modern social phenomenon to be further investigated.

4.1.2 [Chotpitayasunondh. & Douglas \(2016\).](#) How “phubbing” becomes the norm: The antecedents and consequences of snubbing via smartphone. *Computers in Human Behavior*.

ABSTRACT: Smartphones allow people to connect with others from almost anywhere at any time. However, there is growing concern that smartphones may actually sometimes detract, rather than complement, social interactions. The term “phubbing” represents the act of snubbing someone in a social setting by concentrating on one’s phone instead of talking to the person directly. The current study was designed to examine some of the psychological antecedents and consequences of phubbing behavior. We examined the contributing roles of Internet addiction, fear of missing out, self-control, and smartphone addiction, and how the frequency of phubbing behavior and of being phubbed may both lead to the perception that phubbing is normative. **The results revealed that Internet addiction, fear of missing out, and self-control predicted smartphone addiction, which in turn predicted the extent to which people phub. This path also predicted the extent to which people feel that phubbing is normative, both via (a) the extent to which people are phubbed themselves, and (b) independently.** Further, gender moderated the relationship between the extent to which people are phubbed and their perception that phubbing is normative. The present findings suggest that phubbing is an important factor in modern communication that warrants further investigation.

4.1.3 [Ryan, Allen, Gray, & McInerney \(2017\).](#) How Social Are Social Media? A Review of Online Social Behaviour and Connectedness. *Journal of Relationships Research*.

ABSTRACT: The use of social media is rapidly increasing, and one of the major discussions of the 21st century revolves around how the use of these applications will impact on the social relationships of users. To contribute to this discussion, we present a brief narrative review highlighting the advantages and disadvantages of social media use on three key aspects of social connectedness: **social capital, sense of community, and loneliness.** The results indicate that using **social media can increase social capital, lead to the formation of friendships and communities, and**

reduce loneliness. However, some social media site users may experience weakening friendships, online ostracism, and heightened loneliness. Therefore, we argue that the use of social media has contradictory effects on social connectedness. Moreover, the direction of these outcomes is **contingent upon who is using the site and how they are using it.** Based on these arguments, possible directions for future research are discussed. It is recommended that discourse be continued relating to the association between online social behaviour and connectedness, as this will enable researchers to establish whether the positive outcomes of social media use outweigh the negative.

4.1.4 [Dwyer, Kushlev, & Dunn \(2018\)](#). Smartphone use undermines enjoyment of face-to-face social interactions. *Journal of Experimental Social Psychology*.

ABSTRACT: Using a field experiment and experience sampling, we found the first evidence that phone use may undermine the enjoyment people derive from real world social interactions. In Study 1, we recruited over 300 community members and students to share a meal at a restaurant with friends or family. Participants were randomly assigned to keep their phones on the table or to put their phones away during the meal. **When phones were present (vs. absent), participants felt more distracted, which reduced how much they enjoyed spending time with their friends/family. We found consistent results using experience sampling in Study 2; during in-person interactions, participants felt more distracted and reported lower enjoyment if they used their phones than if they did not.** This research suggests that despite their ability to connect us to others across the globe, phones may undermine the benefits we derive from interacting with those across the table.

4.1.5 [Chan \(2014\)](#). Facebook and its Effects on Users' Empathic Social Skills and Life Satisfaction: A Double-Edged Sword Effect. *Cyberpsychology, Behavior, and Social Networking*,

ABSTRACT: This study examines how Facebook usage affects individual's empathic social skills and life satisfaction. Following the self-presentational theory, the study explores a key component of the Internet paradox—whether Facebook suppresses or enhances users' interpersonal competence (specifically empathic social skills), given their respective personality makeup. Going further, the study assesses these events' subsequent impacts on users' psychological well-being. Analogous to a double-edged

sword, Facebook activities are hypothesized to suppress the positive effect of a user's extraversion orientation on empathic social skills but lessen the negative effect of neuroticism on these skills. The study examines a sample of college-aged Facebook users (n=515), who responded to a large-scale online survey. The findings from a structural equation modeling analysis indicate that while empathic social skills are positively associated with life satisfaction, **Facebook activities mainly exert suppression effects. Only upon low usage can Facebook activities lessen the negative effect of neuroticism on empathic social skills, suggesting that Facebook may appear as a less threatening platform for social interactions among neurotics. Yet, results in general suggest that undesirable effects may occur at high levels of Facebook usage whereby both extroverted and neurotic users displace real world social ties to online ones.** The findings point to the complex ways in which social media usage may impact the livelihood of users.

4.1.6 [Uhls, Michikyan, Morris, Garcia, Small, Zgourou, & Greenfield \(2014\)](#). Five days at outdoor education camp without screens improves preteen skills with nonverbal emotion cues. *Computers in Human Behavior*.

ABSTRACT: A field experiment examined whether increasing opportunities for face-to-face interaction while eliminating the use of screen-based media and communication tools improved nonverbal emotion–cue recognition in preteens. Fifty-one preteens spent five days at an overnight nature camp where television, computers and mobile phones were not allowed; this group was compared with school-based matched controls (n = 54) that retained usual media practices. Both groups took pre- and post-tests that required participants to infer emotional states from photographs of facial expressions and videotaped scenes with verbal cues removed. Change scores for the two groups were compared using gender, ethnicity, media use, and age as covariates. **After five days interacting face-to-face without the use of any screen-based media, preteens' recognition of nonverbal emotion cues improved significantly more than that of the control group for both facial expressions and videotaped scenes.** Implications are that the short-term effects of increased opportunities for social interaction, combined with time away from screen-based media and digital communication tools, improves a preteen's understanding of nonverbal emotional cues.

EXCERPT: We found that children who were away from screens for five days with many opportunities for in-person interaction improved significantly in reading facial emotion (DANVA 2), compared to those in the control group, who experienced their normal

media exposure during an equivalent five-day period ($F_{5,88} = 4.06$, $p < .05$, $d = .33$). In the experimental condition, participants went from an average of 14.02 errors in the Faces pretest (including both child and adult faces) to an average of 9.41 errors in the posttest (a reduction of 4.61 errors), while the control group went from an average of 12.24 to 9.81, which was a reduction of 2.43 errors (we attribute this change to a practice effect). Thus, the group that attended camp without access to any screen-based media improved significantly more than the control group, who experienced their usual amount of screen time. Fig. 1 illustrates these change scores.

[What are we missing?]

4.2 STUDIES SHOWING POSITIVE EFFECTS

4.2.1 [Bohn \(2021\)](#). How social media is changing the way people get to know each other. *Penn State Research*.

This is an interview with the author of [“Social Media Communications: Trends and Theories”](#)

EXCERPT: DO-IT-YOURSELF BACKGROUND CHECKS: When most people meet someone new for the first time, the book explains, they often feel a need to “reduce uncertainty” about that person — or learn more about them when deciding whether to form a friendship.

This is usually done in three ways: by interacting directly with the person, asking others about the individual, or by observing the person interact with others. But now, research has shown that social media has introduced a fourth strategy.

“Platforms like Twitter and Facebook are particularly rife with uncertainty-reducing information such as personal beliefs, friends and acquaintances, and photographs,” Zhong said. “This could be useful information to people forming any kind of relationship, but potential employers especially tend to do routine social media searches for job applicants before scheduling a face-to-face interview.”

BLIND COMMUNICATION: Speaking to someone face to face allows a person to pick up nonverbal cues — such as smiling, arm crossing and body positioning — that help people communicate. But because social media lacks this face-to-face contact,

research has found that people have adapted to compensate when communicating online.

“People may ask more direct questions and disclose more information about themselves when communicating with a stranger through a computer than when interacting face to face,” Zhong said. “Uncertainty might decrease more slowly when communicating online, but this strategy is still effective.”

TAKING A STAND: According to Zhong, group communication was often difficult prior to the Internet. But now, social media and other online platforms have made collaborating with large groups of other people much easier.

One of the ways this has manifested is through social movements, both positive — like campaigns to engage voters — and negative, such as recruitment by terrorist organizations. And, in countries without a free media, it can act as a way to get important information to citizens.

“In some countries, where anti-government demonstrations erupted and turned into mass protests lasting for months, platforms like Twitter and Facebook became a crucial source of information for protestors and activists,” Zhong said. “In this way, social media can often serve as a citizen-powered version of CNN during a social crisis, where people can seek real-time information that the news media are unwilling or unable to cover.”

[What are we missing?]

4.3 STUDIES SHOWING LITTLE OR NO EFFECTS

4.3.1 [Downey & Gibbs \(2020\)](#). Kids These Days: Are Face-to-Face Social Skills among American Children Declining? *American Journal of Sociology*.

ABSTRACT: Many social commentators posit that children’s social skills are declining as a result of exposure to technology. But this claim is difficult to assess empirically because it is challenging to measure “social skills” with confidence and because a strong test would employ nationally representative data of multiple cohorts. No scholarship currently meets these criteria. The authors fill that gap by comparing teachers’ and parents’ evaluations of children’s social skills among children in the Early Childhood Longitudinal Study 1998 and 2010 cohorts. **The authors find no evidence**

that teachers or parents rate children’s face-to-face social skills as poorer among more recent cohorts, even when accounting for family characteristics, screen time use, and other factors. In addition, within cohorts, children with heavy exposure to screens exhibit similar social skills trajectories compared to children with little exposure to screens. **There is a notable exception—social skills are lower for children who access online gaming and social networking many times a day.** Overall, however, the results represent a challenge to the dominant narrative that social skills are declining due to technological change.

[What are we missing?]

4.4 MAJOR REVIEWS AND META-ANALYSES

[What are we missing?]

SECTION 5: WHAT DOES THE RESEARCH SAY ABOUT THE EFFECTS OF PHONE-FREE SCHOOLS?

We believe the best way to understand the effect of phone policies is through experimental evidence. No study we know of has been a perfect experiment: asking a group of schools (determined by random assignment) to go phone-free, while a control group makes no changes in policy, and measuring the effects on bullying, academic performance, physical activity, and mental health. However, we have compiled a list of studies, many of them quasi-experimental, that look at large sets of schools and their educational outcomes before and after they implemented phone bans.

We have begun a [spreadsheet](#) of these experiments with the most important information about each of them: the type(s) of phone bans investigated, the educational outcomes measured, and the grades of the students in the study. **This spreadsheet is a work in progress.**

Note: we decided to include in this section only studies that looked at school phone policies that continued for over two weeks. We are excluding shorter phone-free “trial runs”, such as [Gajdics](#)

& Jagodics (2021), because short abstinences from addictive substances are likely to cause withdrawal. For this reason, studies in which schools go phone-free for a short period of time might show negative emotional consequences that do not reflect the true effects of phone-free schools.

5.1 STUDIES AND DATASETS SHOWING POSITIVE IMPACTS

5.1.1 [Beneito, & Vicente-Chirivella \(2022\)](#). Banning mobile phones in schools: Evidence from regional-level policies in Spain. *Applied Economic Analysis*.

ABSTRACT: PURPOSE: The autonomous governments of two regions in Spain established mobile bans in schools as of the year 2015. Exploiting the across-region variation introduced by such a quasi-natural experiment, this study aims to perform a comparative-case analysis to investigate the impact of this non-spending-based policy on regional Programme for International Student Assessment (PISA) scores in maths and sciences and bullying incidence.

DESIGN: The authors apply the synthetic control method and diff-in-diff estimation to compare the treated regions with the rest of regions in Spain before and after the intervention.

FINDINGS: **The results show noticeable reductions of bullying incidence among teenagers in the two treated regions. The authors also find positive and significant effects of this policy on the PISA scores of the Galicia region that are equivalent to 0.6–0.8 years of learning in maths and around 0.72 to near one year of learning in sciences.**

ORIGINALITY: To the best of the author's knowledge, this is the first empirical study analysing the impact of mobile phone bans in schools on bullying cases, exploiting variation across regions (or other units), years and age intervals. Besides, the scarce formal evidence that exists on the consequences of the mobile phones use in students' academic achievement comes from a micro perspective, while the paper serves as one more piece of evidence from a macro perspective.

[Banning stringency: Bans phones in the classroom. Not clear how enforced]

5.1.2 [Beland & Murphy \(2016\)](#). Ill Communication: Technology, distraction & student performance. *Labour Economics*.

ABSTRACT: This paper investigates the impact of schools banning mobile phones on student test scores. By surveying schools in four English cities regarding their mobile

phone policies and combining it with administrative data, we adopt a difference in differences (DID) strategy, exploiting variations in schools' autonomous decisions to ban these devices, conditioning on a range of student characteristics and prior achievement. We find that student performance in high stakes exams significantly increases post ban, by about 0.07 standard deviations on average. **These increases in performance are driven by the lowest-achieving students. This suggests that the unstructured presence of phones has detrimental effects on certain students and restricting their use can be a low-cost policy to reduce educational inequalities.**

[Ban Stringency in this study: "We define a school as introducing a school ban if that school did not allow them on the premises or required them to be handed in at the start of the day"]

EXCERPT from Conversation article on this study: We found banning mobile phones at school leads to an increase in student performance. Our results suggest that after schools banned mobile phones, test scores of students aged 16 increased by 6.4% of a standard deviation. This is equivalent to adding five days to the school year or an additional hour a week.

The effects were twice as large for low-achieving students, and we found no impact on high-achieving students.

Our results suggest low-performing students are more likely to be distracted by the presence of mobile phones, while high-performing students can focus with or without mobile phones.

5.1.3 Pawlowski, Nielsen, & Schmidt (2021). A Ban on Smartphone Usage during Recess Increased Children's Physical Activity. *International Journal of Environmental Research and Public Health*.

ABSTRACT: School recess provides a unique opportunity for children to be active. However, many children perceive smartphones as a key barrier for engaging in physical activity during recess. The aim was to investigate if a ban on smartphone usage during recess changed children's physical activity. During August–October 2020, children from grades 4–7 (10–14 years) at six Danish schools were banned from using their smartphones during recess for a four-week period. Questionnaire and systematic observation (SOPLAY) data were collected from 814 children before intervention

(baseline) and 828 during the last week of intervention (follow-up). **The mean frequency of physical activity significantly increased from baseline to follow-up (odds ratio = 1.370), as did physical activity on a moderate level (odds ratio = 1.387). Vigorous physical activity significantly decreased (odds ratio = 0.851). The increase in physical activity was found among both schools having outdoor and indoor recess, among both boys and girls, and nearly equally among grades 4–7.** This suggests that implementing a ban on smartphone usage during recess would improve the everyday conditions for health among a broad range of schoolchildren. Future studies are needed to further investigate the association between recess physical activity and smartphone usage.

...However, notably, we observed a much greater decrease in sedentary behavior and a slightly larger increase in moderate PA for girls than for boys when a ban on smartphone usage was implemented.

[Ban Stringency: In the morning, all children placed their smartphones in a received “smartphone hotel”. The teachers were responsible for ensuring that all children handed in their smartphones, as well as for placing the “smartphone hotel” in a locked cupboard. Computers and tablets were told to be placed in the children’s school bags during recess. This study only includes data on smartphone usage since we registered almost no use of tablets and computers during recess across the six schools.]

5.1.4 [Abrahamsson \(2024\)](#) Smartphone Bans, Student Outcomes and Mental Health. Working paper.

ABSTRACT: How smartphone usage affects well-being and learning among children and adolescents is a concern for schools, parents, and policymakers. Combining detailed administrative data with survey data on middle schools’ smartphone policies, together with an event study design, I show that **banning smartphones significantly decreases the health care take-up for psychological symptoms and diseases among girls. Post-ban bullying among both genders decreases. Additionally, girls’ GPA improves, and their likelihood of attending an academic high school track increases. These effects are larger for girls from low socio-economic backgrounds.** Hence, banning smartphones from school could be a low-cost policy tool to improve student outcomes.

DATA: For this study, I link three primary data sources: a compilation of Norwegian administrative data sets, including the national educational registers, family registers, tax registries, and health registers; a nationwide pupil survey; and survey data on

middle schools' smartphone policies. I study a sample of students who completed grade 10 between 2010 and 2018.

CONCLUSION: In this paper, I evaluate the effect of banning smartphones from school on students' outcomes. (...) Importantly **Boys GPA, test scores, and choice of track at high school is not affected** as seen in Appendix Figure A22. My results show that **banning smartphones leads to a significant decline at the intensive margin for the number of consultations related to diagnosis and treatment for psychological symptoms and diseases, both for specialist and GP care, by 60% and 29% relative to pretreatment mean**, respectively. Thus, **banning smartphones leads to a reduction in girls' need for care related to mental health issues**. Additionally, **girls' educational performance improves as their GPA increases by 0.08 and their teacher-awarded grades increase by 0.09 standard deviations**. **Post-ban girls' externally graded exams in mathematics improved by 0.22 standard deviations**, suggesting that the human capital accumulation of girls is improved post-ban. **Girls are also 4–7 percentage points more likely to attend an academic high school track post-ban**, suggesting that banning smartphones leads to an improvement in girls' mid-term educational outcomes. Further, I provide evidence that **bullying decreases by 0.42 and 0.39 of a standard deviation for girls and boys, respectively, when they are exposed full-time in middle school**. The magnitudes of all my estimates are larger among girls from low socioeconomic backgrounds, suggesting that this particular group of students is distracted by unstructured technology in the classroom. There are no negative effects of banning smartphones on students from high socioeconomic families, or on boys.

[Ban Stringency: Looked at differences across types of bans. **Finding:** girls attending a middle school introducing a strict policy against smartphones, experience an increase by 0.12 standard deviations in GPA. This estimate is significant four years post-ban at the 5% level (p-value 0.032). Additionally, girls attending a middle school with a strict policy have significantly higher teacher-awarded test scores by 0.08 and 0.14 standard deviations, three and four years post-ban (p-values 0.075 and 0.011). These results, shown in Panel A and B in Figure 12, show that both GPA and average grades set by teachers for girls improve after strict smartphone bans in schools are implemented... These results by type of policy, suggest that at schools with a strict policy, students experienced a larger increase in their educational performance, when it comes to GPA and test scores. This is in line with several behavioral experiments showing that having the phone nearby but in a silent mood, is still distracting and could potentially even increase phone usage, especially among persons with phone addiction having increased FoMO (Liao and Sundar, 2022). For high school track, mental health, and bullying the results are less pronounced by type of ban.”]

Figure 12: Effect of Smartphone Ban on GPA, Test Scores and Likelihood of Attending an Academic High School Track by Type of Ban for Girls

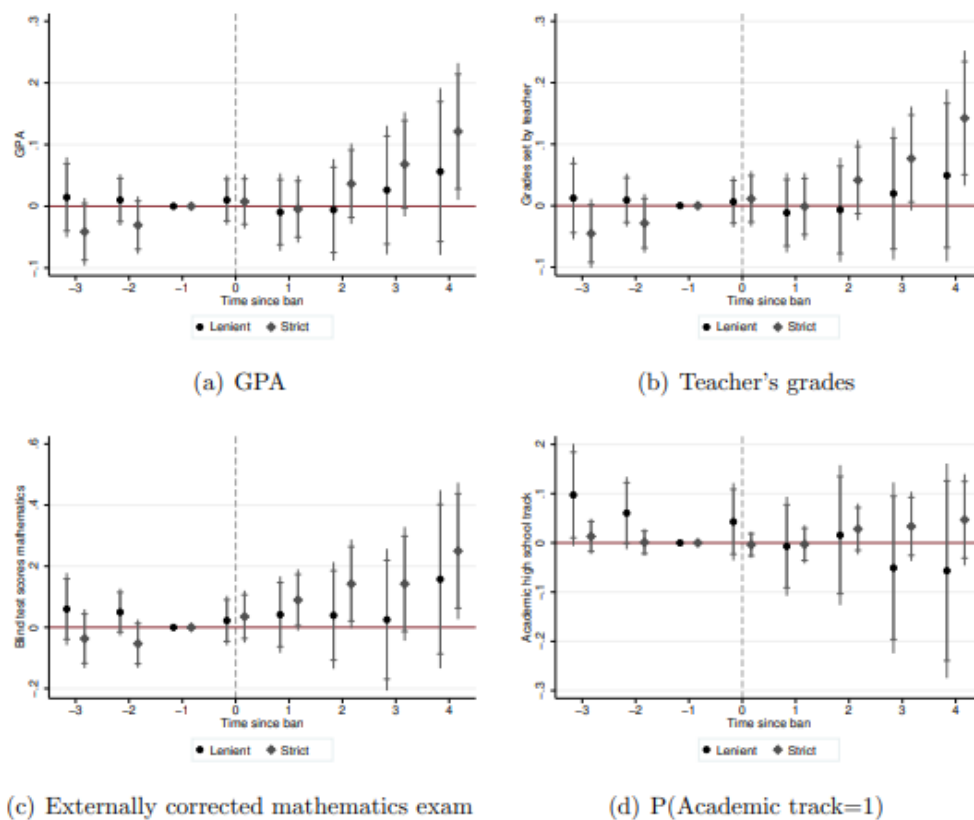


Figure 11: Effect of Smartphone Ban on Bullying by Type of Ban for Girls

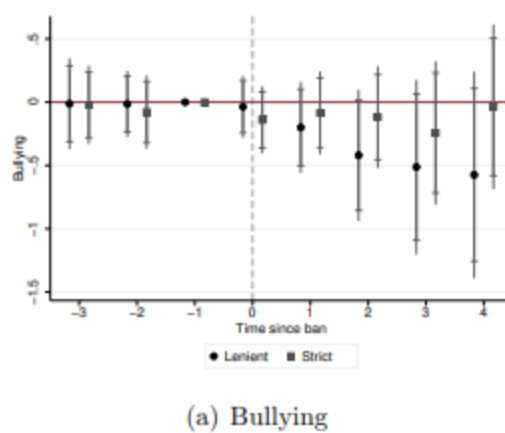
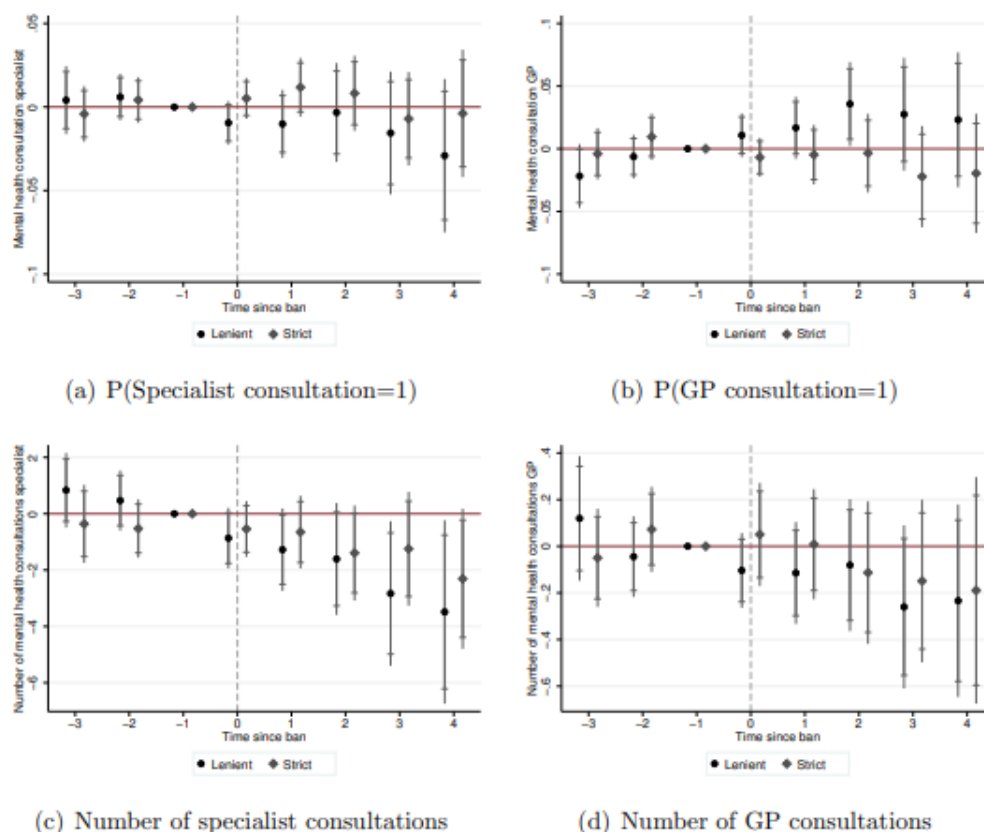


Figure 10: Effect of Smartphone Ban on Diagnosis and Treatment by Specialist and GPs for Psychological Symptoms and Diseases by Type of Ban for Girls



5.1.5 [Disconnect \(2024\)](#). Policy Exchange.

ABSTRACT: We then considered the subset of secondary schools in England to investigate whether there was a correlation between the type of ban and school performance – restricting this to England only as this was where robust and consistent data existed on measures such as Progress 8, Attainment 8, Ofsted ratings and proportion of pupils eligible for Free School Meals.

We found that secondary schools with an ‘Effective ban’ were more than twice as likely (43%) to be rated ‘Outstanding’ by Ofsted – more than double the 21% of all England secondary schools with this rating. The difference between schools with an ‘Effective ban’ and schools with other policies was found to be statistically significant with a p-value of 0.002. We further found that the mean Progress 8

score of secondary schools with an ‘Effective ban’ (0.23) was noticeably higher than the mean Progress 8 score for any other policy type, 0.13 higher than the mean score for secondary schools with only a ‘Partial ban’ and 0.25 higher than the mean score for secondary schools with ‘Banned but phone present with student’, a difference of 1.0 – 2.0 GCSE grades, respectively.

The difference between schools with an ‘Effective ban’ and schools with other policies was found to be on the edge of statistical significance, with a p-value of 0.059. We found that secondary schools with an ‘Effective ban’ had only a marginally higher Attainment 8 score than schools with other policies, a difference that was not statistically significant. Finally, we considered whether or not there was any correlation between the type of phone policy and the proportion of pupils eligible for Free School Meals (a common proxy for disadvantage), in order to ascertain whether or not our performance measures were simply picking up differences in the pupil cohort.

We found that those secondary schools with an ‘Effective ban’ had a slightly higher mean proportion of 28.12%. This is 2.61% higher than the mean of secondary schools with ‘Banned but phone present with student’, and 6.54% higher than the mean of secondary schools with only a ‘Partial ban’. Nationally, a higher proportion of pupils eligible for Free School Meals is correlated with lower Progress 8 and worse Ofsted ratings – making it even more impressive that schools with an ‘Effective ban’ buck this trend.

5.1.6 [Sungu, Choudhury, & Bjerre-Nielsen \(pre-print\)](#). Removing Phones from Classrooms Improves Academic Performance.

ABSTRACT: Widespread smartphone bans are being implemented in classrooms worldwide, yet their causal effects on student outcomes remain unclear. In a **randomized controlled trial involving nearly 17,000 students**, we find that mandatory **in-class phone collection led to higher grades** --- particularly among **lower-performing**, first-year, and non-STEM students --- with an average increase of 0.086 standard deviations. Importantly, **students exposed to the ban were substantially more supportive of phone-use restrictions, perceiving greater benefits from these policies and displaying reduced preferences for unrestricted access**. This enhanced student receptivity to restrictive digital policies may create a self-reinforcing cycle, where positive firsthand experiences strengthen support for continued implementation. Despite a mild rise in reported fear of missing out, there were no significant changes in overall student well-being, academic motivation, digital usage, or experiences of online harassment. Random classroom spot checks revealed **fewer**

instances of student chatter and disruptive behaviors, along with reduced phone usage and increased engagement among teachers in phone-ban classrooms, suggesting a classroom environment more conducive to learning. Spot checks also revealed that students appear more distracted, possibly due to withdrawal from habitual phone checking, yet, students did not report being more distracted. These results suggest that in-class phone bans represent a low-cost, effective policy to modestly improve academic outcomes, especially for vulnerable student groups, while enhancing student receptivity to digital policy interventions.

[COMMENT: This is a high-quality controlled experiment testing phone collection at the beginning of class. They found that this policy led to a significant improvement in GPA, especially among lower-performing students. However, there are some minor issues:

- It focuses on college students, and not adolescents
- The intervention only lasted 3 months
- It's based on teacher's grades, and not standardized tests

]

[What are we missing?]

5.2 STUDIES AND DATASETS SHOWING NO CHANGE OR NEGATIVE IMPACTS

5.2.1 [Kessel, Hardardottir, & Tyrefors \(2020\)](#). The impact of banning mobile phones in Swedish secondary schools. *Economics of Education Review*.

ABSTRACT: Recently, policymakers worldwide have suggested and passed legislation to ban mobile phone use in schools. The influential (and only quantitative) evaluation by Beland and Murphy (2016), suggests that this is a very low-cost but effective policy to improve student performance. In particular, it suggests that the lowest-achieving

students have the most to gain. Using a similar empirical setup but with data from Sweden, we partly replicate their study and thereby add external validity to this policy question. Furthermore, we increase the survey response rate of schools to approximately 75 %, although at the expense of the amount of information collected in the survey. **In Sweden, we find no impact of mobile phone bans on student performance and can reject even small-sized gains.**

[Ban Stringency: Broad. Any school that said they had bans. “Although we can observe school performance outcomes for the full population, there is no national policy on mobile phone use in schools, and there are no existing data available on mobile phone policies. To obtain this information, we sent a survey to schools across Sweden during 2018-19 in which we asked if there was a ban on mobile phones at the school level and, if so, when it had been implemented. If, after reminders via email, a school had still not responded, we tried to connect with the respective school principal by phone until the survey was completed. As presented in table 1, we successfully obtained necessary information on the mobile phone ban for 1,086 out of 1,423 schools, which is approximately 76%.”]

5.2.2 [King, Radunz, Galanis, Quinney, & Wade \(2024\)](#). “Phones off while school’s on”: Evaluating problematic phone use and the social, wellbeing, and academic effects of banning phones in schools. *Journal of Behavioral Addictions*.

ABSTRACT: Background and aims: Mobile phone bans in secondary schools are claimed to reduce student distraction and promote learning and face-to-face socializing. Currently, the evidence on phone bans is limited. The aim of this preregistered study was to evaluate the South Australian mobile phone ban’s effects on students’ problematic phone use, academic engagement, school belonging, and bullying. The study also sought to identify student variables that predict phone ban compliance. Methods: As the ban was phased in over 2023, a 2 (phone ban: yes/no) 3 2 (time: baseline, 1-month follow-up) repeated-measures design was employed. Students (n 5 1,282 at baseline; n 5 1,256 at follow-up) in Grades 7 to 12 were recruited from five public secondary schools. Surveys included measures drawn from the Longitudinal Study of Australian Children (LSAC) and the Programme for International Student Assessment (PISA). Results: Problematic phone use was reported by 2.6% of the sample. Being older and a more frequent user of social media predicted lower phone ban compliance. Linear mixed models indicated that **ban and no ban school groups did not differ significantly in terms of problematic phone use, academic engagement, and school belonging**. There was **slightly higher bullying in the ban**

group but bullying decreased significantly in both groups. Discussion: Imposing access restrictions may not affect the underlying psychological mechanisms that drive problematic phone use. Although these results indicate limited to no short-term benefits of the ban, further evaluation with more sensitive methodologies is recommended. Conclusions: Student-technology interactions in learning institutions should be continually monitored to determine the optimal balance to support student etiquette, learning, and wellbeing.

5.2.3 [Goodyear, ... & Pallan \(2025\)](#). School phone policies and their association with mental wellbeing, phone use, and social media use (SMART Schools): a cross-sectional observational study. *The Lancet Regional Health - Europe*.

ABSTRACT: BACKGROUND: Poor mental health in adolescents can negatively affect sleep, physical activity and academic performance, and is attributed by some to increasing mobile phone use. Many countries have introduced policies to restrict phone use in schools to improve health and educational outcomes. The SMART Schools study evaluated the impact of school phone policies by comparing outcomes in adolescents who attended schools that restrict and permit phone use.

METHODS: We conducted a cross-sectional observational study with adolescents from 30 English secondary schools, comprising 20 with restrictive (recreational phone use is not permitted) and 10 with permissive (recreational phone use is permitted) policies. The primary outcome was mental wellbeing (assessed using Warwick–Edinburgh Mental Well-Being Scale [WEMWBS]). Secondary outcomes included smartphone and social media time. Mixed effects linear regression models were used to explore associations between school phone policy and participant outcomes, and between phone and social media use time and participant outcomes. Study registration: ISRCTN77948572.

FINDINGS: We recruited 1227 participants (age 12–15) across 30 schools. Mean WEMWBS score was 47 (SD = 9) with **no evidence of a difference between groups (adjusted mean difference –0.48, 95% CI –2.05 to 1.06, p = 0.62). Adolescents attending schools with restrictive, compared to permissive policies had lower phone (adjusted mean difference –0.67 h, 95% CI –0.92 to –0.43, p = 0.00024) and social media time (adjusted mean difference –0.54 h, 95% CI –0.74 to –0.36, p = 0.00018) during school time, but there was no evidence for differences when comparing usage time on weekdays or weekends.**

INTERPRETATION: There is no evidence that restrictive school policies are associated with overall phone and social media use or better mental wellbeing in adolescents. The findings do not provide evidence to support the use of school policies that prohibit

phone use during the school day in their current form, and indicate that these policies require further development.

Ban stringency:

Table 2 Classifications of variations in school smartphone policies as restrictive (intervention) and permissive (comparator)

Restrictive school smartphone policies (intervention)	Permissive school smartphone policies (comparator)
Allow smartphones onto school premises but insist these are not to be used during the school day and are turned off and out of sight	Allow pupils to carry smartphones and use them at any time point during the day
Allow smartphones onto school premises, but only allow use if sanctioned by teaching staff for educational activities (eg, use of calculator)	Allow pupils to carry smartphones and use them at specific time points during the day (eg, breaks and lunch)
Allow smartphones onto premises but insist they are left in a specified place during the school day for example, school reception or lockers	Allow pupils to carry smartphones and use them for personal use with consent from school staff
Pupils are not allowed to carry their smartphones onto school premises at any time	Allow pupils to carry smartphones and use within designated areas or zones

[What are we missing?]

5.3 MAJOR REVIEWS AND META-ANALYSES

5.3.1 [Böttger & Zierer \(2024\)](#). To ban or not to ban? A rapid review on the impact of smartphone bans in schools on social well-being and academic performance. *Education Sciences*.

ABSTRACT: The effects of smartphone use by children and young people, especially at school, are being discussed around the world. To support this discourse with scientific evidence, this systematic review is guided by the PRISMA framework and examines the

effects of smartphone bans in schools on academic performance and social well-being. As a rapid review, it follows a streamlined methodology in order to provide a scientifically sound basis for educational policy decisions as quickly as possible. After a comprehensive database search, five research studies with quantitative results were selected and analyzed, and the effect sizes were calculated in the areas of academic performance and social behavior. **The meta-analysis yielded an overall effect size of $d = 0.162$ ($p < 0.05$). Smartphone bans have a significant, but modest, effect. This is more pronounced in the domain of social well-being than in the performance domain.** Smartphone bans can reduce social problems, such as bullying. The small effect on academic performance might be due to the limited number of studies and effects. We recommend that smartphone bans be introduced in schools, accompanied by educational measures, and evaluated regularly. This can improve the social climate and reduce potential distractions in the classroom. Further research is needed to better understand the long-term effects on academic performance. The aim of a smartphone ban should be to prevent the misuse of these devices, for example, as a tool for bullying classmates, and to prevent their negative impact on learning processes. Alongside the bans, responsible use of the technology and an understanding of its potential should be taught. Ideally, a level of media literacy is achieved that makes a smartphone ban superfluous.

5.3.2 [Campbell, Edwards, Pennell, Poed, Lister, Gillett-Swan, ... & Nguyen \(2024\)](#).

Evidence for and against banning mobile phones in schools: A scoping review. *Journal of Psychologists and Counsellors in Schools*.

ABSTRACT: Public opinions are divided on the relative benefits versus harms of allowing mobile phones in schools. When debating the consequences of mobile phones in schools, politicians often argue that students' use of mobile phones distract from their learning, increase cyberbullying and lead to poor mental health outcomes. We conducted a scoping review of the global literature, followed the Preferred Reporting Items for Systematic reviews and meta-Analyses extension for scoping reviews (PRISMA-ScR) and pre-registered our protocol with the Open Science Framework (OSF). Our search and screening process identified 22 studies that met our inclusion criteria and shed light on our research questions: whether mobile phone use in schools impacts academic outcomes, mental health and wellbeing and cyberbullying. We found an absence of randomized controlled trials with evidence resting on a small number of studies with different designs, samples, operational definitions of mobile phone bans (i.e. partial, or complete bans) and outcome measures, making reconciliation of findings challenging. Nonetheless, we provide a synthesis of the latest evidence for

decision-makers tasked with deciding for or against mobile phone bans in schools. Directions for future research are provided and practical implications for schools are discussed.

[What are we missing?]

SECTION 6: VIEWS ON PHONES IN SCHOOLS

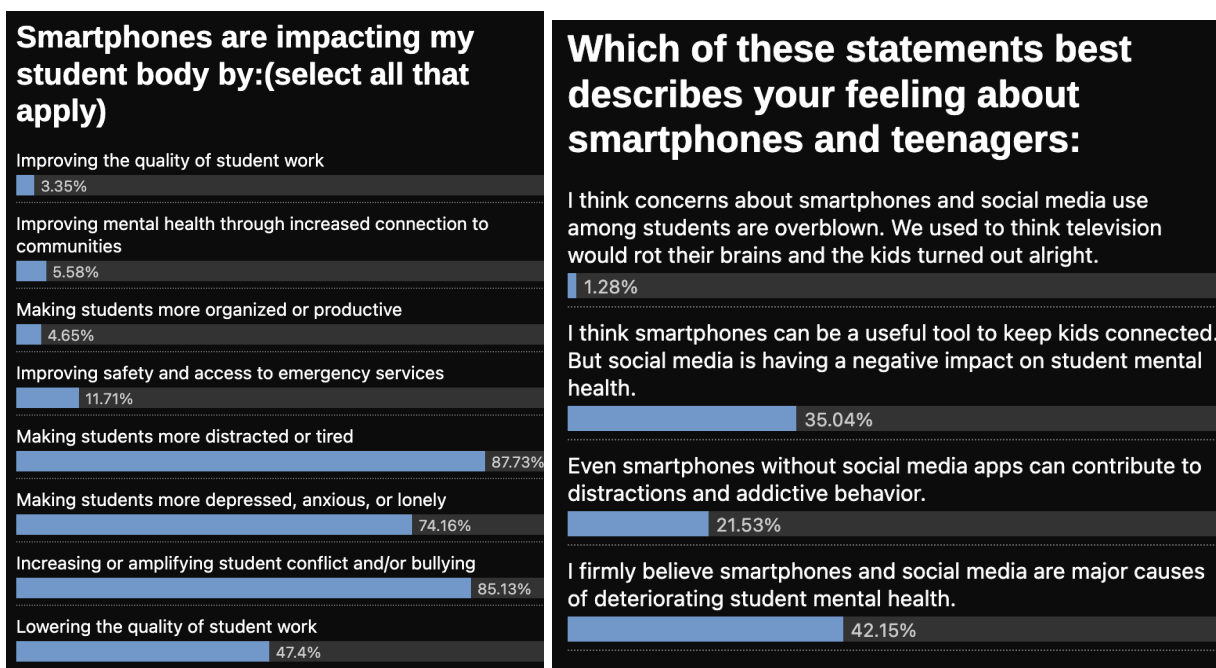
6.1 WHAT DO TEACHERS AND SCHOOL ADMINISTRATORS THINK?

6.1.1 [NBC New York \(2024\)](#). Generation Text: See the full NBC survey results as principals reveal concern about phones in schools.

EXCERPT: An exclusive national survey of school administrators shows principals and vice principals are alarmed by how smartphones and social media have transformed school hallways and classrooms.

By wide margins, hundreds of school leaders polled in the survey said they believe phones are having negative impacts on student mental health, making kids tired and distracted, and amplifying conflict and bullying in school communities.

FIGURES:



6.1.2 [Hatfield \(2024\)](#). 72% of U.S. high school teachers say cellphone distraction is a major problem in the classroom. *Pew Research Center*.

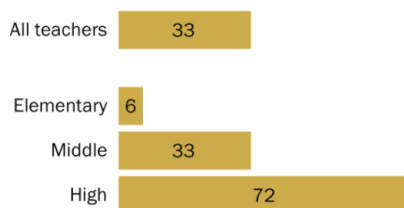
EXCERPT: New York Gov. Kathy Hochul recently announced that she [will introduce legislation to ban smartphones in schools](#) during her state's 2025 legislative session. She cited the impact that social media and technology can have on youth, including leaving them "cut off from human connection, social interaction and normal classroom activity."

Hochul's legislative push comes as K-12 teachers in the United States face challenges around students' cellphone use, according to a Pew Research Center survey conducted in fall 2023. One-third of public K-12 teachers say [students being distracted by cellphones](#) is a major problem in their classroom, and another 20% say it's a minor problem.

FIGURES:

High school teachers most likely to say cellphone distraction is a major problem

% of public K-12 teachers who say that students being distracted by their cellphones is a **major problem** in their classroom



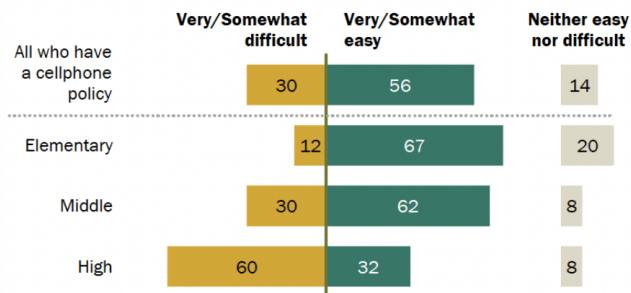
Note: Other response options included "Minor problem" and "Not a problem."

Source: Survey of U.S. public K-12 teachers conducted Oct. 17-Nov. 14, 2023.

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Most high school teachers say cellphone policies are hard to enforce

Among public K-12 teachers who say their school or district has policies regarding students' use of cellphones in the classroom, % saying it is ____ for them to enforce these policies



Note: Shares of respondents who didn't offer an answer are not shown.

Source: Survey of U.S. public K-12 teachers conducted Oct. 17-Nov. 14, 2023. "What's It Like To Be a Teacher in America Today?"

PEW RESEARCH CENTER

NOTE: Based on this [Pew survey](#).

6.1.3 [Gallup \(2018\)](#). U.S. Teachers See Digital Devices as Net Plus for Education.

EXCERPT: STORY HIGHLIGHTS:

- 41% of teachers say digital devices are helpful to students' education
- Most see devices as harmful to students' physical and mental health
- Parents have much more positive views of digital devices than teachers

FIGURES:

Teachers' Views on the Effects of the Use of Digital Devices by Students

Please think about the effects of digital devices on students. Do you believe that students' use of digital devices such as smartphones, tablets and computers has helpful or harmful effects in the following areas?

	Mostly helpful	Neither helpful nor harmful	Mostly harmful
	%	%	%
Effects of digital devices on students' education	42	30	28
Effects of digital devices on students' physical health	4	42	55
Effects of digital devices on students' mental health	4	27	69

U.S. teacher poll

GALLUP PANEL, MARCH 5-12, 2018

NOTE: This survey is on the effects of all digital devices, including tablets and chromebooks, in schools. We believe it is crucial to distinguish between these other devices and smartphones, which are much more likely to be distracting.

6.1.4 [Prothero \(2023\)](#). Do Cellphone Bans Work? Educators Share Their Experiences. *Education Week*.

EXCERPT: About 1 in 10 teachers, principals, and district leaders say that cellphones are banned in their schools while 22 percent believe that they should be banned on campus, according to an October survey by the EdWeek Research Center, which regularly polls educators across the country on education issues.

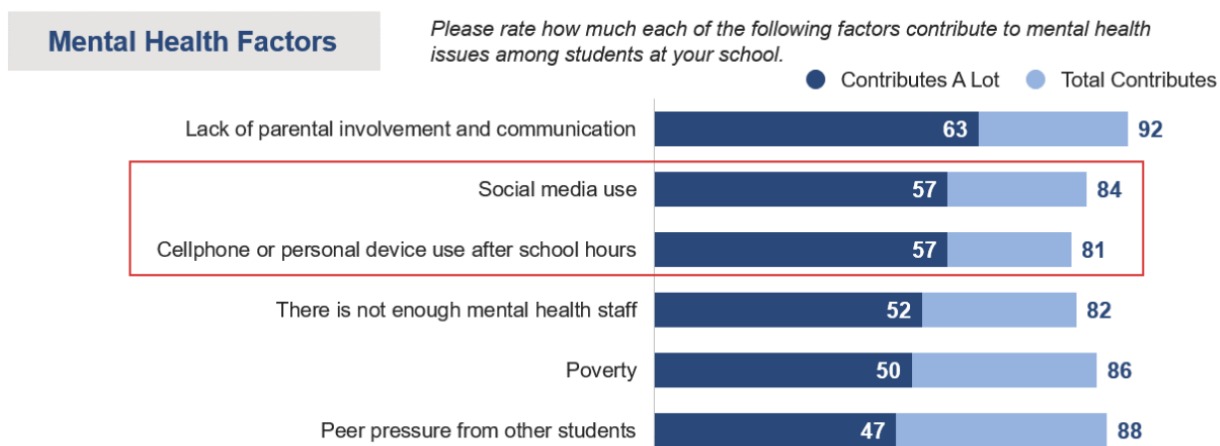
A little more than 200 educators used an open-ended question that asked them to share their perspectives on the survey topics to vent about their growing concerns over cellphones, with some comparing students' use of cellphones to an addiction or describing circumstances where students became panicked over having their cellphones taken from them.

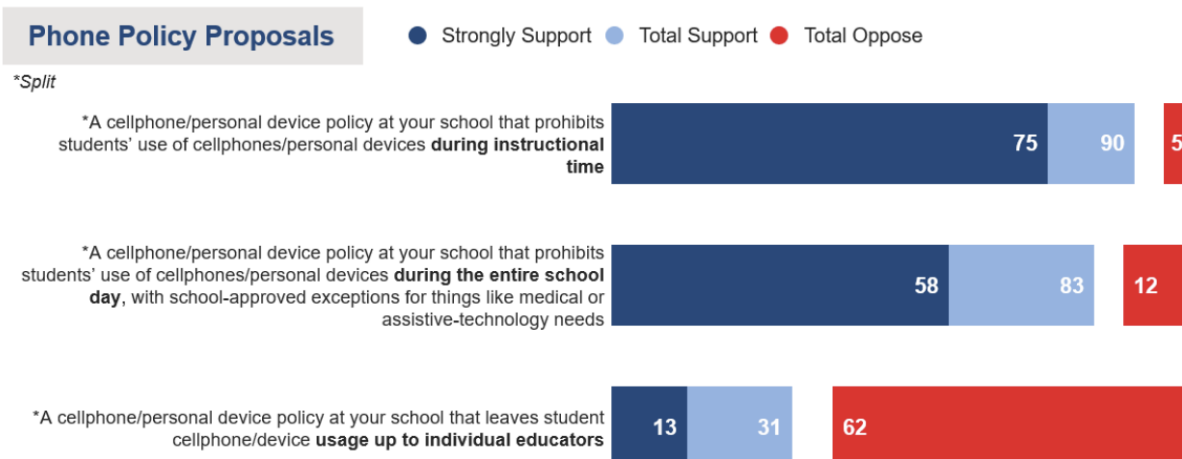
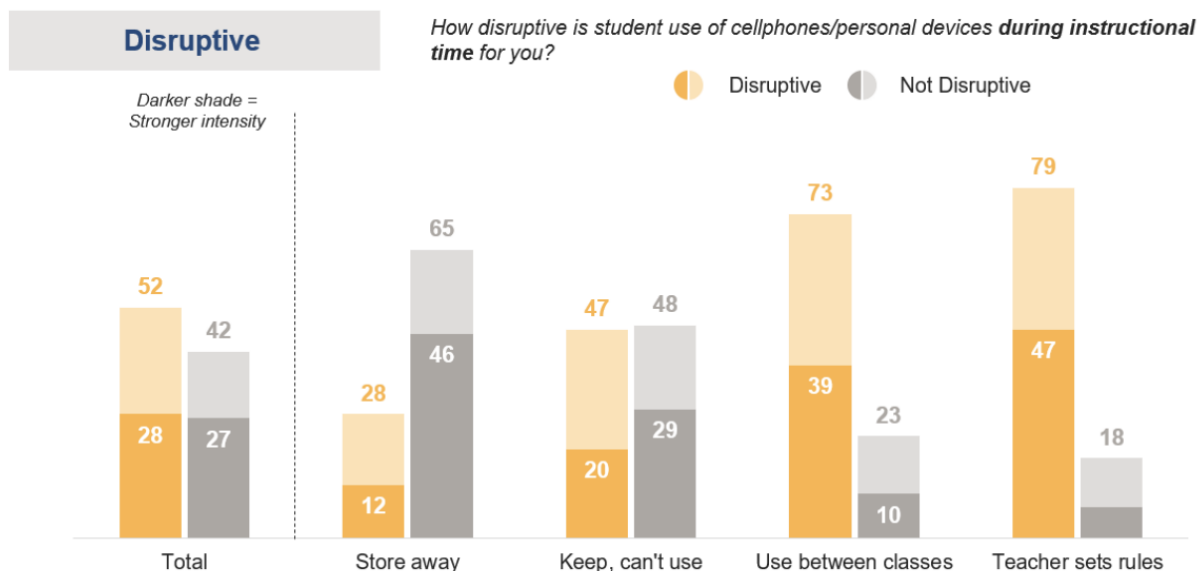
6.1.5 [National Education Association \(2024\)](#). Impact of Social Media and Personal Devices on Mental Health.

EXCERPT: KEY TAKEAWAYS:

1. Over **90 percent of educators feel students' mental health is a serious issue at their school**, and a majority say there has been a significant increase in concerns related to student mental health in the past few years.
2. An overwhelming majority of NEA members—**90 percent—support school policy prohibiting cell phone/personal devices during instructional time**.
3. NEA members voice broad support for the federal and state governments requiring social media companies to make changes to protect student safety and privacy.

FIGURES:





ADDITIONAL NOTES:

- 84% of educators believe that social media use contributes to mental health issues among students at their schools.
- At schools in which the teacher sets phone rules, 79% of educators say that cellphones are disruptive during instructional time. In comparison, at schools where phones are stored away, only 28% say that cellphones are disruptive.
- 83% of educators support **day-long** phone bans. 62% of educators are opposed to policies that leave the decisions up to individual teachers. This is an illustration of the collective action problem. Teachers feel more trapped when the decision is up to them individually.

6.1.6 [Tandon, Zhou, Hogan, & Christakis \(2020\)](#). Cell Phone Use Policies in US Middle and High Schools. *JAMA Network Open*.

EXCERPT: Cell phone use among middle and high school students is ubiquitous, starts at younger ages, and is negatively associated with children's academic and social-emotional outcomes. Parents and educators are concerned about the association of cell phone use with child well-being. Despite these concerns, there are limited rigorous data on school cell phone use policies and practices. The aim of this study was to describe US cell phone policies and practices in middle and high schools.

RESULTS: A total of 103 middle schools (97%) reported having a cell phone policy for students ([Table 2](#)). Phone use during lunch and recess was not restricted by 71 middle schools (33%) and 10 high schools (69%). Across school levels, **over 90% of principals supported restrictions on cell phone use for students in middle and high schools, and over 80% believed that cell phone use during school has negative consequences for social development and academics.**

6.1.7 [NSW Government \(2024\)](#). Mobile ban improves learning, concentration and socialisation.

EXCERPT: The NSW Government's decision to ban mobile phones in all NSW public schools has improved student learning, concentration, and encouraged young people to socialise more, according to a new survey by the NSW Department of Education. One year on from the change, a survey of almost 1000 public school principals found almost universal support for the ban, at 95 per cent, and most say removing the unnecessary distraction has improved students' focus and reduced social isolation. The NSW Department of Education's Centre for Education Statistics and Evaluation survey further found:

- 81 per cent say students' learning has improved since mobile phones were banned
- 87 per cent of principals say students are less distracted in the classroom since mobile phones were banned
- 86 per cent of principals say socialising has improved since the mobile phone ban

[What are we missing?]

6.2 WHAT DO PARENTS THINK?

6.2.1 [National Parents Union \(2024\)](#). New Poll Shows Parents Are Against Cell Phone Ban in Schools; Raise Alarm Over Negative Effects of Social Media on Children.

EXCERPT: When it comes to cell phones in school, parents lack trust in having schools keep phones away from their children during the day. 43% of parents say their child's school bans cell phone use unless they have a medical condition for which it is needed, but only 32% support this policy. The majority of parents (56%) believe students should sometimes be allowed to use their cell phones in school, during times like lunch or recess, at athletic events and in class for academic purposes approved by their teacher.

Parents do want to limit cell phone usage in school to avoid distractions with widespread support for banning it during class when used for purposes other than academics, like texting or entertainment. The cell phone policy should be made at the school or district level, the majority of parents (57%) say.

[What are we missing?]

6.3 WHAT DO STUDENTS THINK?

6.3.1 [Tulane, Vaterlaus, & Beckert \(2017\)](#). An A in Their Social Lives, but an F in School: Adolescent Perceptions of Texting in School. *Youth & Society*, 49(6), 711–732.

ABSTRACT: Text messaging, used by people of all ages, has become the preferred method of communication for teenagers. Teens spend a significant amount of their daytime hours in school. Schools have not readily accepted the use of cell phone technology for fear of academic dishonesty, distraction, and cyberbullying. The current study examined adolescent ($n = 218$) attitudes concerning text messaging in school. The majority of adolescents (71%) supported text messaging in school. A phenomenological qualitative approach revealed that adolescents' experience with texting and school centers on student attention, connection (with family, friends, and emergency responders), and levels of regulation (personal, circumstantial, and school).

EXCERPT: **Some students felt texting was distracting, and others felt that texting in school was simply misunderstood—not distracting at all.** Some felt that they had the ability to regulate their own texting in the classroom, and others felt that there should be external regulations. There appears to be conflict among adolescents regarding what is best in terms of texting in the classroom, and understandably so as adolescents have different lived experiences. Despite the differences identified within the themes, the phenomenological analysis identified that attention, connection, and regulation are the major areas of adolescent concern when discussing texting during the school day.

6.3.2 [Ruston, Tabb, & Rudd \(2023\)](#). Survey Of U.S. High School Students On Classroom Cellphone Use. *Screenagers*.

KEY FINDINGS:

- 71% of high schoolers recommend that middle schoolers not have access to cellphones during class time.
- 92% of high schoolers recommend that elementary students not have access to cellphones during class time.
- **38% of high schoolers recommend that high schoolers themselves not have access to cellphones during class time.**

6.3.3 [Top Hat \(2017\)](#). Cellphones in School are Essential to Learning, Say Students.

KEY FINDINGS:

- 75% of students feel that digital devices help them learn more effectively
- **94% of students want to use cellphones in school for academic purposes**
- 40% of students feel that money is their greatest obstacle to college success
- 31% have gotten by without buying a print textbook for a course
- 81% would pay up to \$100 for a digital textbook

6.3.4 [The Learning Network \(2023\)](#). What Students Are Saying About School Cellphone Bans. *The New York Times*.

EXCERPT: Nearly one in four countries has laws or policies banning or restricting student cellphone use in schools. Proponents say no-phone rules reduce student distractions and bullying. Critics say the bans could hinder student self-direction and critical thinking.

We asked teenagers what they thought: Should schools ban cellphones?

The reactions were mixed. Many students brought up the same reasons they wanted access to their phones during the day: to listen to music, to contact their parents and even for schoolwork. But many recognized the need for some boundaries around phone use, with several supporting an outright ban. Read their arguments below.

[What are we missing?]

6.4 WHAT DO VOTERS / THE PUBLIC THINK?

6.4.1 [Arm \(2024\)](#). America's New Consensus: A National Survey Analysis of the Political and Policy Preferences of Likely 2024 Voters. *Manhattan Institute*.

EXCERPT: The use of cellphones in schools is a growing concern for American parents.

A majority of likely voters say they are either extremely (26%) or very (24%) concerned about cellphones in schools, with voters 65 and older the most concerned (34% extremely, 27% very). Likely voters across the partisan spectrum believe that schools should take actions to limit these devices in schools, with **73% of all voters believing schools should limit access to cellphones, including 71% of Democrats, 66% of independents, and 80% of Republicans.**

6.4.2 [Pew \(2024\)](#). Most Americans back cellphone bans during class, but fewer support all-day restrictions.

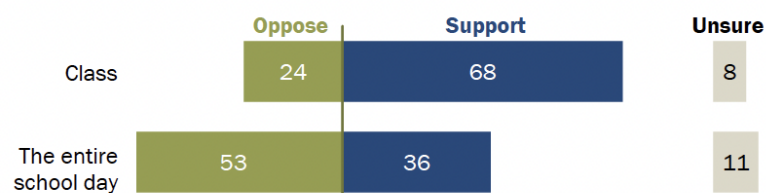
EXCERPT: Some [school districts have called for banning](#) cellphone use entirely, not just during class. Our survey finds the public is far less supportive of a full-day ban on cellphone use than a classroom ban.

About one-third (36%) support banning middle and high school students from using cellphones during the entire school day, including at lunch as well as during and between classes. By comparison, 53% oppose this more restrictive approach.

FIGURES:

Roughly 7 in 10 Americans support a cellphone ban during class; about a third favor an all-day ban

% of U.S. adults who say they ___ a ban that prevents middle and high school students from using cellphones during ...



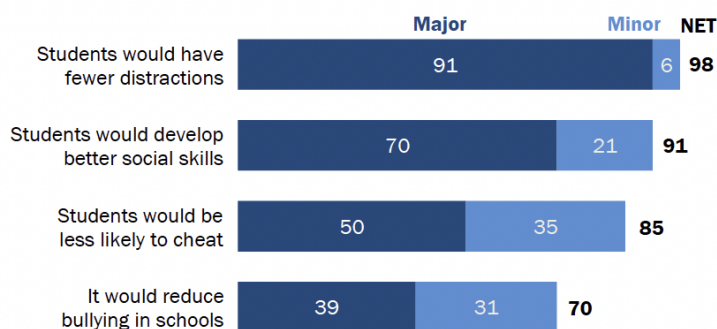
Note: "Strongly/Somewhat support" and "Strongly/Somewhat oppose" responses are combined. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted Sept. 30-Oct. 6, 2024.

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Nearly all Americans who support a cellphone ban cite reducing distractions for why they back it

Among U.S. adults who say they **support** a ban on middle and high school students using cellphones during class, % who say each of the following is a ___ reason



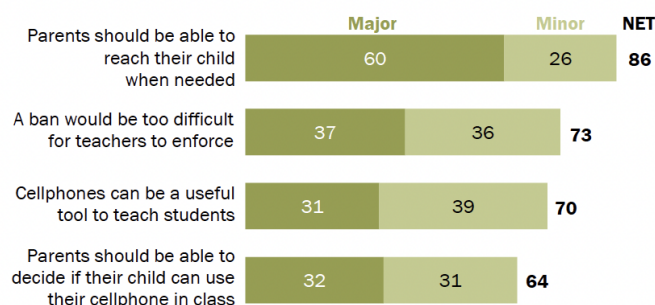
Note: Figures may not add up to the NET values due to rounding. Those who did not give an answer or who gave other responses are not shown.

Source: Survey of U.S. adults conducted Sept. 30-Oct. 6, 2024.

PEW RESEARCH CENTER

Americans who oppose a cellphone ban largely say parents need to be able to reach their children

Among U.S. adults who say they **oppose** a ban on middle and high school students using cellphones during class, % who say each of the following is a ___ reason



Note: Figures may not add up to the NET values due to rounding. Those who did not give an answer or who gave other responses are not shown.

Source: Survey of U.S. adults conducted Sept. 30-Oct. 6, 2024.

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[What are we missing?]

SECTION 7: WHAT ARE POLITICAL LEADERS AND GOVERNMENTS DOING TO PROMOTE PHONE-FREE SCHOOLS?

7.1 [Baker \(2019\)](#). “Should never have been allowed in class”: Parents back move to ban phones in schools. ABC News.

EXCERPT: Students at state schools in Tasmania will be banned from using mobile phones during school hours from term two next year, Education Minister Jeremy Rockliff has announced.

...New Town principal David Kilpatrick said the school's culture and results had improved since the policy was introduced. He said a recent student wellbeing survey found 80 per cent of his school's students had not been cyberbullied, and pointed to the figure as evidence the policy was working. "I couldn't have said that three years ago," Mr Kilpatrick said.

7.2 [Media Officer \(2022\)](#). Mobile phones in school. *The Education Hub, Gov.UK*.

EXCERPT: Most schools have well developed plans in place for the management of mobile phones and that further intervention from Government isn't necessary. In most cases mobile phones are already banned for the majority of the school day with schools taking a range of measures to enforce that policy.

We're producing new guidance that will provide practical advice to schools about how to encourage good behaviour, respond effectively to incidents of misbehaviour both in and out of the classroom, and will support staff in tackling behavioural issues. The guidance makes clear that headteachers need to set out that if they allow pupils to access phones in the school day they need to have measures to mitigate the risk of distraction, disruption, bullying and abuse associated with mobile phones.

7.3 [Ledsom \(2019\)](#). The Mobile Phone Ban In French Schools, One Year On. Would It Work Elsewhere? *Forbes*.

EXCERPT: In September 2018, the French government banned the use of mobile phones in schools. It's a topic that continues to fascinate U.K. and U.S. commentators, who wonder if a similar ban is necessary and/or workable at home.

The law, [according to Le Figaro](#), stipulates that children cannot use their telephones inside school grounds (or at school based activities outside of school such as sporting events or day trips) nor can they connect via any device to the internet. There are possible pedagogical exceptions for children with special needs.

It's up to each school to determine how to police the ban, which applies to children in école maternelle (pre-school), école élémentaire (equivalent to junior high school, up to age 10) and collège, up to age 15 (ninth grade). At Lycée, which

a teenager attends for the last 3 years of high school, individual establishments make their own rules regarding phone use.

7.4 [Henriques-Gomes \(2019\)](#). Victoria to ban mobile phones in all state primary and secondary schools — Australian education. *The Guardian*.

EXCERPT: Students at Victorian public schools will be banned from using their phones from next year.

In an effort to reduce distractions and cyber bullying, and hopefully improve education outcomes, students will have to switch off their phones and store them in lockers during school hours until the final bell, the education minister, James Merlino, has announced. In case of an emergency, parents or guardians can reach their child by calling the school.

The only exceptions to the ban will be where students use phones to monitor health conditions, or where teachers instruct students to bring their phone for a particular classroom activity.

7.5 [Department of Education, Western Australia \(2020\)](#). Student Mobile Phones in Public Schools Policy—Policies—Department of Education.

EXCERPT: The Student Mobile Phones in Public Schools policy took effect from the start of Term 1, 2020.

The [policy](#) requires all public schools to implement a ban on the use of mobile phones for all students from the time they arrive at school to the end of the school day. This extends to the use of smart watches which need to be on airplane mode during this period. The policy aims to reduce distractions in class and improve student engagement.

Under the policy:

Primary students cannot have a mobile phone in their possession. If your child is in Kindergarten to Year 6 and they bring a mobile phone to school, it will be stored until the end of school.

Students in Years 7 to 12 are allowed to have their phone in their possession, but must turn it off and keep it out of sight until the end of school.

Exceptions are allowed for students who have approval from the principal to use a phone to monitor health conditions, or where teachers give students permission to use mobile phones for a specific purpose.

If students need to contact their parents/carers, they can do so through the school's administration. Likewise, if parents/carers need to get a message to their children, they should call the school.

Principals and school staff determine how they implement this policy. For more information, contact your school.

7.6 [Walker \(2023\)](#). Cellphone Bans in School Are Back. How Far Will They Go? *NEA*.

EXCERPT: Until 2015, students in New York City were not allowed to bring their cell phones into school. That year, city leaders ordered schools to lift the ban and begin tailoring policies that accommodated phones in some manner.

In 2015, 67 percent of U.S. schools had similar bans on the books, a major decline from 90% in 2009. Some experts anticipated this relaxation would continue. Many schools became resigned to the prevalence of the devices in students' lives and many were concerned that banning the devices could adversely impact low-income students [who relied on mobile-only access to the Internet](#).

By 2020, however, the percentage of schools with cellphone bans had jumped to 77 percent, according to recently-released data from the [National Center for Education Statistics](#).

The scope of these bans varies, along with the rationale. School leaders who have instituted more expansive restrictions (including outside the classroom) believe a cell phone-free environment will lead to less incidents of cyberbullying, improve attendance, and reduce time on social media (and associated mental health problems). The most often-cited reason is to improve engagement in class.

...Many schools became resigned to the prevalence of the devices in students' lives and many were concerned that banning the devices could adversely impact low-income students [who relied on mobile-only access to the Internet](#).

7.7 [Theocharous \(2023\)](#). *Phone ban in SA public high schools starts today*. 9News.
[More on SA phone ban policy]

EXCERPT: Public schools across [South Australia](#) have banned mobile phones from school grounds starting from today.

The state government says the ban is there to minimise anti-social behaviour, bullying and distractions from classrooms and will be enforced in 44 schools.

"Some of the incidents of bullying and harassment that is taking place on social media through the use of smart devices, just reinvigorates me to make sure we get this ban in place as soon as we can," Education Minister Blair Boyer said.

7.8 [Jilani \(2022\)](#). New York high school encourage kids to put phones away.
NewsNation.

EXCERPT: The 1,500-student high school began the school year encouraging students to abide by a three-level system for cell phone usage.

Level 1 covers most of the school day, when students are required to turn their phones off while they are in class. Teachers can enforce this rule within their classroom as they wish.

During Level 2, which occurs in homeroom or common periods like lunch, students can briefly check their phones but aren't allowed to use them for prolonged periods of time on things like social media or games.

At Level 3, students can use their phones to listen to music or a podcast during their free period, but they're encouraged not to use them for social media or gaming, just like in the previous levels.

The initiative was the brainchild of Jennifer Rosenzweig, an English teacher who had long worried about the impact of excess cell phone use.

7.9 [Klein \(2019\)](#). Schools Say No to Cellphones in Class. But Is It a Smart Move? *Education Week*.

EXCERPT: California recently passed legislation that allows school districts to restrict or prohibit device use in class, although it's not a requirement. And at least four other states debated putting significant limits on the devices.

Other countries have had more success enacting widespread bans. Ontario, a Canadian province, is restricting student cellphone use during instructional time. (The restrictions, which are scheduled to go into effect later this year, include an exception for classroom activities and health and other emergencies.) And in 2018, France passed a law outlawing the use of cellphones in schools for students up to age 15.

...**Canada's Ontario province and France** have enacted significant restrictions on student cellphone use in schools. But measures restricting cellphone use have been much harder to pass in the United States. Here's a list of the states that have recently considered some sort of student cellphone restriction:

California: Allows school districts or charter schools to limit or prohibit the use of smartphones during school hours. Status: Enacted.

Arizona: Called for a public policy that portable electronic devices should not be used in classrooms unless specifically authorized by "the individual having authority over the public school classroom." Status: Failed.

Maine: Required the department of education to adopt rules restricting the use of cellphones by students. Allowed students to use their cellphones in the front office of the school in the event of an emergency. Status: Failed.

Maryland: Established a task force to study the impact of student cellphone use in classrooms on student learning and teacher instruction and report its findings to the legislature. Status: Failed.

Utah: Required individual public schools to develop a policy on the use of cellphones in school and submit that policy to district officials every two years. Status: Failed.

Source: National Conference of State Legislatures; Education Week

7.10 [Wakefield \(2021\)](#). China bans children from using mobile phones at school. *BBC News*.

EXCERPT: Children in China are to be banned from using their phones in school, the Ministry of Education has ruled. Pupils will not be allowed to bring mobiles to school without written parental consent. The authorities say they want to protect young people's eyesight, improve their concentration and prevent internet addiction. Schools are being encouraged to find other ways for parents to communicate with children during the school day.

7.11 [Orlando \(2022\)](#). Another school has banned mobile phones, but research shows bans don't stop bullying or improve student grades.

EXCERPT: This week, one Sydney high school [made headlines](#) for banning mobile phones during school hours. Phones can come to school but must stay in locked pouches allowing teachers to "focus on educating students."

This follows other recent phone bans at both public and [private schools](#) around Australia. In 2020, Victoria [banned phones](#) for all state primary and [secondary schools](#) and many [private schools](#), while prestigious Sydney girls school SCEGGS Darlinghurst [banned phones](#) in May 2022.

This is part of a [worldwide trend](#). In a move popular with parents, schools and governments see phone bans as a way to fix [bullying](#) and [student](#) disengagement.

7.12 [Williamson \(2021\)](#). There is nothing Dickensian about a well-ordered, disciplined classroom. *The Telegraph*. [Williamson is the Former Secretary of State for Education of the United Kingdom].

EXCERPT: Gavin Williamson **told The Telegraph** phones should not be "used or seen during the school day", though he said schools should make their own policies. Phones can act as a "breeding ground" for cyber-bullying and social media can damage mental health, he added.

"It's now time to put the screens away, especially mobile phones," he wrote.

..“Technology has been invaluable in keeping children learning during lockdowns and we support its use,” he said.

“Outside the classroom, the use of mobile phones distracts from healthy exercise and good old-fashioned play.

“Worse, it acts as a breeding ground for cyber-bullying, and the inappropriate use of social media sites.

“While it is for every school to make its own policy, I firmly believe that mobile phones should not be used or seen during the school day, and will be backing head teachers who implement such policies.”

The government will be consulting on how to help heads remove phones from schools, later this year, he added.

7.13 [Carr-Gregg, McLean, & Third \(2020\)](#). Review into the non-educational use of mobile devices in NSW schools – report. *NSW Education*.

EXCERPT: As mobile digital devices are adopted by ever larger numbers of children and young people in New South Wales, the review team is mindful that our approaches to the use of such devices in schools must heed international expert advice that the mitigation of the potential risks of harm must be matched by a commitment to nurturing the positive potential of digital media use for children and young people. This is critical if we are to adequately prepare children and young people for the digital future. In this spirit, the review team makes the following recommendations.

RECOMMENDATIONS:

- Implement a mandatory ‘digital licence’ for all students in NSW
- Provide mandatory cyber safety education for students
- Review the adequacy of existing cyber safety education in the curriculum and ICT general capability
- Provide better quality and more cyber safety education for teachers, including NESA-registered professional learning
- Restrict the use of smartphones for students in primary school
- Provide better guidance for secondary schools, including policies that could be adopted depending on a school’s circumstances

- Commission world-first, independent, qualitative and quantitative research
- Better utilise agencies with requisite expertise

ADDITIONAL INFO ON RECOMMENDATION: Restrict the use of smartphones for students in primary school.

Reflecting the current practice of the vast majority of primary schools in NSW, the review team recommends that a state-wide restriction be placed on the use of smartphones for students in primary school in NSW.

Given that many children require a mobile phone to travel to and from school, the review team recommends that the NSW Government resource facilities to ensure the safe storage of children's mobile devices in government primary schools during school hours.

The review team recommends that, where a parent wishes their child to take a smartphone to and from a primary school, they should opt either to purchase a 'dumb' phone or other device without internet access or a camera, or alternatively use parental controls to deactivate the camera and internet functionality on an existing 'smart' device.

The review team recommends that the NSW Government provide accessible information to schools about how to deactivate such functionality on devices (e.g. existing smartphones that may already have been handed down to children by adult carers). This information could then be communicated by schools to parents and carers.

The review team noted that, even where schools are deploying tablets, laptops and desktop computers in the teaching of the curriculum (all using school filtering systems), it appears that the majority of primary schools in NSW have already restricted the use of smartphones in both classrooms and in the playground. Schools have a wide variety of policies and processes in place to support the implementation of this restriction. The review team considers there are strong ethical and legal reasons to justify such a restriction. In particular, we note schools' duty of care to provide a safe learning environment and reported increases in cases of stalking, inappropriate peer-to-peer contact, access to pornography and image-based abuse among primary school students.

...The review team notes that many parents regard their child having a smartphone as an essential communication tool, especially going to and from school. In light of this, the

review team recommends that schools make provision for the safe storage of mobile digital devices during the school day. Consideration should be given to involving the whole school community in determining the most practical way to store these devices during the school day that is equitable, secure and manageable. This should ideally involve a consultation process with teachers, students and parents. Principals should make the final decision.

Models of mobile digital device policy for schools' consideration

Model 1

Complete restriction on unauthorised use of mobile devices in school hours, including recess and lunchtime. In some instances, schools may choose to apply these restrictions to students while they are in school uniform travelling to and from school, during school excursions and extra-curricular activities on school grounds. Students must hand their mobile digital devices in at the beginning of the school day and collect them after school or store them in an approved location. Schools need to provide secure storage facilities to ensure the viability of this model. Schools also must recognise that implementing complete restriction potentially has an opportunity cost for students' long-term development of digital skills and literacies (though this model permits teacher-endorsed use). Examples include The Shore School (NSW), John Edmondson High School (NSW) or MacKinnon High (VIC). Mount St Benedict College in Pennant Hills, St Andrew's Cathedral School in Sydney, Kamaroi Rudolf Steiner School in Belrose.

Model 2

Developmentally-defined restriction on unauthorised use of mobile devices in school hours for students in years 7-10. This model recognises older students' increased capacity to self-regulate in relation to their mobile digital device use. Schools need to provide secure storage facilities for the storage of mobile digital devices when not in use by students. Eg: Cranbrook School in Bellevue Hill where Junior School students and students in Years 7 to 9 are not permitted to have this phone turned on during school hours and must keep it secured in their bag or locker and students in Years 10 to 12 may use phones during recess and lunch breaks for communication purposes only.[10]

Model 2A) Complete restriction of the use of mobile phones in secondary schools, with the exception of Years 11-12, who are permitted to use their mobile

digital devices at any time during school hours. The French model is an example of this.

Model 2B) Complete restriction of the use of mobile phones in secondary schools, with the exception of Years 11-12, who are permitted to use their mobile digital devices in specific physical locations and/or at certain times. An example includes Camberwell Girls Grammar School (VIC)

Model 3

Partial restriction on unauthorised use of mobile devices in school hours. The aim of the partial restriction model is to enable students to develop the habit of routinely disconnecting, thereby encouraging them to learn the value of self-regulation of their technology use. Schools need to provide secure storage facilities during designated technology-free days or times to ensure the viability of this model. Schools should complement partial restriction with clear policy about how technology is to be used outside technology-free periods or spaces (e.g. Models 4 and 5 below). For example, Queenwood School for Girls in Mosman[11] ask parents of K-6 students to only provide students with 'dumb phones'.

Model 3A) School-designated technology-free days (e.g. Technology-free Tuesdays). On a regular day (e.g. weekly or fortnightly) students are required to leave their mobile digital devices at home or hand them in at the beginning of the school day and collect them after school. An example includes St Paul's Catholic College (NSW).

Model 3B) School-designated technology-free times and spaces. Use is permitted in specific physical locations and/or at certain times only. Examples include Wodonga Senior Secondary (VIC) and Newington (NSW).

Model 4

No restriction on unauthorised use of mobile devices in school hours (including during school excursions and extra-curricular activities on school grounds). To be effective, this model requires that the school actively work with students and their families – both formally and informally – to ensure they understand their responsibilities to themselves and others regarding appropriate mobile digital device use. This model allows individual teachers to make their own rules for their own classroom. The school needs to have a well-developed policy around

the encouragement and enforcement of students' safe, responsible and informed use of mobile digital devices, and to ensure that teachers are well-equipped to support such use. An example includes Wantirna College (VIC)[14].

Model 5

The active promotion of the use of mobile devices for educational and other purposes, during school hours. To be effective, this model requires that the school actively work with students and their families – both formally and informally – to ensure they understand their responsibilities to themselves and others regarding appropriate mobile digital device use. The school needs to have a well-developed policy around the encouragement and enforcement of students' safe, responsible and informed use of mobile digital devices, and to ensure that teachers are well-equipped to support such use. Schools need to understand and ensure their legal responsibilities to ensure students' duty of care. Teachers need to be supported to develop the skills and resources to maximise the potential of devices in classroom teaching.

7.14 [Interdiction du téléphone portable dans les écoles et les collèges](#) [Cell phone ban in schools and colleges]. Ministère de l'Éducation Nationale et de La Jeunesse.

EXCERPT: The legal framework: The use of mobile phones can seriously impair the quality of listening and concentration necessary for teaching activities. Its use is the cause of a significant proportion of incivility and disturbances within establishments. Mobile phones can arouse covetousness, racketeering, theft between comrades. In addition, their use within establishments diminishes the quality of collective life, which is essential to the development of pupils. Finally, mobile phones are sometimes vectors of cyberbullying and facilitate access to violent images, particularly pornographic images, for young people, via the Internet. For all these reasons, the use of mobile phones and any other electronic communications terminal equipment is prohibited within schools and colleges.

The scope of the ban: The ban concerns the use of mobile phones and any other electronic communications terminal equipment (tablet or connected watch, for example) within schools and colleges.

The law also allows the board of directors of high schools to introduce, in the internal regulations, the prohibition of the use by high school students of these devices. This

prohibition is valid during school and extracurricular time. It is also effective during all school activities organized outside the school or school establishment.

Exceptions provided by law: Pupils with a disability or suffering from a debilitating health problem retain the authorization to use medical devices associated with communication equipment (device allowing diabetic children to manage their blood sugar levels, for example).

Concerning conditional bans, the law makes it possible to provide for circumstances, in particular educational uses, and places in which the internal regulations expressly authorize the use of a mobile phone by students. These are indeed cumulative conditions, the rules of procedure having to specify both the circumstances and the places.

7.15 [Mobile phones in schools: are they being banned?](#) (2024) The Education Hub, Gov.UK

EXCERPT: We're introducing [guidance](#) which encourages all schools to follow this approach, so that more pupils can benefit from the advantages of a phone-free environment. Here's everything you need to know. **The new guidance says that schools should prohibit the use of mobile phones, but they will have autonomy on how to do this.** Some may allow phones to be brought onto the premises but **not to be used during school hours**, including at breaktime. This brings England in line with other countries who have put in place similar rules, including France, Italy and Portugal.

Schools will be able to choose an approach to prohibiting mobile phones which suits them. **This could include banning phones from the school premises, handing in phones on arrival at school, or keeping phones locked away.**

7.16 [Dathan \(2024\)](#). Schools will get new powers to ban mobile phones. The Times.

EXCERPT: Mobile phones will be banned in schools in England under guidance issued to head teachers today in an attempt to minimise disruption and improve behaviour in classrooms. **The nationwide rules will give backing to teachers in prohibiting the use of mobile phones throughout the school day**, including at break times. Pupils who breach the ban face detention as well as having their phone confiscated for as long

as the head teacher deems necessary. The guidance also gives teachers the power to search rucksacks and the legal protection from being sued by parents for loss or damage to confiscated devices.

The most “straightforward” option is a total ban on phones on school grounds, with pupils told to leave them at home or with parents. This policy provides “a very simple boundary” that means pupils could be punished if a phone were found on school property. A second option would require pupils to hand in their devices to school staff on arrival and collect them at the end of the school day. Lockers that cannot be accessed until the end of the school day have also been offered to allow children to store phones while in lessons. A [third], more liberal, policy would put trust in pupils by allowing them to keep hold of their phones but only on the “strict condition that they are never used, seen or heard”. Consequences for breaching this policy would need to be “sufficient to act as an effective deterrent”, the guidance states, and it is “important that schools enforce this policy vigorously, consistently and visibly”

7.17 [Newsom \(2024\)](#). Governor Newsom urges schools to immediately restrict cell phones in the classroom ahead of the new school year.

EXCERPT: Sacramento — In a letter to California schools, Governor Gavin Newsom today called on every school district to restrict smartphone use in classrooms as the new academic year begins. In his letter, the Governor applauds districts that have already implemented cell phone restrictions, like Los Angeles Unified, and reminded education leaders of the mental health, scholastic, and social risks of cell phone use in classrooms.

In 2019, Governor Newsom [signed](#) AB 272 (Muratsuchi) into law, which grants school districts the authority to regulate the use of smartphones during school hours. Building on that legislation, he is currently working with the California Legislature to further limit student smartphone use on campuses. In June, the Governor [announced](#) efforts to restrict the use of smartphones during the school day.

7.18 [Kelly \(2024\)](#). Minister to ask secondary schools for mobile phone ban during school day. *RTÉ News*.

EXCERPT: Minister for Education Norma Foley has said she plans to ask second-level schools to ban the use of mobile phones by students during the school day.

Earlier today, the minister told journalists: "I am now in a space where I'm saying, looking to introduce a ban on the mobile phone at post-primary."

A spokesperson for the minister said Ms Foley would be writing to schools in the next week or two "to give advice and guidance" around mobile phone use "and her desire to have a ban on mobile phones in place".

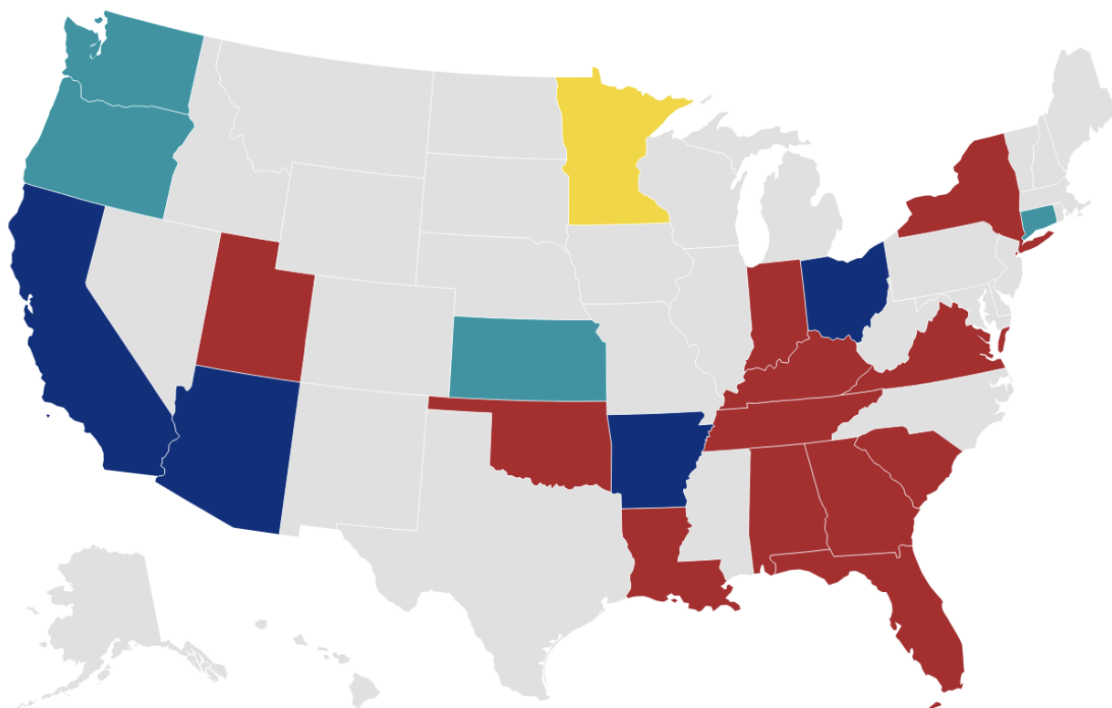
7.19 Reinwald (2025). Four states enact cellphone bans in May so far. *Ballotpedia*.

FIGURE:

Statewide policies on cellphone usage in K-12 public school classrooms

Since 2023, several states have passed laws or implemented policies/executive orders¹ banning or limiting student cellphone usage in classrooms or encouraging districts to move in that direction.

■ Law/executive order prohibits cellphones in classrooms and/or schools
 ■ Law limits cellphones in classrooms
 ■ State policy encourages districts to limit cellphones in classrooms
 ■ Law requires districts to adopt a policy on cellphones but does not specify requirements
 ■ No statewide policy



¹Virginia Gov. Glenn Youngkin (R) issued an executive order banning cellphones in classrooms.

[What are we missing?]

SECTION 8: WHAT ORGANIZATIONS ARE PROMOTING OR STUDYING THE EFFECTS OF PHONE-FREE SCHOOLS?

8.1 [AwayForTheDay](#).

DESCRIPTION: "Away For The Day" (AFTD) initiative to help transform schools into cell phone-free spaces.

ADDITIONAL INFO: We have looked deeply into the scientific literature and have found several concerning studies about [academic performance](#) and [emotional well-being](#) regarding cell phones in schools. To find solutions, the [Screenagers](#)' team talked with dozens of schools that recently changed from allowing students to carry phones to adopting "Away For The Day" policies. They heard almost exclusively positive stories about the changes. From there, the "Away For The Day" initiative was born. We believe that having phones put away in lockers, so the phone is physically off of the students, is the best practice.

8.2 [EverySchool.org](#)

DESCRIPTION: EverySchool.org spreads awareness and share resources about digital wellness and research-based classroom tech use to school communities.

8.3 [Delay Smartphones](#)

DESCRIPTION: Our aim is to help parents feel supported in making informed decisions on when to give their child their first smartphones.

8.4 [Phonefreeschoolsmovement.org](#)

DESCRIPTION: A collaborative movement by parents, educators, administrators, and students to support and implement effective phone-free policies for K-12 schools.

[What are we missing?]

SECTION 9: OBJECTIONS (AND RESPONSES)

9.1 PEDAGOGICAL OBJECTIONS

The Claim: Smartphones are useful teaching tools

Examples:

- [Klein \(2019\). Schools Say No to Cellphones in Class. But Is It a Smart Move? *Education Week*.](#)
- [Should Students Be Allowed to Use Cell Phones in Schools? *New EdTech Classroom*.](#)

Our Response:

In brief: Smartphones may be useful teaching tools, for instance, and may make it easier for some teachers to [create engaging lesson plans](#). That's true, but any increase in engagement during a lesson may be offset by students getting distracted during the same lesson. When we add in the costs to all other teachers and the loss of social connection between classes, it's hard to see how the marginal benefit of a phone-based lesson outweighs the costs of a phone-focused student body.

Global PISA test scores in decline

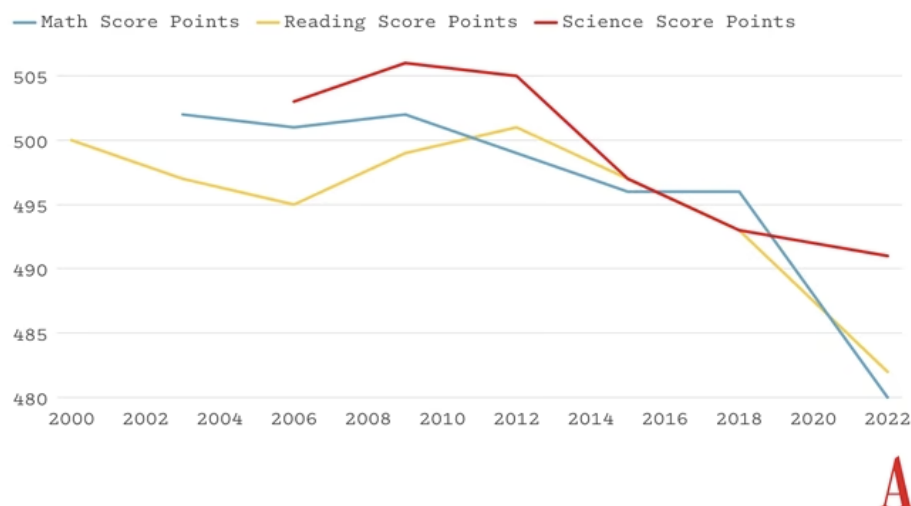


Image. [Global declines in test scores](#), data from the programme for international student assessment.

[What are we missing?]

9.2 PARENTS WANT TO BE ABLE TO REACH THEIR CHILDREN

The Claim: Many parents report wanting to have unlimited access to their children throughout the school day. Shouldn't they have the freedom to do this?

Examples:

- [Selinger-Morris \(2023\)](#). Why are parents opposing a school phone ban? *The Sydney Morning Herald*.
- [Chen \(2023\)](#). Should Public Schools Ban Cell Phones? *Public School Review*.

Our Response:

- Chapter 3 of [The Anxious Generation](#)
- [Skenazy \(2024\)](#). How phones are making parents the Anxious Generation. *After Babel*.

In brief, from [Skenazy \(2024\)](#): Trust is a muscle. It has to be exercised to get strong. My mom, who quit her job to stay home with me and my sister, somehow was not worried for six hours a day, and then for several more after I ate my snack of cookies and milk (cow's, whole!), and often went back out to play. In that way, she, like most of the other parents back then, learned to believe in me, our neighbors, and even her own parenting. All were good enough to keep me safe. Her trust muscle grew, because it got daily exercise, thanks to the social norms of the time.

Phones stop that from happening. Instead of getting accustomed to being out of touch for a while, now we are always able to be in touch. That's one reason some parents are [worried about](#) school phone bans. A friend showed me the letter from her first grader's school begging parents not to text their kids throughout the day (usually via watches), even if they were going to be a little late to pick up. Even if they felt like sending a heart emoji.

For the school, the problem is that this is [distracting](#). For the child, the problem is that it keeps pulling off the Band-Aid of self-sufficiency—the ability to be out in the world on their own, handling life. (Lack of that independence is a [huge part](#) of what is making kids anxious. More about that in another post. Actually, more on that in [my whole book!](#)) Focusing back on parents: It's bad for us, too, because we get no chance to build that trust muscle. Instead, we keep seeking—and getting—addictive hits of reassurance that our kids are fine, they're safe, they're where they should be, and they're feeling our love. Only constant connection soothes us.

9.3 HAVING PHONES IN CASE OF EMERGENCIES (SCHOOL SHOOTINGS)

The Claim: What if there is a school shooting or emergency, and parents are not able to get in touch with their children?

Examples:

- [Schultz \(2022\)](#). Schools clash with parents over bans on student cell phones. *AP NEWS*.
- [Klein \(2022\)](#). School Shootings Are Fueling the Debate Over Cellphones in Class. *Education Week*.
- [Logan, & Kamenetz \(2018, February 17\)](#). Should The Parkland Shooting Change How We Think About Phones, Schools and Safety? *NPR*.

Our Response:

- Haidt (2023). [Get Phones Out of Schools Now](#). *The Atlantic*. [See our free [Substack version](#)]

[Text from Haidt (2023). [Get Phones Out of Schools Now](#).]

In brief: I (Jon) am the father of two high-school students, and of course I would want to connect with my children in such a nightmare scenario. But would a school where every student has a smartphone be safer than one in which only the adults have smartphones? Ken Trump, the president of [National School Safety and Security Services](#), warns that using a cellphone during an emergency can increase safety risks. “During a lockdown, students should be listening to the adults in the school who are giving life-saving instructions,” [Trump explains](#). “Phones can distract from that. Silence can also be key, so you also don’t want that phone noise attracting attention.” In addition, it seems to me that 300 parents rushing to the school in 300 cars would probably make things more difficult for first responders.

9.4 EXACERBATING THE DIGITAL DIVIDE (AND OTHER UNINTENDED IMPACTS)

The Claim: Cell phone bans are likely to disproportionately impact kids of lower socioeconomic status. They are less likely to have laptops or other non-banned devices.

Examples:

- [Walker \(2023\)](#). *Cellphone Bans in School Are Back. How Far Will They Go?* NEA.

Our Response:

- Chapter 11 of [The Anxious Generation](#)
- Rausch & Haidt (2024). TK.

In brief: First, test scores have fallen *the most* among [low-income](#) (as well as [lower-performing students](#)) since 2012, and phone bans in school appear to be [most](#)

[effective](#) for these kids. We do need to be thoughtful when proposing solutions to make sure that kids have access to the internet when necessary and useful for academic purposes.

Second, the digital divide was once primarily about access to computers and digital technologies. While this remains true in some parts of the world, in most economically developed nations, the digital divide now concerns *who has the most protection* from them. As teens from historically marginalized groups are moving more of their lives onto these products, they are being harmed at greater rates than other groups and have less choice to avoid them.

These trends appear to be *increasing social disparities in health, education, and success, not decreasing them*. As Jim Steyer, CEO of Common Sense Media, stated in an important [New York Times essay](#),

Greater use of social media by Black and Hispanic young people help perpetuate inequality in society because higher levels of social media use among kids have been demonstrably linked to adverse effects such as [depression and anxiety](#), inadequate [sleep](#), [eating disorders](#), poor self-esteem and greater exposure to online harassment

Akeem Marsh, medical director of the Home of Integrated Behavioral Health at the New York Foundling, explained in this same essay that among the low-income Black and Hispanic kids he works with,

Social media use is often a primary concern, or it comes up in treatment... Already kids from these communities have few advantages, he explained. They may not have access to after-school programs. They're often in single-parent households. They lack support systems. I think in the long term... we're going to see real differences in the impact [from social media]."

Phones in schools will likely make things worse for low-income students as single-parent and lower-income families generally have fewer resources to monitor and manage the constantly growing number of parental controls for each new addictive feature, app, and device that emerges every few months. Understaffed and under-resourced schools will also find it more challenging to manage phone, tablet, iPad, and laptop use throughout the school day.

[What are we missing?]

9.5 PREPARING STUDENTS FOR THE REAL WORLD / EMBRACING TECHNOLOGICAL CHANGE

The Claim: We need to prepare students to deal with smartphones and distractions. We can't remove smartphones and all other distracting technology from their lives forever.

Examples:

- Berry (2022). Banning Phones in Class? Not So Fast. *Wired*.

Our Response: Smartphones and social media are designed by tech companies to be as easy to pick up as possible and do not require technology skills. Kids learn very specific, limited skills when they spend hundreds of hours on the same social media sites.

Kids *should* learn how to use different technologies in school. They just do not need to have a smartphone with them throughout the school day.

[What are we missing?]

9.6 THE SOLUTION IS DIGITAL LITERACY, NOT BANS

The Claim: We need to teach kids how to use digital technology. It's especially important to introduce it to them early. As long as we prepare them for life online they will be fine.

Examples:

- Are cell phone bans in schools the answer? *Boston Children's Digital Wellness Lab*.

Our Response: Yes, it is important to teach kids digital literacy, just like it is important for kids to go through drivers ed before they are licensed to drive (when they are 16!). But relying on digital literacy teaching (and significant investment from already exhausted parents) has its own problems:

Digital literacy will likely come up short as single-parent and lower-income families generally have fewer resources to monitor and manage the constantly growing number of parental controls for each new addictive feature, app, and device that emerges every few months. Understaffed and under-resourced schools will also find it more challenging to manage phone, tablet, iPad, and laptop use throughout the school day.

9.7 LOGISTICAL CONCERNS

The Claim: How can we possibly confiscate, store, and return the cell phones of hundreds or thousands of students every day? If we're not taking away phones, how can we enforce the ban?

Examples:

- [Wamsley \(2017\). France Moves To Ban Students From Using Cellphones In Schools. NPR.](#)

Our Response: First, we do recommend that students store their phones in some place that is out of reach for the entire school day, like [Yondr pouches](#) or phone lockers. This has been done by many schools across the United States effectively. Schools have long (and effectively) implemented school-wide student behavior policies that require similar logistical concerns, like dress codes.

If you are a school administrator who wants to make your school phone free but are apprehensive about doing the logistical work necessary, check out the [phone free school movements administrator kit](#) for help getting started.

[What are we missing?]

9.8 OBJECTIONS FROM STUDENTS

9.8.1 [r/highschool: My School Is Banning Phones.](#) *Reddit.*

QUOTES:

- My school banned phones at the start of my junior year. The punishments are severe: if you get caught with it, the school takes it and you have to go after

school with your parents to pick it up. More than that, you get social suspension and/or detention. In response, I bought my own Chromebook to bring to school. It was like \$20, they aren't hard to come by. I also use my mobile hotspot with it because the school's wifi is chock full of filters. The school issued Chromebooks also have a shit ton of spyware installed so they can watch what you're doing remotely. No idea why they allow bringing your own laptop when phones aren't allowed. It's basically the same thing. I text my friends on Discord all the time with it.

- Lol they started doing this my 9th grade in a pouch thing as well and while I never used my phone anyways in class because I found it disrespectful to the teachers (I would rather daydream than visibly annoy them), I hate that the reason they do it is because they see us as little kids. Every year our school adds a new rotten and mostly idiotic rule and this has been one of the big ones, especially for us upperclassmen.
- "I knew this was coming but I'm still a little annoyed about it. I'll miss texting my friends all day since they're never in my classes. I know it'll be for the best, though, and I'm looking forward to actually talking to my classmates since we all can no longer just go on our phones when we're bored. The anger and chaos that will ensue once word spreads of the ban will be entertaining too.
- I wouldn't be able to do that bc I always type stuff down on my phone like on reminders and google docs and having to do it on paper or the school chromebook isn't the same. Luckily I'll be in university in a few weeks and I just graduated hs in June
- Our school had Yondr for a year or two before the pandemic hit, and I can confirm that people did talk to each other more, although some just went on their chromebooks as a replacement, and honestly I think it was better in the end, especially since I didn't have a phone. Can also confirm that there will be issues because people in my high school did eventually break the pouches (can open without magnet) within the first few days, and people will have a lower reputation of the school, though not as a big of a issue as one may think.

[What are we missing?]

9.9 OTHER OBJECTIONS

- 9.9.1** [Lamb \(2023\)](#). Experts see pros and cons to allowing cellphones in class. *Harvard Gazette*.

EXCERPT: Pereira's approach is to step back — and to ask whether a student who can't resist the phone is a signal that the teacher needs to work harder on making a connection. "Two things I try to share with my new teachers are, one, why is that student on the phone? What's triggering getting on your cell phone versus jumping into our class discussion, or whatever it may be? And then that leads to the second part, which is essentially classroom management.

"Design better learning activities, design learning activities where you consider how all of your students might want to engage and what their interests are," he said. He added that allowing phones to be accessible can enrich lessons and provide opportunities to use technology for school-related purposes.

Mesfin Awoke Bekalu, a research scientist in the Lee Kum Sheung Center for Health and Happiness at the Chan School, argues that more flexible classroom policies can create opportunities for teaching tech-literacy and self-regulation.

"There is a huge, growing body of literature showing that social media platforms are particularly helpful for people who need resources or who need support of some kind, beyond their proximate environment," he said. [A study he co-authored by Rachel McCloud and Vish Viswanath for the Lee Kum Sheung Center for Health and Happiness](#) shows that this is especially true for marginalized groups such as students of color and LGBTQ students. But the findings do not support a free-rein policy, Bekalu stressed.

In the end, Rich, who noted the particular challenges faced by his patients with attention-deficit disorders and other neurological conditions, favors a classroom-by-classroom strategy.

"It can be managed in a very local way," he said, adding: "It's important for parents, teachers, and the kids to remember what they are doing at any point in time and focus on that. It's really only in mono-tasking that we do very well at things."

[What are we missing?]

SECTION 10: COMMON SKEPTICAL ARGUMENTS (AND RESPONSES) ABOUT THE RESEARCH ON THE IMPACTS PHONES IN SCHOOL AND PHONE BANS

[COMING]

10.1 Smartphones in the classroom do not negatively impact academic performance

10.2 Smartphones in school do not negatively impact socialization

10.3 The Evidence on Phone Bans Is Inconclusive

SECTION 11: WHAT RESEARCH IS NEEDED?

We desperately need more research on the school-wide impacts of two types of policy: stricter rules on smartphone use, and the encouragement of more play in school. Let's test these two policies experimentally so that we learn whether these approaches work and which variations work best. And let's do it using entire schools for the interventions so that we can examine changes in school culture, rather than using individual children or individual classes within a single school. Here's how it might work: A school district superintendent, or a state-level education commissioner, or a governor—anyone who has influence with at least a few dozen elementary and middle schools—would recruit a pool of interested schools. Those schools would then be randomly assigned into four experimental groups: (1) phone-free, (2) play-full (that is, Play Club plus extra recess), (3) phone-free plus play-full, and (4) the control condition, which carries on with whatever it was doing before, but is asked not to change phone or recess

policies. In just two years, we'd find out whether these interventions work, whether one of them is stronger than the other, and whether there is an added benefit to combining them. There are many variations of this basic experiment, adding or subtracting conditions or implementing policies in different ways. The Let Grow Project could be included as part of the play-full school condition, because it draws on and amplifies the autonomy, risk-taking and independence fostered by free play. Or a study could simply compare schools that do the Let Grow Project with those that don't.

- 11.1** [Selwyn & Aagaard \(2021\)](#). Banning mobile phones from classrooms—An opportunity to advance understandings of technology addiction, distraction and cyberbullying. *British Journal of Educational Technology*.

ABSTRACT: There is now an emerging worldwide trend for mobile phones being banned from classrooms and schools. While some academics working in the area of educational technology have raised concerns, many others have so far failed to respond to what is a significant shift in the ongoing development of digital education. The paper considers how academic researchers and other educational technology stakeholders can respond to what might be perceived as the curtailment of some forms of digital education. In particular, the paper argues that this current turn away from digital devices offers an opportunity to advance understandings about a number of seemingly problematic issues regarding the continued use of digital technologies in schools. In particular, the paper reconsiders five such areas of concern that are associated with banning phones from school: (1) technology addition; (2) digital distraction; (3) cyberbullying; (4) surveillance capitalism; and (5) environmental sustainability of digital education.

[What are we missing?]

* * * * *

APPENDICES

APPENDIX A: ADDITIONAL NEWS STORIES GENERALLY SUPPORTIVE

A.1 [Lemov \(2022\)](#). Take Away Their Cellphones. *Education Next*.

EXCERPT: The pull of smartphones and social media apps designed to distract is bound to undermine any expression of support, after-school sport, or card table. The single most important thing schools can do is to restrict cellphone access for large parts of the school day. Allowing students to use their phones as classroom tools (for quick research or as calculators, for example), or to leave them turned on (but with silent haptic notifications that distract nonetheless), or to turn them on during lunch or other learning breaks keeps them connected to their devices and disconnected from one another.

It won't be easy, but it can be done. France has done it. The state of Victoria in Australia has done it. Some American public schools and districts have done it, in Missouri, Pennsylvania, Maine, and New York. These bans are often followed by remarkable and instantaneous change. "It has transformed the school. Social time is spent talking to friends," a teacher from Australia told my colleagues and me. "It is so nice walking around the yard seeing students actually interacting again, and no distractions there is no difference between young people and adults, and second, that there is no difference between the people who run a school—and therefore are responsible to stakeholders for outcomes—and the young people who attend the school. Both are mistaken.

The purpose of a school is to give young people the knowledge and skills they require to lead successful lives. This always involves an exercise of social contract. We collectively give up something small as individuals and receive something valuable and rare in return as a group. It is impossible to run a school without this sort of give-and-take. **Suggesting that we give students "freedom" to use cell phones whenever they want is trading valuable and enduring freedom that accrues later for a self-destructive indulgence in the present. The argument that "schools should teach young people the skill of managing technology" is patently unrealistic.** during class," said another.

The change, teachers told us, was quick—so long as you could get the adults to follow through. That is, if the rule was consistent and enforced, then students adapted quickly and were happy, even if they fought it at first. If the ban didn't work, the problem was usually that some of the adults didn't follow through. "Consistent enforcement from all = key," one teacher explained in a note. "Can't be 'the cool teacher'." The problem, of course, is that there's a strong incentive to be "the cool teacher," so schools must spend time making sure teachers understand the reasons for the rule and holding them accountable for supporting it. School and district leaders should be prepared for doubts, skepticism, and pushback. We've seen this at the state level already. In 2019, lawmakers in four states proposed legislation to ban cellphones in school. But the bills, in Arizona, Maine, Maryland, and Utah, failed to advance.

A rule that barred students from bringing cellphones into New York City public schools was ended in 2015, because then-Mayor Bill DeBlasio said "parents should be able to call or text their kids," though individual schools may choose to limit phone access. Two comments I often hear: "it's an infringement on young people's freedom" and "the role of schools is to teach young people to make better choices. We should talk to them about cell phones, not restrict them."

The first response makes two assumptions: first, that schools are not designed to address, much less unravel, psychological dependence on portable supercomputers designed to disrupt and hold our attention. Teachers already have a daunting list of educational priorities. They are not trained counselors, and the school counselors on staff are in woefully short supply. It's magical thinking to propose that an epidemic that has doubled rates of mental health issues and changed every aspect of social interaction among millions of people is going to go away when a teacher says, "Guys, always use good judgment with your phones."

We're not really wrestling with the problem if our response assumes that the average teacher, via a few pithy lessons, can battle a device that has addicted a generation into submission. Restriction is a far better strategy. These efforts won't be simple to execute, but the alternative is simply too damaging to students' learning and well-being. Keep cellphones turned off and out of sight during the school day—and give students and educators a fighting chance to focus, reconnect, and build school cultures that nurture belonging and academic success.

A.2 [O'Gorman \(2018\)](#). *The Case for Locking Up Your Smartphone*. The Atlantic.

EXCERPT: Needless to say, Yondr is still an imposition. And controlling attention requires more than just locking a device in a [binge-breaking](#) neoprene pouch. Joelle Renstrom has [reported](#) the results of her own Yondr experiment in a class at Boston University, where she had her 30 students lock away their devices over the course of a semester. At first, 37 percent of the students found the policy annoying, but by the end of the term that figure had dropped to 14 percent.

Those are promising, if tentative, results, but Renstrom's anecdotal comments about the experiment may be more instructive than the data she collected. Renstrom describes her students' initial experience of Yondr as "akin to caging a pet, a clear denial of freedom." Moreover, she observes that some students left their cases unlocked as a sign of rebellion, even though they didn't remove the phones from them.

A.3 [Rosen \(2017\)](#). The distracted student mind—Enhancing its focus and attention. *Kappanonline.Org*. [Not a study]

EXCERPT: For more than three decades, I've studied the psychological effects associated with the introduction of new digital technologies. Over that time, my research team and I have watched Americans move from an initial fear of computers to a state of wary acceptance to eager adaptation to what has become more or less an obsession with the tiny devices we now carry in our purses and pockets.

What does this obsession mean for today's students? Recent research findings are sobering:

- Typically, college students unlock their phones 50 times a day, using them for close to 4½ hours out of every 24-hour cycle. Put another way, they check their phones every 15 minutes — all day long (and sometimes all night) — and they look at them for about five minutes each time.
- Teenagers are almost always attempting to multitask, even when they know full well that they cannot do so effectively.
- When teenagers have their phones taken away, they become highly anxious (and visibly agitated within just a few minutes).
- The average adolescent or young adult finds it difficult to study for 15 minutes at a time; when forced to do so, they will spend at least five of those minutes in a state of distraction.

A.4 [Singer \(2023, October 31\)](#). School Cellphone Bans Are Trending. Do They Work? *The New York Times*. [NEUTRAL ARTICLE]

EXCERPT: Young people have filmed violent school fights and posted the videos on TikTok. Students have also participated in social media challenges in which they vandalized school property.

In 2021, 16 percent of U.S. high school students said they had been bullied via text message or social media platforms like Instagram over the previous year, according to [a report this year](#) from the Centers for Disease Control and Prevention.

Some students are also being inundated by social media notifications. [A recent report](#) from Common Sense Media, which tracked about 200 young people with Android phones, found that participants typically received 237 cellphone notifications during the day — about one quarter of them during school hours.

...A [federal survey](#) of principals in 2016 found that schools with cellphone bans reported higher rates of cyberbullying than schools that allowed cellphone use. (The report did not offer an explanation as to why schools with cellphone bans reported higher cyberbullying rates.)

A study of schools in Spain, published last year, found [a significant reduction in cyberbullying](#) in two regions that had imposed school cellphone bans. In one of those regions, math and science test scores also significantly increased.

A recent [study in Norway](#) found that female students exposed to smartphone bans in middle school had higher average grades. But the bans had “no effect” on the average grades of boys, perhaps because girls spent more time on their phones, the study said.

A.5 [Daly \(2023\)](#). *Should schools ban cellphones?* The Thomas B. Fordham Institute.

EXCERPT:

- Just as more kids began spending more time with their phones, we saw a massive spike in depression and mental illness. By 2012, major social media platforms had become particularly engrossing/addictive by adding features such as likes and retweets, then coding sophisticated algorithms that massively

increased the length of time users would remain engaged. By 2015, most American teenagers had smartphones. In the years to come, nearly every indicator of youth wellness worsened. It happened in one developed country after another, where technology adoption occurred at the same clip. The share of adolescents reporting high levels of loneliness, for instance, doubled in less than a decade. [Psychologist Jean Twenge](#), whose early work on this issue was often dismissed as alarmist, has proven terribly prescient. She and others say that while we may not be able to keep kids away from dangerous social media all the time, the least we can do is to make schools a respite.

- Phones prevent socialization between students during school. Ask a veteran teacher what's changed in recent decades, and the first thing they're likely to mention is kids not talking to one another anymore. Some can barely initiate or sustain a conversation with a same-age peer. They don't have the practice. Others wear AirPods like security blankets. Phone bans are seen as restoring critical interactions that kids missed—to their lasting detriment—during Covid closures.
- Despite what rules may exist, most students are using their phones during school. In a [study conducted by Common Sense Media](#)—which does fantastic work on this issue—97 percent of kids aged 11–17 were on their phones between 8 a.m. and 3 p.m. on school days for an average of forty-three minutes. They typically picked up their phone thirteen different times. The most frequently accessed apps were social media. To fed-up policymakers, this is evidence that guardrails on student phone usage have utterly failed. It's time to get serious.
- Phone usage reduces learning. You may be aware that we're experiencing something of a learning crisis since the arrival of the pandemic. [It's bad](#). We need to maximize every tool to help students recover. In classrooms where phones are permitted, [students perform worse](#)—even if they are not among those using a device. This may suggest that distraction is contagious across whole groups.

A.6 [Gecker \(2024\)](#). Kids are using phones in class, even when it's against the rules. Should schools ban them all day? *AP News*.

EXCERPT: The hold that phones have on adolescents in America today is well-documented, but teachers say parents are often not aware to what extent students use them inside the classroom. And increasingly, educators and experts are speaking with one voice on the question of how to handle it: Ban phones during classes.

“Students used to have an understanding that you aren't supposed to be on your phone in class. Those days are gone,” said James Granger, who requires students in his

science classes at a Los Angeles-area high school to place their phones in “a cellphone cubby” with numbered slots. **“The only solution that works is to physically remove the cellphone from the student.”**

Nationally, 77% of U.S. schools say they prohibit cellphones at school for non-academic use, according to the National Center for Education Statistics. But that number is misleading. It does not mean students are following those bans or all those schools are enforcing them.

A study last year from Common Sense Media found that **97% of kids use their phones during school hours**, and that kids say school cellphone policies vary — often from one classroom to another — and aren’t always enforced.

For a school cellphone ban to work, educators and experts say the school administration must be the one to enforce it and not leave that task to teachers. The Phone-Free Schools Movement, an advocacy group formed last year by concerned mothers, says **policies that allow students to keep phones in their backpacks, as many schools do, are ineffective**. “At first it was a battle. But it has been so worth it,” he said. “Students are more attentive and engaged during class time. Teachers are able to teach without competing with cellphones. And student learning has increased,” he said, citing test scores that are at or above state averages for the first time in years. “I can’t definitively say it’s because of this policy. But I know it’s helping.”

[What are we missing?]

APPENDIX B: ADDITIONAL NEWS STORIES GENERALLY CRITICAL

9.1 [Horn \(2023\)](#). Ban the Cellphone Ban. *Education Next*.

EXCERPT: Yet while these concerns have led to more cellphone bans, there also has been an explosion in useful learning applications for mobile devices. Think of Duolingo for learning language, or ABC Mouse for learning elementary school subjects, or Quizlet for checking understanding. The ability to learn nearly anything from a phone is better than it’s ever been for all ages of learners.

With the active learning methodologies at the heart of these apps, the learning opportunities on mobile devices are in many ways superior to many of the more passive, video- and text-based ones built for laptops and personal computers. Cellphones may distract from traditional lectures or whole-class instruction. But they also command and can hold individual students' attention—a precious resource that fuels learning, even if that learning doesn't look like what we've seen before. Phones also may get in the way of students mastering required academic standards, while also connecting students to the information about which they are most curious.

How to explain the paradoxes?

In many [learning models](#), there simply isn't a productive place for smartphones. But is that the fault of the phone or the model?

Take a case-study classroom, for example. In it, all students are expected to participate in a group discussion to work through a specific situation with a joint set of case facts. If students are instead paying attention to their own devices, the conversation suffers and student learning slows as well.

Contrast that with a foreign-language class where all students work on personalized language modules on Duolingo, for example. They then put their phones away to participate in small-group conversations. (Even before smartphones, a version of this called "language lab" put individual students at headphone stations to work independently with the education technology of the day before rejoining group conversations.) The phone is central to the design of the learning experience. Of course, there's a risk that students will work on tasks outside of the one assigned. But schools and teachers can use technology to block access to other apps or build on the social dynamics of the classroom to incentivize students to stay on task.

This phenomenon has been true with Internet-connected laptops as well. A 2016 study about a set of West Point classrooms showed that allowing computers when there wasn't a key purpose for them diminished learning (see "[Should Professors Ban Laptops?](#)" research, Fall 2016). On the other hand, a blended-learning model like New Classrooms' Teach to One relies on laptops to personalize math instruction for middle school students. [Research](#) has found students make outsized gains on math tests after successive years of participating in Teach to One classrooms.

One last argument for maintaining cellphones is that schools must teach students to use them responsibly. But many educators' retort is that they are simply helping show students that there is a time and place for such devices—and school isn't it.

In that respect, cellphone bans are following the larger trend of banning many things in schools—from books to speakers to certain kinds of speech or topics of debate. Cellphones may make for another easy bogeyman, but blanket bans are ill-informed and regressive. Though we might not see a big reversal in phone bans anytime soon, we should. Educators on the ground should choose for themselves when and whether to allow their students to carry cellphones to class, so they can leverage learning apps to help students make progress.

9.2 [Berry \(2022\)](#). Banning Phones in Class? Not So Fast. *Wired*.

EXCERPT: DURING THOSE DYSTOPIAN months of the spring 2020 lockdown, one of my students streamed class on her phone, holding my co-teacher and I at literal arm's length as she hid out in the quiet of her family minivan. For her and so many students, the phone was the thing her learning depended on. According to a [2021 Center for Democracy and Technology report](#), 86 percent of teachers reported that “schools provided tablets, laptops, or Chromebooks to students at twice the rate prior to the pandemic,” scrambling to democratize digital access when school went remote.

In this environment, any phone with internet capability became a mini-classroom. “If the Chromebook failed, it was like, ‘What wonderful backup, you can just pop on Zoom on your phone,’” says Allison Cundiff, an English teacher in St. Louis, Missouri.

To ban that same phone now because it is also a portal to the rest of the world feels, at best, like an overcorrection, and at worse like an abdication of responsibility. Tess Bernhard, a former high school biology teacher and current PhD candidate studying the proliferation of K-12 educational technology, describes all-out personal device bans as “an extremely blunt tool,” one that feels like “a huge irony” given that while at home, students became acclimatized to using phones to submit assignments, communicate with teachers, and monitor grades.

...TEACHING HIGH SCHOOLERS to ignore the vortex of their phones is undoubtedly challenging, but so is the practical implementation of a ban that

both parents and students will resist. As one grinning student told me in reference to her parents' harsh tech guidelines: "Tell me I can't do something and I'll figure out a way to do it." A ban might mean not allowing students to arrive with cell phones, collecting them at the beginning of the day and distributing them at the end, requiring them to stay in backpacks all day, or distributing locked pouches where students store their devices until a teacher "unlocks" them with a wireless signal.

But each method comes with its own drawbacks. A primary challenge in resource-strapped public schools across America is implementation and funding. The locking Yondr pouches cost \$15 to \$30 per student, an expense shouldered by already cash-strapped school districts, with students often responsible for replacement costs if bags break (a feat students have inevitably learned to do themselves). During New York City's now-outlawed eight-year ban on devices, a cottage industry of local businesses offering to store devices made more than \$4 million a year off students willing to pay for safekeeping themselves—all the same, this mass-storage eventually opened the door to mass theft. Though unilateral bans hypothetically affect all students, students are unlikely to be impacted equally. Research has shown that while the pandemic boosted screen time universally, adolescents facing systemic racism-driven financial and social inequalities have seen the greatest increase. When cell phone use becomes grounds for discipline, history suggests minority students suffer the most.

Furthermore, under a policy of top-down prohibition, teachers are tasked as enforcers, rather than—as so many of us aspire to be in our classrooms—role models who treat students with trust and maturity, and receive this in return.

9.3 [Loveless \(2023\)](#). Using Cell Phones as Learning Tools (Complete Guide). *Education Corner.*

EXCERPT: Cell phones were once considered a distraction in the classroom. While that still remains true, educators have slowly found that phones can be turned into learning tools. Phones have evolved over the years into powerful teaching aids that, when used appropriately, can improve learning outcomes.

Lisa Nielseon, an educator who started her career as a librarian and eventually went on to be an education blogger and speaker, broke down the [history of cell phones](#) in the class. From the day they were introduced, cell phones were considered a nuisance to educators, which is why schools banned all electronic devices in the 1990s. This was

also partly because school administrators feared that these devices would be used by students who were attempting to do things that were illegal.

Unfortunately for these cautious administrators, cell phones became increasingly popular by the late 1990s and, by 2002, there were calls for lawmakers and administrators to reconsider bans of cell phones in the school. The National School Safety and Security Services noted that many schools were starting to allow cell phones among their students, and by the mid-2000s, the role of cell phones in the school were being rethought. Policies changed to allow cell phones on campus so long as they were turned off during the day. However, educators couldn't stop the use of these devices. As the 2000s rolled along, even elementary school students commonly used cell phones on a daily basis.

By 2007, educators conceded that cell phones could play an important part in learning. Universities started using text messages to reach out to students, and a survey released by Cingular Wireless indicated that parents believed text messaging helped to improve communications with children. The following year, schools in Brooklyn began distributing cell phones to students, and by 2010 there was a significant shift toward embracing cell phones as educational tools. **Text messaging had previously played a role in keeping students connected with their schools, but cell phones were now being used for increasingly broad educational purposes as they became just as powerful as laptops while occupying a fraction of the space.**

The history of cell phones in the classroom is therefore one in which cell phones transitioned from being devices that educators feared to tools that educators embraced. Cell phones became not only increasingly ubiquitous but increasingly powerful, making them capable of replacing devices like laptops and computers. It should be no surprise then that school administrators and educators shifted toward embracing these devices as classroom tools.

Researchers have pointed to the [increasing power](#) of cell phones and their capabilities as reasons why they can make effective language learning tools. Many modern cell phones have the power and potential of computers from the past decade and require only a fraction of the energy to operate. For years, the United States conceptualized computers in traditional terms: as personal computers and laptops. However, recent decades have seen more and more people switching to personal devices for personal computing.

This provides several avenues by which they may be able to benefit when attempting to use cell phones in the classroom. First, they will be working with a population that is already accustomed to using their phones to perform different tasks. Attempts to do something as simple as use an internet search only require turning on a phone and opening the browser. For teachers, this means saving on time that would otherwise be dedicated to having to teach students how to use the device. This allows teachers to move quickly into their lessons instead of having to introduce new tools to the students and train them on those tools.

The second advantage is that, with the modern generation of cell phones, even many basic models have performance power that outstrip those of computers from previous generations. In some cases, and particularly in disadvantaged schools working with outdated technology, this may mean access to tools that are more powerful than might be found in the computer lab. Of course, teachers cannot make this assumption.

The Center for Digital Education lists [several ways](#) that cell phones can be used in the classroom. The most obvious way is by using cell phones as research tools. **Phones can be used to link to the internet and find information from reputable sources that can be used in reports. However, there are also other creative ways that the Center argued cell phones could be used.**

One of these ways was Twitter. Teachers can use a Twitter feed made specifically for the classroom to post assignments and due dates, which can help students stay connected. Teachers can also use Twitter feeds to field questions from students who might be otherwise too shy to ask. Students can ask a question using the class Twitter feed and teachers can respond in-class without singling out the student. This is made easier when the teacher creates a [recognizable hashtag](#) that students can use. Other forms of social media can be used for similar purposes, such as maintain a classroom Facebook page to keep students updated.

There are other ways cell phones can be used, of course. Class wide texts can keep students up to date on assignments, and students can use their phones as a class planner to record important dates. For projects, cell phones can also play an important role in gathering media. Cell phones can be used to take photos, record video, and make audio logs.

Photos and video can be added to PowerPoint presentations. Or, students can make entire videos, post them to YouTube, then share them with the class. These video projects can document historic sites in the city or act like running documentaries of

research they're doing. Audio recording can be used to similar effect, acting as a voice over for projects. However, the basic recording function of a cell phone can also be used to record classroom lectures and refer to them when they're studying.

...A specific example of how cell phone technology was integrated [into the classroom](#) was laid out by authors Warnich and Gordon. In this specific example, educators used Poll Everywhere, which is a free audience response system. An audience response system works by allowing the audience to vote on a topic or to vote, as a group, for what they believe the correct answer to a question is.

In this example, History teachers received immediate feedback from their students. The classroom's responses were transmitted and instantly displayed at the Poll Everywhere website, and graphs and tables displayed responses from the audience to reflect how many students were voting for which answer.

The teachers simultaneously displayed the answers using a projector. After all votes had been taken in, the instructors used the responses to determine whether the lesson was appropriately taught, determine how many students had accurately picked up on the lesson, and used the responses as a springboard to further discussion about the topic. The use of an automated response system was therefore important to generating increased participation from the class as well as important to increasing teacher awareness about how well students were learning.

Another example of using mobile phones to enhance learning was found in lessons developed by a group of Sri Lankan science educators. The researching duo Ekanayake and Wishart [published a study](#) about how these teachers were enhancing their lessons using cell phones. These teachers used the media features of cell phones to make science lessons that much more interactive, to help engage students more heavily with their lessons, and to help students learn in an inquiry-based style.

This approach asked students to capture images and video on their mobile phones from outside the classroom. To help support a discussion about household chemicals, the instructors asked students to go around their homes and take photos they found of chemicals within their own homes. Then, during the class, the students transmitted their images to the teacher using a Bluetooth connection.

Once a collection of photos were gathered, group discussion broke out about whether to classify these chemicals as detergents, medical supplies, or other classes of chemicals. Finally, the groups created visual stories involving the groups of photos gathered from

each student's cell phones. This approach helped to promote independent investigation on one hand but also collaborative work on the other.

9.4 [Brooker \(2019\)](#). Why banning phones from schools is a backward step for education. *TNW*.

EXCERPT: If we are to harness the power of these devices to create more engaging and effective learning experiences, we need to better understand the behaviors and motivations of young people today. In classrooms, technology needs to better facilitate the human experience rather than being seen as a problem.

When we were designing our game-based education platform, we realized that if you have a room of students with heads buried in devices, you're not maximizing the precious social time the classroom brings. That's why it's so important to establish a pedagogy which enables learners to look up, see each other and engage in a social and playful learning experience filled with student-led questions, conversation, and debate. That should be the focus of introducing any type of tech to the classroom.

Technology can enable a a richer learning experience, rather than distracting from it. If the concern is that social media will divert students' attention, then we need to involve students in the process to design experiences that truly engage and motivate them.

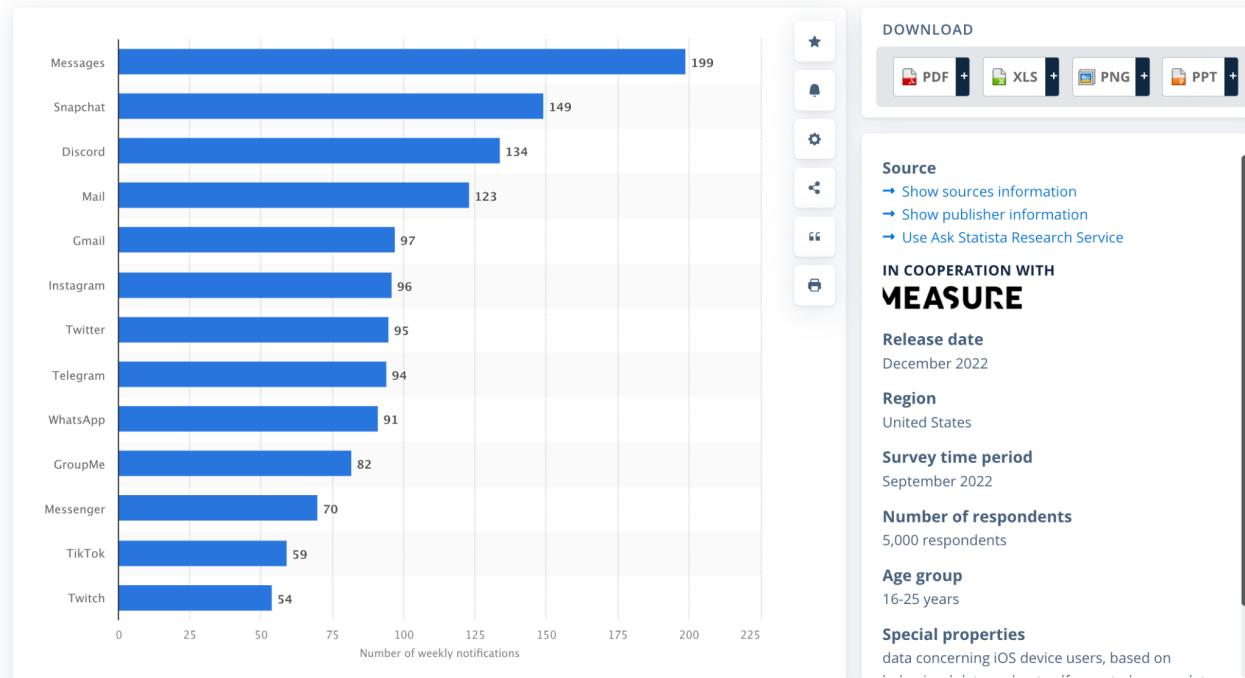
Mobiles can help students understand their progress, point them in the right direction, and even help them discover the interests in life where they'll achieve their full potential. They are devices that enable creativity, collaboration, and problem solving — essential skills in an ever changing and uncertain world.

[What are we missing?]

APPENDIX C: HOW OFTEN DO TEENS HAVE THEIR FOCUS INTERRUPTED BY THEIR PHONES?

C.1 [Ceci \(2023\)](#). Average weekly notifications received by Gen Z mobile users in the United States from selected social apps as of September 2022. *Statista*.

Average weekly notifications received by Gen Z mobile users in the United States from selected social apps as of September 2022



C.2 [Lenhart \(2015\)](#). Teens, Social Media & Technology Overview 2015. *Pew Research Center: Internet, Science & Tech.*

EXCERPT: In a testament to the shifting landscape of texting, one third (33%) of teens with cell phones use messaging apps like Kik or WhatsApp. These apps are more likely to be used by Hispanic and African-American youth who own cell phones, with 46% of Hispanic teens and 47% of African-American teens using messaging apps to send texts, compared with one-quarter (24%) of white teens with cell phones.

Teens on the lower end of the income spectrum are also more likely to use messaging apps on their smartphones, with 39% of cell-owning teens from households earning less than \$50,000 annually using the apps, compared with 31% of teens from wealthier families. Girls are also a bit more likely than boys to use messaging apps, with 37% of cell-owning girls using them compared with 29% of boys with cell phones. Use of these apps varies little by the age of the teen.

The number of text messages sent or received by cell phone owning teens ages 13 to 17 (directly through phone or on apps on the phone) on a typical day is 30. The number of messages exchanged for girls is higher, typically sending and receiving 40 messages a day. And for the oldest girls (15 to 17), this rises to a median of 50 messages exchanged daily.

Among teens with cell phones, those from less well-off families are more likely than others to report that they simply don't send text messages. Some 18% of teens from families earning less than \$30,000 annually report that they do not text, compared with less than 7% for those in higher-earning families.

FIGURE:

A Typical Teen Sends and Receives 30 Texts a Day

Among all teen cell phone users, the mean & median number of texts they send & receive

	Mean	Median
All teen cell phone users	67	30
Sex		
a Boys	56	20
b Girls	79	40
Race / ethnicity		
c White, non-Hispanic	67	30
d Black, non-Hispanic	63	30
e Hispanic	66	25
Age		
f 13-14	56	20
g 15-17	74	30
Sex by age		
h Boys 13-14	39	20
i Boys 15-17	65	25
j Girls 13-14	72 ^h	30
k Girls 15-17	83	50
Household income		
l <\$30K	53	20
m \$30K-\$49,999	87	30
n \$50K-\$74,999	60	30
o \$75K+	69	30
Parent educational attainment		
p Less than high school	47	20
q High school	79	30
r Some college	58	30
s College+	76	30
Urbanity		
t Urban	72	30
u Suburban	61	25
v Rural	83	30

Source: Pew Research Center's Teens Relationships Survey, Sept. 25-Oct. 9, 2014 and Feb. 10-Mar. 16, 2015 (n=929 teen cell phone users ages 13 to 17).

Note: Percentages marked with a superscript letter (e.g., ^a) indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age).

PEW RESEARCH CENTER

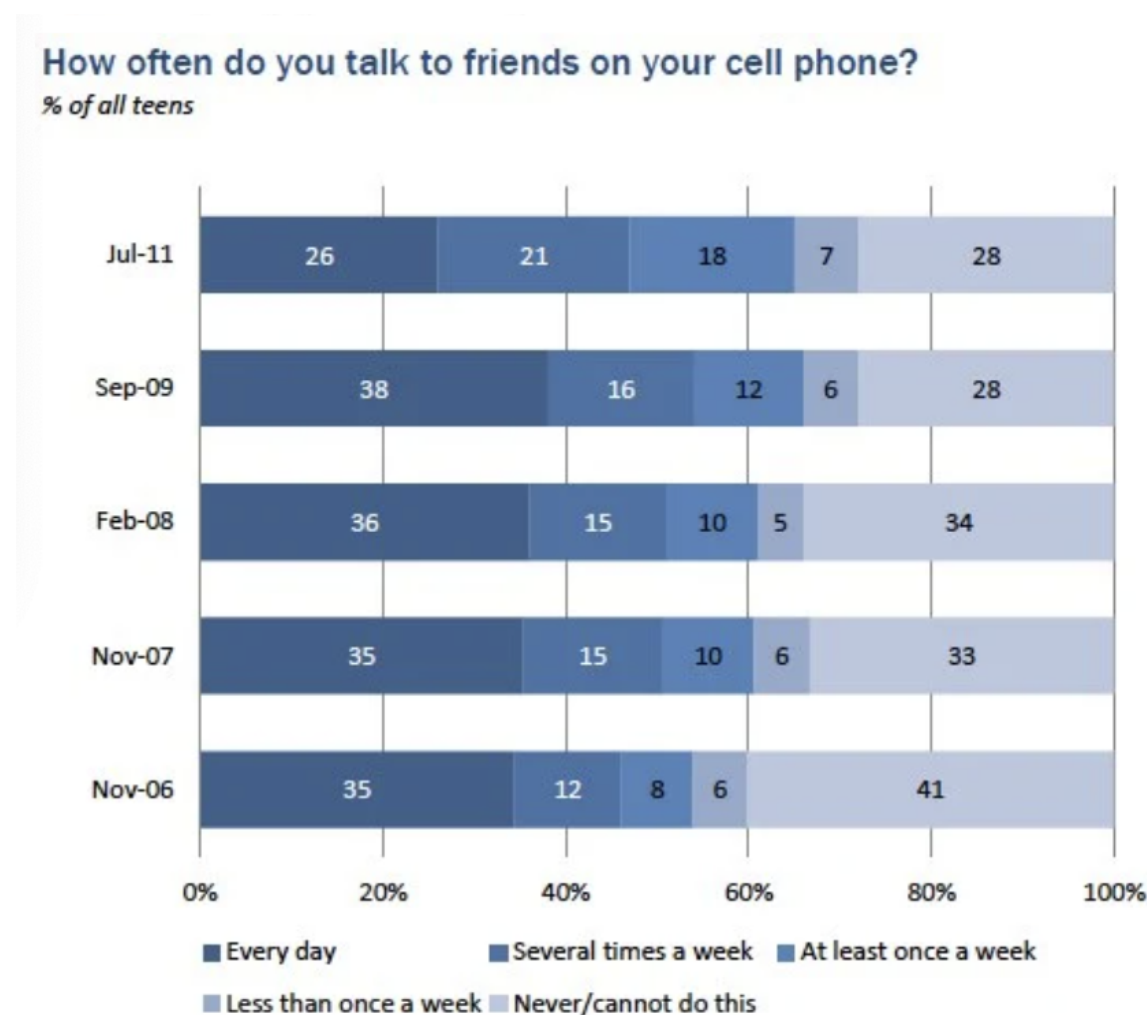
C.3 [What teens do with their phones \(2012\)](#). Pew Research Center: Internet, Science & Tech.

EXCERPT: The median number of texts (i.e. the midpoint user in our sample) sent on a typical day by teens ages 12-17 rose from 50 in 2009 to 60 in 2011. Much of this increase occurred among older teens 14-17, who went from a median of 60 texts a day to a median of 100 two years later. Boys also had a slightly larger increase in the median number of texts sent or received each day moving from 30 texts to 50 texts on a

typical day. Older girls remain the most enthusiastic texters, with a median of 100 texts a day in 2011, compared with 50 for boys the same age.

And while we see no growth in the median number of texts among white youth (flat at 50), black teens saw substantial increases, moving from a median of 60 to a median of 80 texts a day. Hispanic youth also send and receive very large numbers of texts with a median of 100 texts sent and received each day.

FIGURE:



Source: The Pew Research Center's Internet & American Life Project, April 19 – July 14, 2011 Parent/Teen Survey. n=799 teens 12-17 and a parent or guardian. Interviews were conducted in English and Spanish, by landline and cell phone.

- C.4** [Vaterlaus, Barnett, Roche, & Young \(2016\)](#). "Snapchat is more personal": An exploratory study on Snapchat behaviors and young adult interpersonal relationships. *Computers in Human Behavior*.

ABSTRACT: Snapchat is a social media platform that allows users to send images, videos, and text with a specified amount of time for the receiver(s) to view the content before it becomes permanently inaccessible to the receiver. Using focus group methodology and in-depth interviews, the current study sought to understand young adult (18–23 years old; $n = 34$) perceptions of how Snapchat behaviors influenced their interpersonal relationships (family, friends, and romantic). Young adults indicated that Snapchat served as a double-edged sword—a communication modality that could lead to relational challenges, but also facilitate more congruent communication within young adult interpersonal relationships.

EXCERPT: The young adults ranged from sending zero to 70 snaps per day ($m = 13$ snaps per day). But sample size of 32.

- C.5** [Blodget \(2013\)](#). The Most Active Snapchat Users Get Hundreds Of "Snaps" A Day. *Business Insider*.

EXCEPRT: A Snapchat insider tells us that the most active Snapchat users get "hundreds" of Snaps per day. When asked for a more refined number, the insider suggested that ~150 might be a good approximation.* The average active Snapchat user, meanwhile, the insider estimates, gets 20-50 Snaps per day. The average active user (teenagers), the insider says, now gets more "Snaps" than texts.

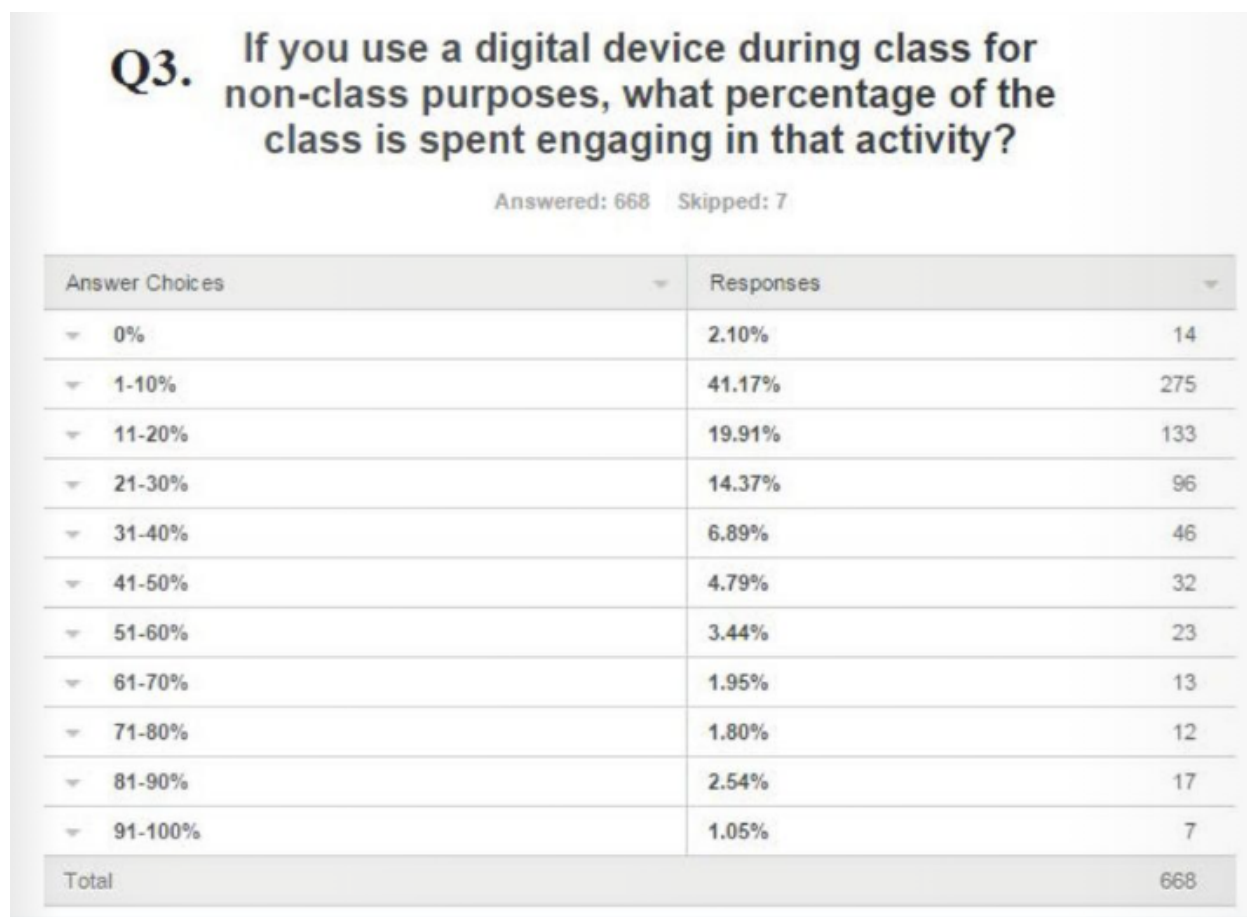
...Now, remember that one Snap can be sent to many people, so the average number of Snaps sent is likely lower than this. Also, as with any average usage number like this, the average is skewed by super-heavy users."

- C.6** [McCoy \(2016\)](#). Digital Distractions In The Classroom Phase II: Student Classroom Use of Digital Devices For Non-Class Related Purposes. *Journal of Media Education*.

ABSTRACT: A 2015 survey of American college students examined classroom learning distractions caused by the use of digital devices for non-class purposes. The purpose of the study was to learn more about Millennial Generation students' behaviors and

perceptions regarding their classroom uses of digital devices for non-class purposes. The survey included 675 respondents in 26 states. Respondents spent an average of 20.9% of class time using a digital device for non-class purposes. **The average respondent used a digital device 11.43 times for non-class purposes during a typical school day in 2015 compared to 10.93 times in 2013.** A significant feature of the study was its measurement of frequency and duration of students' classroom digital distractions as well as respondents' motivations for engaging in the distracting behavior.

FIGURE:



[What are we missing?]

APPENDIX D: EFFECTS OF PERSONAL LAPTOPS ON STUDENT LEARNING

D.1 [Aagaard \(2015\)](#). Drawn to distraction: A qualitative study of off-task use of educational technology. *Computers & Education*.

ABSTRACT: Today's educational system increasingly integrates digital devices such as laptops and tablets in the classroom on the assumption that the use of these technologies will increase student motivation and learning. However, research shows that students often use technologies for distractive purposes like off-task activity and multitasking. Few studies address the processes involved in this activity. This article offers a postphenomenologically informed qualitative study of students' off-task use of technology during class. Building on interviews with students in a Danish business college about their off-task technology use, findings suggest that off-task activity is not always a conscious choice. Because of deeply sedimented bodily habits, students often experience habitual distraction in the form of prereflective attraction towards certain frequently visited websites (e.g., Facebook). Laptops are experienced as endowed with an attractive allure that “pulls you in”. Students sometimes go as far as closing the lids of their laptops to avoid this habitual distraction. Theoretical and practical implications are discussed.

[What are we missing?]

APPENDIX E: ED TECH

E.1 ARTICLES AND EVIDENCE IN SUPPORT OF ED TECH

[TO COME]

E.2 ARTICLES AND EVIDENCE AGAINST ED TECH

E.2.1 [Press, A. \(2023, September 11\)](#). Switching off: Sweden says back-to-basics schooling works on paper. *The Guardian*.

EXCERPT: “There’s clear scientific evidence that digital tools impair rather than enhance student learning,” Sweden’s Karolinska Institute, a highly respected medical

school focused on research, said in a statement in August on the country's national digitalisation strategy in education.

"We believe the focus should return to acquiring knowledge through printed textbooks and teacher expertise, rather than acquiring knowledge primarily from freely available digital sources that have not been vetted for accuracy."

E.3 ARTICLES AND EVIDENCE WITH MIXED VIEWS ON ED TECH

E.3.1 [Global Education Monitoring Report Team \(2023\)](#). Global education monitoring: technology in education: a tool on whose terms?

EXCERPT: Several countries are banning telephones or other technology from schools. Concerns over data privacy, safety and well-being also underpin debates about the use of some technology in schools, especially by students at young ages. The use of smartphones in schools is contentious. Studies from Belgium (Baert et al., 2020), Spain (Beneito and Vicente-Chirivella, 2020) and the United Kingdom (Beland and Murphy, 2016) show that banning mobile phones from schools improves academic performance, especially for low-performing students. Analysis for this report shows that, globally, almost one in four countries has introduced such bans in laws or policies. In particular, 13% of countries have laws and 14% have policies that ban mobile phones. Bans are more common in Central and Southern Asia (Figure 8.4). In 2011, Bangladesh imposed a ban on the use of mobile phones by teachers in classrooms (Samad, 2011). In 2017, both students and teachers in schools and colleges were banned from bringing mobile phones into classrooms (bdnews24, 2017).

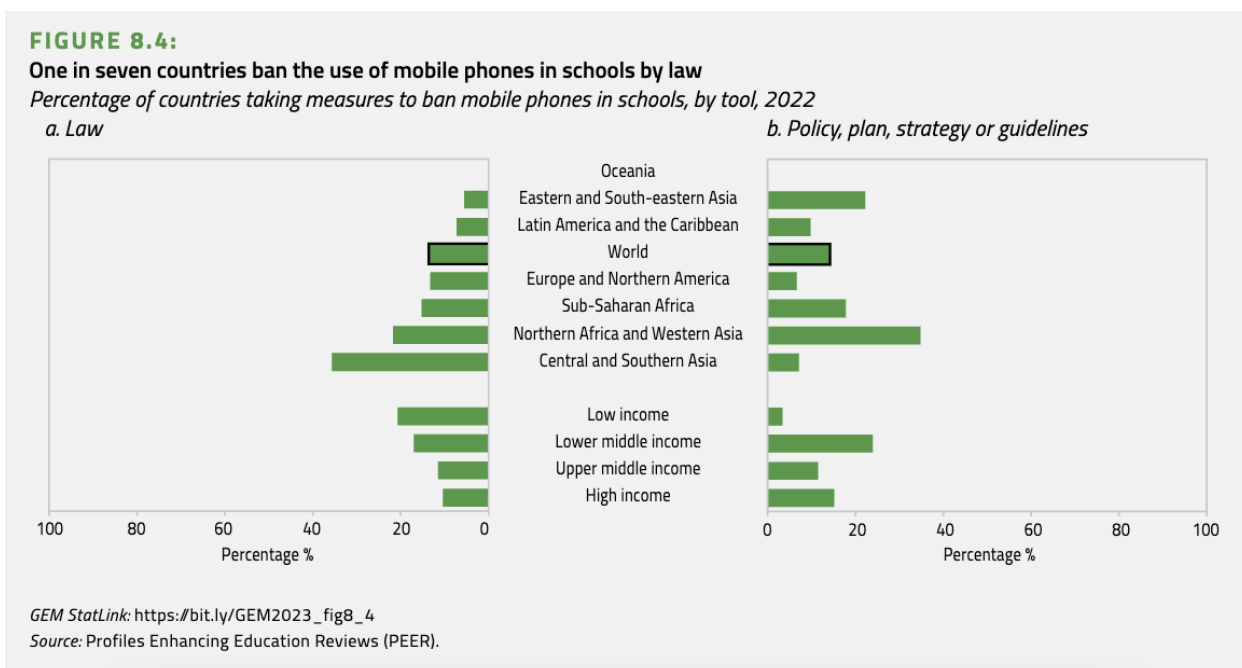
Article 25 of the education law in Tajikistan states that the use of mobile phones by students is prohibited in primary, vocational and secondary schools. In Uzbekistan, the law calls for switching off all devices when entering schools.

One in seven countries ban the use of mobile phones in schools by law...

Banning technology from schools can be legitimate if technology integration does not improve learning or if it worsens student well-being. Yet, working with technology in schools, and the accompanying risks, may require something more than banning. First, policies should be clear on what is and is not permitted in schools. Students cannot be punished if there is no clarity or transparency on their required behaviour.

Decisions in these areas need conversations supported by sound evidence and involve all those with a stake in students' learning. Second, there should be clarity on the role these new technologies play in learning and on their responsible use by and within schools. Third, students need to learn the risks and opportunities that come with

technology, develop critical skills, and understand to live with and without technology. Shielding students from new and innovative technology can put them at a disadvantage. It is important to look at these issues with an eye on the future and be ready to adjust and adapt as the world changes



[What are we missing?]

APPENDIX F: OTHER SOLUTIONS

F.1 [Gui, Gerosa, Argentin, & Losi \(2023\)](#). Mobile media education as a tool to reduce problematic smartphone use: Results of a randomised impact evaluation. *Computers & Education*. (h/t Marco Gui).

In recent years a public debate has been growing around mobile media and young people, as research has found adverse relationships between the intensive use of smartphones and well-being in this age group. However, there is still a lack of structured interventions targeting teachers and schools on the issue. This paper shows the results of a pre-registered cluster randomized controlled trial evaluating the impact of a media education intervention focusing on screen time management and the conscious use of mobile devices. The impact of a teacher training course is assessed on their 10th grade students (789 treated, 2572 controls), looking at their smartphone use, digital skills, and

subjective well-being. **Post-intervention differences, controlling for baseline measures at wave 1, show a moderate but significant decrease in smartphone pervasiveness and problematic use among treated students, with girls displaying greater beneficial effects than boys on withdrawal symptoms. Girls also show an increase in subjective well-being.** No effect is found on the level of digital skills measured with an ad-hoc test. These results highlight that media education interventions focused on screen time management and content-related digital skills can be effectively incorporated into daily teaching and are relevant for students' well-being. The paper also offers practical indications to develop effective media education interventions in a constant connectivity environment.

Passage from the discussion: First of all, as far as we know, **the present study is the first to present evidence of the beneficial impact of mobile media education on general well-being.** In particular, the joint effect of the trial on both problematic smartphone use and general well-being raises the question of what is the exact causal chain behind this evidence. Although we cannot confirm the existence of a causal path connecting a lower problematic smartphone use to a higher general well-being, the results suggest that this could be an interesting hypothesis to properly test. This hypothetical causal link seems supported by related empirical literature showing that a number of psychological constructs such as self-control, attention management, mindfulness and self-regulation are relevant for mobile media use (e.g., [Bayer et al., 2016](#); [Hefner et al., 2018](#); [Karsay & Vandenbosch, 2021](#); [Levy, 2016](#); [Schneider et al., 2022](#)). All these variables are also related to general well-being and therefore they could be tested as additional intervening factors.

APPENDIX G: EDUCATIONAL PERFORMANCE OVER TIME

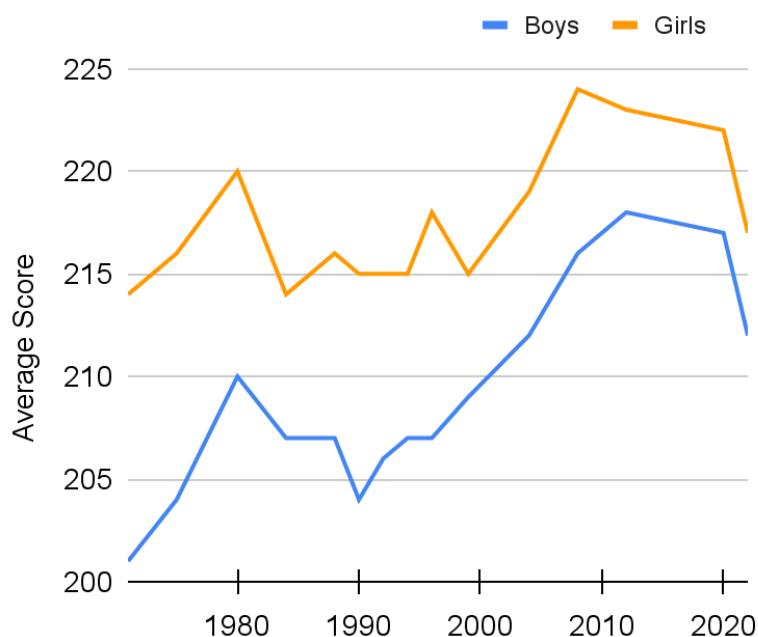
G.1 [Department of Education, Institute of Education Sciences](#). National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1971–2020 Long-Term Trend Reading and Mathematics Assessments. Graphs created by Zach Rausch (see [spreadsheet](#)).

EXCERPT: Since the 1970s, the National Assessment of Educational Progress (NAEP) has monitored student performance in mathematics and reading through long-term

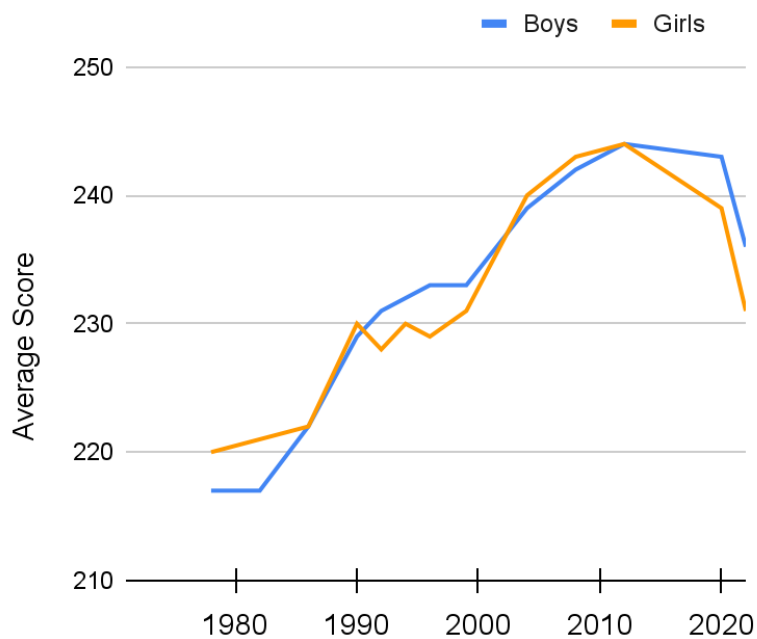
trend (LTT) assessments across three age levels (9-, 13-, and 17-year-old students). These assessments measure students' educational progress over long time periods to look for and monitor trends in performance. NCES decided to administer the LTT assessment for age 9 students—the last NAEP assessment given before the pandemic in March 2020—after two years rather than four years in order to provide pre and postpandemic results for age 9 students in reading and mathematics. **The assessments were administered from January to March in 2020 and 2022, respectively. About 7,400 age 9 students from 410 schools participated in each subject in 2022.** The focus of the 2022 Age 9 Long-Term Trends Reading and Mathematics Highlights Report is on the comparison of age 9 students (typically in grade 4) between 2020 and 2022. A report summarizing results across the entire trend period will be released in the spring of 2023, along with results for 13-year-old students.

FIGURES:

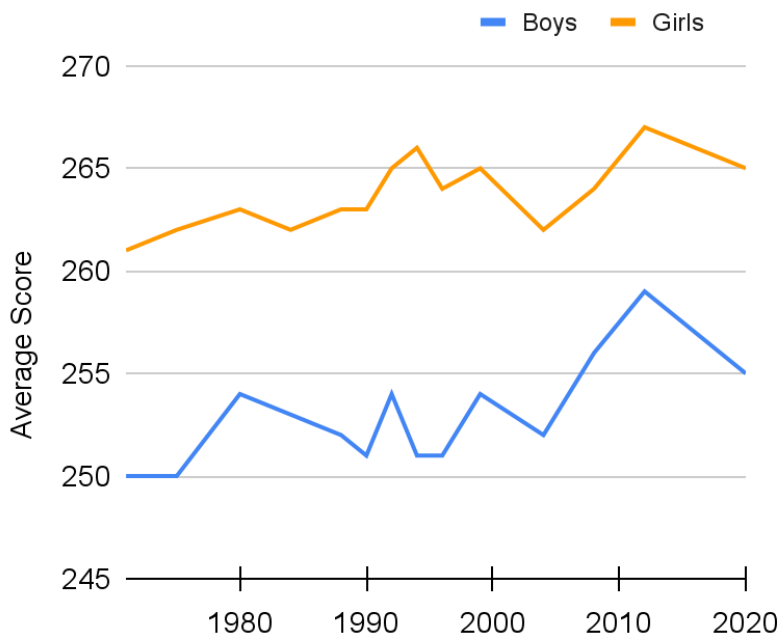
NAEPS Reading, Age 9



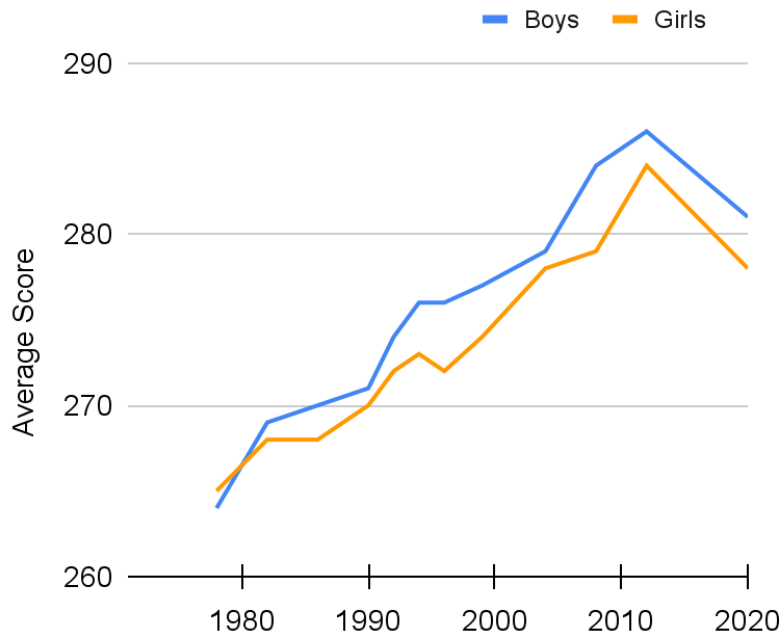
NAEPS Math, Age 9



NAEPS Reading, Age 13



NAEPS Math, Age 13



G.2 [Sparks \(2021\)](#). Young Adolescents' Scores Trended to Historic Lows on National Tests. And That's Before COVID Hit. *Education Week*.

EXCERPT: The NAEP Long-Term Trends study is a separate set of math and reading tests from the better-known main NAEP given every other year. Rather than testing students in particular grades, the trend NAEP uses a stable set of questions from the first administration in the early 1970s and tests a nationwide sample of students at ages 9, 13, and 17.

“Results of the National Assessment of Educational Progress Long-Term Trend study, released this morning, find **math scores in 2020 significantly declined for students at ages 9 and 13 since the test was last given in 2012.**”

“None of these results are impressive; all of the results were concerning, but the math results were particularly daunting, and particularly for 13-year-olds,” said Peggy Carr, the commissioner of the National Center for Education Statistics, which administers

NAEP. “I’ve been reporting these results for years, decades. And I’ve never reported a decline like this.”

“Reading scores for most students stayed flat for both age groups from 2012 to 2020, but they showed 6- and 7-point drops, respectively, for the lowest-performing 10 percent of students at ages 9 and 13.”

“Overall math scores for Black, Hispanic, and white 9-year-olds as well as white 13-year-olds flattened since 2012, while the performance of Black and Hispanic teenagers dropped. That led the math-score gap between Black and white young adolescents to widen from 28 points in 2012 to 35 in 2020.”

“Moreover, while 34 percent of 13-year-olds scored at least 300 out of 500 in math in 2012, only 32 percent of their peers in 2020 did so. This means that nearly two thirds of 13-year-olds could struggle with moderately complex math reasoning and procedures, such as finding the area of a square or gauging a percent a part represents of a whole.

“Among 9-year-olds, only 44 percent achieved at least 250 scale points, 3 percentage points fewer than in 2012. This means fewer of these students, and significantly less than half, could consistently multiply a three-digit number by a single-digit number or use the context of a situation to decide basic probability.”

“Background surveys conducted with the tests show that in spite of wide-scale state and district efforts to introduce algebra in middle school, only a quarter of 13-year-olds have taken algebra, a 9 percentage-point drop since 2012. Only 23 percent of the adolescents had taken at least pre-algebra, compared with 29 percent in 2012, with the rest taking regular math courses. In fact, the share of young teenagers who were taking no math classes at all, while very small, doubled from 1 percent to 2 percent in that time.”

“Similarly, far fewer students in NAEP reported they are reading for pleasure in 2020 versus 2012. The percentage who reported they “never or hardly ever” read for fun jumped from 9 percent in 1984 to 16 percent in 2020 among 9-year-olds, and from 8 percent to 29 percent of 13-year-olds in the same time period.”

G.3 [Bloomberg \(2022\)](#). Colleges Should Bring Back Testing Requirements. *Bloomberg*.

EXCERPT: In the latest dismal signs for students, scores on the [ACT](#) college entrance exam have fallen to the lowest level in 30 years, while fourth- and eighth-grade math and reading scores from the [National Assessment of Educational Progress](#) (often called the nation's report card) show devastating declines. Taken together, these results underscore the urgency of K-12 interventions and the necessity of reinstating testing standards for college applicants.

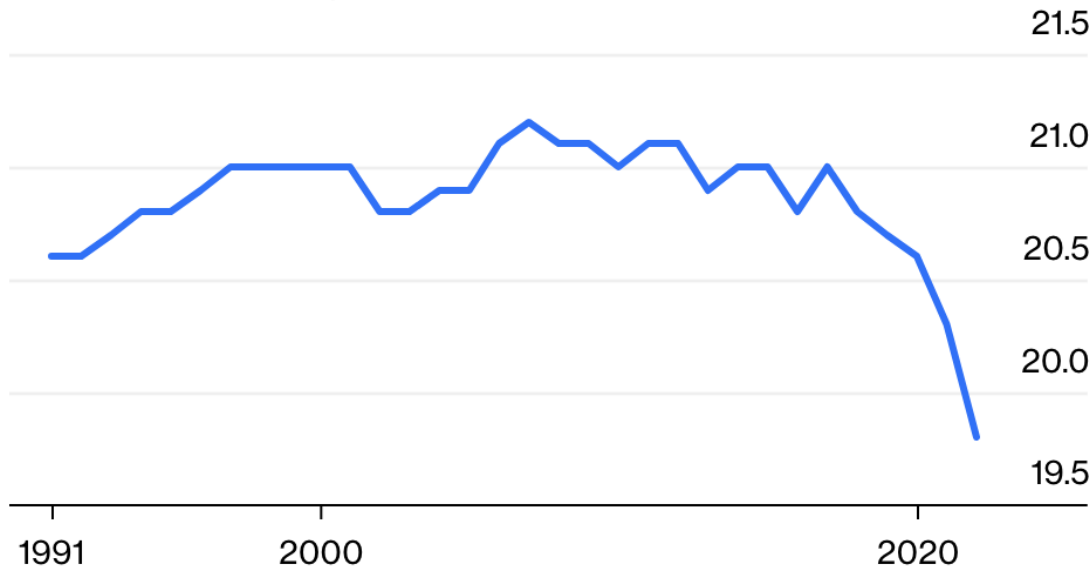
...Average ACT scores have declined every year since 2018, while the share of students failing to meet college readiness standards in any of its four subject areas — English, math, reading and science — has increased by 7 percentage points. With the exception of Asian students, teens of every race perform worse now than they did five years ago.

...This year's NAEP scores show that students in fourth and eighth grades suffered the largest declines ever recorded in math. Only about one-quarter of eighth-graders scored at a proficiency level in math, down from one-third three years ago. The decline in reading scores, while not as dramatic, was no less troubling.

Plummeting Performance

Scores on the ACT college entrance exam have fallen to the lowest level in 30 years

— National ACT composite score



Source: National Center for Education Statistics

G.4 [Nesi \(2023, Dec 16\)](#). Are kids' test scores really declining?

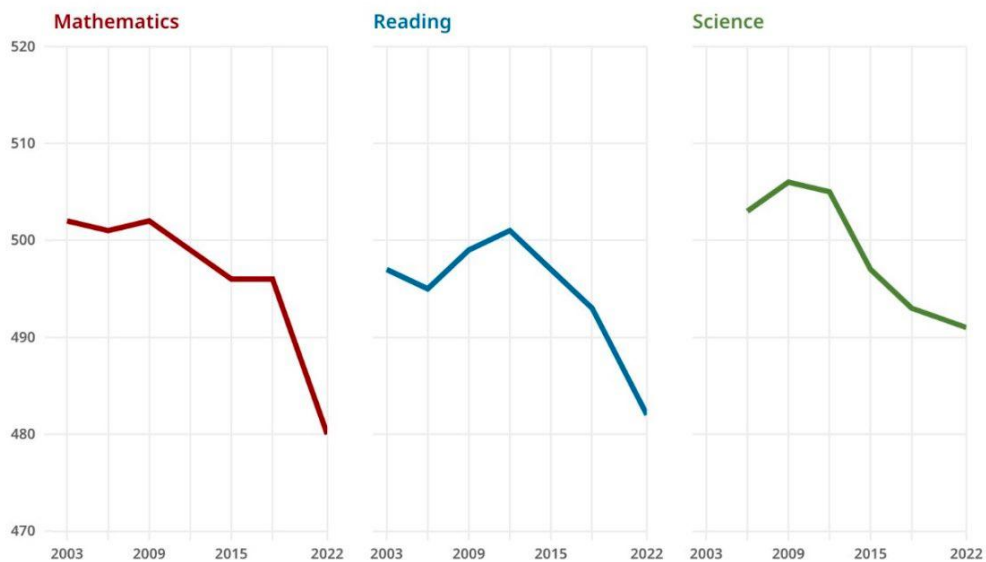
EXCERPT: [In the U.S.](#), scores in reading and science have not changed since 2012. They have declined in math (by 13.1 points). If declining scores are due to phones, why didn't U.S. students' scores decrease in reading and science, too? ... In fact, though 29 out of 63 countries showed declining performance in at least two subjects from 2012-2022, that means more than half of countries did not show declines in at least two subjects. If phones are entirely to blame, why wouldn't nearly all countries—or at least those with widespread smartphone adoption, like the U.S.—show this same declining pattern?

...In math, the decline in scores from 2003-2018 is not statistically significant. This means math scores were actually stable from 2012-2018. Remember, we're talking about a test with a standard deviation of 100 points, so a couple points here and there are just noise (even if a zoomed-in Y axis makes them look larger). There is a

significant decline in math from 2018 to 2022, but this could be due to the pandemic... In reading and science, there is a statistically significant decline starting in 2012. This fits with the introduction-of-phones explanation. But why weren't math scores declining from 2012 onward, too? Are English and Chemistry teachers more likely to ban phones in the classroom than Math teachers? (Seems unlikely based on my own high school experience).

Trends in mathematics, reading and science performance

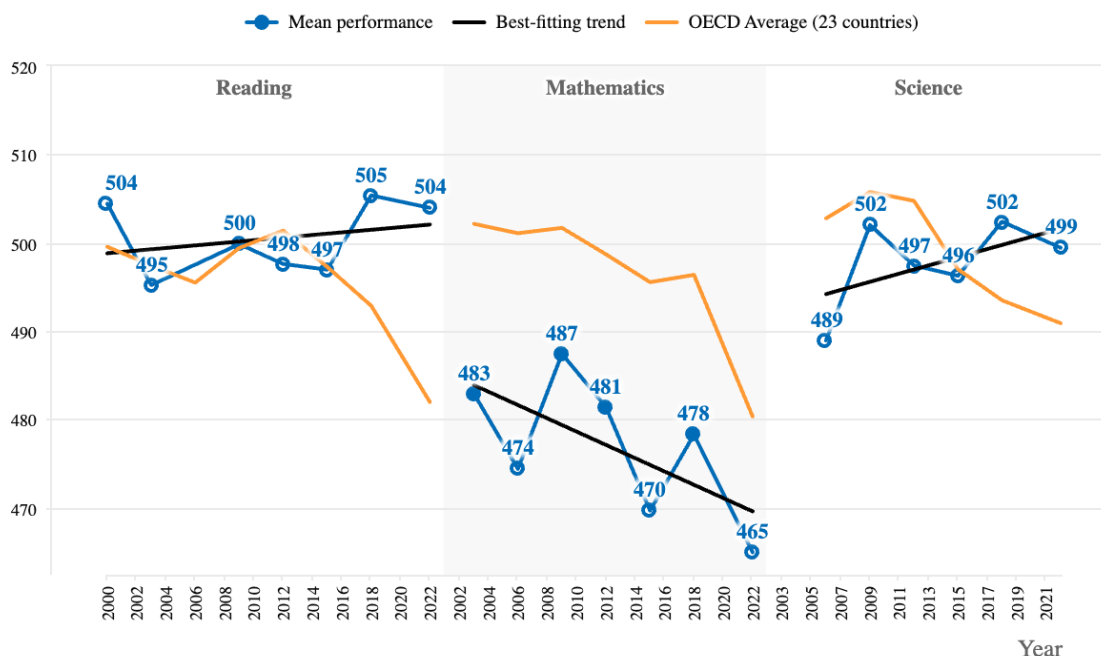
PISA test scores, OECD average



Source: OECD (2023), PISA 2022 Results (Volume I): The State of Learning and Equity in Education.

United States

Score points



APPENDIX H: PHONE-FREE SCHOOL LEGISLATION IN THE UNITED STATES

H.1 [Focus on Learning Act \(2023\)](#). [\[Full text\]](#) Representative Cotton (R- Ark) and Kaine (D-Virg.). [\[Additional sources on the bill: 1\]](#)

INTRODUCED: 11/2023 [\[Status\]](#)

WHAT IT IS: The Focus on Learning act would “require the U.S. department of education to study the impact of cellphone use on student academic performance, engagement, mental health, behavior, as well as its effects on classroom instruction and school climate. The legislation also calls for establishing a pilot program that would award grants to school districts that agree to create a cellphone-free school environment. Those pilot programs would also be studied and analyzed to understand the effects of schools that are cellphone-free.” ([source](#))

HOW IT WORKS:

- Participating schools would be given grants to purchase secure containers to store students' phones during school hours. Student cellphone use would be prohibited during the school day, including at lunch and in between classes. There would be exceptions for students with health conditions or disabilities, and non-English speakers.
- When applying for the program, districts would need to seek input from parents, students, and educators in determining which schools would participate in the pilot.
- Schools participating in the pilot program would need to put a communication system in place to allow school staff to contact local emergency responders. They would also need to have a clear process for students to contact their parents.
- The cellphone storage containers would be controlled by school administrators. ([source](#))

H.2 [Oklahoma Senate Bill on Phone-Free Zones.](#)

INTRODUCED: 02/2024

STATUS: In Committee [[Bill Tracker](#)]

H.3 [Vermont Bill on Electronic Devices in Schools.](#)

INTRODUCED: 01/2024

STATUS: In Committee [[Bill Tracker](#)]

H.4 [Executive Order 33 \(2024\).](#) [[Full text](#)] Establishing Cell Phone-Free Education to Promote the Health & Safety of Virginia's K-12 Students. Governor Glenn Youngkin (Virginia).

ISSUED: 7/2024

KEY FEATURES:

Directive to define and establish "cell phone-free education" in Virginia K-12 public schools. Cell phone-free education includes:

- Elimination or severe restriction of the use of cell phones and smart phones during instructional time
- Age appropriate restrictions on personal devices connected to the internet during instructional time
- The option to implement pouches or cell phone lockers

H.5 [Blume & Karabatur \(2024\)](#). LAUSD approves cellphone ban as Newsom calls for statewide action. *Los Angeles Times*.

EXCERPT: **The Los Angeles school board Tuesday set in motion a plan to ban cellphones all day on campus**, saying the devices distract students from learning, lead to anxiety and allow cyberbullying.

The ban would **take effect in January** after details are approved in a future meeting by the Board of Education, with the goal of enforcing it across a student's entire time at school, including lunch and other breaks.

"Our students are glued to their cellphones, not unlike adults," said board member Nick Melvoin, who spearheaded the resolution. "They're surreptitiously scrolling in school, in class time, or have their head in their hands, walking down the hallways. They're not talking to each other or playing at lunch or recess because they have their AirPods in."

WHAT IT IS: A district-wide school cellphone ban in Los Angeles Unified School District, which is the second largest district in the nation.

H.6 [EducationWeek \(2024\)](#). Which States Ban or Restrict Cellphones in Schools?

EXCERPT: At least 15 states have passed laws or enacted policies that ban or restrict students' use of cellphones in schools statewide or recommend local districts enact their own bans or restrictive policies, according to an Education Week analysis.

As the debate over cellphones in schools continues, Education Week is tracking state-level legislation and policies that aim to limit students' access to the devices during the school day.

H.7 [Panchal & Zitter \(2024\)](#). A Look at State Efforts to Ban Cellphones in Schools and Implications for Youth Mental Health. *KFF*.

EXCERPT: Heading into the 2024-2025 school year, a growing number of states are implementing or considering state-wide bans on cellphones in schools. Many leaders in education and policymakers suggest cellphone bans will help mitigate youth mental health concerns and distractions during academic instruction. The resurgence of cellphone bans follows two advisories from the U.S. Surgeon General on the [youth mental health crisis](#) and the [harmful impacts of social media use](#) and recommendations from [UNESCO](#) to limit cellphone use in schools across the world. Unlike many recent political issues, school cellphone ban policies have largely received bipartisan support,

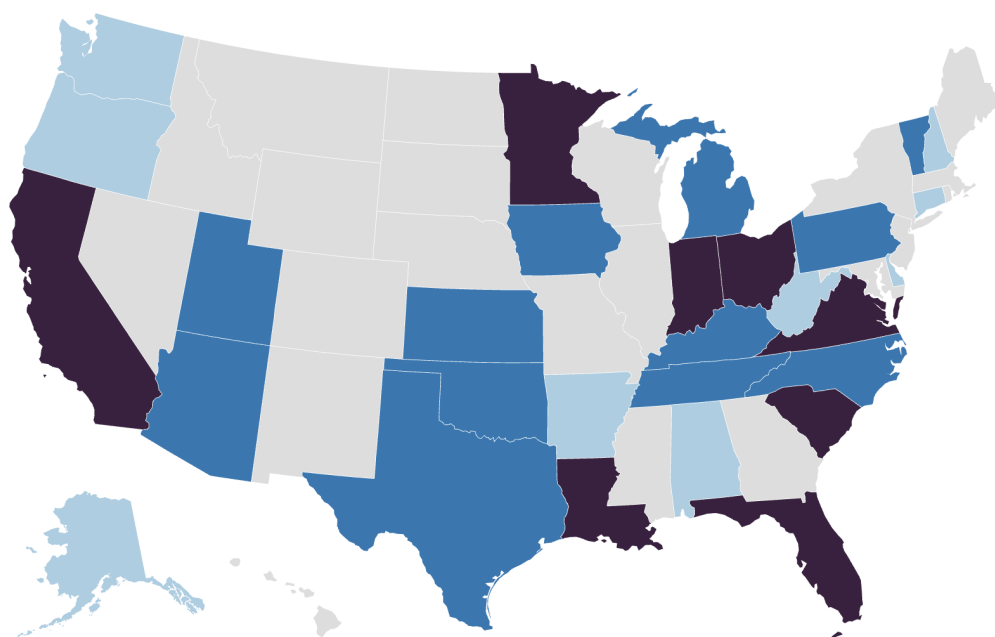
and the [Biden-Harris administration](#) continues to promote online safety for youth. At the same time, research on the effectiveness of cellphone bans is limited, and although multiple states are adopting these bans, challenges remain with enforcement, accommodating exceptions, and equity.

FIGURE:

School Cell Phone Bans or Restrictions, by State

State-level data reflects policies as of November 4th, 2024

- State-Wide Ban or Restriction (8)
- State Education Department Issued Policy Recommendation or Pilot Program (9)
- State-Wide Legislation Introduced (12)



Note: Restrictions or bans at the school or district level are not shown on this map.

APPENDIX I: PHONE-FREE SUMMER CAMPS

I.1 JOURNALISM ON PHONE-FREE SUMMER CAMPS

I.1.1 [Baskin \(2024\)](#). Why Kids Need Summer Camp. *After Babel*.

EXCERPT: Clearly, young people are struggling, becoming more anxious and fragile. Excess technology usage (especially social media) and well-intentioned parental overprotection combine to fuel this crisis.

Meanwhile, many parents feel insufficiently armed to tackle these trends. They have little to no idea how to reduce their child's tech usage (in part because everything and everyone is on these devices). They sense that their children lack resilience, but are unsure how to provide safe experiences that foster confidence and strength, especially when their presence impedes these outcomes.

In an odd irony, an experience created over 160 years ago is ideally crafted to address today's major challenges. Originally designed to instill a love of nature and character, camps now promote a new set of critical skills—the ability to own our technology (rather than be owned by it) and the strength to face difficulties and thrive.

In my TEDx talk 12 years ago, I paired my concerns about technology with an optimism that camps could serve as an antidote. Both the concern and the optimism are even more true today. Amelie's quote that starts this article speaks to her struggles with her phone, but also celebrates her summer liberation and self-rediscovery: "Suddenly life wasn't out to get me, but I was out to get life."

Our young people deserve to share this empowering belief.

[What are we missing?]

I.2 RESEARCH ON PHONE-FREE SUMMER CAMPS

I.2.1 [Megret \(2023\)](#). No connectivity, better connections: teenagers' experiences of a phone-free summer camp in the United States. *Journal of Adventure Education and Outdoor Learning*.

ABSTRACT: Phones have become pervasive in many teenagers' lives, and outdoor educators are increasingly faced with making decisions regarding technology. This case

study sheds light on the complex relationship between teenagers, phones and residential outdoor environmental education by exploring the experiences of participants at a phone-free summer camp in the US. It was conducted over six weeks and gathered evidence from individual interviews, focus group interviews and unstructured conversations. The three main findings were: **(1) participants expressed overwhelmingly positive attitudes towards the experience, especially regarding social interactions.** (2) This positive experience was perceived to only be possible at CIFC, where an engaging programme and a strong community supported participants in their phone-free experience. (3) As a result of (2), teenagers expressed concerns about applying their experience outside of camp. These findings have important implications for practitioners and contribute to pedagogical discussions regarding phones on outdoor environmental education programmes.

I.2.2 [Povilaitis \(2019\)](#). Smartphone-free summer camp: adolescent perspectives of a leisure context for social and emotional learning. *World Leisure Journal*.

ABSTRACT: In today's society, nearly all adolescents have access to a smartphone with internet and social media connectivity, and almost half report "almost constant" online use. Studies on smartphone usage have observed associations with increased levels of anxiety, depression, and stress. In recent years, adolescents shifted from spending leisure time with peers in-person to online interactions and communication, which has been linked with feelings of loneliness. As young people now spend much of their leisure time online, there is increasing importance placed on experiences in which they are able to interact face-to-face with peers and develop social awareness, relationship skills, and interpersonal relationships offline. One such leisure context is summer camp, where technology is often not permitted. The purpose of this study was to explore adolescent perspectives of a smartphone-free residential camp experience. Results indicated that **youth felt positively about the smartphone-free camp experience, they were presented with opportunities to interact socially and form deeper connections with peers offline.** Findings from this study have implications for recreation and leisure practitioners, parents, and adolescents themselves.

I.2.3 [Gillig \(2020\)](#). Longitudinal analysis of depressive symptoms among LGBTQ youth at a social media-free camp. *Journal of Gay & Lesbian Mental Health*.

ABSTRACT: INTRODUCTION: Frequent social media use (SMU) is associated with elevated depressive symptoms (DS) for youth, but the relationship over time is unclear. **METHOD:** LGBTQ youth ages 12–18 (N = 214) were surveyed before and after attending a social media-free summer camp.

RESULTS: **Pre-camp, SMU was not associated with DS. However, the relationship between pre- and post-camp DS was moderated by pre-camp SMU ($b = -.03$, $p = .02$). For youth with lower SMU, pre-camp DS more strongly predicted post-camp DS.**

CONCLUSION: Findings highlight the influence of a “social media break” in an affirming environment on LGBTQ youth mental health.

I.2.4 [Uhls, Michikyan, Morris, Garcia, Small, Zgourou, & Greenfield \(2014\)](#). Five days at outdoor education camp without screens improves preteen skills with nonverbal emotion cues. *Computers in Human Behavior*.

ABSTRACT: A field experiment examined whether increasing opportunities for face-to-face interaction while eliminating the use of screen-based media and communication tools improved nonverbal emotion–cue recognition in preteens. Fifty-one preteens spent five days at an overnight nature camp where television, computers and mobile phones were not allowed; this group was compared with school-based matched controls (n = 54) that retained usual media practices. Both groups took pre- and post-tests that required participants to infer emotional states from photographs of facial expressions and videotaped scenes with verbal cues removed. Change scores for the two groups were compared using gender, ethnicity, media use, and age as covariates. **After five days interacting face-to-face without the use of any screen-based media, preteens’ recognition of nonverbal emotion cues improved significantly more than that of the control group for both facial expressions and videotaped scenes.** Implications are that the short-term effects of increased opportunities for social interaction, combined with time away from screen-based media and digital communication tools, improves a preteen’s understanding of nonverbal emotional cues.

EXCERPT: We found that children who were away from screens for five days with many opportunities for in-person interaction improved significantly in reading facial emotion (DANVA 2), compared to those in the control group, who experienced their normal media exposure during an equivalent five-day period ($F_{5,88} = 4.06$, $p < .05$, $d = .33$). In the experimental condition, participants went from an average of 14.02 errors in the Faces pretest (including both child and adult faces) to an average of 9.41 errors in the posttest (a reduction of 4.61 errors), while the control group went from an average of

12.24 to 9.81, which was a reduction of 2.43 errors (we attribute this change to a practice effect). Thus, the group that attended camp without access to any screen-based media improved significantly more than the control group, who experienced their usual amount of screen time. Fig. 1 illustrates these change scores.

[What are we missing?]

APPENDIX J: STORIES FROM COMMENTERS