SCIENCE, TECHNOLOGY, AND THE ENVIRONMENT HUNG UP ON CELL PHONES



When was the last time you checked your cell phone in class? How many phones do you think are in the school? Do they belong there?

In July 2023, **UNESCO** released its Global Education Monitoring report. The study concluded that technology should be used in classrooms only when it supports learning. UNESCO says that technology should "never **supplant** the human connection" that is so important to education.

UNESCO also recommends banning smartphones from classrooms. Why? For one thing, smartphones create an uneven playing field. Not everybody has one, and not all smartphones are equal.

RULES IN CANADA

Schools across Canada are divided on the issue.

Ontario banned cell phones in schools in 2019, but students still have them. "If you were to walk into any school in Ontario you would not know that there was a ban," one educator told reporters.

Quebec's education minister said that he plans to ban the devices in most teaching settings. But the proposal still needs approval from the provincial cabinet.

British Columbia's education minister says decisions around student cell phone use should be left to each teacher and school.

SPLIT FOCUS

A 14-country study found that smartphones distract students from learning. That's even the case if the phone is just nearby. And once distracted, it can take up to 20 minutes for students to re-focus on learning.

Another study showed that the closer smartphones were to students, the worse they performed on a test. Students who left their phones in a different room did best. Students whose phones were in their pocket or bag came next. Students with phones on their desks performed worst.

"The human brain is incapable of thinking of more than one thing at a time," said Dr. Michael Rich of Harvard Medical

DEFINITIONS

SUPPLANT: to take the place of; to replace

UNESCO: United Nations Educational, Scientific and Cultural Organization – a specialized UN agency aimed at promoting world peace and security through international cooperation in education, arts, sciences, and culture. The headquarters are in Paris, France.

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School. "What we think of as multitasking is actually rapid-switch-tasking. And the problem with that is that switch-tasking may cover a lot... of different subjects, but it doesn't go deeply into any of them."

Dr. Sachin Maharaj of the University of Ottawa studies educational leadership. He argues that schools should teach more than just content. They must teach "habits of mind." That includes thinking deeply and focusing for long periods of time. It also involves listening attentively and empathetically to others.

HEALTH ISSUES

UNESCO's report raised a big concern. It found that screentime and smartphone use hurt students' social relationships and mental health. Another study in the U.S. linked higher screentime to "poorer well-being." More screentime was also associated with less curiosity, weaker self-control, and more emotional instability. It led to more diagnoses of anxiety and depression, as well. Even two hours of screen use per day can increase depressive symptoms, result in poorer learning outcomes, and negatively impact sleep and

HOOKED ON CELLS

Your cell phone shouldn't take over your life. There are ways to fight cell phone addiction. One strategy? Keep yourself on a schedule. You can set alarms for how often you check your phone, suggests Dr. Larry Rosen, author of *The Distracted Mind*. You might start with every 15 minutes, then move to larger intervals. Warn close friends and family that you may not respond to their messages immediately.

When it's not time to look at your phone, plan other ways to fill the time. Have real-life conversations!

Make your phone less appealing by setting it to greyscale. Turn off push notifications for non-essential apps. Remove distracting apps from your home screen.

Many experts advise keeping your phone out of your bedroom. Use a regular alarm clock and charge your phone in another room, so your phone is not the last thing you see at night and the first thing you see in the morning. Make some areas of your home phone-free zones.

You can even use your smartphone to track your smartphone use! Apps such as QualityTime and Moment let you set usage goals and see how well you maintain them.

fitness, concluded a different study from the United Kingdom.

Does two hours sound like a lot? CDC (Centre for Disease Control) data from 2018 showed that young people aged 11 to 14 averaged nine hours in front of a screen each day. The number for 15- to 18-year-olds was only slightly lower, at 7.5 hours.

Cell phones also bring another concern – cyberbullying. Phones and social media let bullies extend their reach even when school is out. Banning cell

phones in schools could at least offer a **respite**.

PRACTICAL CONCERNS

However, the bullying argument has two sides. Cell phones can also be a lifeline for students who are being bullied. The phones are a way to connect with help and support.

Dr. David Chorney, an education professor at the University of Alberta, points out that students are only in school about eight hours per day. Banning cell phones during school will not address the problem of too much

DEFINITIONS

CENTRE FOR DISEASE CONTROL (CDC): the U.S. National Public Health Agency based in Atlanta, Georgia

RESPITE: a short period of rest from having to deal with a difficult or unpleasant situation

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screentime. Instead, he advises open family communication about cell phone use.

Patti Bacchus is a former chair of the Vancouver School Board. She calls cell phone bans a "1960s solution to a 2023 problem." Students have lives outside the classroom, she argues. Some may have part-time jobs or need to take care of siblings. Phones help them manage these tasks.

USING THEM WISELY

Some students use their phones to capture notes from slideshows. Phones can be used to check facts and for quick research. Teachers can use phones in their lessons. For example, students might listen to a piece of music while writing. Or, they might take a photo that shows a real-life application of a math or science lesson.

When Ontario restricted classroom cell phone use, the Canadian National Institute for the Blind (CNIB) and other groups for people with disabilities pushed back. Technology can help make school more accessible. There are apps that let students read class materials using magnification software. Other apps help them navigate school hallways using

audible GPS. Not every student's needs are the same.

Phones and social media can also provide some students with resources or supports that are not available in their environment. This is especially true for **marginalized** groups.

DID YOU KNOW?

The number of smartphones in the world is 6.92 billion. That means that 85.88 percent of the global population owns a smartphone.

A COMPLICATED ISSUE

UNESCO recognized that students need to learn the risks and opportunities that come with technology. The report says that technology with a clear role in supporting learning should be allowed in school. Most importantly, it argues that decisions about technology in schools must take the needs of the learner into account.

What are your experiences with phones in school? Are they a helpful necessity or a harmful distraction? ★

DEFINITIONS

AUDIBLE: heard or perceptible by the ear

MARGINALIZE: to make someone or something seem not important or relevant; to prevent someone from having power or influence

COMPREHENSION QUESTIONS

1. How many smartphones are there worldwide?		
2. Which province has banned cell phones in schools? Which province is thinking about a ban?		
3. What does CDC stand for? Where is this agency located?		
4. According to the CDC, how much screentime do young people aged 11 to 14 average each day? How much screentime do 15 to 18-year-olds average?		
5. What does UNESCO stand for?		
6. What report did this agency release in July 2023?		
7. What did this report say about technology in schools?		
8. What did it say about cell phones and education?		
9. List at least three reasons why some researchers say cell phones should not be allowed in classrooms.		
10. List at least three reasons why some researchers and groups say phones should be allowed in classrooms.		

QUESTIONS FOR FURTHER THOUGHT

1. UNESCO says that technology should "support, but never supplant, the human connection on which teaching and learning are based." As you see it, in what ways might having a cell phone in class support human connection? In what ways might it supplant human connection? Provide examples to support your thinking.
2. Many experts argue that they see an improvement in students' mental health and class engagement when cell phones are banned from classrooms. Do you agree with this argument? How might we see and measure these changes? Explain.
3. Be honest! How do you feel about banning cell phones in class? Discuss the pros and cons of a classroom ban.

QUESTIONS FOR ONLINE EXPLORATION

Note: The links below are listed at www.lesplan.com/links for easy access.		
1. Learn how Canadian schools are experimenting with cell phone bans: https://www.cbc.ca/news/canada/canadian-schools-cell-phone-bans-1.6869993		
What questions do you have?		
2. What do the experts say that smartphones are doing to young people? https://www.cbc.ca/radio/sunday/the-sunday-edition-november-19-2017-1.4406916/what-are-smartphones-doing-to-young-people-1.4406942		
3. Hear from a teacher in PEI who told his students to leave their cell phones on in class: https://www.cbc.ca/news/canada/prince-edward-island/pei-classroom-cellphone-etiquette-1.5148452 Do you think these teachers are in the majority? Explain.		
4. Some researchers suggest that we would be more creative, more connected, and happier if we put down our smartphones: https://www.cbc.ca/news/canada/british-columbia/should-i-use-my-smartphone-less-in-2019-1.4957763		
What did you learn?		
5. Review the UNESCO report on smartphone use in classrooms: https://www.unesco.org/en/articles/smartphones-school-only-when-they-clearly-support-learning		
Do you agree with the report's findings? Why or why not?		

PUTTING IT ALL TOGETHER

A. Write the letter that corresponds to the bes	answer on the line beside each question:
1. Which jurisdictions has banned ce a) British Columbia c) Ontario	ell phones in classrooms? b) Quebec d) Nunavut
2. How many hours of screen time do a) 6 c) 7.5	b) 7.5 d) 9
3. UNESCO = United Nations a) Educational c) Elementary	, Scientific and Cultural Organization b) Ergonomic d) Economic
	If a statement is <u>True</u> , write one important fact to <u>False</u> , write the words that make it true on the line below.
4. True or False? Students perform be	est on tests if their cell phone is stored under their desk.
-	t recommended that cell phones be banned in ey release too much radiation.
6. True or False? The CDC is the U.S. in Atlanta, Georgia	National Public Health Agency and it is located
C. Fill in the blanks to complete each sentence	e.
7. The UNESCO report said technology should learning outcomes.	only be used in schools to
8. Once distracted by a phone, it can take a stud	lent up to minutes to refocus.
9. The province of	is planning to ban cell phones in schools.
D. Respond to the following question in parag	graph form. (Use a separate sheet of paper if necessary.)
10. As you see it, should cell phones be banned	during class time? Give reasons to support your response