School cellphone ban: Mixed evidence around the use of technology in schools

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7-9 minutes

"Research indicates there are health and social benefits to reducing screen time and encouraging students to interact with each other during their breaks."

The policy would ban cellphones for the whole school day but schools could choose how to enforce it.

However, Papatoetoe High School principal Vaughan Couillault said students having cellphones was not an issue at his school.

He told *AM* cellphones were actually sometimes appropriate to assist children in their learning such as when they needed to film themselves for a task.

Couillault said there were consequences when students used their phones when they shouldn't.

Education Minister Jan Tinetti said a full ban would "undermine schools who are best placed to make this decision". Many already already had bans, she said.

Education experts say too much device use in the classroom is linked to poorer results and high use at home creates tired kids who arrive at school not ready to learn and struggling to focus in class - but schools also need to prepare students for a technological world.

Unesco has called for smartphones to be banned from classrooms to avoid distracting students and disrupting learning based on its recent Global Education Monitoring Report.

"Even having a phone nearby when notifications are coming through is enough to break students' concentration, with one study showing that it can take up to 20 minutes to refocus on learning," Unesco said.

"Proximity to a phone was found to have a negative impact on learning in 14 countries. And removing smartphones from schools in Belgium, Spain and the UK improved learning outcomes, according to studies cited in the report. But less than a quarter of schools have banned them."

Some technology could support learning in some contexts, but not when it is over-used or inappropriately used, it said.

The report says evidence is mixed as to the impact of device use in schools.

"The report shows that regulations for technology set outside of the education sector will not necessarily address education's needs."

It found the use of technology could improve education but student use of devices beyond a moderate threshold had a negative impact.

A report from the Programme for International Student Achievement (Pisa) found New Zealand 15-year-olds spent 42 hours a week on the internet - well above the OECD average of 35 hours per week.

Only students in Denmark, Sweden and Chile spend more time online.

In class, they were using digital devices for about 84 minutes a week.

The Growing Up in New Zealand study found that 8-year-olds watched television or videos for an average of two hours a day and played games or did homework on devices for another hour. That did not account for any screen time at school.

World-renowned educator Pasi Sahlberg said there was not a lot of hard evidence around technology's impact on academic achievement but as a parent, there were "clearly inconvenient consequences of the time they spend with technology and their learning outcomes at school".

He said making the use of technology mandatory in schools did not work because for some students and teachers it became a barrier to learning, but banning smartphones at school was not helpful either because students needed to learn how to manage their own digital wellbeing.

"Young people are reading much less than they used to. Young children are playing outdoors much less than they used to."

Given that young people had their phones with them 24/7, the increased

presence of digital media was a likely reason for declining learning and difficulties in learning, he said.

Sahlberg, a professor of educational leadership in the Melbourne Graduate School of Education at the University of Melbourne, said they were close to the time and point in their research where they could establish a credible link between the decline in educational performance and the new digital habits of young people.

His research has shown that 60 per cent of teachers in Australia think most children are not ready to learn when they arrive at school each day and that the proportion of those children has increased over the past five years.

He said children today struggled to focus on maths tasks long enough to solve a problem or to be able to read for 15 minutes.

The Growing Up Digital study in Australia found about a third of parents let their children go to bed with their smartphones every night and that 60 per cent of those children who were struggling at school slept with their phones.

Sahlberg said taking phones to bed meant they were coming to school with less sleep, and a poorer quality of sleep, than in the past.

But, he was quick to point out some students did learn better through the use of technology so finding a balance was important.

Education Hub founder Nina Hood said, while limited data was available at this stage, overall the evidence suggested too much device use was associated with poorer learning outcomes.

"More limited device use tends to lead to better academic outcomes," she said.

An American study by the Reboot Foundation found those who used digital technology at school for a few minutes to half an hour daily performed best and those who used it for more than half an hour performed worse even than those who did not use it at all.

Hood said it came down to how digital technology was being used and who was using it - students, teachers or both together.

A 2021 Ministry of Education report based on the results of the 2018 Pisa report backed that up saying most Kiwi 15-year-olds had access to devices at school but most types of devices were negatively associated with test scores.

The same report found a teacher's use of devices in English, maths and science influenced scores positively but when students used devices unaccompanied by a teacher their performance in maths and science was considerably lower than students who did not use devices in lessons.

It also showed the best readers used devices alongside their teacher for more than an hour a week.

That positive effect in reading was only seen in Australia, Denmark, Korea, the United States and New Zealand. In all other countries, results declined with device use.

But the Pisa and Pirls studies found device use in English lessons was linked to a reduced enjoyment of reading.

Hood said digital literacy was important and students needed to be explicitly taught how to research online and decide what was a reliable source and what was not - skills that required and improved reading.

But, when it came to reading longer texts like novels and plays, research suggested students had better comprehension and recall when reading a physical copy.

Using devices to test and reinforce basic maths skills and knowledge could be helpful but was of little help when it came to problem-solving, Hood said.

Founder of Sensible Screen Use and post-graduate student Jamie Cullen said she believed, based on the research, that the high use of digital devices in New Zealand schools was part of the reason achievement rates were declining.

She acknowledged that used in the right way, digital devices could support learning but said when it came to core skills, research showed learning outcomes generally declined.

She agreed children needed to learn digital skills but said schools, especially at primary level, needed to reconsider how they were using technology and whether it was necessary for children to have their own devices at that age.