

Guidelines for Use of Wired and Wireless Technology in Classrooms

All wireless devices emit radio-frequency (RF) microwave radiation. Recent scientific studies have shown that this type of non-ionizing radiation, previously thought to be relatively safe, has measurable and harmful biological effects on humans. Developing fetuses and young children are among the most vulnerable to this type of radiation.

The safest solution is to provide wired connections. *Wired connections are faster, more secure, more economical and safer than wireless networks. Most wireless routers have Ethernet connections, and allow the wireless function to be disabled. Using state-of-the-art technology, your IT department can install wired Ethernet connections in classrooms.*

For situations where wired installations are not yet possible, we offer the guidelines below. The guidelines are based on the Precautionary Principle, which dictates that when an activity raises threats of harm to human health, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.

This is a living document that will be regularly updated as additional science on wireless radiation emerges.

1. Proximity to wireless devices is the most important factor in determining the amount of your radiation exposure. The amount of radiation decreases significantly as you move away from the source.
2. Avoid prolonged, close contact with wireless routers, laptop computers, tablets, cell phones and cordless phones. Don't allow children to hold devices on their laps.
3. Concentrated groups of wireless devices (such as clusters of children using their tablets or laptops while connected to the internet) emit the highest levels of radiation in the classroom.
4. Placing wireless devices in "airplane" mode will eliminate virtually all radiation emissions. If students are not using the internet, make sure they de-activate the WiFi connection using this setting or ask them to turn off their devices.
5. The router is a constant source of radiation in a classroom. The strongest radiation from a router typically extends out from the router 5 to 10 feet in every direction. Find out if the router has an easily accessible power switch that can be turned off when you don't need access to the internet.
6. Ask your staff IT person if they can reduce the power of the router. Commercial routers are more powerful than those for home use and are often overpowered for classroom needs.



This information is provided by Grassroots Environmental Education, Inc., a science-based non-profit organization, in cooperation with New York State United Teachers (NYSUT). To learn more about wireless radiation and the peer-reviewed science supporting these Guidelines, please visit www.grassrootsinfo.org/wireless-radiation

© 2022 Grassroots Environmental Education. All Rights Reserved.