Guidelines for Safer Use of Wireless Technology in Classrooms

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

These 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 the 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.

3. Concentrated groups of wireless devices (such as clusters of children using their tablets or laptops to stream or download) can emit even more radiation than a router.

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 turn off their devices.

5. Wired Ethernet 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. Ask your IT department if it would be possible to install wired Ethernet connections in your classroom.

6. The router is usually the most significant 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.

7. 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.