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Wireless networks in education: simple steps to reduce health risks

Key safety measures for WiFi networks

- Avoid using WiFi if it isn't necessary for connectivity. Where classrooms already have wired network access, use these instead.
- Where classrooms are powered, but without wired access to the school networks, a centralised switch and dLAN units can provide a reliable and secure form of networking for as many laptops as necessary without any microwave electromagnetic field exposure.
- Wired Ethernet or dLANs should also be used at home instead of WiFi.
- If a new classroom is to be built, or electrical work is to be carried out in an existing classroom, network cables can be added at the same time, providing wired network access with minimal extra cost and time.
- Turn off wireless access points and wirelessly enabled laptops when not in use – school policy can ensure this is done consistently.
- Situate access points as far away from child sitting areas as possible.
- Locate laptops in the classroom in a way that keeps pupil heads at least a metre from the laptop screens (where the antennas are).

Key safety measures for other devices

- Interactive white boards – only use wireless if essential. Switch off the systems when not in active use.
- Mobile phones - limit use of mobile phones by children and staff in school buildings during the school day
- Laptops should be earthed when being used while powered by their mains-adaptor/charger unit. This is to greatly reduce electric fields at the keyboard.

Further information available from

- <http://www.powerwatch.org.uk/rf/wifi.asp>
Powerwatch can also offer Consultancy in RF surveys, network planning and minimisation of RF exposure.
- <http://www.wiredchild.org>
- <http://www.wifiinschools.org.uk>