

## Hardware & software requirements and recommendations for BYOT

Wellington High School has a set of minimum hardware and software requirements that all devices must meet in order to provide BYOT students reliable and consistent access to information and key learning services.

**Take this information into your chosen retailer to help you when buying a device to use at school.**

Devices not meeting the minimum requirements may not be able to access the Internet or other networked services at times or at all – especially under heavy load or large concentrations of BYOT users in one area.

**The most important hardware requirement is the wireless support.**

### Requirements and Recommendations

#### Recommended Hardware: Netbook / Laptop / Ultrabook – suitable for all classes

**Wireless:** At least support for both 802.11 G/N. A/G/N support is strongly recommended.

*When looking at what wireless standards a device supports it is important to pay close attention. Below are how some of the wireless chip configurations are advertised / specified.*

**802.11 g/n:** Very common on cheaper devices. The unit supports both the G and N standards; however the N standard will only operate in the 2.4 GHz radio spectrum.

**802.11 a/n:** Uncommon. The unit supports both the A and N standards; however the N standard will only operate in the 5.0 GHz radio spectrum.

**802.11 a/g/n:** Reasonably common on lower mid-range devices and up. Supports the A, G and N standards. The N standard will be able to operate in both the 2.4 and 5.0 radio spectrums.

**802.11 n:** Unfortunately quite a few device specifications only list 802.11 n without specifying anything else. More information will need to be obtained by the purchaser to ensure the device meets the minimum requirements.

**Processor PC:** Intel Atom /equivalent or greater (Dual Core processor strongly recommended) . A Single Core processor will do everything that the student will need to do at a basic level (Google docs, etc.)

**Note:** A Dual core processor will allow the student to run more demanding software on their computer and make the computer feel more responsive but can be slightly more expensive.

**Processor Mac:** Intel Core 2 or greater.

**Note:** The only reason a processor is mentioned for an Apple computer is because there doesn't appear to be a browser (compatible with PowerPC) with proper Google Docs support. The most recent browsers don't support the PowerPC architecture.

**Display:** A display size of 10.1" or greater is recommended

**Note:** A display any smaller than this can make it harder to use & make class work and research harder to do. The screen size can also affect the physical size of computer with the keyboard keys being shrunk to fit.

**Keyboard:** As close to full size keys as possible is recommended.

**Note:** Having as close as possible to full size keys makes the keyboard easier to use. It usually relates to the screen size (the smaller the screen usually also means the smaller the keyboard).

**Battery:** A battery that can last at least 6 hours is strongly recommended.

**Note:** If the battery cannot last this long then the student will need to ensure they have their power adapter with them and are near a power socket so they can charge their computer.

**Operating System PC:** Windows XP (Minimum), Windows Vista or Windows 7 (or greater).

**Note:** Either of these operating systems are fine, though I would expect to see a majority of them Windows 7. Linux is also supported (though not mentioned) as it would likely only serve as an internet only operating system.

**Operating System Mac:** OSX 10.5/Leopard (Minimum) or greater.

**Note:** *This is mentioned due to a few OSX 10.4 machines that couldn't run a browser that properly supported Google Docs. OSX 10.5 also supports the Intel Processor, which is a processor requirement for the Macs.*

**Antivirus:** An antivirus package is recommended.

**Other Software:** Any other software that may be needed will be provided via a download page available at Wellington High School. This will consist of Open Source (no cost) software.

**Note:** *There is a range of free open source software available for PC and Mac which can meet the needs of most classes – though I expect most classes will just use the Internet and Google Docs.*

## **Supported Hardware (iPads, android tablets etc):**

### **Apple iPad (1, 2 and 3) – Internet access only (may not be suitable for all classes)**

**Wireless:** The Apple iPad(1, 2 or 3) currently meets wireless networking requirements.

#### **Accessories**

**Keyboard:** An external Bluetooth keyboard is recommended.

**Note:** *Only of benefit if the student regularly types for long periods at a time.*

**Case:** A case that allows the iPad to stand on an angle for easy viewing is recommended. A case that can accommodate a keyboard as well is also recommended.

**Software:** Software for the iPad is only available via the Apple app store. ***We will endeavour to find and recommend only free software however in certain situations paid software may be necessary at cost to the student.***

**Note:** *The iPad supports the Word Processor (at a basic level) and the Spreadsheet functions of Google Docs. If any of the other Google Docs tools are required to be used, alternative methods will need to be found. Any work created outside of Google Docs would still need to be submitted via Google Docs or via e-Mail (to be decided)*

*Some testing will need to be done to verify the usability of these tools on the iPad. Any other media created for submission will either need to be e-mailed or submitted via Google Docs. If using iCloud (this may not be available within the school) it is up to the student to ensure any work done for submission gets to the teacher via E-Mail or via Google Docs.*

### **Possibly supported Hardware: Android Tablets – Internet access on certain devices and operating system versions only (may not be suitable for all classes)**

**Wireless:** Not all Android Tablets meet the minimum wireless specifications. The tablet must support the A/G/N wireless standards. At this stage I am unable to come up with a definitive list of which particular tablets have this support.