

### **Bring your Own Device (BYOD)**

### What is BYOD?

In 2019 Murwillumbah High School will continue with its BYOD policy that enabled students to bring their devices to school to be used in an education setting. This means that students can either purchase a new device or bring a pre-owned device to be used in class in an educational context. It is important to note that participation in BYOD remains optional.

All students participating in BYOD are required to sign the BYOD student agreement that covers school owned Department of Education equipment and includes BYOD devices in school.

It is because BYOD is being conducted in an educational setting that THE FOLLOWING DEVICES ARE NOT SUITABLE OR PERMITTED UNDER BYOD:

- Smartphone
- iPod
- MP3 Player

**Please note:** Google Chromebooks currently have limited capability in the High School environment and are therefore not recommended.

### **Conditions of BYOD**

- Students will be required to sign a BYOD Student Agreement
- As students will be responsible for ensuring their device is adequately protected. It
  is recommended that students have a laptop bag with a padded area designated to
  carry the laptop/tablet and/or a protective case/sleeve.
- Student devices are required to meet minimum specifications that relate to hardware, software, device size and if purchasing a new device; wireless capability.

If you are unsure, please feel free to contact our friendly Murwillumbah High Staff on (02) 6672 1566 and ask to speak with the school Technology Support Officer (TSO) regarding BYOD.

### **Device Specifications:**

### **Hardware Requirements**

### **Tablets:**

 Keyboard: A tablet device should have a separate keyboard other than the built in 'on screen' keyboard.

• Screen size: Minimum 25cm

Battery life: At least 6 hours to last the whole school day

### Laptops:

• Weight: Maximum of 2.5kg

• Screen size: Minimum of 25cm – recommended maximum of 37.5cm

• Battery life: At least 6 hours to last the whole school day

**NOTE:** All students carrying technology must have a laptop bag or case. Students carrying technology are responsible for that technology.

### **System Specifications:**

- Microsoft Windows 7 or newer 64 bit version recommended
- Apple Mac OS X 10.6 or newer
- Apple iOS 6 or newer
- Microsoft Windows for Surface RT or newer

### Wireless N capable

Wireless capability does not guarantee that the device is going to connect and work automatically with the schools standardised 5GHz wireless network range. Many wireless 'n' devices are 2.4GHz and will not work on 5GHz wireless. In order to connect to the school wireless network (WiFi), you must ensure that your device has the following specifications.

The device must have 802.11n or 802.11ac on 5GHz - otherwise referred to as 'dual band', 802.11abgn, 802.11agn or 802.11ac. **NOTE:** 'bgn' wireless is not 5GHz however if the specifications contain an 'a' for example, 802.11agn this will be wireless N 5GHz. Wireless 'a' is 5GHz.

If you own an existing device that will not connect to the school wireless, ask the retailer about a USB WiFi dongle that may be able to boost devices to the Wireless N 5GHz range.

### Additional recommendations:

- Minimum 4GB RAM
- Accidental loss and breakage insurance

### **Software Specifications:**

- Microsoft Office Software Package (can be installed from the student portal free of charge)
- Virus Protection Software
- Microsoft OneNote or equivalent

### **Wireless Connectivity**



Wireless Connectivity is key to BYOD in schools! Devices must support **Dual Band** (**5GHz** & **2.4GHz**).



### **Operating System**

To ensure the latest programs and software are compatible, we recommend the current or previous version of any operating system.

E.g. iOS 10 for iPads/iPods

### **Battery Life** Minimum 5hrs



Devices need to last the school day; we recommend a minimum of 5hrs battery life without recharging.



**Minimum Storage & RAM** 16 GB Storage 2 GB RAM (Tablets) 120 GB Storage 4 GB RAM (Laptops)

To be able to store and process data effectively these minimum specifications are recommended.

# **Hardware Features**Keyboard, Camera & Microphone



If using a tablet a keyboard will be necessary and a stylus may also be useful.



Screen Size
Minimum 10 inches

Ensure the screen is of a reasonable size to enable ease of use throughout a school day.

#### Other essential considerations

**Casing:** Needs to be tough and sturdy, can it be dropped without breaking?

**Weight:** Is the laptop light enough for your child to carry each day?

**Durability:** Consider the overall durability of the device, are the keys and inputs sturdy.

Look for a tough and thick outer shell



Remember this device is expected to last several years

#### Accessories



**Carry Case:** A <u>waterproof</u> carry case is essential in protecting your device and can provide ergonomic advantages.

**Insurance:** Devices can become lost or be broken easily at school, make sure your policy covers these eventualities.

**Warranty:** Make sure you consider purchasing extra warranty to reduce future repair costs as these devices will be used extensively.

### Wi-Fi Connectivity

Wireless operates on two frequency bands **2.4GHz** and **5GHz**. The DEC Wi-Fi officially supports 5 GHz. With BYOD now becoming very popular the advice should always be for students to purchase mobile devices that support both bands rather than just 2.4GHz, because they will get the best performance from the DEC Wi-Fi connection.

### **Antivirus Programs**

As part of the **NSW DEC BYOD Policy** an active antivirus application is required. Most operating systems have a free antivirus program installed (**Microsoft Defender**). Please check that the antivirus program is enabled and definitions updated.

### Software Partners

All NSW Department of Education and Communities students are eligible to download <u>free</u> Adobe and Microsoft software from this website. This software is only available to download onto personally owned devices. This software includes Microsoft Office, MS Office 365 and Adobe Creative Suite.

Students will need to use their @education.nsw.gov.au student email address to register on their first visit. To register, click on the "Sign In" link at the top of the page and then click on the REGISTER button. A verification email will be sent to your DEC email address. To complete the registration please select the link provided in the email.

nsw-students.onthehub.com/WebStore



All BYOD Devices must be registered with the school before connecting to the Wi-Fi

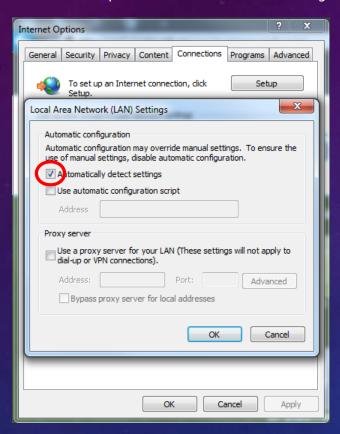


## **Configuring BYOD Wi-Fi and Proxy Settings**

**Education** 

## Windows / Internet Explorer

Tools...Internet Options...Connections...LAN Settings

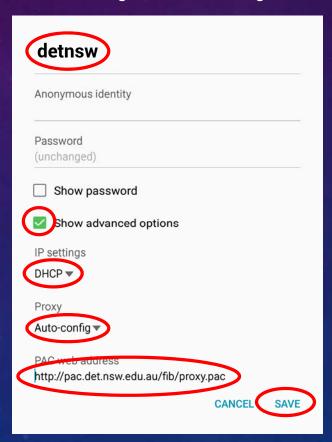


# Apple iOS Settings...Wi-Fi...detnsw

| <b>〈</b> Wi-Fi                         | detnsw |            |
|--|--------|------------|
| IP ADDRESS                             |        |            |
| DHCP                                   | BootP  | Static     |
| IP Address                             |        | 10.        |
| Subnet Mask                            |        | 255.255.   |
| Router                                 |        | 101        |
| DNS 10. 34, 153.107.14.212, 153.107.78 |        |            |
| Search Domains                         | 3      | detnsw.win |
| Client ID                              |        |            |
|  |        |            |
| Renew Lease                            |        |            |
| HTTP PROXY                             |        |            |
| Off                                    | Manual | Auto       |
| URL                                    |        |            |

## Android

Settings...Wi-Fi...detnsw... Manage Network Settings



**NOTE**: If your device does not support auto-config, you can set **Manual** proxy using *proxy.det.nsw.edu.au* on Port 8080

## **GENERAL STEPS:**

- 1. Connect to **detnsw** OR **nswdet** (forget and recreate if you are having problems connecting)
- 2. Authenticate to the WiFi using first.lastname@detnsw with your password (your portal ID)
- 3. Configure the proxy settings as described above
- 4. When prompted to authenticate for Internet access, use first.lastname@detnsw with your password



## Problem authenticating with your Windows BYOD?

If you are connected to the school's Wi-Fi but aren't asked to authenticate for Internet access, try these steps one at a time and test again. **If it works, stop**. If not, try the next step.

