



## Atherton SHS Position paper – BYOX

### **Context:**

For many years schools have introduced and integrated technology into teaching and learning to improve the educational experience and student outcomes. The promise of increased student engagement and outcomes through the use of tools such as tablets, laptops, internet access and software programs is deeply appealing and has seen huge amounts of money invested from state and federal governments and schools into technology infrastructure. Unfortunately, it is difficult to show consistent holistic improvements in student outcomes from these efforts.

It is important that we recognise that digital technology will not replace high level teaching skills. Research cautions schools not to rely on computers to teach students and has not linked the improvement of student outcomes just to the use of computers (Hattie 2009). Successful strategies that integrate technology depend on the quality of the teaching. In particular, having teachers who are well trained in the use of technology and are able to teach using diverse strategies that provide multiple opportunities for learning are linked to improved outcomes for students.

To date the most significant investments at ASHS have been with teachers receiving laptops for teaching and the Federally funded *National Secondary School Computer Fund* devices. At the end of 2008 and the beginning of 2009 Atherton State High School teachers received laptops from the *Computers for Teachers (C4T)* program. It would seem almost unimaginable for many teachers that these tools have not always been available. It is now impossible to work without a device given the introduction of OneSchool and its roll marking, reporting and planning functionalities.

Integration of student use of laptops and devices has been challenging for schools. Federal Government investment through the *National Secondary School Computer Fund* NSSCF has allowed teachers to extend the practical integration of technology into everyday teaching and learning. In particular, subjects such as English have been able to significantly improve students' drafting processes. In recent times many schools have opted to enrich their digital environments through the development of laptop programs and in recent times this has moved to BYOD – Bring Your Own Device - where students supply their own computers with the model and style set by the school (e.g. Atherton SPS's Apple laptop program). With the rapid evolution of technology, the most recent version of this is to allow a student to bring ANY device that meets minimum standards and allows students to complete their tasks. This is termed BYOX (Bring Your Own.....X = any kind of device)

The department's [Digital Strategy 2014-17](#) has been published to allow schools to explore local solutions. It outlines the overall framework to support business solutions and better educational outcomes through the improved delivery of high quality, cost effective, contemporary information and communications technologies.



Currently the use of technology in classroom practice is branded as eLearning. Whilst we continue to brand contemporary learning as an “other” through labelling it as eLearning, we will continue to position it as something either in competition or comparison to “traditional” learning. Whereas the reality is that the opportunities “eLearning” brings are akin to the change from slates to pencils and paper, only a little more sophisticated. The teaching skills are still key but the tools are so much better.

Atherton State High School has chosen this time to articulate its preferred position with regards to digitally augmented learning. We do this to take full advantage of:

1. the rich and rapidly changing digital environment;
2. the proliferation of digital apps, tools and equipment suitable to enhancing learning and
3. the rapidly developing skills and techniques that teachers can apply to enhance, strengthen or add to traditional teaching techniques.

The BYOX position paper is not designed to address the entire suite of themes that are represented under the eLearning badge but to provide a clear position regarding students using their own devices on the school site.

**Version:** 3.0

**Purpose:**

The purpose of this paper is to publish Atherton SHS’s preferred Bring Your Own Device (any kind) position for community consultation.

**References:**

[DET Strategic Plan 2014 - 18](#)

[Digital Strategy 2014-17](#)

[Queensland Government ICT Strategy](#)

[Smart Classrooms](#)

[AITSL teaching standards](#)

**Philosophy:**

Atherton SHS understands that students engage with a wide variety of devices both inside and outside the school environment. The desired culture at ASHS is where students engage effortlessly with contemporary teaching and learning practices. As a result, we aim to develop an environment where digital technology augments strong teaching and learning practices within the framework of our guiding principles:

1. Maximise outcomes for all students
2. Work in a culture of excellence
3. Provide efficient, effective service delivery

**BYOX and eLearning:**

The national professional standards for teaching articulate expectations regarding integrating digitally rich opportunities for students to experience the highest quality teaching.



Atherton SHS intends to develop digitally rich teaching and learning environments within the school that lead to a seamless integration of Information and Communication Technologies (ICT's) into core practice of teachers. We will do this by:

- Integration:
  - Teachers will identify opportunities to integrate technology through curriculum planning.
  - The way we teach (our Pedagogy) will support students using their own devices, school devices or traditional (pen and paper) methods
  - Leaders will monitor staff integration of ICTs into the curriculum planning of teaching staff through line meetings and audits.
- Professional development
  - Teachers participate in professional development that will enable them to deliver learning in an ICT rich environment.
  - Leaders will assist staff to access professional development tailored to staff needs.

### Devices:

Although ASHS has a large number of laptops and computers, over 70% of these are out of warranty. With an estimated replacement value of approximately \$700,000, it is simply not feasible for the school to continue to purchase and manage devices. The cost of managing, maintaining and procuring technology has been a substantial component of the school budget and has shifted resource away from other areas such as facilities maintenance. We do not wish to operate a hire or lease business for electronic devices, nor an IT repair company. Instead, ASHS would like to focus on our core business of teaching and learning.

### Devices at Atherton SHS:

- Atherton State High School will move to a BYOX model in 2015.
  - This means students are able to bring devices for school use that meet the minimum specifications as indicated in the ASHS resource list.
- Atherton SHS will reduce its pool of classroom based devices through natural attrition
  - This means that as devices become redundant through lack of warranty and/or damage they will not be replaced.
- Atherton SHS will maintain a small pool of devices for loan
  - This means that a pool of school devices will be removed from classrooms and made available for short term loan through the library.
- Atherton SHS will partner with external service providers for maintenance of devices
  - This means that the school will look to shift technician costs from the school and place them in maintenance agreements with external providers.
  - Rather than maintain onsite servers, the school will explore offsite storage of data with EQ.



## *Facilities and Assets:*

Atherton SHS will provide learning environments that enable teachers to deliver digital content every lesson.

- All learning spaces requiring digital integration are equipped with appropriate tools and assets
  - Lighting
  - sound,
  - projection,
  - acoustics,
  - seating,
  - connectivity and
  - power

## *Futures focus:*

The nature of technology is that it is constantly evolving. This creates both opportunity and challenges. Future consideration needs to be considered with regards to the following:

*Wireless vs 3G/4G.* Currently Atherton SHS pays for internet connection at an amount of over \$20000 a year. As school operates primarily between 9am and 3pm we are essentially paying for connection that we do not use for 75% of the time. If the future C4T devices for teachers come with 3G connectivity then we should review the need for the data package we are paying for. Further discussions are being held with Department of Education (DET) officers to advocate for DET supplied SIM cards so that students can access the internet without using the wireless network and yet still have content monitored through departmental filters.

*External server management and hosting.* We consistently upgrade our server every three to five years at a cost of approximately \$10,000 to \$15,000. Currently there are schools in Queensland which are in arrangements with private companies to manage all server and network requirements. This is similar to arrangements made with regards to photocopiers. The saving is not only on the asset but also in the HR requirement for technicians in schools. We plan to move to offsite data storage in the future once departmental protocols are established.

*Office 365.* Atherton SHS has joined the department's rollout of Office 365. Office 365 is the same Microsoft Office we already know and use every day, except it is powered by the cloud, meaning we can get to applications and files from virtually anywhere - PC, Mac, and tablets - and they're always up to date. Business-class email and shared calendars that we can get to from virtually anywhere means people stay in sync, and on schedule. Users can work together on documents that are always current and accessible from virtually anywhere. For more information on Office 365, check the [Microsoft website](#).

*Microsoft Office 2013 Suite.* All state school students from Prep to Year 12 can now download multiple free copies of the Microsoft Office 2013 Suite to their personal home and mobile computer equipment. Students who want the free software will need an active Managed Internet Service (MIS) login, school email account and password - those who don't have these should contact Mr Jackson and she will help them activate their MIS login. Currently, MS Office Suite is available for students' personal equipment only - not equipment which is part of a school network. For more information, contact Atherton SHS tech Mr Jackson.



*Device affordability.* Over the last few years we have seen the introduction of tablets and affordable laptops. Specifications to run common programs have been reduced and a broader range of software options have been made available. Cost points for devices suitable for use by students are at or below \$500, with the indicative cost for students approximately \$700 for the basic device outlined in the resource list

### *Social Justice.*

Whilst device affordability has never been better, there are students in the school who will not be able to afford their own device. In this instance, students will be able to use traditional methods to record and submit work, and will have access to loan or classroom computers so that they can enjoy the digitally rich environment as well.

## Summary

Atherton SHS has moved to a BYOX arrangement from 2015. This means that students are able to bring any device to school that allows them to complete allocated work and research to augment their learning.

This move is a “soft” rollout where students are able to bring their devices from the start of the school year and have them linked to the school network. There is no focussed launch of BYOX that would be at odds to the augmented learning position outlined in this paper.

The school will continue to engage with emerging technologies and support providers to integrate technology within the learning environment.



## BYOX eLearning FAQ's for parents:

### *What do I need to do to ensure my child's device is secure?*

Just like with any other piece of equipment, students will need to ensure that they keep their bags and their contents with them at all times. Students who wish to store their devices (say at lunch time whilst out playing) can either discuss a solution with their teacher or they can see the resource centre staff to check their bag in for safe storage. Parents are also encouraged to discuss a tracking solution with the supplier of the device. We plan to create a safe area in the resource centre where laptops can be booked in while students aren't using them (e.g. at lunch time), and they can collect the computers again before class. Students should discuss storage solutions with their teachers to ensure that their devices remain secure.

### *How will my child's device be monitored to ensure that they are doing their work?*

Students will be expected to use their devices appropriately whilst at school. Teachers will monitor student usage just as they do with non-digital equipment. Students using their own device on the school's network will have the same filters as school devices, meaning that there is an increased level of monitoring whilst the student is at school. Parents will need to monitor home usage just as they would if their child is using a home computer/device. Parents can access information from [CyberSmart](#) to maximise safe and appropriate use of technology. Student expectations regarding the use of any electronic device at school is outlined in the Atherton SHS Personal Electronic Devices Policy.

### *What device do I need to buy for my child?*

Whilst there is no specified device that Atherton SHS recommends that parents purchase, there are minimum specifications that devices must meet to be used effectively at school. A full list of these specs is published as part of the annual resource list. Parents should also consider factors such as battery life, sturdiness and peripherals required when making a purchase decision. All devices must be fitted and maintained with an up to date antivirus program to ensure that the computer and the network is not infected by viruses. Parents are able to purchase copies of antivirus software through the department's preferred supplier – please see Mr Jackson for more information – or purchase their own outright from the computer supplier, a retailer or online.

Indicative Device Cost (as of 1/12/2014)	
<i>Student pays</i>	<i>Department pays</i>
The device	Office suite for private use
Antivirus software	Office 365 (limited)
Specialised peripherals for specialised activities	Filtering and monitoring through DET network
eText software (through resource scheme)	Internet connectivity
Specialised software	Access to learning portals (e.g. Learning Place)
	Teaching and learning resources and selected online content
	Server and/or cloud storage

### *How long will my device last?*

With care devices will last in a school environment for at least three years, with history showing that devices at school typically last up to five years. Parents should discuss the best device for





their child's needs with the supplier who will be able to advise on extended warranty and accessories to help protect the device (e.g. damage resistant carry cases)

### *Where do I buy my device?*

As a member of the Atherton Tableland Chamber of Commerce, Atherton SHS encourages parents to purchase from a local business. Significant benefits can also exist when dealing with warranty and repairs if dealing with local businesses. Please discuss or research not only the best hardware solution but also the best repair, warranty and insurance solution for your child before you purchase a device. Ask the supplier what support exists if there is a repair required, what is the turnaround time and if a hot swap exists (given a loan device until repairs are completed).

### *Will my child's teachers have the skills to teach in this digitally rich environment?*

Teachers, like students, have different levels of expertise and experience with digital learning. Different subjects also have different requirements for student ICT usage meaning that teachers will use different methods for their instruction depending on the subject they are teaching at that time. Professional development will be available for all teaching staff to ensure that they meet the demands of teaching their subject in a digitally rich manner.

### *Will my child use their computer every lesson?*

Not all classes require the use of technology, whilst others use it 100% of the time. Students will use their devices in a variety of ways that suits the context of their education. In English or History they may use their device for note taking and research and in graphics or art, use the device to complete drawings using specialised software.

### *Will my child be disadvantaged if they don't have their own device?*

There is little research stating that students would be disadvantaged if they don't have a computer with them at school. The taking of notes and receiving of hand outs can still occur on paper, a computer is just a digital way to organise and store this information for easy access. However, if the student doesn't access a computer at all, then, when researching concepts and issues the student will be disadvantaged. At ASHS all students will have the opportunity to access computers either in the classroom, the library or on loan.

### *What happens if half the class have a device and half don't?*

Students will be able to store and record information from teachers in a variety of ways. Teachers will still teach using the same methods (pedagogy), with students able to record information using either traditional pen and paper or digitally through their device. Students with devices will have immediate access to a teacher's electronic resources where students without devices will need to rely on paper handouts or other print material. Students with their own devices will not need to use school devices, to borrow or loan a computer and will have immediate access to resources and research opportunities.

### *I've bought a computer for my child, what do they do on the first day?*

The student will need to connect the device to the school's wireless network. This is similar to connecting to any other wireless network around the home or available in shops and restaurants. Once at school the student will need to click on the network access icon at the bottom right-hand side of the screen. This will bring up the option of adding other networks. Students would select this option and type in the Network QDETA-X, the selected security is WPA Enterprise. The student would then need to enter their student username and password. If they have problems



they can always contact the IT tech teacher Mr Jackson. Students will be shown how to store, save and access information and programs as part of the teaching and learning cycle.

*What happens if my child's computer is damaged or stolen?*

The responsibility for the security of any device is with the student. The device should be insured for lost and damage, this can normally be added to the household's content insurance as a listed item. An alternative option is to take out addition insurance when purchasing the computer for theft and damage. The school will deal with the act of theft or malicious damage in line with our Responsible Behaviour Plan, but cannot bear the replacement cost.

*Do I need insurance or special warranty for my child's device?*

Atherton SHS strongly supports parents purchasing extended warranty on the device and that the device is insured either via home contents insurance, or device insurance via the company.

*I've purchased a ..... (e.g. Apple, tablet, Dell) device, can my child use it?*

Yes, as long as the device can access the wireless network it can be connected to the school. Printing is established via a webpage interface so students can print easily. Any other specification for the device could be subject based, such as Video Editing for Film and Television and this would be discussed with the student once they start senior school.

*I want to buy software that matches what they use at school, what do I do?*

The main suite of programs used by the school is the Microsoft Office suite (Word, Excel, Powerpoint, etc) which is provided for free through the Department for all private devices of students. Please see Mr Jackson to have Office suite loaded onto a student's computer.

*How will my child organise their information?*

As per the Atherton SHS bookwork policy, all students will be shown how to store information so that they are able to access it quickly and efficiently. Students will also be taught how to store information so that it does not get lost.





## **BYOX resource information**

Students are encouraged to bring their own device to work with at school and at home. Although the school has many devices in classrooms this fleet of laptops will be gradually reduced as funding arrangements have shifted.

Students who bring their own devices are able to harness the full capabilities of the technology and begin the integration of their personal learning management and productivity into their studies.

As guide for parents we have provided the following advice:

### **Device Specification**

The device can either be a laptop or a tablet, however if you are purchasing a tablet it is recommended that you also purchase an external keyboard for typing. There is research which shows that consistent typing on a touch screen could increase the risk of Repetitive Strain Injury (RSI).

The screen should preferably more than 12" (approximately the same size as a piece of A4 paper). This is to reduce the risk of eye strain from possible extended use of the device.

The preferred operating system with Atherton SHS is Microsoft Windows 7/8/8.1/10 . Please be considerate that not all teachers are familiar with Mac and Android operating systems and therefore will be less likely to be able to help a student with general computer use on these platforms. The operating memory should be 4GB (RAM) or greater.

If you already have a device which is slightly below these specifications, the main criteria is if the device can operate Microsoft Office 365 suite of programs which include Word, Excel, Power Point and that the device can connect to WIFI. If the device can't connect to WIFI students will need to transfer information via a USB.

The Microsoft Office 365 Suite of Programs; Word, Excel, PowerPoint is offered to all students and staff of Education Queensland FREE of charge. It can be installed from the student/staff email account by using their login and password at the website:

<http://owa.eq.edu.au/>

Once logged into the email account student/staff can then click on the Office 365 button to proceed with the installation of Office 365

Any device which significantly exceeds these specifications is probably not necessary for the average student. The price range for a suitable school device which has similar specifications to those listed above should not exceed \$1000 with the average cost being \$700.

It is recommended that the device has extended warranty that includes accidental damage. This is arranged when purchasing the device. It is also suggested that the device is insured for lost or theft, this can be done as a separate insurance policy or as part of your household content insurance.

Extras recommended are protective casing for the device and stylus for touch capable devices.



# *Atherton State High School*

*On Eagles' Wings*

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The choice of device also depends on the user's personal preference, they may not wish to carry a heavy 17" screen and/or are only light computer users. Perhaps the student uses the device heavily for media\social interaction. The choice of a personal device is by nature "personal", and various needs vs wants need to be taken into account when choosing a device they will be using for a large portion of their schooling years at Atherton SHS.